Empirical Investigations:
Eliciting Users' Views and Values

INSC 543/CSE 599P
Value Sensitive Design

Email Discussion Question: 5 PM Tuesday, October 20
For Class: Wednesday, October 21

Conceptual investigations can only go so far. Depending on the questions at hand, many analyses will need to be informed by empirical investigations of the human context in which the technical artifact is situated. Empirical investigations are also often needed to evaluate the success of a particular design. These investigations can be applied to human activities that can be observed, measured, or documented. Thus, the entire range of quantitative and qualitative methods used in social science research is potentially applicable here, including observations, interviews, surveys, experimental manipulations, collection of relevant documents, and measurements of user behavior and human physiology.

Empirical investigations can focus, for example, on questions such as: How do stakeholders understand individual values in the interactive context? What value tensions do stakeholders experience and in what ways? How do different stakeholders prioritize competing values in design trade-offs? How do stakeholders prioritize individual values and usability considerations? Are there differences between espoused practice (what people say) compared with actual practice (what people do)? Moreover, because the development of new technologies affects groups as well as individuals, questions emerge of how organizations appropriate value considerations in the design process. For example, regarding value considerations, what are organizations' motivations, methods of training and dissemination, reward structures, and economic incentives?

For Wednesday's class, we'll begin a discussion of various uses of and methods for empirical investigations. Our focus will be on how to elicit users' views and values about a proposed or deployed technology. We'll leave for a future class: With extensible technologies, when does the technical investigation end and empirical investigation begin? And from the perspective of human values, what is the relationship between usability and empirical investigations?

First read Gaver et al.'s work on cultural probes. Consider this method in light of the goal of eliciting users' views and values. How principled and systematic a method is it? What does the method do well? What are its limitations? How does it compare with pastiche scenarios?

Gaver, B., Dunne, T., and Pacenti, E. (1999). Cultural probes. *interactions, 6*(1), 21-29.

Next read the following very readable chapter on how to elicit people's views and values and analyze that data. This chapter was written in the context of investigating the human relationship with nature but the structure and methods described here apply equally well to investigating people's relationships with information technology. As you read, consider how the methods described here work to elicit people's values, and the ways in which these methods could be expanded or further developed.

Kahn, P. H., Jr. (1999). *The human relationship with nature: Development and culture*. Chapter 5: Structural-developmental methods (pp. 77 – 93). Cambridge, MA: The MIT Press.

Then, to gain an understanding of how such methods might be applied to people's views and values about information technology, please review the Watcher and Watched study about privacy in public (from last week). In your review, pay close attention to the methods: what questions are asked, how are the questions framed, what order are they asked in, what type of data is generated, how the data is coded and how the data is analyzed. As you read, consider both strengths and limitations of this data collection and analysis.

Friedman, B., Kahn, P. H.. Jr., Hagman, J., Severson, R. L., and Gill, B. (2006). The watcher and the watched: Social judgments about privacy in a public place. *The Human-Computer Interaction Journal*, *21*(2), 233-269.

Finally, familiarize yourself with the coding manual that was developed to analyze the data from the study above. In your reading of the coding manual, pay attention to the hierarchical structure of the coding categories.

Friedman, B., Kahn, P. H., Jr., Hagman, J., and Severson, R. L. (2005). *Coding manual for 'The Watcher and The Watched: Social Judgments about Privacy in a Public Place*,' (UW Information School Technical Report IS-TR-2005-07-01). Seattle, WA: University of Washington, The Information School. Available online at: http://hdl.handle.net/1773/2074

Please bring a hardcopy of this coding manual to class on the 21th.

WRITE a question and that you would be interested in discussing that focuses on method – how to elicit users' views and values about an information technology. If you like, situate your question in terms of your class project, or other research or design projects. Then provide an initial discussion of your own question. As before, your writing should be concise, grammatically correct, and, as appropriate, draw on (and at times quote from) the reading.

Please EMAIL your question and discussion to Alan at borning@cs.washington.edu and Batya at batya@u.washington.edu in the BODY OF AN EMAIL MESSAGE no later than 5 PM Tuesday afternoon, October 20. We will use your questions to structure some of the discussion on Wednesday.

No late questions will be accepted.