

Coding Caring Workshop Report

May 28-29, 2019

Themes

(1) Care is Relational Not Transactional

Care is a process that requires commitment, responsiveness, respect, and reciprocity, among other values and virtues. Care is a variable experience that remains an open-ended and ongoing process because of differences between care-givers and care-receivers. A recurring example of a fundamentally human-human form of communication as part of care was the presence of touch. Furthermore, care is embedded within a community: networks of people care for one another and foster a community around the care-receiver. For these reasons, care is not a dyadic, routinised, commodifiable, outcome-oriented service or product and hence cannot be codified into procedural algorithms.

(2) Caring Takes Time and Vulnerability

Time emerged as an important factor in care: the best care involved making and giving time. We have limited time and “spend” time caring. Care involves selflessness, discomfort, or vulnerability on the part of the care-giver. This discomfort also marks a recognition of the care-giver’s feelings by the care-receiver or their loved ones. Insofar as vulnerability and taking time are constituents of care, efficiencies through automation to save time may come at the expense of care.

(3) Care Respects and Supports Autonomy

Sometimes the best care fosters the care-receiver’s independence and self-determination. Decisions about *what* to prioritize *when* are contextual and require deep concrete knowledge of the care-receiver. This knowledge will be difficult or even impossible to generalize in code (in digital or in ethical codes).

(4) Technology Can Augment Care

Care technologies could be a tool that enhances human-to-human care. Using AI-parsed X-rays can give diagnoses a higher degree of certainty. AI wheelchairs can encode therapists’ knowledge of children’s abilities. Here, technology plays “the role of scaffolding agential capacity at certain points.” This contrasts with technology that replaces human-to-human care relationships.

(5) Care Comes in Many Forms

Care practice can be distinguished into four categories: emotional support, instrumental support (e.g., picking up medications), complex medical tasks (e.g., wound care), and care coordination (e.g., understanding discharge instructions). As one participant put it: “Tech can help a lot with instrumental activities like cooking, taking your medication, shopping,

transportation. But then you get to the fundamentals of daily living: eating, toileting, dressing, etc. It's a little harder to imagine machines there. Finally, a huge part of looking out for older folk is companionship. You also need safety monitoring, sharing activities, reassurance and explanation, affection, concern, empathy, and presence. I have my doubts about robots' ability to contribute to these." Additionally, we can shift the need for care by changing the environment. For example, a wheelchair ramp outside a house allows an individual get to the door herself. Ageing in place and institutional care will require different kinds of technological interventions.

(6) Problems of Care are Primarily Social, Political and Economic, Not Technical

Caring technologies might be market-led 'quick fixes' for larger political, social and economic problems. Participants observed a lack of economic structure that honors and supports care work. Whereas innovation is valorised, care-givers are stigmatized, in part due to the stigma of vulnerability. We need to acknowledge issues of gender, race, and class when we talk about care practices and labor, and be careful not to reinforce inequities in the technologies we build. Design and data should not cater exclusively to the norm of the nuclear family given other types of communities and valuable social roles. An ethics of care should be a way of seeing technology as part of social, political and economic systems and not be exhausted by a set of instructions or principles.

(7) Current Notions of Care Need to be Rethought

Discussing AI and automation in care allows us to confront fundamental notions of care and opens the possibility of creating points of intervention and new coalitions. One way to rethink care is to understand the role of the designer in the caring ecosystem. Is the engineer of a caring technology taking part in care work? Is she properly placed to understand the context of use? Will the engineering process incorporate a diversity of voices? Will it involve caregivers and care receivers? Will it create new forms of labor through its maintenance?

(8) Care Technology Produces (Negative) Externalities

Technologies are changing care norms in deleterious ways. For instance, technologies frame care as solvable and amenable to technical rather than social or economic approaches. One example of this is the substitution of machines for human laborers or family members. Many technologies to prompt individualistic approaches to care. For example, VR treatments for veterans with PTSD is an individualistic technological approach. Care technologies risk to deskill embodied knowledge as AI replaces human judgement. Finally, technologies risk creating new inequalities as human forms of care become a luxury item, accessible only to the rich.

Conflicts

(1) Can Technologies Care?

An overarching conflict regarded the question of whether caring is a uniquely human or animal activity. Most if not all participants seemed of the view that technologies do not care because they are 1) limited in their ability to interpret complex situations 2) should not be ascribed agency beyond the technical attributes they were designed to have, and 3) are not moral and have “nothing to lose and nothing to sacrifice by virtue of its care work.” It was also thought that even if a person felt they were being cared for by a technology, this emotion or perception would not meet our criteria of human dignity and flourishing. “Care may be uniquely human. Anything beyond that is a perception, a support, or a tool.”

However, some participants raised questions about this view. For instance, self-sacrifice or altruism could fall within the realm of robotic care, whereas humans can be disinclined to altruistic behavior. To imagine that humans will always deliver good, ‘genuine’ care is to romanticise the caring process and place demands on the care-givers – perhaps care from machines could offer a more dignified process in some cases. Others pointed out that technology could support people – particularly the elderly infirm – in their capacity to *care for*, even if that care was for a technology.

(2) Could versus Should?

Just because something *can* be built doesn’t mean that it *should* be built. Others counter that this distinction is irrelevant because the ‘tech is coming’. Questions persist, however, about what mechanisms should be for intervening in technical designs and policies around AI care. “We need to speak loudly about how robots should assist in care, and not assume that we can just build it and it will work out.”

Recommendations

- Technologies of care should have limits and should be subject to regulating bodies and pre-market approval.
- Care technologies should not be market-led. Regulators, developers and funders should ask if resources could have gone into supporting human care.
- Care technologies should be tools that aim to supplement or augment caring relationships and should be integrated such that they respect the values of those relationships.
- The development of any caregiving technologies should advocate for a) intersectional design and b) the engagement of care-givers and care professionals in their design.

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