

## More-Than-Tech Communities: Alternative Imaginaries Within Hacking and Crafting

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Tech communities are groups that come together to engage with particular technologies. In describing two instances of such communities—hacker- and makerspaces in the United States, and the crafting activities of peasant movements in Colombia—we explore the ways in which their activities exceed their focus on and use of technology and find that practices of hacking and crafting are embedded in imaginaries of attentiveness and care. The use of technology is thus intertwined with the production of particular affects rather than being a goal in itself. We propose the notion of more-than-tech communities as a means of highlighting the ways in which there will, in such communities, always be more at stake than relationships and interactions with technology.

*Keywords: hacking, crafting, tech community, social movement, care, reparation*

*[I was] just desperately trying to **find our community**, our tribe of people who want to stay late and work on something and who want to do that stuff, who want to create things.*  
—Kevin, United States, 2012; emphasis added.

*The purpose of this space is to **make people feel** your story, once they do, they stop labeling you as a guerrilla militant.*  
—Community leader, Colombia, 2016; emphasis added.

What do we talk about when we talk about tech communities? The question might seem banal. Scholarship on such communities exactly emphasizes the ways in which they engage with or develop particular technologies (Braybrooke & Smith, 2018). The community is oriented (and thereby secondary) to the technology. In our fieldwork with different communities that make use of technology and crafts, however, something rather different has emerged. Our interlocutors have frequently pointed to *other* purposes and relationships as being crucial beyond their use of and knowledge exchange concerning technology, making, and crafts.

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In what follows we reflect on this observation in more depth, drawing on two sets of ethnographic material to explore how groups that are seemingly focused on technology use or development exceed these aims, folding them into other kinds of purposes and relationships. This article, therefore, contributes to a better understanding of the ways in which the imaginaries of tech communities are multiple, going beyond tech-oriented ideologies such as the Californian Ideology. Our chosen ethnographic vignettes contrast our experiences of two very different communities. Both can be understood as oriented to or making use of technology/ies though—as we will argue—this in fact turns out not to be their most important or defining feature. In both cases, and despite key differences between the positionalities, practices, and politics involved in each case, we find that the use of technology is intertwined with the production of care and particular affects.

Our first case stems from fieldwork in hacker- and makerspaces across the United States in 2012 (Davies, 2017).<sup>1</sup> Hackers are often framed as a kind of tech community par excellence: They are early adapters, pioneers, or innovators (see discussion in Hepp & Schmitz, 2022). During the period that this fieldwork was carried out, there was huge excitement (in the United States, in particular) about the maker movement and its potential for innovation and industrial (re)development (see e.g., Anderson, 2012; Hatch, 2013). In contrast, our second case deliberately expands the notion of a tech-oriented community to include practices of crafting and making. Here we explore the production and use of a “crafted empathy chair” in peasant communities in Colombia—a setting that in many ways could not be further from a Silicon Valley hackerspace but which similarly makes use of mundane technology to produce particular effects and affects in its participants and audiences.

In the next section we contextualize our ethnographic cases through a discussion of some of the dynamics that will be key to understanding them, in particular the Californian Ideology, other tech imaginaries, and previous characterizations of tech communities. We then present ethnographic vignettes of these different spaces to draw out what they can tell us about the nature of community in each. In both spaces, we argue, care and solidarity are crucial and acknowledged as such by our interlocutors. This observation leads us to a discussion of what this might mean for how we think about tech communities: We suggest that tech communities inevitably exceed their orientation to technology, and therefore might be better framed as “more-than-tech” communities.

