

Values as Generative Forces in Design

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Abstract

How do values inspire, energize, and politicize the design process? In turn, how does the process of design influence and inform our understanding of values? This workshop will explore the relationships between and amongst values, design, and creativity through a series of interactive activities, creative inquiry into the varied roles of values in the design process and design in the process of understanding values.

Keywords: values, design, creativity, value-sensitive design, values in design

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1 Description

Half or Full day: Half day

Purpose and Intended Audience:

According to Parsons (1935), values can be understood as “the creative element in action in general, that element which is causally independent of the positivistic factors of heredity and environment” (1935: 306). Since Parson’s time, a wide range of research has helped to deepen this somewhat opaque insight (Fleischmann, 2014). We now have a burgeoning field dedicated to studying values in relation to technologies and design that has produced empirical studies by scholars such as Ahn et al. (2012) regarding the role that values play in attitudes toward creative remixing and Shilton (2013), who introduces the concept of value levers to show how values can enable new ways of looking at problems and creatively engendering solutions.

However, it is also well established that different cultures and organizations prioritize creativity and creative work differently, indicating that an interrelationship between values and creativity may not be universal (Fleischmann et al., 2011; Hofstede, 2001; Schwartz, 2007; Sousa & Coelho, 2011). Hacker culture, for example, particularly esteems the link between values and creativity (Kelty, 2010), yet other studies indicate correlations between creativity and specific values (Dollinger et al., 2007; Kasof et al., 2007) or a relationship among values, creativity, and network structure (Zhou et al., 2009). While it is clear that the relationship between values and creativity is an important topic, there is still great potential to demonstrate the practical relevance of creativity to the study of values and design. With this workshop, we seek to bring together a community of researchers and information professionals interested in questions of values in design to open new avenues for discussion and future research in this area.

2 Proposed Format

Our format builds on work by others who have developed creative mechanisms to engage people in activity and discussion on values: Friedman, Nathan, Kane, and Lin (2011) (see also Friedman and Hendry, 2012) developed the Envisioning Cards, a set of, ideation cards that orient designers towards longer-term, values-oriented considerations during the design process; Flanagan and Nissenbaum (2007) use the affordances of games and gaming in their Values at Play approach, which uses play to foster creativity around values related to social activism; and Halpern et al. (2013) use scavenger hunts and Nathan et al. (2007) use design noir to similar ends.

Inspired by these examples of creative brainstorming and play, this workshop will involve a variety of activities that facilitate an understanding of the relationship between values and creativity. To begin, participants will work in small teams to respond to a set of design prompts in which they create mock-ups/prototypes (such as games, wearable technology, and cataloging systems) demonstrating particular

values. After this design phase, we will engage in a group discussion in which participants reflect on the ways in which values were connected to their creative process. In particular, we will guide the conversation to include an account of the ways that proscribed values, value conflicts, and value tensions played a role. The workshop will close with a discussion of next steps and potential future collaborations.

Draft schedule:

9:00-9:30am – Introductions and goals

9:30-10:45 am – Design Activity

10:45-11:45am – Reflection on values in the process

11:45 – 12:00pm – Wrap-up and next steps

Goals or Outcomes:

We expect the workshop will generate new insights within our community about the ways in which values, values conflicts, and values tensions relate to creativity in design. In discussion, we will encourage these insights be turned into future objects of study by workshop members by producing and sharing documentation of the workshop as well as a contact list of attendees.

Relevance to the iConference:

Investigations of the intersection among values and design are a growing part of the iSchool community. This workshop will provide a chance to gather like-minded researchers together to pursue a new theme in this area, namely the intersection of values and design research with creativity and innovation. The interactive workshop format will enable exploration and discussion, embodying the creative ideals of the topic.

Expected/Preferred Number of Participants: We expect about 25 participants, and would prefer to limit participation to 30 participants to ensure we have a cohesive group with plenty of chances for interaction.

References

- Ahn, J., Subramaniam, M., Fleischmann, K.R., Waugh, A., Walsh, G., & Druin, A. (2012). Youth identities as remixers in an online community of storytellers: Attitudes, strategies, and values. *Proceedings of the 75th Annual Meeting of the American Society for Information Science and Technology*, Baltimore, MD.
- Dollinger, S.J., Burke, P.A., & Gump, N.W. (2007). Creativity and values. *Creativity Research Journal*, 19(2-3), 91-103.
- Fleischmann, K.R. (2014). *Information and human values*. San Rafael, CA: Morgan & Claypool.
- Fleischmann, K.R., Wallace, W.A., & Grimes, J.M. (2011). Computational modeling and human values: A comparative study of corporate, academic, and government research labs. *Proceedings of the 44th Hawai'i International Conference on System Sciences*, Kauai, HI.
- Flanagan, M., & Nissenbaum, H. (2007). A game design methodology to incorporate social activist themes. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, San Jose, CA.
- Friedman, B., & Hendry, D.G. (2012). The Envisioning Cards: A toolkit for catalyzing humanistic and technical imagination. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)*, Austin, TX.
- Friedman, B., Nathan, L. P., Kane, S., and Lin, J. (2011). Envisioning cards. University of Washington, Seattle, WA.
- Halpern, M.K., Erickson, I., Forlano, L., & Gay, G. (2013). Designing collaboration: Comparing cases exploring cultural probes as boundary-negotiating objects. *Proceedings of Computer-Supported Collaborative Work (CSCW)*, San Antonio, TX.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage.
- Kasof, J., Chen, C., Himsel, A., & Greenberger, E. (2007). Values and creativity. *Creativity Research Journal*, 19(2-3), 105-122.
- Kelty, C.M. (2010). Outlaw, hackers, Victorian amateurs: Diagnosing public participation in the life sciences today. *Journal of Science Communication*, 9(1), 1-7.

Nathan, L.P., Friedman, B., Klasnja, P., Kane, S.K., & Miller, J.K. (2007). Envisioning systematic effects on persons and society through interactive system design. *Proceedings of Designing Interactive Systems (DIS)*, Cape Town, South Africa.

Parsons, T. (1935). The place of ultimate values in sociological theory. *International Journal of Ethics*, 45(3), 282-316.

Schwartz, S.H. (2007). Value orientations: Measurement, antecedents, and consequences across nations. In R. Jowell, C. Roberts, R. Fitzgerald, & G. Eva (Eds.), *Measuring attitudes cross-nationally: Lessons from the European Social Survey*. London, England: Sage.

Shilton, K. (2012). Value levers: Building ethics into design. *Science, Technology, & Human Values*, 38(3), 374-397.

Sousa, C.M.P., & Coelho, F. (2011). From personal values to creativity: Evidence from frontline service employees. *European Journal of Marketing*, 45(7/8), 1029-1050.

Zhou, J., Shin, S.J., Brass, D.J., Choi, J., & Zhang, Z.-X. (2009). Social networks, personal values, and creativity: Evidence for curvilinear and interaction effects. *Journal of Applied Psychology*, 94(6), 1544-1552.