

Professional goals and research interests: Owens Portfolio Two

Professional goals.

In light of my new permanent position as an Information Technology Specialist with the National Digital Information Infrastructure and Preservation Program at the Library of Congress, I have made significant revisions to my professional goals and doctoral program of study. Instead of looking for academic appointments, my intention is to continue working for the Library of Congress on the design, development, and promotion of systems that ensure preservation, access and use of digital cultural heritage materials.

While the topics of thinking and cognition are still important to the work I am engaged in, I have decided to shift away from educational psychology as my primary specialization to research methods. Additional understanding of social science research methods will significantly enhance my work at the Library of Congress. Specifically, the ability to interpret and synthesize research on cutting edge technologies will be much more important to my work than my ability to conduct large research projects. Much of my educational psychology coursework was methodological in nature, or focused on issues related to research design, methods, and measurement, and is thus still applicable. However, I have altered my program of study to include additional grounding in research methods coursework. I am particularly interested in qualitative methods and thus my program focuses much more directly on qualitative research approaches.

Research goals and interests

At this point, I have published three articles in peer-reviewed journals, a book review, an encyclopedia entry, and two entries in conference proceedings. I have presented at a range of peer-reviewed conferences, including the annual meetings of the American Educational Research Association, the American Historical Association, the National Association for Research on Science Teaching, and the History of Science Society. In light of this work I feel confident in my ability to continue to develop and conduct research.

This semester I am planning to continue my exploration of creative production in online communities by designing a study of Etsy. Etsy is a website where people, primarily women, create a web presence for selling handmade creative products. I am particularly interested in understanding how this site scaffolds its users into entrepreneurship, creative production, and the technical competence required to run an online storefront. I am in the early stages of planning for this project. I will design this study as part of my course with Dr. Kim Sheridan this semester.

In the long run, I feel that the work I have done exploring individual online communities will be instrumental in developing a more synthetic project that explores some of the issues I am interested in across a series of online communities. Specifically, I am interested in further exploring the part of my work that focuses on the components of the communities that enable and invite productive participation. I am ultimately interested in understanding how different technical systems invite and scaffold individual's

involvement and production in online communities that support creative production of media and knowledge.

My interest in games and learning led me to explore online communities in which game players are becoming game designers. Specifically, I had looked at web communities arranged around modifying the game *Civilization* and creating role-playing games with RPGmaker. Reflecting on this work, I can say I am much less interested in games and play than I am in the depth and character of the work that people, and in many cases young people, are engaging in these kinds of online communities. Furthermore, after reflecting on my earlier work in the history of technology and taking on my new position working on digital preservation at the Library of Congress, I can also say that I am less specifically interested in the learning that occurs in these communities and more interested in how differently designed systems support the creation of knowledge, creative productions and other content.

This interest has intersected with and emerged from my professional experience. In my four years of leading outreach for Zotero, a very successful open source software project, I saw hundreds, if not thousands of people commit themselves to helping to improve and help to design the software. In many cases, individuals came to the software development community with limited technical skills and abundance of interest and through guidance with individuals in the projects forums developed very valuable technical proficiencies with things like JavaScript, and metadata standards.

In these two very different kinds of environments, communities where young people chat about making video games and a community where graduate students and researchers work to improve a software project, I see a few important commonalities. In both places, individuals are committing to challenging projects that require significant time commitments and which require them to develop new technical competencies. In this respect, the communities of game makers are much more akin to open source software communities than communities of game players. People's commitment to involvement in both kinds of communities is not simply about fun, although participating and working toward goals is rewarding. Participants seem to be much more driven by a desire to contribute to projects that they find to be meaningful.

