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Control vs. Care: Frameworks for Systems Redesign During COVID-19

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Frameworks for Systems Redesign During Covid-19

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Purpose of Workshop

The scale and urgency of the Covid-19 pandemic have strained social systems both locally and globally, warranting a spirit of creative resourcefulness in tending to the crisis while new specially-tailored systems are conceived. In the face of this challenge, a jarring clash often occurs as socio-technical systems, with their pre-existing design priorities, simply reposition their services in response to the new demands of a public health emergency. As communities struggle to resume work, education, and entertainment, a persistent design question lies at the center: what *should* we be optimizing for in this new context, and how might the values of our available systems support or hinder that aim?

This design challenge finds an important ally in Bioethics, which helpfully introduces comparative frameworks of Control and Care drawn from the practice of health, medicine, and nursing. These distinctions are extensible to the assessment and reimagining of non-medical socio-technical systems. In this workshop, we'll examine a variety of systems we observe in this situation, introduce the history and principles of these frameworks, and operationalize them as design tools.

So-called "smart access" systems are one such example of an existing system being repurposed in response to Covid-19. These products, previously marketed as "automated, contactless property management solutions," are now touted as a means to secure the acute health and safety concerns of a building's occupants. These systems are visible throughout commercial buildings, often connecting peripherals such as thermal scanners, biometric readers, mask-detection cameras, and human security attendants.

When observed through a framework of Control, core attributes of the existing system design emerge: an architectural paradigm of "compatibility," a single-direction data authority structure, and a broad subjugation of human users without mechanisms to declare consent. Reframing the design analysis through a framework of Care reveals the system's centering on asset security at the expense of the dynamic social environment it is purported to support. A framework of Care also reveals alternative priorities, such as the privacy and well-being of people that encounter the building, or a notion of sustainable community that contrasts with paternalistic surveillance.

This designerly approach to comparative analysis also provides a foundation to inspire forward-looking systems thinking and design. In the case of "smart access," how might these systems better sense and support the health and safety needs of the surrounding community? By

leveraging the frameworks, value-driven design responses emerge, such as disclosing readings only to the assessed person, automating targeted maintenance services, and including local health authorities as participant stakeholders of the system. Stepping back from the present context of Covid-19, we can ask how these insights might fundamentally change the design of systems to contribute more responsibly to sustainable and equitable societies.

Workshop Goals

The goals of this workshop are to:

1. Introduce system-value alignments in context
2. Translate Bioethics frameworks of Control and Care to frameworks of systems thinking
3. Identify opportunities to enhance the practical methodologies of systems design to center on the sustainable well-being of individuals and society.

Through this workshop, we expect to:

1. Generate a collection of example cases (including initial comparative analyses through the frameworks of Control and Care, as well as sketches of imagined alternatives)
2. Refine a translational framework of systems of control versus systems of care to share with the greater RSD and System Design community

Workshop Reflection

In keeping with RSD9's theme of systemic design for well-being, the workshop homed in on the difficulties in drawing distinctions between care and control as surveillance systems have found traction as public health tools during a pandemic. As one participant put it, "Surveillance went from spying to 'taking care of you' in a heartbeat."

Thermal scanners served as the introductory case study for the workshop. These products have previously been deployed as red-light traffic cameras, weapons detection instruments, and border surveillance. As societies struggled to respond to Covid-19, thermal scanner vendors re-positioned these technologies as essential tools to any community health strategy. For example, some advertisements now featured thermal scanner systems as a pathway for employers to return employees to their places of work. However, the technology's original design prioritized the control of environments—and the people within them—by remote administrative authorities responding to an adversarial condition. Doubts about the devices' qualifications for medical use, such as the (im)precision with which they are able to detect a person's body temperature, were quickly followed by concerns for privacy and well-being of employees. What are the risks when employers begin tracking workers' — or visitors' — health data, and what response would actually support employees if they were turned away by automated health screenings?

In looking toward other systems for evidence of care, participants pointed to constructive examples such as distilleries pivoting to produce hand sanitizer and cloud kitchens working to

feed migrant populations. There was a marked contrast in response to interventions originating within a community versus a corporation, and trust was a key factor. Selflessness on the part of the organization assuming responsibility for care-giving was another.

Following the workshop, the facilitation team will continue researching technological function creep and developing a care-oriented design framework. Scenarios will continue to focus on technology designed to manage building environments, in particular residential development and institutional spaces such as schools and health care facilities. In developing an alternative design framework addressed to this growing industry, our aim is to enrich the design process of these products, businesses, and regulations; to prioritize constant assessment of the qualitative and social dimensions of their impact; and to advocate for the representation of people affected by these systems.

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