

Sustainability and the Good Life

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INTRODUCTION

Sustainability has become a critical concern in many different areas of design [7], having great influence on traditional design disciplines such as product design and architecture, where the ideals of sustainability are reshaping educational curriculum as well as involving, engaging and guiding design students all over the world. While there is a growing interest in issues of sustainability also in the field HCI [1], few HCI-related educational programs appear to have incorporated sustainability as a key, permeating ideal and quite few papers in the current HCI literature actually explicitly claim to deal with issues of sustainability.

Why is not yet HCI on the bandwagon? This paper uses the philosophy of technology of Albert Borgmann to find a number of potential reasons for HCI's somewhat drowsy response to sustainability. In doing so, we will also uncover a number of anomalies in current HCI that may ultimately come to make it impossible for HCI not to take a number of new design ideals, including sustainability, more seriously.

FROM USABILITY TO USER EXPERIENCES

Traditional HCI allowed researchers and practitioners to share and rely on the 'five E's' of usability; that interactive systems should be designed to be *effective, efficient, engaging, error tolerant, and easy to learn*. Work carried out inside this 'usability paradigm' is quite rewarding. There is a specific and shared terminology; a set of collective techniques and methods; and, perhaps most importantly, a communal sense of for what to strive. A 'good design' means a design with a high level of usability, which can be measured, analyzed, and debated according to a battery of methods, practices, and techniques developed within the paradigm.

While few people would argue against the practical value in improving the usability of interactive systems, a number of conceptual frameworks and associated methodological approaches have been proposed as candidates for a post-cognitivist approach to HCI, revealing some of the limitations of the cognitivist paradigm and aimed at capturing various aspects of interactive experiences and a richer understanding the relationship between a human user, a computing system and the context in which the meeting takes place. These have included ethnography and ethnomethodology; phenomenology; distributed cognition; activity theory, and others. A recent trend is also to seek inspiration in design theory, methods, and practices rather

than in formal methods of evaluation [4]. In different ways, these approaches regard the human being as *a whole*, not just as an entity with a set of cognitive skills. This whole tends to have a life, too, full of social and cultural concerns, individual goals and interests, relationships, etc. Thus, computer use is no longer something that helps us perform our work more efficiently, but rather something that helps us pursue our lives [5]. But if we agree that the role of the 'five E's' is changing when we move from work-related HCI to everyday use of interactive systems, then what replaces them in terms of 'goods' for which to strive? These issues have the possibility to open up and make explicit a dimension of HCI design that has so far been largely deemphasized. With the current interest in issues like sustainability however, this ethical aimlessness cannot continue.

FOCAL THINGS AND PRACTICES

Philosopher Albert Borgmann [2,3] suggests that we need to be cautious and rethink the relationship—and the often assumed correspondence—between what we consider as *useful* and what we think of as *good* in terms of technology; some technologies may be both useful and good, while some technologies that are useful for some purposes might also be harmful, less good, in a broader context.

In a traditional, fairly romanticized depiction of what life 'used to be like' in a country house, Borgmann points out that the *focal thing*, the *heart*, for the inhabitants of this house used to be its fireplace. It was a natural gathering point around which most activities were either centered or to which they were in some ways related. To keep the house warm, trees had to be cut down, split into wood and dried, the fire had to be built and maintained, and it was here food preparation naturally took place, etc. In this way, the fireplace as a focal thing was inseparable from our involvement and engagement with the thing in the context in which it appeared. This context, or 'world', is made possible and brought into being only by the appearance of the focal thing [3]. Focal things seem to be characterized by *commanding presence*. The fireplace puts demands on us—to cut down trees, to chop and dry wood, and to keep the fire burning—requiring patience, endurance, skill, and some amount of resoluteness. Keeping the fire alive is also a continuous activity; connecting us with our other activities and with the larger context of life, one's community, one's place. Focal things also have *centering powers*, a kind of long-term, growing insight that this is the

right thing to do and the right way of living [6]. Hence, a key characteristic of focal things, according to Borgmann, is that they tend to unify means and ends. Achievement and enjoyment are brought together; so are individual and community; mind and body; and body and world.

