
Personal Values in HCI Research

Corina Sas

Lancaster University
Lancaster, UK
corina@comp.lancs.ac.uk

Abstract

This paper describes a broad overview of the core values underpinning my research agenda for more than a decade. It draws from value research, research values, and values in HCI, and concludes with some insights on the challenges and opportunities of developing a value-driven personal research agenda.

Author Keywords

Values, emotions, HCI research

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Related Work

This section outlines key perspectives from value research in social sciences, research values, and values in HCI.

Value Research

Social science scholars have had a long standing interest in value research particularly in sociology of religion, politics [23] and human action [7], where values are deemed essential for structuring and understanding attitudes and behaviors. Values are hierarchically organized desirable goal beliefs which consistently guide individuals and groups across situations supporting the selection and evaluation of events and behaviors [22].

While the relationship between values and behaviors is indirect [6], the relationship between attitudes and values has been also explored, with findings indicating that values are more abstract than attitudes, and that attitudes could express goals or values relevant to the self [6]. The importance of values, particular social and cultural ones for the sense of self has been captured by Gecas [4]'s concept of value-identities. The latter are constructed as people identify themselves in terms of their deeply meaningful core values.

Drawing from Schwartz [22] and Gecas [4] work, Hitlin [6] has emphasized value-identity in terms of "wider social and symbolic sphere rather than to one's self and one's other values" [p.122]. He also highlighted its significance for authenticity as a motivational component of the self which is activated when people behave consistently to their core values. When reflected upon, such behaviors allow people to better understand and prioritized their core values.

Research Values

The role of researchers' values, particularly in social sciences, has received a great deal of interest. This has been explored especially with respect to value bias on normative research questions exploring how things ought to be (rather than how they are) [1].

Blau [1] also discussed the tension brought up by researchers' values, and how they strongly impact scholarly work from the selection of research problems, to the selection of research methods, and interpretation of findings. She also mentioned that such unavoidable value bias could be in fact valuable, given the values are made explicit upfront in academic writing, alongside the raw data and the reasoning for their interpretation.

For example, *self-identity audit* proposed by Tracy [24] provides a useful guide to reflect on one's values and their impact on research.

Another strand of research on scholarly values has focused on academic freedom and research ethics. The former deals mostly with the selection of research problem and interpretation of findings, while the latter with the research methods. Eisenberg [3] described academic freedom as the value of critical objectivity in scientific inquiry and knowledge dissemination able to challenge the status-quo with limited repercussions. However, high quality research is often expensive particularly as competitive HCI research outcomes increasingly require larger user samples, and robust systems tested through longitudinal studies in the wild. This brings forward the issue of external research funding and its impact on academic freedom conflicting with other interests such as economic development. Within the current economic context of scarce research funding, the value of academic freedom is seriously challenged.

Values in HCI

HCI focus on values is not a new and landmark works include value sensitive design [5] as a theoretical and methodological approach accounting for values in design. This has been later critiqued to for its focus on universal and decontextualized values, and lack of clarity of the participants' and researchers' voices in design [2]. In a seminal workshop focused on the future of HCI in 2020, Sellen and colleagues [21] reflected on the future goals of HCI research. They identified the renewed importance of accounting for human values in design in the light of five key transformations, i.e., multiple interfaces, increased reliance on technologies and the challenges of hyperconnectivity, enduring digital footprint and stronger opportunities for creative engagement.

In this context, one of the major design challenges is to decide what problem to focus on, given that design choices support some values while hindering others [21]. Authors also propose an additional pre-stage of design process, i.e., *understand*, aimed to identify the human value that the technology to be design will address.

Other relevant HCI work has looked at designers' personal experiences [25] and emotions [19,20] in order to understand their impact on design, while an extensive body of work has explored the design of interactive systems for values underpinning social change such as sustainable behaviour.

Autoethnography: Self-identity audit

In this section I reflect on my own values and how they have shaped my research agenda after the completion of my PhD [9,10,15,16], and as an academic over the last thirteen years. I highly value academic freedom and the privilege of shaping my own research projects. This however comes at the cost of strong responsibility in selecting specific research problems to focus on.

I tend to spend considerable time on identifying pertinent and timely research questions. Major such choices are usually made after in depth introspection in order to align my research goals with the goals of my value-identity. My core value is making the world a better place while leveraging my specific skills and expertise. In particular, I value helping people reach their potential to become more self-aware [17], reflective [12], and creative [8]. These have shaped my work on developing MeditAid [11], a tool to support meditation training, and the AffectTech project focused on developing personal technologies for affective health. I am also strongly attracted to the value of social justice, poverty alleviation, and women

empowerment. For example I have explored the practices of democratizing technology production [14], and unregulating financial transactions [13], while the Digital Threads project focuses on financially empowering rural women in developing context.

