iSchool Proposal for Themed Wildcard Session on New Information Systems Methods

Susan Leigh Star and Marina Jirotka

'New Information Systems' is an emerging field composed of social studies of science (STS), information sciences (IS), workplace studies and technological design, and new media forms such as cyberinfrastructure or eResearch. Within this area we are exploring the connections and inter-relationships between empirical studies of information at knowledge creation and use, and methods from more traditional IS, social networks, grounded theory and ethnomethodology. The collective creation of a theoretically driven cluster at this juncture would tie us together in a convergence that would link our scholarship and enable students to access this strong and existing - yet invisible - college. We propose a "wildcard" session here that makes a space for people to speak about their methods, assess their viability for helping to build our emerging community, and hopefully to explore the "behind the scenes" actions associated with practicing any methods.

Such an event is most timely. At the recent meetings of the Society for the Social Studies of Science (4S), an entire day was devoted to the emerging intersections of STS and IS. In addition it should be noted that the same book, Memory Practices in the Sciences (G. Bowker, MIT Press, 2007), won the best book award at both ASIST and 4S. This might be seen as a harbinger for the deeply theoretical and methodological work that is to take place, if the intersection is to be a robust one.

Our research directions will be focused on studies of infrastructure, ethical actions that are inscribed into IS, and theoretical studies of questions such as 'what is useful information'? We need to unpack the contextual nature of knowledge creation and use. As well, we need to understand the ways in which it is entangled with obligations from different domains and communities of practice such as privacy, consent, anonymity, confidentiality, ownership and a whole host of organizational and professional matters. New media studies point to an intense overlapping and interrelationship of fields and disciplines.

Methods should come from a combination of (1) sensitivity to the historical moment (e.g., multiculturalism, extreme changes in the meaning of 'global'); (2) an assemblage of tools that are ready to hand, theoretically driven, are pleasant and effective to use; and (3) embody an ethical commitment to the values and meanings of those who are being studied (emic), within a way to explore the conventions, standards and infrastructures that both constrain and enable their experiences (etic).

The papers here aim to show a range of approaches from the current STS, IS and Workplace Studies emergence that speak to the criteria detailed above. Each participant in the experiemntal forum will bring an example of their research, and as honestly as possible, assess its methodological strengths and weaknesses. The assessment will be relative to strengthening the development of the iSchool community, to the intersections noted above, and to the welfare of respondents.

Susan Leigh Star (Santa Clara University)
Assessing grounded theory and boundary objects. Grounded theory is the most popularly cited analytic approach in qualitative methods. Boundary objects is a notion, found in the work of Star and co-authors, that examines assemblages of humans and things, and how things that exist in more than one community of practice are used in performing cooperative work. The discussion here attempts to combine the information/knowledge needs and cooperative work aspects of boundary objects, with the theory-generating power of grounded theory. Leigh will explore what such a theory may look like, and what boundary objects may be used in this combined approach. She will detail how to study both intersecting and shared communities, and how to develop theory by constant comparison, lateral thinking and the poetics of infrastructure.

Jack Whalen (Xerox PARC) and Marina Jirotka (Oxford University)
This section will discuss the sensitivity of an ethnomethodological orientation for revealing the practical accomplishment of knowledge creation and use – in its moment to moment unravelling of the complexities of these knowledge practices. Jack and Marina look at how members of different work communities -- from service technicians to software engineers to vehicle manufacturing (hardware) engineers to 9-1-1 dispatchers to radiologists and financial traders-- learn what they know to do what they do, in very practical terms, and the role of this practical knowledge in organizational life.

In this regard, it seems likely that much of an organization's most valuable knowledge, its 'intellectual capital', is not centered in official document repositories and databases − scientific formulae, "hard" research data, computer code, codified procedures, financial figures, customer records, and the like − but rather is in the largely undocumented ideas, insights, and know-how of its members.

We have learned, through careful studies in the field, at the work site, that this quite tacit knowledge is deeply rooted in the experiences of individuals and the culture of their work communities. It commonly originates as practical solutions -- through everyday inventions and discoveries -- to the exigencies of work, and in this way serves as the critical resource for ordinary work practice. In fact, much of this knowledge often remains embodied *in* the practice.

Crucial steps in a new practice and fresh solutions to recurrent conundrum are

commonly shared through conversations and stories among small circles of colleagues and work groups, with members filling in the blanks from their own experience. These instructions and stories are naturally expressed in the language -- the local vernacular -- of those groups and communities. But it is equally recognized that the challenge for organizations is to then somehow convert this valuable but mainly local knowledge into forms that other members of the organization can understand and, perhaps most important, act upon together.

Jack has been concentrating on how technology, in concert with changes in work processes or structures, can enable this 'conversion', this concerting and coordinating of community action. Marina's has been concerned with bringing a richer comprehension of socially organised work practice into the process of engineering technological systems that focus on supporting everyday work and interaction.

In this session, drawing upon specific empirical examples, they will describe some of these experiences along wih the strengths and challenges of adopting this approach in organisational settings.

Scout Calvert (UC Santa Cruz)

My work is about the enduring qualities of the book and how its resistance to commodification enables this thing we call a public library. Even as new media forms gain prominence, they must nevertheless reckon with and be measured against the book form. I am interested in developing library-appropriate research methods for thinking critically about old and new technologies, and the way these technologies allow or constrain decisions on the part of librarians. Many of the decisions librarians make are in a fraught ethical domain: privacy and freedom of information are obvious examples. However, we naturalize the way technological infrastructures make these decisions for us. I would like to collaborate in producing methods and an ethic that allows librarians to mandate characteristics in developing technologies which both preserve librarians' prerogatives to make ethical judgment calls, and make the fact that those judgment calls are necessary visible. Specifically, this is a search for a method for integrating appropriate technologies into library work that will structurally preserve the possibility of a public library, even as the book mutates and shares the stage with other media. Ultimately, "content" only matters to the degree it is germane and hence not a generic commodity bought to fill up space (ie., it must be more than "mere" content), while "containers" continue to actually really matter and dictate the name of the game for the immensely diverse patronage of the public library.