

Eric Cook: Research Statement

In my research, I focus on addressing the role of technology in facilitating amateur and everyday creativity. The overall goals of my research are two-fold: a) providing rich description of existing and emergent socio-technical contexts and practices; b) generating new theory of everyday creative practices, as mediated by technology, culture, cognition and sociality. Together, these goals inform our understanding of behavior and our constructed environment, as well as being directive to the design of new tools and new socio-technical settings. I approach these two goals via the main themes of my research: understanding the connections between *technology and creative practice*, and the use of *technology in building and sustaining psychological well-being*.

I take creativity as fundamentally collaborative in character--enacted on multiple simultaneous levels, encompassing interactions between creative partners, overlapping communities of practice, accumulated cultural resources, audiences real and perceived, and the individual creator's own reflection on their past activities. Creativity rests not just in one individual's abilities, but also in the window of opportunity presented to them by their historic, cultural and social positioning; between the tools, knowledge and resources of their domain, the gatekeepers and norms of their field, and the skills, motivation and agency of the individual.¹

Researchers of end-user innovation, civic policy, computer-supported cooperative work and human-computer interaction have all argued over the past decade for the importance of studying and facilitating creativity via technology². Recently, this push has received additional institutional and financial support in the form of the National Science Foundation's CreativeIT program. I believe that attending to everyday creators in context is the most fruitful approach to this broad call, and have oriented my work accordingly. If we are to successfully design the next generation of information systems to support the creativity of the greatest number of individuals, we should not focus just on genius-level exemplars, but rather on the types of personally creative activity and work that millions already engage in every day. Similarly, if we are to get an accurate representation of the types of issues, affordances and tensions that impact everyday creative activity, we must consider that creativity in context, where the context includes tools, audiences, peers, and the broader culture.

¹ Discussion of this socio-cultural model of creativity can be found in: Csikszentmihalyi, M. (1996). *Creativity: Flow and the Psychology of Discovery and Invention*. New York: HarperCollins.

² For a summary, see: Mitchell, W. J., et al (Eds.). (2003). *Beyond Productivity: Information Technology, Innovation and Creativity*. Washington DC: National Academies Press.

In a 2009 paper³, I investigated these issues through a qualitative study of an online creative community. The study analyzed the user community of the Reaktor software package, a commercial music production environment designed for the creation of customized and idiosyncratic virtual musical instruments. By focusing on a critical incident surrounding a contentious community contribution, my co-authors and I found four topics of specific importance to creative communities. The topics included: contribution assessment, support for learning, perceptions of audience and tensions about commercialization. We used the analysis of these four topics to explore both the value and problematic aspects of simultaneously designing for amateur and professional users in online creative communities. In doing so, we highlighted a fundamental tension in creativity-support technology--facilitating individual customization versus designing for community maintenance.

In my current program of research, I investigate everyday media production and sharing. Specifically, I ask how individuals' everyday media use relates to their *well-being practices*. Much of the existing research on social technology focuses on construction of identity, biography and self-presentation, but often stops before considering what psychological benefits individuals may gain through these activities. We can consider this issue through the lens of well-being, a concept often addressed in positive psychology literature. Although sometimes operationalized in a narrow fashion, focusing only on affect levels or only on social support, the concept of well-being can be dealt with in a more robust fashion. , I argue we should consider well-being not as a status level, but instead as a multifaceted and interrelated set of practices for the development and maintenance of positive psychological states, deployed with the particular social and technical resources available at hand.

In turn, I believe a more theoretically nuanced concept of well-being to be deeply informative in responding to some of the most persistent and as yet unresolved debates about the influences of technology on both the individual and on our culture: Are recent developments in information technology facilitating the development of new forms of community, or are they causing more social isolation? Are they helping you stay connected or eroding our civic engagement? Is technology empowering the individual creator, or fostering a culture of mediocrity? While these dichotomous arguments highlight the strength of opinions on such issues, they also obscure a more subtle and conflicting reality. One of the primary contributions in my dissertation is to help our understanding of *when* and *how* creative technologies can help individuals build and maintain well-being, in all its multiple facets.

³ Cook, E., Teasley, S., Ackerman, M. (2008). *Contribution, Commercialization & Audience: Understanding Participation in an Online Creative Community*. Proceedings of ACM Group 2009, Sanibel Island, FL, May 10 – 13, 2009.

Dissertation Research

In my dissertation, I focus my investigation of everyday media production specifically on the domain of snapshot digital photography. This is a setting in which rapid and dynamic changes have occurred to the technologies of creation, storage and dissemination, while simultaneously building upon a century of entrenched content and use conventions. I treat current technology for the creation and dissemination of end-user media as *locations* for research, rather than the specific focus of the work. In doing so, I have positioned my research agenda to extend beyond the systems and context that are fashionable in 2010, addressing practices and behaviors that will persist into the foreseeable future, with interesting permutations.

Via qualitative methods such as semi-structured interviews, home observations and content analysis, I conduct research on how people use everyday digital photographic practices to organize and make sense of their lives, to communicate with known audiences and to build and support their well-being. In parallel, I ask how these biographical and well-being tactics are facilitated, hindered and altered by current technology. In addition to detailing the relationships between online photographic communication with friends and family and personal well-being, my data analysis also emphasizes the importance of self-as-audience, the reflective processes and curatorial processes related to photography as the symbolic organizing of one's life.

Future Work

Continuing the line of investigation in my prior work, I plan to conduct further studies of how individuals' everyday creative practice, technology use and well-being tactics are interrelated. The next phase in my research agenda has already begun through a recently-funded grant, "Learning from creativity in the wild: Leveraging the success of Creative Content Systems" (NSF Grant #IIS0855865). Conducted through the NSF's CreativIT program, I serve as co-investigator in the project with my advisor, Stephanie D. Teasley. In the study underway, we consider the massive growth of user-generated media sites over the past decade as success cases of technology-supported creativity, and seek to derive lessons from these cases in order to direct the design of future creativity support tools. In this project, I turn again to online photography sites as a location for data collection and contextualization, as systems such as Flickr.com and Photo.net feature diverse user based, including multiple forms of creative amateurs (ranging from communicative snapshot photographers and daily lifeloggers to serious hobbyists), as well as multiple degrees and types of professional (and would-be professional) participants. We plan a mixed-methods approach to derive the audience models of these different classes of user, allowing us to prototype technology with more appropriate audience awareness tools and feedback mechanisms in response to the differing needs of amateurs and professionals in user-generated content systems.

My work in the future will continue along these lines, starting with the rich and emergent behaviors of creative practices in the wild, and considering the relationships between individuals, social groups and broader cultural resources. Through this agenda, I will contribute to better understanding and more effective support for amateur and everyday creators. I will also continue to situate my work within a broader historical context. User-generated content systems such as youtube.com, flickr.com, etc. can be viewed as socio-technical settings that are both *transforming* and *revealing* creative production and dissemination, providing researchers with unprecedented access to the creative output of millions of users everyday. At the same time, it is important not over-privilege the story of transformation. Less-frequently told, but no less interesting, is the accompanying story of *continuity*. Many of the core social functions, use practices, and symbolic representations in amateur media have persisted for decades, despite changes in media, production costs and access to technology. In my current and future research, I seek to attend to both of these stories of everyday creativity in current computer-mediated settings.