Unsurprisingly, a major obstacle in working towards these values, is earning research funds. Useful in this respect is identifying funding opportunities whose goals align with my values. For example, H2020 framework funded by European Commission highlights current societal challenges, some of which match well my own values. Global Challenges Research Fund from UK Research Council is another good match. Unfortunately, with increasingly limited research fund, bidding for research grants is a disheartening endeavor. Having the research project strongly aligned with one's value-identity is crucial in developing resilience for refining the bids. Another key component is working with people who share the same values, although as a community, we lack effective mechanisms for communicating such personal values.

The questions which I would like to explore in this workshop are how can we better communicate personal values in academic writing, who are the beneficiaries of our research outcomes, how we can make our design knowledge more actionable [18] and measure impact.

Acknowledgement

This work has been supported by AffectTech: Personal Technologies for Affective Health, Innovative Training Network "Marie Curie Actions" funded by the H2020 People Programme (GA 722022), and the UK Research Council through the Digital Threads project, (AHRC Grant AH/P014186/1).

References

1. Blau, Francine D. 1981. On the role of values in feminist scholarship. *Signs: Journal of Women in Culture and Society* 6.3: 538-540.
2. Borning and Michael Muller. 2012. Next steps for value sensitive design. *Proc. CHI'12*, 1125-1134.
3. Rebecca Eisenberg. 1987. Academic freedom and academic values in sponsored research. *Tex. L. Rev.* 66: 1363-1404.
4. Viktor Gecas. 2000. Value Identities, Self-Motives, and Social Movements. In *Self, Identity, and Social Movements*. Minneapolis: Univ. Minnesota, 93-109.
5. Batya Friedman. 1996. Value-sensitive design. *interactions* 3.6: 16-23.
6. Steven Hitlin. 2003. Values as the core of personal identity: Drawing links between two theories of self. *Social psychology quarterly*: 118-137.
7. Talcott Parsons. 1939. *The Structure of social action*. Free Press.
8. Antti Salovaara, Kristina Höök, Keith Cheverst, Michael Twidale, Matthew Chalmers & Corina Sas. 2011. Appropriation and creative use: linking user studies and design. In *CHI '11 Extended Abst.* 37-40
9. Corina Sas. 2004. Individual differences in virtual environments. *International Conference on Computational Science, LNCS 3038*, 1017-1024.
10. Corina Sas. 2004. Individual differences in navigating and experiencing presence in virtual environments. *PhD Thesis*. National Univ. Ireland.
11. Corina Sas and Rohit Chopra. 2015. MeditAid: A Wearable Adaptive Neurofeedback-based System for Training Mindfulness State. *Personal and Ubiquitous Computing*, 19, 7: 1169-1182.
12. Corina Sas and Alan Dix. 2011. Designing for reflection on personal experience. *International Journal of Human-Computer Studies*, 69, 5: 281-282.
13. Corina Sas and Irni Khairuddin. 2017. Design for Trust: An Exploration of the Challenges and Opportunities of Bitcoin Users. In *Proc. CHI'17*.
14. Corina Sas and Carman Neustaedter. 2017. Exploring DIY practices of complex home technologies. *ACM Trans. Comput.-Hum. Interact.*
15. Corina Sas, Gregory O'Hare & Ronan Reilly. 2003. A connectionist model of spatial knowledge acquisition in a virtual environment. *Workshop on user modeling, information retrieval and machine learning*, 40-47.
16. Corina Sas, Gregory O'Hare & Ronan Reilly. 2003. On-line Trajectory Classification. *Intern. Conf. on Computational Science, LNCS 2659*, 1035-1044.
17. Corina Sas, Steve Whittaker, and John Zimmerman. 2016. Design for rituals of letting go: An embodiment perspective on disposal practices informed by grief therapy. *ACM Trans. Comput.-Hum. Interact.* 23, 4: 1-37.
18. Corina Sas, Steve Whittaker, Steven Dow, Jodi Forlizzi, and John Zimmerman. 2014. Generating implications for design through design research. In *Proc. CHI '14*. ACM, 1971-1980.
19. Corina Sas and Chenyan Zhang. 2010. Investigating emotions in creative design. *Proc. DESIRE*, 138-149.
20. Corina Sas and Chenyan Zhang. 2010. Do emotions matter in creative design? In *Proc. DIS'10*, 372-375
21. Abigail Sellen, Yvonne Rogers, Richard Harper, and Tom Rodden. 2009. Reflecting human values in the digital age. *Commun. ACM* 52, 3: 58-66.
22. Shalom Schwartz. 1994. Are There Universal Aspects in the Structure and Content of Human Values? *Journal of Social Issues* 50:19-45.
23. James Spates. 1983. The sociology of values. *Annual Review of Sociology* 9,1: 27-49.
24. Sarah Tracy. 2012. *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. John Wiley & Sons.
25. Xiao Zhang and Ron Wakkary. 2014. Understanding the role of designers' personal experiences in interaction design practice. *Proc. DIS'14*, 895-904. ACM.