### **Tech-Oriented Communities**

While the term tech communities has been used rather loosely—referring, for instance, to both high-tech industry (Chou, Ching, Fan, & Chang, 2011) and more specialized groups such as those advocating for civic tech development (Schrock, 2018)—in this special issue it is used to refer to “technology-oriented communities,” in particular those that “critically question tendencies of commercialization” in the development of new technologies and offer alternative imaginations of them. While the notion of community gestures to identity politics and the romantic sense of an authentic and unified collective (and as such has been deconstructed and

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<sup>1</sup> This study was carried out in collaboration with my (Sarah R. Davies’) research partner, Dave Conz, who passed away not long after the fieldwork was completed. As with other publications that have come out of the research (e.g., Davies, 2017), this article is dedicated to his memory, and could not have been written without his involvement in the research. His participation is the reason that the discussion of the interviews later in the article is written in the first-person plural rather than singular.

problematized; see Joseph, 2002), here we understand it simply to mean lay or public groups that come together to engage with specific technologies. Hackers are a key example of such a group (and were certainly a frequently cited one during the 2000s), but this definition would also encompass groups of motorcycle enthusiasts, crafting circles, tech activists, and ham radio hobbyists (Ratto & Boler, 2014), among others. Importantly, we understand “tech” to encompass “low tech” practices such as crafting.

In research literature the focus has tended to be on groups that engage with (and in some cases develop) emerging technologies, often exploring tensions between capitalist and resistant or emancipatory logics. In a highly prescient article, Barbrook and Cameron (1996) described a merging of technological determinism and optimism with libertarian individualism, capitalism, and a vague sense of “hipness,” also known as the “Californian Ideology”; similarly, Fred Turner (2010) has traced the merging of the 1960s’ counter-culture with Silicon Valley’s nascent computer industry, a process that resulted in the contemporary tech industry’s simultaneous claims to emancipatory practices and capitalist productivity. This fundamentally neoliberal imagination of personal freedom combined with techno-optimism suffuses language around contemporary digital technologies (in particular) and the companies that sell them (an imagination most recently framed as “technochauvinism”; Broussard, 2019). Perhaps more surprisingly, it is also present in groups or practices that may be ostensibly framed as critical, countercultural, or as resisting “big tech” (Braybrooke & Smith, 2018; Davies, 2017; Dunbar-Hester, 2016; Nguyen, 2016). Much of the early writings about hacker- and makerspaces celebrated the “access to tools” they provided (Anderson, 2012; Hatch, 2013), framing them as representing a new moment in the democratization of technologies that had previously been confined to industry and academia (Hunsinger & Schrock, 2016). But these spaces have now been subject to extended critique and reflection: At the very least, they are riven with “tensions and contradictions” (Braybrooke & Smith, 2018, p. 1), combining exploitative practices with what often seems to be good faith optimism in social betterment (Dunbar-Heston 2020). Relatedly, recent work has pointed out the diversity of the global landscape of hacker- and makerspaces and the difficulty of characterizing this movement through a single imaginary, emancipatory or otherwise (Kohtala, Boeva, & Troxler, 2020).

Other scholarship has pointed out the ways in which tech communities such as hacker spaces go beyond the Californian Ideology and in practice incorporate a wider set of imaginaries, practices, and materialities. Such research has, for instance, critiqued an emphasis on “making” over and above practices of repair, support, or maintenance (Chachra, 2015), suggested that care is often sidelined in discussions of making (Reed, 2016), pointed out the complex and often invisible networks of diverse forms of labor that allow hacking and making to take place (Stevens, 2019), argued for the use of feminist frames and values in expanding imaginations of tech practice (Nagbot, 2016), and explored experimental practices and their importance in the material politics of more-than-social movements (Papadopoulos, 2018). Such research has emphasized that we need to study *all* the practices, relationships, more-than-human participants, and resources that allow tech-oriented communities to function and create more livable worlds and spaces of possibility not only those that are most visible or celebrated. Indeed, it has sometimes seemed to be the case that the practices that are highly vaunted in public discourse about tech communities—such as entrepreneurship or innovation—are actually less important to the life of these communities than those that are less publicly visible, such as care (Davies 2017; González-Arango, Villamizar-Gelves, Chocontá-Piraquive, & Quiceño-Toro, 2022; Toombs, Bardzell, & Bardzell, 2015). Our discussion builds on this work, seeking to explore two tech communities and the role of affect and care within them. We pay particular

attention to forms of “attunement” (Choy, 2018) involving members of these tech communities, adopting a relational understanding of affect (Slaby, 2019; von Scheve 2018) and viewing it as embedded in collective practices like hacking and crafting, community building, and individual commitments.

