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# Next Steps for Value Sensitive Design? A Practitioner's Progress

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## **Abstract**

Over the last 20 years, value sensitive design (VSD) as a framework and approach based in theory has been widely applied, and also contested, in HCI. In this presentation, I draw on 8 years of practice to show how VSD is a suitable and productive methodological framework for research on social change and social impact. My goal is to promote discussion at HCIC of the connection of theory and practice, and how bridging the gap between theory and practice can, in turn, bridge the gap between academic and industry research.

## **Author Keywords**

Value sensitive design, participants' voices, homeless young people, music, art, design activities.

## **ACM Classification Keywords**

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

## **Introduction**

Value sensitive design (VSD) has been debated as theory, framework and method [e.g. 1]. Since 2007, I have viewed VSD, not as prescriptive theory for uncovering universal values or engaging in series of conceptual, empirical and technical investigations, but as a methodological framework with the goal of engaging in design in order to uncover what is

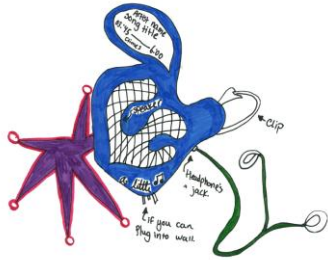
Each participant filled in an activity sheet with questions based on the Envisioning Cards [1,10],



The activity sheet and technique were adapted for a workshop in Nov. 2014 where VSD was introduced at Google.

Leading to a drawing,

☐ Soler Panel.  
☐ Evolvable + reliable solar panel.



And a story,

Tommy was having a bad day. His mother had just passed away, forcing him to become homeless. His girlfriend left him because he smelled bad and his friends no longer wanted to hang out with him because he had no money. He was downtown Seattle contemplating suicide when he was approached by two Orion Outreach workers. In addition to giving Tommy socks, snacks, and a flyer to connect him to services that he so desperately needed, they handed him "a little note." He had seen these on t.v. but his mother would never purchase him one because she didn't agree with the music he listened to. Instantly he popped the headphones in and logged on, pulling up "My Girlfriend's Dead" by the Vandals. After that he had the drive to get up and walk to Orion, where upon entering he asked to speak with a counselor to get all of the ideas off his chest. He spoke about his recent homelessness, his mother's passing and the loss of his girlfriend + friends, all the time flicking through all the songs that he could remember, each one slightly more uplifting than the last until finally he felt well enough to go out for dinner, sign up for shelter, and made an appointment with the counselor for tomorrow morning.



That became part of an art exhibit.

**Figure 1. Design activity.** See [3], p. 23 for more detail.

important to people. I am keenly interested in social change, incorporating action research, ethnography, participatory and co-design to strengthen the voices of those who have not been heard [1,2,7,8,9]. Also, I draw on theoretical thinking as diverse as Norbert Weiner, James Spradley, James Agee, among others in order to engage people who are considered vulnerable, to explore the ordinary and the extraordinary in human experience and to question whether the emphasis in HCI should be on people or technology [3,6,7,9].

### Experience

I have engaged in research, design and service projects with over 400 homeless young people, aged 15 to 30. With an overarching goal of improving their welfare, I investigated safety and mobile phones, identity and social network sites, emotions and music, empathy and health, and discussed vulnerability and precaution, among others [3,4,5,7,8,9]. Recently, using techniques adapted from academic work (Fig. 1), I introduced VSD at Google. Here, I first present examples of practices drawing on a number of theoretical perspectives to strengthen participants' voices in my research and reporting, and then discuss introducing VSD to industry.

### Co-creation and Idea Dissemination

Co-creation strengthens participants' voices [1]. In 2008, together with homeless young people, a community technology center was co-created [7] where over 100 students actively participated in a VSD-centered curriculum about digital technology and jobs [2]. This center still exists today, contributing to a change in circumstances for some young people. In order to disseminate our experiences and to connect the academic theorizing with in-practice application, we wrote a journal article publishing the curriculum co-authored with agency

staff and with a homeless co-author [2]. For our co-authors, this was their first academic publication reaching a previously unknown audience. The paper has been cited in social work, health, and communications research, and other service providers have implemented the curriculum.

