SHOT 2020 Unconventional Session Abstract

Making and Doing History: On Non-Traditional Modes of Critical Engagement

Feminist STS scholars Frances Bronet and Linda Layne suggest that we should not "sit back and offer post facto critiques of new technologies, but [instead]... intervene to proactively influence design" ("Teaching Feminist Technology Design," 179). Historians of science and technology are particularly well-positioned to intervene in this way, and in fact have already been doing so. This unconventional session, a mixture of roundtable and guided group discussion, will highlight such work and offer a space for collective reflection to discuss methods that mobilize our historical research towards a future that is anti-racist, feminist, and inclusive. During this session, the panelists will share their critical making and activist projects and introduce how their historical research informs this work. These projects take many forms: multimedia design exhibitions, participatory design projects, critical mappings, public humanities and activist approaches to teaching history, and beyond. Much of this work follows the recent slew of prominent scholarship bridging race studies, feminist STS, and the history of science and technology.

Each panelist will present a brief (5 minute) introduction of their work, but the majority of the session will be devoted to a facilitated discussion by the organizers that will form the basis of a "best practices" document that shows how historians can better center social justice and critical making practice in historical research. The organizers will take extensive notes during the discussion and compile the group's insights into a public-facing document. In this facilitated discussion format, the organizers hope that this panel can provide the SHOT community with a template for "engaged scholarship" that directly pushes back on traditional academic spaces which privilege few perspectives and enforce audiences to largely receive, rather than contribute, to a session's content.

Panelists:

Crystal Lee (MIT)
 Laine Nooney (NYU)
 Mar Hicks (Illinois Institute of Technology)

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Mar Hicks (Illinois Institute of Technology)Bess Williamson (Art Institute of Chicago)

Whitney Pow (Northwestern/NYU)

Xiaochang Li (Stanford)

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Speaker contributions and abstracts

Since this panel will function primarily as a facilitated discussion with only a small portion of the time devoted to paper presentations (~5 minute per speaker), the contributions of each speaker and the speaker abstracts are combined here.

Crystal Lee conducts research on two registers: first, she is a historian and ethnographer who takes computational visualization as a subject of historical inquiry, and second, she is a human-computer interaction (HCI) researcher seeking to make data visualizations more accessible. In this panel, she will discuss her current project, which draws on the long history of tactile information systems to then investigate, inform, and critique the current practice of making multisensory data visualizations in computer science and HCI research.

Ranjodh Singh Dhaliwal (rjdhaliwal@ucdavis.edu) will talk about his practice as a designer and developer of video games for social awareness and citizen science. Drawing on his experiences working as an academic historian and software developer with multicampus teams doing research on biochemistry (for the game FoldIt) and global ecologies (for Frack! The Game), he will outline some possible relationships between scholarship and critical making, for pedagogy, social justice, and for multidisciplinary inquiry.

Producing scholarly work in video game history offers a high potential for public impact beyond the academy, gamers and game developers are highly connected on social media, and share tremendous enthusiasm for their medium of choice. Laine Nooney (laine.nooney@nyu.edu) will discuss how she has navigated that kind of visibility and mode of public outreach over the past five years, through a range of activities including writing for mainstream outlets, serving as a subject matter expert for journalists, running a game history themed twitch stream, founding a "hybrid audience" journal that solicits work from non-academics, circulating her research on social media, and presenting her work at game industry conferences, for game developer audiences.

As a historian of technology who focuses on the history of labor, gender, and sexuality, and works in a predominantly male, tech-focused engineering university, **Mar Hicks** (mhicks1@iit.edu) spends a considerable amount of time thinking about how the histories of technology they write can serve the populations they teach—and not just while they are doing their degrees, but later, as they get out into the workforce. For their remarks on this panel, Hicks will talk about how labor activism in the tech sector (both now and in the past) has influenced their historical practice, as well as how their background as a former IT professional influences which stories they see as integral to understanding the past, present, and future of the large technological systems with which we have to interact as workers and citizens.

Bess Williamson (<u>swilliamson1@saic.edu</u>) will discuss how historical work on disability technologies and accessible design informs pedagogy and advocacy for disabled students, faculty, and staff. Class exercises critically examining the technologies of education

(classrooms, online course software, digital documents, etc) link histories of disability rights to current technologies of access.

Critical design and art practice can shape how we understand and teach the history of interactive technologies. Whitney Pow (whitneypow@u.northwestern.edu) will speak about their experience as a digital media historian and artist practitioner and their work designing games and interactive art that locates queer and transgender life in video game and software history. Bridging the gap between the constraints of "back-end" design intent and "front-end" user experience is an important component to understanding interactive technologies. Whitney will discuss using game engines like Unity to teach students about critical approaches to space, power, and colonialism in game and software history, as well as their experience as a public historian and designer who has exhibited their work and spoken at arts festivals like Ars Electronica, Chicago art galleries, game design workshops, and video game festivals.

Xiaochang Li (xiaochangli@stanford.edu) will examine the promises and the perils of both practice-based engagements across critical and technical disciplines as well as collaborations that bridge academic scholarship and industry. Drawing on experiences that range from co-founding a start-up the midst of PhD research to teaching in an institution that feeds directly into Silicon Valley, she will discuss how non-traditional collaborations can shape research, teaching, and mentorship. This discussion will also aim to open up questions about our ethical and intellectual commitments as scholars and how to navigate pressures from tech and related industries at the institutional level.