In doing so our analysis speaks to a number of questions. What relationships and imaginaries are present in different tech communities, and how do these relate (or not) to the Californian Ideology and other types of ideology? How do the practices of tech communities go beyond their focus on forms of technology or craft? How does the use of particular technologies shape practices of attentiveness and (relational) affect within communities? Ultimately, how can we think the notion of “tech-oriented communities” otherwise? In reflecting on these questions we draw on two sets of ethnographically oriented material, the first derived from research into U.S. hacker- and makerspaces in the early 2010s (Davies, 2017), and the second coming from more recent research that explored crafting and curating as strategies for dealing with the aftermath of war violence in post-accord Colombia (Mora-Gómez, 2023). In both cases, the research took a qualitative approach, one that, in particular, paid attention to how certain objects are embedded in everyday practices, the stories around those practices, and what situated interactions achieve (Beaulieu, 2010; Widjanarko, 2020; Winthereik & Verran, 2012). While these studies shared a sensibility toward multi-sited ethnography (Marcus, 1995, 2012), they were carried out in very different sites and held very different meanings to us as researchers (with our primary interests being in the nature of “hacking” in the United States, on the one hand, and crafting as a means of repair in a post-conflict context, on the other), and have been used to develop different kinds of arguments within diverse academic literatures (see Davies, 2017; Mora-Gómez, 2020; Tacchetti, Quiceño-Toro, Papadopoulos, & Puig de la Bellacasa, 2022). In drawing them together we therefore understand them not only as an opportunity to explore, compare, and connect (Mohácsy & Morita, 2013) two very different kinds of tech-oriented communities, but as offering an analytical logic of juxtaposition (Law, 2007)—one that is “about juxtaposition and difference, there is no obvious hierarchy or narrative” (Law, 2007, p. 135). In exploring material from two contrasting cases, we frame them not as representative or indicative but as opening up tensions and questions that might speak to other forms of tech-oriented community and scholarly discussion of these.

Our ethnographic vignettes illustrate a central argument: These tech communities can be understood as being more than tech in that they are structured through care practices and affective experiences of intimacy and repair. Care should, we suggest, thus be understood as a key “alternative imaginary” within communities that interact with technology or that use it precisely to nurture other forms of attentiveness and care. After exploring our ethnographic vignettes in the two sections that follow, we discuss the wider implications of this argument.

### **Community and Affect in U.S. Hackerspaces**

If I had to sum up this visit in one word, it would be “community.” The idea of community was ever-present in the conversations I had—it was explicitly mentioned, repeatedly, by both Kevin and Kyle, and was implicit within other discussions. Hacker Inc., people said, was a community. This is what they liked about it and what made it distinctive. It was also important to be part of a community—to be located in the heart of a relatively active and interesting district of the city.

We arrived bang on 7 pm, and as we entered—someone had to come and let us in, as the door was locked—a few people who had been waiting outside, clustered around a bench, came in as well. Kevin checked out who had been before and, as most hadn't, gave a quick tour, in which I tagged along. Much of this was familiar but I caught a few interesting phrases: Hacker Inc., he said, was a "community workshop"—a place where people "create stuff." He talked about the loose governance of the space: It is "democratic slash anarchistic." (I'm not quite sure what that means—how is this anarchy expressed?) He says this and laughs—and as I think about that I'm struck by the fact that there was quite a lot of laughter and humor within all of the conversations. (Fieldnotes, January 2012. All names of people and hackerspaces have been changed.)

What are hacker- and makerspaces about and for? The answer would seem to be self-explanatory: Hacker- and makerspaces are, presumably, spaces where one can hack and make, and therefore where the technologies that enable these practices are central. The above extract—from fieldnotes written after a visit to the public hours of a hackerspace early on in the research—shows how this assumption was quickly complicated by experience of these spaces. While the technologies were an important part of the hackerspace, we were surprised to find that other aspects were often more prominent, or more strongly emphasized, as users talked about their involvement in it. Plenty of those using Hacker Inc. (as we are calling this space) had tools that were just as good, if not better, at home, or primarily used the space as a way of meeting and chatting with like-minded people. For these users, the social and communal aspects of the space were central. In particular, as the extract also suggests, the idea of community was woven through our experiences with Hacker Inc., and through the formal and informal interviews we conducted there. This notion of community was multivalent: In Hacker Inc., for instance, people talked about the sense of community they encountered there; the local community the space was situated in and the hackerspace's interactions with it; and *the* community—a way of describing the collective of people who were part of the space and through whom its activities were carried out. "The community does it," one informant told us when asked about how the space was organized, governed, and run.

