Care, labor and design: <u>An</u> <u>intersectional approach to Computer</u> <u>Supported Collaborative Work</u>

### Amelia Abreu

UX Night School/Abreu Consulting Portland, Oregon, USA amelia@abreu.co

#### Abstract

In order to work from positions of intersectionality, Feminist CSCW scholars and practitioners would be well served to contemplate one broad topic: care. We can contemplate human care work, in its ethics, politics, and poetics, as a form of physical, technical, affective, material and immaterial labor, as a technical application of vast bodies of knowledge.

This paper proposes three areas where focusing on care, broadly defined across public, industry and private spheres can change our perspective as we explore race, class, gender, and power in the design of socio-technical systems: care as a grounds for intersectionality, care as collaborative work, and the role of care in building and maintaining technologies.

## **Author Keywords**

Computer Supported Collaborative Work (CSCW), Design Research, Caregiving, Labor.

# **ACM Classification Keywords**

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

## **General Terms**

Design, Human Factors, Theory

Copyright is held by the author/owner(s).

### Introduction

As we enter 2017, there is one central issue which seems to call out our attention as intersectional feminists working in, around, or in applying the lessons of Computer Supported Collaborative Work: care.

Human caregiving work, and the collaborative experience of both giving and receiving care and performing its labors, is already, as part of human social life, subject to surveillance, automation, algorithmic abstraction, and other everyday interactions with computing. It is an activity that is at times immersive but also casual. We can contemplate human care work, in its ethics, politics, and poetics, as a form of physical, technical, affective, material and immaterial labor. Care is highly technical at times, applying vast bodies of knowledge: the push for "evidencebased" care [Panzarasa et al, 2002] serving as a prime example. Since its inception, the CSCW community has looked at tools that helped to centralize knowledge and create communities of practice online, often for the purposes of care work either informally [Berg, 1999], or in institutionalized settings [Fitzpatick and Ellingsen, 2013]. Yet, despite fundamental work at this intersection of care work, gender, and technology, [Turkle, 2012; Hardt and Negri, 2001] feminist scholars are often politely taciturn about systematic issues of race, class, and gender, especially those close to their own environs. What does a critical design approach [Bardsell and Bardsell, 2013] focused on care allow us to gain in terms of intersectional understanding?

In order to build more robust critical frameworks for design, this paper proposes three foci for better framing care works: care as an intersectional issue, care as collaborative work, and existing gaps in understanding care work's relationship to computing.

# Care as an Intersectional Issue for CSCW

There may be no more intersectional issue than care for feminism, especially in examining the presence and representation of marginalized people in building and maintaining technologies.

Women of color are disproportionally wellrepresented in the global caregiving labor forceoften as migrant laborers and in low paying positions lacking the protections of most other global industries. [Yeates, 2005; Parreñas, 2000] Yet, as women of color, we are disproportionally under-represented in academic STEM fields [Ong, et al, 2011]. In industry computing and technology white women are subject to attrition rates that are cited as high as 50% by the tenyear mark; for women of color, queer women, and other underrepresented groups, attrition figures and the corresponding data is not available . [Hill, 2010]. To understand care work as technologists requires us to understand the anti-patterns that account for women of color's absence from one industry and presence in another.

Yet, in recent years, technologists have been subject to a revival of "corporate feminism" or "white feminism". The self-proclaimed movement, embodied by figureheads such as Facebook COO Cheryl Sandberg, who in the book by this title, urges an implied educated, cisgendered female audience to "lean in" to corporate labor. It advocates, as means of women's advancement, practices of outsourcing caregiving labor (such as hiring household laborers) or by using technological interventions (such as egg-freezing and surrogacy procedures) in order to postpone reproductive labor and caregiving responsibility or avoid it altogether. This brand of feminism places a market value on caregiving labor rather than to problematize it in global contexts or reframe it as essential operational support to capitalist production [Federici, 2012].

We may also consider care as a grounds for intersectional feminist action in conjunction with queer and trans social activism. As accounts and studies of the AIDS era demonstrate [Cvetkovich, 2003], care and recognition of care work is deeply political and politicized.

# **Care as Collaborative Work**

#### Caring for my Daughter

Care, is by nature, collaborative, as the quality and efficacy of care depends both on giving: performing the work processes (to borrow Cowan's frame), and receiving care. Often, as studies in Nursing and other fields have shown, care is performed by a team that must work in sync: Nursing charts allow for care workers to keep record in order to give continuity of care [Bowker, Timmermans, and Star, 1996].

In order to illustrate the collaborative and networked aspects of care work, I will use as example, some of the processes of care work I perform in caring for my daughter.