According to Borgmann, the understanding and appreciation of the role of focal things and practices have disappeared from modern technology: “Technology ... promises to bring the forces of nature and culture under control, to liberate us from misery and toil, and to enrich our lives. [...] implied in the technological mode of taking up with the world there is a promise that this approach to reality will, by way of the domination of nature, yield liberation and enrichment” [3, p. 41]. Borgmann argues that this promise has led society to believe that the good life should be technologically mediated and supported. While Borgmann does not reject the possibility of technological good—as was the case with the fireplace—he is however highly skeptical about the conventional view that technology frees us to attend to other, more stimulating pursuits [6], arguing that we are typically not freed up at all by technology but rather made passive—and if we are freed up, it is only to have time for more technology. In this downward spiral, we become consumers, increasingly disengaged from things and from each other. Technology tends to seduce us toward a focus upon material goods, quantitative thinking, commodities, and disposability, where any kind of guidance from considering issues of the good and the excellent is left out. Borgmann’s prophecy is that we have become mesmerized by the promises of modern technology—“to bring the forces of nature and culture under control, to liberate us from misery and toil, and to enrich our lives” [3, p. 41]—whose devices demand less and less of our own skills, efforts, patience, and risk. But in this shift from engagement with focal things and practices to disengaged consumption of devices, his fear is that we have come to disappoint our own, deeper aspirations. Rather than the promise of technological enrichment and consumption, we have come to find ourselves disengaged, diverged, and distracted, and—ultimately—lonely.

NEW IDEALS FOR HCI DESIGN

The focus of Borgmann’s philosophy of technology is a concern for our engagement with reality. In this, technology tends to invite a consumptive way of being. From one perspective, it is easy to dismiss Borgmann’s position as just a slightly more modern strand of the kind of alienating philosophy developed previously by Heidegger, Jaspers, and Ellul. Second, Borgmann’s idea about the alienation role of technology is also at odds with what many would state to be their lived experience of that technology. Many kinds of information and communication technologies, at least on the surface, on the contrary appear to enhance people’s lives. Chat technologies for instance make it possible to keep up relations with people over geographical distance; web forums allow people with a specific shared

interest to take part in detailed discussions otherwise impossible; virtual worlds like World of Warcraft allow people from different parts of the world to experience a sense of community and equality, and so on. Thus, rather than taking Borgmann’s work very literally, especially in the area of HCI design, it could make more sense to use his work as *an alternative voice* to the ubiquitously unproblematic and unreflective approach to technological development that is currently permeating and dominating the field. Borgmann’s work could be used to *support different ways of seeing*. Borgmann’s analysis of information technology can be used to point out the ambivalent role that various kinds of technologies come to play in our everyday existence, all of which are not exclusively positive and point to a brighter, more technologically enriched future. As an alternative, a different way of seeing, Borgmann’s work seems to ask the right questions; it raises the important social, cultural, ethical, ecological, and moral issues from which contemporary HCI cannot escape. These questions are also at the heart of understanding sustainability, not only in HCI.

In light of this, we argue the need for a philosophy of technology to emerge within HCI design. HCI needs to become more aware in terms of human implications and social, cultural, ethical, ecological, and political impact. To continue to be a relevant voice in interactive systems design, we argue that it is important to leave the comforting moral aimlessness of the usability paradigm. Specific types of questions—or perhaps anomalies—within the paradigm bring these matters to a head. Our fear is that if HCI as a field does not choose to deal with these questions, its perceived relevance may become lost, and more relevant fields of research and design will contentedly take over HCI’s role in shaping future interactive systems. In this process, Borgmann’s philosophy of technology could be seen as a starting point for such a discussion of ‘new goods’ in HCI design.

REFERENCES

1. Blevis, E. (2007) Sustainable Interaction Design, CHI 2007: 503-512.
2. Borgmann, A. (1992) Crossing the Postmodern Divide, Chicago, IL: Univ of Chicago Press.
3. Borgmann, A. (1984) Technology and the Character of Contemporary Life, Chicago, IL: U of Chicago Press.
4. Fallman, D. (2003) Design-oriented Human-Computer Interaction, CHI 2003: 225-232.
5. Gaver, B. (2002) Designing for Humo Ludens, 13 Magazine, Nr 12, 2-6.
6. Strong, D. & Higgs, E. (2000) Borgmann’s Philosophy of Technology, In Higgs, E. S. et al (Eds.) Technology and the Good Life? Chicago, IL: Univ of Chicago Press.
7. Wahl, D. C. & Baxter, S. (2008) The Designer's Role in Facilitating Sustainable Solutions, *Design Issues*, 24(2).