This emphasis on community was similarly present in the other hacker- and makerspaces we went on to visit, and it became a key aspect of our analysis of the U.S. hackerspace movement (Davies, 2017). In the accounts of those we spoke to, the people who were committed to a particular space—its community—*were*, in fact, the hackerspace, more so than the physical building or the tools it might contain. At the core of hacker- and makerspaces were relationships among people, and these relationships were more important than those between people and technologies or objects. A physical space was a "second phase," which came after a community had formed and solidified; in the same way, several people told us that the hackerspace community would continue to exist even if their space and equipment were taken away.

If these spaces are relational, created through interactions among individuals and the formation of a semi-stable "community," such relationships were also deeply affective. This already starts to emerge in the fieldnote extract above, in the observation of the prevalence of humor and laughter in the space, but can be further demonstrated through another encounter, in a hackerspace in a different city, later on in the research. In this case, I (Sarah R. Davies) have visited this space alone, for a tour and interviews with some friendly members, and I sit in the depths of a large, black, battered, and very squishy sofa next to one of the people who have answered a call sent out on the space's email list and volunteered to speak with me. Keith is somewhat

shy, and a little awkward, but happy to talk about his involvement in (what we will call) Excellent Tools. He's actually rather new to the space and explains that he hopes to get to know people through involvement in it. Our bodies angled together, he notes that friends have told him he is too goal-oriented, so he's trying to take things slowly, and to enjoy the space without stressing about whether he will be accepted as a full member when, in a few months, he can apply for this status. He is honest, and vulnerable, and talks passionately about the aspects of the space he appreciates: that everyone is welcome, no matter their level of skill; that it's a "non-pressure environment"; the excitement of others there for their projects. As we talk, he shares his emotions, and the interview quickly becomes a space of mutual affect as I heard about, and to some extent participated in, his hopes, pleasures, and anxieties about his life and the role of Excellent Tools in it.

The encounter with Keith was particularly intense, but the extent to which his sense-making about the hackerspace scene was framed through the expression of particular emotions was not unusual. Affect coursed through the interviews we carried out and was tangible in the spaces we visited—again, to a degree that surprised us. Participants spoke about their spaces with evangelistic zeal and explained how much their involvement in them had supported them in difficult situations. Through hacker- and makerspaces they had found "their people," or been enabled to realize the projects they cared about, while in the spaces themselves, as the fieldnotes above suggest, there was often an atmosphere of humor, openness, and shared fun. Not all the affect we encountered was positive: Like Keith, interviewees were honest about their struggles, and the hurts and challenges that had led them to value so highly what they found in hacker- and makerspaces. The key point is that in this research we found such spaces to be experienced and framed as emotional places, and the relationships that came together within them to be presented as intrinsically affective. These affective ties could, of course, incorporate tools, technologies, and the physical spaces themselves: Interviewees talked about the affection they might have for a particular piece of equipment or explained the complex history of a space's location while articulating fond memories of an old building or site. But these affects were always mediated through the notions of community discussed above and were therefore entangled with human as well as nonhuman actors.

In presenting these vignettes and using them to illustrate the degree to which these U.S. hacker- and makerspaces were affective, community-oriented, relational spaces we are building on other work that has argued for the vital, though often hidden, role of affect and care in hackerspaces (Nagbot, 2016; Toombs et al., 2015). Even in this form of "tech community," then, the imaginaries that circulate are not straightforward reproductions of the Californian Ideology but more complex combinations of aspects of this alongside visions of communal relationships and a range of affects that go far beyond techno-optimism. The next section considers a very different form of the tech community and the affects that circulate there.