On a typical weekday morning, when my five year-old daughter is in my care, I have a "routine" of tasks in which I either perform for her or help her in: I'll begin by waking her up, then helping her go to the toilet. I'll then, along with my own dress and grooming tasks, help get her dressed for the day, help her brush her teeth and wash her hands and face. I'll "do" her hair for the day by combing, braiding, or tying it back: her hair is naturally kinky and curly, so the work of keeping it neat and tidy is work towards a certain type of race, class, and gender presentation. [Collins, 1994] After grooming, we'll then eat breakfast: I typically prepare her food, eat with her, then prepare her school lunch. Then, to prepare to leave for school for the day (and my "work day" outside of our home), help her put on her coat, transport her to her school (either by car or by bike), then finally, "do drop off", meaning walk her to her classroom, help her put away her coat and her lunch and engage in casual interaction and conversation with fellow parents and and children and the school's teachers and staff.

These tasks and processes are coordinated with other care workers, negotiated through individual acts, and done according to particular situated knowledges. Care work is both collaborative and technical, often requiring different styles of collaboration and disparate knowledges. As anyone who has cared for a child knows, they are often difficult collaborators: navigating their care often means negotiation, questioning, and explanation of one's own logic.

Moreover, my presence as a caregiver requires communication and collaboration in my absence: I must communicate the results of routine activity to others when my daughter is with her father, or in the care of a friend, family member or hired babysitter. These actions are repeated by other actors when intersect, and re-appropriated across domains. We accomplish this through verbal communication, text messages, handwritten notes, emails, and shared documents, along with other communication and collaboration technologies and solutions.

# **Missed Connections: Care and Computing**

The previous arguments can lead to the third: that care is a human constant that computing has failed to fully theorize or problematize. All humans receive care from others during their lifetimes: in early childhood, during times of sickness or duress, in the form of everyday operational assistance (such as the work of cooking and cleaning), or at the end of life. Moreover, it is access to care that remains a crucial feminist issue, with issues ranging from access to reproductive healthcare to elder care and AIDS health activism. [Sontag, 1989]

Yet to return to Cowan's [1983] frame, the work of care (which often takes place across locations, domains and institutions is industrialized, if not fully realized or supported.

For the CSCW community, understanding and supporting care can also allow us to examine our assumptions in terms of domain. We tend to conceptualize care as a problem of the private sphere, which is possibly why we take privacy seriously in terms of medical or health information. In building technologies, the motivations for information security is ostensibly informed by care ethics or care politics. [Dourish et al, 2004]

However, care happens in both the public sphere and commercially, and often in a hybrid manner, with, for example, the United States' fast-growing private prison industry, or in the case of global medical tourism. Care ethics, care politics, and care poetics can help shape the next generations of technology, including those security features and Internet of Things devices.

As technologists and scholars, to support the collaborative work of care means to develop efficient, usable, accessible, privacy-enabled, and meaningful interactions with technology both emerging and extant.

# References

- Bardzell, Jeffrey, and Shaowen Bardzell. "What is critical about critical design?." Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. ACM, 2013.
- 2. Berg, Marc. "Patient care information systems and health care work: a sociotechnical approach." International journal of medical informatics 55.2 (1999): 87-101.
- Bowker, Geoffrey C., Stefan Timmermans, and Susan Leigh Star. "Infrastructure and organizational transformation: Classifying nurses' work." Information technology and changes in organizational work. Springer US, (1996). 344-370.
- Cowan, Ruth Schwartz. More work for mother: The ironies of household technology from the open hearth to the microwave. Vol. 5131. Basic Books, 1983.
- Cvetkovich, Ann. An archive of feelings: Trauma, sexuality, and lesbian public cultures. Duke Univ Pr, 2003.

- 6. Dourish, P., Grinter, R.E., Delgado de la Flor, J. et al. Pers Ubiquit Comput (2004) 8: 391.
- 7. Federici, Silvia. Revolution at point zero: Housework, reproduction, and feminist struggle. PM Press, 2012.
- Fitzpatrick, Geraldine, and Gunnar Ellingsen. "A review of 25 years of CSCW research in healthcare: contributions, challenges and future agendas." Computer Supported Cooperative Work (CSCW) 22.4-6 (2013): 609-665.
- 9. Hardt, Michael, and Antonio Negri. Empire. Harvard University Press, 2001.
- Hill, Catherine, Christianne Corbett, and Andresse St Rose. Why so few? Women in Science, Technology, Engineering, and Mathematics. American Association of University Women. 1111 Sixteenth Street NW, Washington, DC 20036, 2010.
- Collins, Patricia Hill. "Shifting the center: Race, class, and feminist theorizing about motherhood." Mothering: Ideology, experience, and agency (1994): 45-65.
- Ong, Maria, et al. "Inside the double bind: A synthesis of empirical research on undergraduate and graduate women of color in science, technology, engineering, and mathematics." Harvard Educational Review 81.2 (2011): 172-209.
- Parreñas, Rhacel Salazar. "Migrant Filipina domestic workers and the international division of reproductive labor." Gender & Society 14.4 (2000): 560-580.

- Panzarasa, Silvia, et al. "Evidence-based careflow management systems: the case of post-stroke rehabilitation." Journal of biomedical informatics 35.2 (2002): 123-139.
- 15. Sontag, Susan. "AIDS and its metaphors." (1989).
- Yeates, N. Global Commission on International Migration (GCIM), Global Care Chains: A Critical Introduction, September 2005, Global Migration Perspectives, No. 44.