

## W02: Do Tools and Technology Have Values?

Please read the following two articles:

Grudin, J. (2006). The demon in the basement. *interactions*, Nov/Dec, 50-53.

Kranzberg, M. (1986). Kranzberg's laws. *Technology and Culture*, 27, 544-560.

Orlikowski, W. J. (2000). Using technology and constituting structures: A practice lens for studying technology in organizations. *Organization Science*, 11(4), 404-428.

In value sensitive design a “human value” is defined as “is important to people in their lives, with a focus on ethics and morality.” As you read these articles, keep in mind the following questions:

- What is a “tool?” What is a “technology?” What is a “value?”
- How do values relate to tools or technologies? How, if at all, do tools or technologies afford or resist certain values?
- Do values reside within the technology itself? Can, for example, a car, bicycle, pair of shoes, software architecture, or mobile phone application “embed” one or more values? Or, do values reside within the people or social institutions that surround the technology?
- Perhaps values do not reside in technologies; if not, where in the human-technology relationship do values reside? What is Orlikowski's position?
- What is “infrastructure” and why is infrastructure important when we consider these and similar questions? What does it mean to ask about the meaning of infrastructure?
- What position does Value Sensitive Design take on the question of “where do values reside?” What implications for information system design follow from this position?

These kinds of questions – related to “value” and “tool” or “technology” – are a key motivator for the application and development of value sensitive design. In these videos, you might discern specific concerns and questions related to human bodies, values, and technologies:

Cellan-Jones, R. (2015, January 29). Office puts chips under staff's skin. BBC News. Retrieved September 21, 2015 from <http://www.bbc.com/news/technology-31042477>

Silverman, L. (2015, September 14). Live-in laboratory may help older adults live independently longer. National Public Radio. Retrieved from <https://owl.english.purdue.edu/owl/resource/560/10/>

*Your writing prompt.* Referring to specific examples in Orlikowski (2000), discuss how values come to be implicated with technology, that is: How do values become mixed up with or become a part of technology? Grudin (2006) and Kranzberg (1986), cited above, will provide some useful theory and vocabulary for making your case.

*Format.* Your written response should be about 500-600 words (4–7 paragraphs) and must be formatted as a single-page PDF document. Please include your name in the header or footer. Your writing should be concise, clear, interesting, and free of spelling and grammatical errors.