### **Caring Through a Crafted Chair**

During my (Fredy Mora-Gómez's) time with Campesino<sup>2</sup> movements (2015–2016), I became engaged with the ongoing struggles of those in their communities who still inhabited rural areas considered Red Zones,

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<sup>2</sup> I use the idiosyncratic word in Spanish because in English the word peasant has different connotations. In Colombian Spanish, Campesino movement is a politically recognized organization. I use the word Campesino

areas of frequent war confrontations among multiple armed actors. Long-lasting armed conflict, multiple occupations by guerrillas and paramilitary groups, and continuous armed confrontations between the Colombian Army and other armed actors were part of their everyday lives (Hristov, 2005; Lugo-Vivas, 2010). Additionally, coca production was already an important part of their agricultural activities, sometimes due to life-threatening pressure by armed groups, sometimes because of the absence of other options, and at other times, less predominantly, for ancestral and activist reasons. A recent regulation, the Law of Victims, had granted some of these Campesino the status of Collective Subjects of Reparation. This meant that the Colombian state would now provide certain forms of monetary and symbolic compensation for the losses suffered by those communities because of past—and still ongoing—violence inflicted by the armed conflict. Besides using this compensation to rebuild local schools and finance collective productive projects of coffee making, some of these social movements used some of their compensation to organize a Campesino fair.

I was invited by one of the leaders of the Campesino movements I had met before to participate in her stand at the fair. As the curator, she had already installed an arrangement comprising wooden cubicles, chairs, audio systems, and headphones at the venue, the main square of the city hosting the fair. After I placed myself inside one of the cubicles I was handed a pair of headphones, which I wore while looking at the curator in front of me. Our eye contact was the premise of the encounter. The audio was her own detailed narration of what happened at her farm some years ago. Its contents were powerfully moving and made it easy to picture her in the situation described: She was living there with her partner and their three children until paramilitary groups came to their farm requesting food and money. The presence of guns and the insistence of the commander were enough reason for her to comply with their demands. The voice in the audio kept telling the story while the owner of that recorded voice, the curator sitting in front of me, continued to maintain eye contact.

The undesired visitors dispossessed the woman sitting in front of me of her house, her partner, and two of her daughters, filling her life with pain, anger, and fear. Her recorded voice, but also her body, in front of me, partially communicated the anger and pain she experienced back then. A crafted chair, a cubicle, a recording, and the presence of the narrator in front of me comprised an arrangement that permitted my embodiment of similar emotions as well. However, by exceeding the temporality of our encounter, the curator's story put me in contact with similar ones from the past years in other locations. The vivid narration reminded me of the hundreds of families in similar situations, both back then and at the time of writing.

Back in the stand, the curator invited me to stay and help her to deliver the headphones to participants. People initially participated in the arrangement without a clear idea of its purpose. After the audio finished, some participants cried, others thanked the person in front of them, and others expressed their sorrow for the story.

The cubicles and the chairs were crafted by the curator and other members of her Campesino movement a few weeks before the fair. The wood and connecting pieces were taken from old desks donated by the town's school. Those participating in the crafting project drew on the carpentry skills of one of the community

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to exclusively address the social movement itself and not specific individuals within the group for which I would have switched to the inclusive linguistic forms in spoken Spanish (*campesina* or *campesine*).

members, who often worked as a carriage artisan in one of the traditional fairs of the region. While cutting, filing, and assembling the wooden pieces as four connected cubicles, the curator's main vision was of a face-to-face encounter between the visitor and the Campesino member. The initial idea consisted of crafting four separate cubicles, each of which would accommodate two people such that every participant and their host were isolated from their surroundings. However, this initial design turned out to be impossible because of a lack of raw materials. The alternative was to assemble four pairs of sitting spaces, each separated—but not isolated—from each other by a thin plank of wood. Given this restriction, and as an attempt to offer a greater degree of intimacy to the encounters, the curator came up with the idea of using noise-canceling headphones that might partially isolate the participant so that they could focus on the stories. However, the purchase of such devices was too expensive for the community; in addition, the stories, initially envisioned as being told directly by their protagonists, would now have to be recorded and played. Undaunted, the curator engaged in negotiations with different civil servants in the municipality to borrow three laptops and to purchase four pairs of headphones so that the display could be possible as part of the Campesino fair.