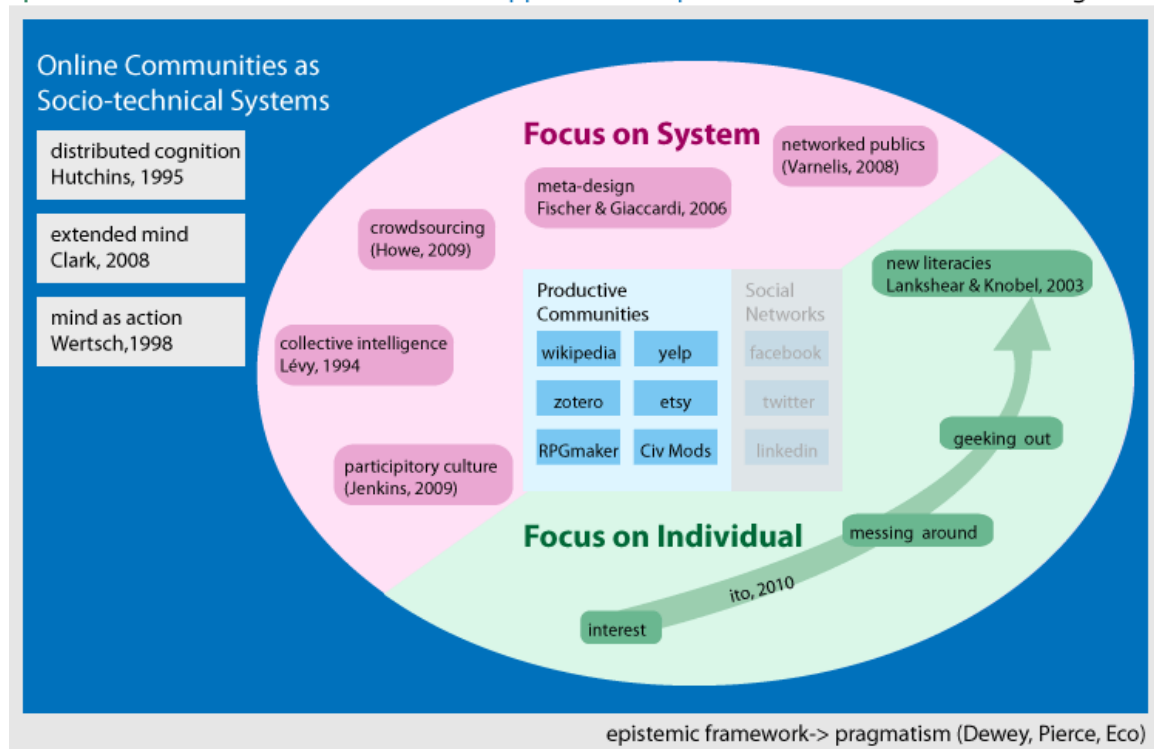
The remainder of this section on my research interests will walk through the pictorial representation of my conceptual framework.

Productive Online Communities

At this point, it becomes important to define exactly what kinds of online communities I am referring to. I am interested in spaces where individuals are involved in work, either the production of media or the production of knowledge. For example, Wikipedia is a community of individuals working to create an encyclopedia, RPGmakervx.net is a community of individuals working to create videogames, and Yelp is a community web site where members reviews of restaurants and services that serve as a reference and guidebook. While these are each different kinds of activities, they are all focused around a specific topic and are intended to produce media or knowledge. In contrast, social

networking sites like Facebook and Twitter serve as communications platforms, but they do not directly support the kind of work that I am interested in.

Understanding **how different technical systems** invite and scaffold **individual's involvement and production** in **online communities** that support **creative production** of media and knowledge.



Individual's Experiences and New Literacies in Online Communities

In response to demands for digital competencies, scholars have begun to frame media engagement and production skills as new literacies (Lankshear & Knobel, 2003). Online affinity communities, that is, websites and web forums where individuals discuss and create media associated with common interests, are increasingly being explored as places where young people are acquiring these new literacies (Gee, 2004). Through extensive ethnographic fieldwork, Ito and others found significant numbers of young people engaged in these communities are “learning to navigate esoteric domains of knowledge and practice and participating in communities that traffic in these forms of expertise” (2010, p. 28). Studies of fan fiction forums (Black, 2005), and videogame fan-forums (Squire & Giovanetto, 2008; Duncan, 2010) suggest that young people are acquiring valuable new literacy skills in these communities.