### Consent and Power

Another way to strengthen participants' voices is balancing power through consent. Through the years, I engaged homeless young people at service agencies, interacting with young people, staff and volunteers. As a researcher, I required permission from agencies, and in one case I was finger-printed and subsequently cleared by the US Department of Justice. However, permission was not sought from the young people with whom I was to be engaged. To address this unequal distribution of consent and power, and to honor and hear from young people themselves about *their* consent, I asked agency staff to present my proposed studies to elected youth councils (where I was not allowed). They, in turn, voted on whether the studies could take place. In all cases, youth approved the studies and expressed appreciation for being consulted.

### Documents Intended as Communications

Borning and Muller make the case [1, p. 7], partly in reaction to my earliest CHI paper [7], that issues around "quotation-without-permission" can be addressed when participants "...knowingly create documents...that are intended as communications media to others." Taking up this view, I included a design activity (Fig. 1) in my dissertation study that promoted reflection through questions related to the VSD Envisioning Cards [1,10]. In this activity, homeless young people created firsthand accounts of their music experiences in 129 drawings and stories, giving explicit

permission for the drawings and stories to be used for research and in public art exhibits. The subsequent exhibit [3], *Music is My Life*, was co-created and presented by a team of 20 volunteers in Seattle, WA. Presenters included homeless young people, staff and students from University of Washington, service agency staff, business owners and others. With funding from City of Seattle Department of Neighborhoods, and Fulbright Canada (with the US Embassy), *Music is My Life* has now appeared at six venues (Fig. 1) and has been seen by 1000s of people in the US and Canada.

### Practice and Industry Research

Finally, in my research work at Google, I continue to apply VSD in practice. So far, I have taken this up in two different ways. First, I worked with other Googlers to introduce VSD through a hands-on workshop. Since industry practitioners seldom engage in debating theory, we introduced VSD via the design activity (Fig. 1), introducing theory through practice. The workshop created interest in VSD and will be run at other venues, but also resulted in actionable outcomes for the design of a Google product. Second, I lead a Google volunteer project to build mobile phone applications for a homeless service agency in Seattle<sup>1</sup>.

### Conclusion

My goal is to promote discussion at HCIC of the connection between theory and practice in VSD with concrete examples from my own work. I will through this exposition also show how to bridge the gap between academic and applied, industry-based research.

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<sup>1</sup> This effort is being kept confidential prior to public release. I will be able to share details by the time of HCIC 2015.

### References

- [1] Borning, A. and Muller, M. Next steps for value sensitive design. In *Proc. CHI 2012*, ACM Press (2012), 1125-1134.
- [2] Hendry, D. G., Woelfer, J. P., Harper, R., Bauer, T., Fitzer, B., and Champagne, M. How to integrate digital media into a drop-in for homeless young people for deepening relationships between youth and adults. *Children & Youth Services Rev.* 33, 5 (2011), 774-782.
- [3] Woelfer, J. P. Music is my life: Disseminating design research to the community. *Ext. Abstracts DIS 2014*, ACM Press (2014), 21-24.
- [4] Woelfer, J. P. Engaging homeless young people in HCI research. *interactions* 21, 1 (2014), 54-57.
- [5] Woelfer, J. P. and Hendry, D. G. Homeless young people on social network sites. In *Proc. CHI 2012*, ACM Press (2012), 2825-2834.
- [6] Woelfer, J. P. and Hendry, D. G. Designing ubiquitous information systems for a community of homeless young people: Precaution and a way forward. *Personal & Ubiquitous Computing* 15, 6 (2011), 565-573.
- [7] Woelfer, J. P. and Hendry, D. G. Homeless young people's experiences with information systems: Life and work in a community technology center. In *Proc. CHI 2010*, ACM Press (2010), 1291-1300.
- [8] Woelfer, J. P., Iverson, D. G., Hendry, D. G., Friedman, B., and Gill, B. T. Improving the safety of homeless young people with mobile phones: Values, form and function. In *Proc. CHI 2011*, ACM Press (2011), 1707-1716.
- [9] Yoo, D., Hultgren, A., Woelfer, J. P., Hendry, D. G., and Friedman, B. A value sensitive action-reflection model: Evolving a co-design space with stakeholder and designer prompts. In *Proc. CHI 2013*. ACM Press (2013), 419-428.
- [10] VSD Envisioning Cards.  
<http://www.envisioningcards.com/>