In these negotiations, the curator explained the purpose of their project to the civil servants. One of the main struggles of living in a Red Zone, as this particular Campesino movement did, was the social stigma that came with it. The curator explained that young adults from their communities were unable to find jobs when moving to the city because employers believed they were guerrilla or paramilitary combatants, or that they inevitably engaged in illicit activities such as cultivating coca. The purpose of the stand, and therefore of borrowing the laptops and purchasing the headphones, the curator explained, was to "make people feel their stories." As my opening vignette shows, the negotiations were successful: The curator and other participants in the project were able to record the audios and finish crafting the stand.

During my conversations with the curator and the other crafters engaged in the project, the name Empathy Chair emerged as a suitable one for the arrangement. At the time of writing, multiple Crafted Empathy Chairs (CECs), organized by different social movements and Collective Subjects of Reparation, are being displayed at street exhibitions, squares, protests, and marches across Colombia—even in protests and marches occurring during the pandemic. Their outcomes and diverse messages have not reached the visibility of the media, reparation indicators, or academic papers. But CECs and multiple variations of the same arrangement continue to draw audiences in every place they are installed.

How can we think about this instance of making and crafting? The CEC is an artefact that allows the curator and her team to grant passersby "access to their inner feelings" (Scarry, 1987, p. 37). The CEC is, then, a mediator that also translates the message it carries. My elaboration as a participant, the realization of my position of privilege, the intervention in the social imaginaries of participants about Campesinos from Red Zones, and the transformations triggered through reading about the CEC are only some of the multiple effects that such translation produces. The CEC is an example of other crafted arrangements by communities and social movements labeled as victims, internally displaced people, refugees, and migrants, mainly from different rural areas of Colombia and, more recently, from Venezuela. These arrangements permit their audiences to engage in practices of recognition of the painful experiences embodied by people whose everyday lives are constantly pierced by the armed conflict. This attentiveness similarly makes participants concerned with and responsive toward (Tronto, 1998) the conditions of vulnerability communicated by people like the curator and her community. The CEC thus opens up spaces in which its audiences may (or not) engage in new practices of solidarity and trust (Tronto, 2012) toward

the protagonists of the stories—those same people who are, of course, standing in front of their audiences to make a stronger claim with the presence of their bodies.

As an instance of technology, the chairs, cubicles, and headphones displayed in a stand in the middle of a main square are not the final goal of the arrangement. Instead, the narrated stories and the presence of those who narrate are crucial to the CEC. Equally crucial is the affective engagement of the audiences and their potential involvement in practices of solidarity and care toward Campesino movements or any other people directly affected by the violence of the armed conflict. Tangible objects may be part of the CEC, but a central role is played by the communication taking place and the affective exchange in which subjective states (Derksen, Vikkelsø, & Beaulieu, 2012) and their attendant feelings and emotions emerge through the whole arrangement.

### Discussion

We have presented snapshots of empirical work with two very different communities: U.S. hacker- and makerspaces in the early 2010s, and a Campesino community involved in creating a “crafted empathy chair” in post-accord Colombia in 2015–2016. Both groups rely on, and integrate, different forms of technology and crafts. Hacker- and makerspaces are in many ways predicated on “access to tools,” and participants in them talked about the value of such technologies and their pleasure in them, while the curators behind the CEC “hacked” together audio and other materials from diverse sources to craft a particular kind of intimate experience for their audiences. As we have shown, however, as communities they exceed and overflow their use of technology, which is viewed as just one part of a wider set of relationships and affects. For hackers and makers, an experience of community was key to making sense of their participation, with this community being multiple and affective. The CEC is similarly an affective technology, designed to create intimate and emotional encounters that may go on to nurture practices of solidarity and care. In both cases, these communities can be understood as being configured through situated practices of care and affective experiences of intimacy, solidarity, and repair. Needless to say, there are important differences in what is being repaired and what solidarity stands for in each case, and these differences far exceed our discussion here. However, we would suggest that those situated practices of care and attentiveness might be understood as key alternative imaginaries within tech-oriented communities (see Toombs et al., 2015). On the one hand, care functions as an alternative to predominant ideologies, such as technological determinism, techno-optimism, and individualism within U.S. hacker- and makerspaces; on the other, the crafting together of innovative combinations of technology and face-to-face communication opens up possibilities for everyday forms of reparation that are an alternative to, challenge, and coexist with, the reparation policies of the Colombian state and to public imaginaries about the people inhabiting Red Zones.

