

Existentialist HCI

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Abstract

HCI has borrowed some concepts from existential phenomenology, in particular Dreyfus's interpretation of Heidegger's philosophy. Not all concepts have been widely discussed, and it is urgently important to investigate further consequences of existential phenomenology on research and design of technology.

"Presence-at-hand" and "readiness-at-hand" are two concepts that have been accommodated into the HCI terminology. However, other implications of existential phenomenology do not lend themselves so easily into technological design. The reason is that technology itself stands under serious criticism.

If we take phenomenology seriously, we must also discuss its critique of technology. I argue that we must follow through on the implications thereof, even to the point of making technology more marginal in our society.

1 Introduction

There are good reasons to believe that critical reflection is beneficial for design of technology in general, and science on design in particular. Indeed, it is hard to conceive of science *without* any kind of critical reflection. The discussion surrounding critical reflection in Human-Computer Interaction (HCI) concerns particular kinds of critical theory, namely the ones stemming from humanities and arts, in particular Heidegger's philosophy, Vygotsky's social psychology and Bakhtin's literary theory.

Here, I am concerned with a particular kind of critical theory, namely existentialist phenomenology, as applied to HCI. The seminal work on the matter was written by Hubert Dreyfus, who discusses technological implications of Heidegger's existentialism [2]. The key issue concerns limitations of technology, namely that strong (classical) Artificial Intelligence is impossible because it makes flawed assumptions on what human cognition is at its very base.

Winograd and Flores were perhaps the first to take the full consequences of these critical reflections in HCI. They abandoned research in AI, and instead chose to focus on how humans use tools in their daily practice, and how those tools should be designed [4].

Two concepts that have been tremendously useful in HCI are "presence-at-hand" and "readiness-at-hand". These describe the transparent use of tools. A hammer, for example, is invisible to us ("ready-at-hand") when we hammer a

nail. We are occupied with hammering, not the hammer. If something happens to render the hammer less useful, e.g. the hammer breaks, it becomes the center of our attention, "present-at-hand". Design of efficient and successful computer applications, then, concerns building tools that are ready-at-hand, transparent for the user.

However, Heidegger's existential phenomenology also concerns a third way of being, *Dasein*. This describes the basic structure of *human being*, the kind of being for which its own way of being is an issue. Drawing from the works of Kierkegaard and Nietzsche, Heidegger moves on to criticize *Dasein*'s modern way of being in the western world.

Some of those criticisms are almost ludic in their intent, technological "solutions" may worsen the human situation rather than solve our daily problems. Unfortunately for us in the HCI community, we cannot keep picking the raisins out of the cookie, it is time to follow through on the full implications of existential phenomenology.

2 Existentialism and HCI: A Gloomy Prospect

In his later works, Dreyfus has criticized aspects of technology other than classical AI, e.g. the WWW. Telepresence is thought to be inachievable, and the Web worsens the human situation by encouraging superficial opinions about every possible matter while discouraging the kinds of activity that give humans meaning. These kinds of activity demand *commitment* and pose a *risk* [3] that cannot be fully realized when people are separated in space. The problems that Kierkegaard saw with the press in his time has, according to Dreyfus, worsened with the advent of the WWW.

The problem is that our culture's way of being lacks meaning and seriousness. The reason is that we have a too strong belief in technology to solve our problems, and indeed seem to believe that everything can be reduced to parts that are "solveable". There is, however, nothing inherently wrong with solving problems. What is wrong is that we treat this problem-solving way of thinking as *the only* acceptable kind of thinking. We stand to lose meaning and commitment, and find ourselves in a passionless, reflective way of being. We value efficiency for no sake but its own, and chase experiences that serve no lasting purpose but only the experience itself. But looking for a solution to *those* "problems" would only worsen them! As Dreyfus says, "This threat is not a problem for which we must find a solution, but an ontological condition that requires a transformation of our understanding of being." [1].

Thus, Heidegger, and later Dreyfus, propose a paradigm-shift, an entirely new way of viewing existence in our culture. In this view, what is currently peripheral in our society is given central attention while what is now central is moved to the periphery. In other words, we need to reconsider what is valuable to us as a society and individuals. Instead of chasing efficiency for its own sake and technological solutions to everything, we need to reposition meaningful values such as friendship, love, communities, nature, and caring as primary in our lives.

Now, I will be so bold as to propose that the implication for the HCI community would be to make a conscious effort to put ourselves at the periphery. Currently, there is much interest in areas such as activity theory, "affective in-

teraction”, ”ludic design”, playful design etc. This is probably a step in the right direction, since it focuses on real human values and emotions rather than mechanistic all-important ”work”, or computers ”understanding” our thoughts and emotions. Still, one might wonder what role computers and design actually plays? Why do we need to build applications for these kinds of things? They will not ”solve the problem”, because ”a new sense of reality is not something that can be made the goal of a crash program like a moonflight” [1].

3 Oh my. What Can be Done?

My suggestion on the matter goes back to what we as HCI practitioners and researchers are doing ourselves. HCI exists as a subject because its issues are useful and important to us. We have seen a change in the area, from measurable response-times into collaborative, affective, and ludic systems. As the very existence of this workshop suggests, this change means something. Instead of always building to solve problems, we may conduct research and build tools to change the very way in which we value what is important in our society.

Still, there is a risk lurking here. Our culture has forces that will attempt to take such a new paradigm over, and mobilize it for technological order. If we do not take careful heed of our understanding of our own way of being, we ourselves may become such a force.

References

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