



SPT2013

Technology in the Age of Information

ABSTRACTS

4 - 6 July 2013



Laboratório
Associado

SOCIUS
Centro de Investigação em Sociologia
Económica e das Organizações

FCT Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

Design for well-being

Philips BREY
Department of Philosophy
School of Behavioral Sciences
University of Twente, The Netherlands
p.a.e.brey@utwente.nl

In this paper I will present an approach for taking into account the well-being of users and other stakeholders in the design of technological artifacts. I will first explicate the central concept of well-being, as well as associated concepts like happiness, quality of life, life satisfaction, liveability, and the distinction between subjective and objective well-being. I will then discuss theories of well-being from both philosophy and psychology, including hedonist, desire-satisfactionist and objective list approaches. I will also identify and discuss a number of values commonly associated with well-being, such as pleasure, autonomy, wisdom, health, flow, accomplishment, and deep personal relationships. I will argue that well-being is best studied by breaking it down into these composite values. I will also discuss issues of contention in relation to well-being, which include problems of subjectivism and pluralism, issues in measuring well-being, and the issue of liberal neutrality in the state's responsibility for promoting the well-being of citizens.

Next, I will discuss the way in which technology can affect well-being and ways in which well-being can be designed for in the development of technological artifacts (Brey, Briggie and Spence, 2012; Van de Poel, 2012; Higgs, Lights and Strong, 2000). Technology affects well-being, I will argue, when the use of technological artifacts has systemic effects on users and other stakeholders by either enabling, stimulating, constraining or undermining the realization of particular well-being values. For example, social networking technology enables fast and easy maintenance of social ties over large distances, but in doing so also lessens the need for face-to-face interaction. This has consequences for the way in which and extent to which deep personal relationships are realized for people. Another example, borrowed from Albert Borgmann (1984), centers around central heating systems, in comparison with wood-fueled fireplaces. Central heating systems enhance well-being by heating rooms more reliably and requiring less unpleasant and time-consuming effort from users. They may also lessen well-being by negating the engagement, flow, social interaction and aesthetic pleasure brought by a fireplace.

Next, I will turn to approaches for designing well-being values into technology. I will look at value-sensitive design (VSD) approaches (Friedman, Kahn and Borning, 2006) and argue for a particular approach to VSD that I have outlined in previous work. I will argue that to design for a well-being value is to design artifacts in such a way that they tend to promote the realization of this value in their expected use contexts. The value may be implied in the proper function of the artifact, or it may be realized as a condition or side-effect of using the artifact.

In designing for well-being, it also has to be taken account whether the user group for the artifact is homogeneous or heterogeneous with respect to the well-being value that is being designed for. (The same is true for other stakeholders and for relevant aspects of the

context of use.) If the user group is homogeneous, then designing for a well---being value can be done using a direct approach and a single configuration. If it is heterogeneous, meaning that the well---being value is realized in different ways for different users, then this must be accommodated for in the design. This can be done by making artifacts adaptable, flexible and multifunctional. It can also be done by designing different versions of an artifact for different users. I will discuss the different design strategies that can be used for this purpose.

I will end with a brief discussion of policy implications. If design for well---being is possible, do designers have a moral obligation to design for well---being? And should the state have a role in ensuring that they do, and that in the case of public infrastructures only technological artifacts and systems that support well---being are adopted? These questions relate to the central discussion in contemporary political theory on liberal neutrality with respect to well---being. And finally, if a role is taken by designers and policy makers with respect to promoting well---being, how is it decided which conception(s) of well---being are supported, in a way that is compatible with the ideals of democracy and justice?

References

Borgmann, A. (1984). *Technology and the Character of Contemporary Life*. Chicago: University of Chicago Press.

Brey, P., Briggie, A. and Spence, E. (eds.) (2012), *The Good Life in a Technological Age*, Routledge.

Friedman, B., Kahn, P. and Borning, A. (2006). 'Value Sensitive Design and Information Systems,' in *Human---Computer Interaction in Management Information Systems: Foundations*, (eds. P. Zhang and D. Galletta). Armonk, NY: M.E. Sharpe.

Higgs, E., Light, A. and Strong, D. *Technology and the Good Life?* (Chicago: University of Chicago Press, 2000).

Van de Poel, Ibo (2012). Can we design for well---being? In *The Good Life in a Technological Age*. P. Brey, A. Briggie and E. Spence. Routledge: 295---306.

* * *