Questioning HCI - Is the HCI field still 'fit for purpose'?

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The field of HCI has evolved and expanded dramatically since its origin in the early 1980's. In this Keynote, I will provide a perspective on the evolution and development of the HCI field, looking backwards as well as forwards, in order to determine what are some of the changes of significance in the field. The HCI community embraces a large community of researchers and practitioners around the world, from a variety of disciplinary backgrounds in the human and social sciences, engineering and informatics, and more recently, the arts and design disciplines. This kaleidoscope of cultures and disciplines provides a rich pool of resources for examining our field. Applications are increasingly exploring our full range of sensory modalities, and merging the digital and physical worlds. An earlier focus on the usability of products and services has been complemented by an emphasis on more personal forms of engagement, enjoyment and experience. Areas such as user-centred design, participatory design, computer-supported cooperative work, and interaction design, in which I have had some involvement over the years, will be mentioned. The recent emphasis in some quarters for a more 'human-centred design' approach will be discussed. With the advent of ubiquitous computing, and the emergence of "The Internet of Things", new kinds of more open infrastructures make possible radically new kinds of applications. Research has also broadened from being performed mainly in research labs to the study of the everyday practices of people – research 'in the Wild'. What does the recent interest in such topics as - the practice turn, ecologies of artefacts, appropriation and tinkering/bricolage, design anthropology, mean for the field?

The question is - to what extent is the mainstream thinking in the HCI field ready for the challenges of these Brave New Worlds? Should this whole field of "Human-Computer Interaction" be replaced? Do the technological, economic, political and social disruptions that we see occurring require us to re-shape, or even demolish and re-create, our field, or is it a case of a more gradual evolution and development of that which we already know? The purpose of the talk is not to engage in a form of Futurism concerning the HCI field, but to examine some of the technical and socio-economic trends that can be clearly observed, and to highlight some areas of particular significance that warrant further attention. I argue for a multi-layered approach that, while exploring new avenues of research concerning people's experience and use of technology in everyday life, does not necessarily dismiss out of hand the corpus of knowledge we have built up concerning our interaction with computer-based

systems. From a personal perspective, issues such as means and ends, our underlying values, and concern for our fellow human beings in an increasingly fragile world, are issues that, while perhaps seen as outside the remit of a narrow HCI brief, impact on the field in significant ways. In this regard, discussions of our future should not be the preserve of techno-determinists, but be open to all. For example, ubiquitous computing can be involved in many scenarios, not only that of "Ambient Intelligence". The notion of 'care robots' needs to be ethically evaluated. We need to engage in the development and critique of these different perspectives and approaches. Being able to work in and with multidisciplinary teams embodying distinct, and at times conflicting perspectives, being able to communicate ones ideas and information across a variety of social and institutional boundaries, will become of great importance. How we formulate our research questions, what research methods we use, and even and how we label our activities may need to be significantly reframed. I argue that those currently within the HCI community could still have a significant role to play in the development and evolution of a more open research area concerned with working and living in a (computer-) mediated world.

Biography

Liam Bannon is Honorary Professor in Human Computer Interaction at Aarhus University, Denmark, and Emeritus Professor in the Department of Computer Science and Information Systems at the University of Limerick, Ireland. In recent years, he has also held Visiting Professor positions in several Universities in France, Spain and Italy. His research interests range over the gamut of human-technology relations, including cognitive ergonomics, human-computer interaction, computer-supported cooperative work, computer-supported collaborative learning, new media, interaction design, and social dimensions of new technologies. He has been involved for many years in the elaboration of more human-centred approaches to the design of complex ICT systems (Bannon, 2011). He was a founding editor of CSCW: The Journal of Collaborative Computing and is serving, or has served, on the editorial boards of several other international journals in HCI, CSCW, CSCL, and Design. He has served on numerous International Programme Committees for Conferences in these areas, and also served as a member of the International Panel of Reviewers for many scientific research projects and organizations wordwide. Liam was recognized as a Pioneer in the HCI field by IFIP in 2010. Liam holds an Honorary Doctorate from the Royal Institute of Technology (KTH), in Stockholm, Sweden. Liam is a Fellow of the Irish Ergonomics Society, was first Chair of the ACM SigCHI Irish Chapter, and is Irish representative on IFIP TC13 (Human-Computer Interaction). In 2013 he was jointly awarded (with Kjeld Schmidt) the EUSSET-IISI Lifetime Achievement Award for contributions to HCI & CSCW.

References

Bannon, Liam (2011) Reimagining HCI: Toward a more human-centred perspective. ACM Interactions (cover story), July-August 2011, vol. 18, Issue 4 pp. 50-57