Our discussion thus contributes to literature on tech communities, discussed above, that has identified the central role that care plays within them and argued for the necessity of scholarly attention to practices that go beyond making, crafting, innovation, and technology development (Braybrooke & Smith, 2018; Castelblanco Pérez, 2021; Chachra, 2015; González-Arango et al., 2022, Toombs et al., 2015). We have similarly described how even archetypal tech-oriented communities such as hackerspaces are experienced as exceeding their orientation to technology. Rather, affect and care are embedded in the socio-

material relationships of tech communities, while conversely material and technical practices (e.g., of hacking, making, or crafting) participate in shaping specific practices of care and forms of affect. Our research thus highlights the continuing need to study tech communities on their own terms, through the meanings and productions that circulate within them, rather than or as well as through an expectation that they are centrally “about” technology.

Our central argument is thus that tech-oriented communities are not necessarily tech-centered. This is particularly clear in the case of the CEC, which uses forms of technology and craft to make visible the consequences of war violence in rural communities. In doing so, it mediates an attention shift (Savransky & Stengers, 2018), potentially allowing its audiences to engage in new forms of attentiveness, responsiveness, and solidarity toward people endangered by war. The matters of concern (Latour, 2004) in hacker- and makerspaces were more various, but always involved entanglements between technologies and other entities, affects, and relationships. Neither technology nor crafted objects were the object of concern—the main thing for which those in the community need to care—in these communities. In the case of hacker- and makerspaces we certainly find deeply affective relationships involving responsiveness and responsibility for nonhuman actors that are traditionally neglected in conventional technoscientific practices (Puig de la Bellacasa, 2017), while the CEC curators also care for the technologies that allow them to craft a particular experience for audiences. Again, though, such attentiveness toward “tech” is not the primary purpose of these communities.

We instead frame the use of technology in such communities as *material modes of engagement that permit affective exchanges among community participants*. For participants in hacker- and makerspaces, engagement with technology produces a community where responsibility and solidarity are part of the affective atmosphere. Similarly, the arrangement of chairs, laptops, headphones, and audio in the CEC allowed for new relationships among its human participants, such that the technology opened up alternative forms of public, but at the same time intimate, recognition of the experiences of those directly affected by war. In both cases, the use of technology is embedded in collective practices that activate intimate relationships of attentiveness, responsiveness, and solidarity among the members of the community with specific material contexts as well as with other audiences.

In this respect, our findings help us to think of the term “tech-oriented communities” otherwise, opening up new dimensions into what matters within them. We suggest that the notion of “more-than-tech communities” helps us capture the implications of our observations regarding care and affective exchanges. With this notion we aim to make sense of the ways in which tech communities often exceed their orientation toward, and use of, technology. There will always be more at stake than relationships and interactions with technology. The achievements of tech communities cannot be reduced to their use of technology, although such achievements (building a community, crafting a particular experience) are still mediated by it, and shaped by its material affordances. Thus, to talk about more-than-tech communities is, first, to acknowledge that there is an excess that conventional discussion of tech-oriented communities cannot capture; second, to emphasize the relationality of communities of which tech is a part; and, third, to acknowledge that these relationships are also affective while still mediated by the material conditions of technology.

Though the specific kinds of relationships involved and the affective dynamics at play differ widely among different communities, as our examples have demonstrated, the term “more-than-tech communities” calls our attention to the complexity and heterogeneity of any particular community that is oriented to or makes use of technology. It further encourages us, as researchers, to explore what is at stake for, and what is going on within, such communities. To engage with more-than-tech communities is thus to train ourselves in new forms of paying attention to the specific achievements of communities and spaces beyond their orientation to technology.

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