Of particular interest in this body of work is Ito's model for how individuals become active participants in these communities. She suggests that individuals begin engagement in these web communities through what she calls “messaging around”. In this early period of their engagement with a new web community, individuals are just dabbling with web communities that pique their interest. Ito's research suggests that through interactions with community members, many individuals move into a more involved stage that she refers to as “geeking” out. In this phase, individuals delve much more extensively into the

kinds of work occurring in these communities. This model resonates with my own studies of these communities, however, her generic model does not take into account the different kinds of designed structures which different kinds of web communities employ. I feel her work opens the door to explore how different kinds of community platforms and community structures affect the model of participation she proposed.

System Level Approaches to Online Communities

In the private sector, the principle behind these some of the sites I have mentioned is increasingly referred to as crowdsourcing (Howe, 2009). As a play on the term outsourcing, the notion of crowdsourcing focus on externalizing a company's production costs to a crowd of skilled participants. There is a growing literature in the business community discussing how this phenomena works. There is a need to better understand the nature of this form outside of profit motives. Non-profit organizations, government agencies, philanthropic organizations, arts-based outreach organizations and advocacy groups have also become interested in this phenomenon, and are eager to know more about how they could make use of this phenomena for the public good.

Henry Jenkins' notion of participatory culture (2009) effectively describes aspects of crowdsourcing but entirely focused on end users, individuals in the crowd of crowdsourcing. His idea of participatory culture holds that new social media forms are enabling consumers of media to act as producers. The idea of crowdsourcing requires participatory culture, but the studies of participatory culture have generally focused on what individuals are doing, learning and accomplishing at the expense of understanding the system they are engaged in. While we have learned a considerable amount from these user studies, principally that users are engaged in a range of interesting practices and developing a range of valuable skills, the next step in this space is to begin to understand how particular designs enable and foster uique participatory structures. It is not simply enough to acknowledge the skills and competency individuals are developing in many of these commercial spaces, to do so is to cede the potential of these designs to private interests. Instead, we need to extrapolate principles of design that can be used to develop these spaces as well.

Studies in engineering and design have begun to develop a vocabulary that can be deployed to contextualize the structures and designs that enable the participatory cultures which scholars such Jenkins and Gee have proposed offer such promise for learning with technology. This vocabulary has been developed in the professional literature of "Metadesign", which has developed a set of principles for designing systems that in turn enable end users to engage in their own design practices (Fischer & Giaccardi, 2006). These principles of metadesign are much more prescriptive than descriptive. They provide a way of thinking about these issues for design practitioners. However, they also can provide a basic language for interpreting how each of the communities participatory structures function.

In the business world, the idea of crowdsourcing is being successfully promoted and advanced as a model for generating revenue. Studying engagement of individuals with many of the same sites that advocates in the business community extol as examples of the profitability of crowdsourcing researchers interested in participatory culture have

suggested that participants are engaged in powerful learning experiences. Engineering and design fields have begun developing a vocabulary for defining principles of metadesign, principles for designing systems that enable participants to design. I would like to explore these different perspectives to understand the ecologies of a set productive web communities in action. I use the term ecology to evoke an equal consideration of the environment, the design of the structure of the sites that enable participation, and the actions and interactions of individuals within that structure.

The Individual and The System

In my diagram, I have placed work that focuses on individuals actions in online communities alongside work that examines the systems that those individuals participate in. I believe that it is possible to connect these two approaches through work that has extended Vygotsky's ideas about how thought is mediated by tools. Hutchin's work on how cockpit's control their speed and large navel vessels move about the sea (Hutchens, 1995 & 1996) offer specific frameworks for understanding the way in which individuals, other people, and tools distribute cognition throughout an environment. I see Werstch's ideas about *Mind as Action* (1998), and cognitive philosopher Andrew Clark's notion of the extended mind (2008) as essentially the same core idea. From this perspective, we can think about the structure and design of these systems as organizing and structuring the thinking and actions of individuals.

Academic goals

I intend to complete a primary specialization in research methods with a secondary specialization in instructional technology. Through these studies my objective is to develop as a researcher and scholar. At this point most of my remaining course of study includes further engagement and practice in research methods. I have read through the syllabi from previous semesters for each of these courses I am slated to take and am confident that this coursework will provide me with the experiences I need to further develop my competencies in methods and practices of for research about knowledge and production in online communities.

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