
Reflective HCI: Articulating an Agenda for Critical Practice

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Abstract

Reflective HCI is a style of HCI research that integrates technical practice with ongoing critical reflection. In the last thirty years, HCI researchers and practitioners have expanded their interests from aspects of cognitive ergonomics concerned with individuals using desktop computers at work to include concern for social and communal aspects of technology use and for affective and aesthetic aspects of design. This has been accompanied by the appropriation of a variety of disciplinary practices, concepts, and methodologies by HCI. In terms of the development and coherence of the discipline, it is timely to take a critical look at the assumptions, values, and traditions of each of these positions, their implications for HCI research agendas, and to try to understand the historical, cultural, and political emergence of HCI as a discipline itself. The main aim of this workshop will be to develop a systematic research agenda for reflective HCI.

Keywords

Critical technical practice, reflective HCI

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

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Introduction

As technologies have migrated from work to domestic and leisure settings, disciplines concerned with the design and use of technologies, such as HCI, have experienced a great deal of change. In the last thirty years, HCI researchers and practitioners have expanded their interests from aspects of cognitive ergonomics concerned with individuals using desktop computers at work to include concern for social and communal aspects of technology use and for affective and aesthetic aspects of design. This has been accompanied by the appropriation of a variety of disciplinary practices, concepts, and methodologies by HCI.

The process of appropriation can be seen as a disciplinary history of progress made through periodic contention and dialogue about what constitutes relevant research and appropriate methods within the discipline. The emergence of Computer Supported Cooperative Work (CSCW) in the 1980s, for example, reflected concern for organizational and political aspects of work, as well as technology's mediation of work, which had up to that point been largely ignored in HCI. This awareness of the complexity of organizational and political processes at work was accompanied by the development of strategies for democratizing design and for integrating insights on the social organization and accountability of work into design. More generally, it led to a shift from a largely cognitive HCI to a HCI concerned with contextualized activity, which can be seen in the influence of ethnography and activity theory over the last decade or so. This has also resulted in attention to affective and emotional aspects of interaction. In more recent times, debate has appeared about the appropriateness of a

predominantly functional, work-focused approach to IT in HCI. This has been played out in increasing attention to aesthetic and ludic aspects of design and use, including the design of technologies that seem to have no purpose other than their playfulness.

However, HCI has appropriated more than practices, methods and concepts in this historical process of defining itself. It has also appropriated several theoretical positions that supplement its traditional cognitive position. These positions include phenomenology (e.g. [17,5]), critical theory (e.g. [4]), the work of Bakhtin (e.g. [7]), and cultural-historical activity theory (e.g. [12,3]). Each of these theoretical positions is dense with values and traditions accrued over their own equally contentious histories. However, as they are integrated into the work of other disciplines, there is a danger that their rich histories and the subtleties of their practices are lost. This danger has been recognized in HCI in warnings about the dangers of a "tourist ethnography" and the reduction of cultural-historical activity theory to subject-object-tool triangles. Moreover, HCI researchers have also emphasized the importance of conceptually sophisticated appropriation of theoretical positions (e.g. 4,5,12,7). These caveats and positive efforts notwithstanding, there are many examples of impoverished appropriation in HCI, and there will continue to be until a critical agenda is firmly established in HCI research and practice.

A clear critical agenda can be one of the means of ensuring that these appropriations are enriching rather than impoverishing for HCI. Each of the practices, methods, concepts, and theoretical positions appropriated by HCI signifies a commitment to certain

values and assumptions in the context of its own discipline and in relations with cognate disciplines. A critically-reflective agenda in HCI research would attempt to make those values and assumptions explicit and encourage their interrogation, particularly in terms of their relevance to HCI. In terms of the development and coherence of the discipline, it is timely to explore the assumptions, values, and traditions of each of these positions, their implications for HCI research agendas, and to try to understand the historical, cultural, and political emergence of HCI as a discipline itself. This would benefit the discipline by enriching HCI discourse on values, assumptions and traditions. It would also benefit practitioners by encouraging reflective practice (cf 14,15).

Researchers and practitioners in HCI are now clearly interested in developing such a critical agenda. For example, CHI has hosted relevant workshops (e.g. [6]) and other conferences are dedicated to developing a critical dimension to HCI (e.g. Critical Computing 2005). Other occasional meetings have resulted in sustained bursts of exploration of the theoretical bases of HCI (e.g. [2]). Agre's explication of the metaphorical bases of technical practice, especially his critical evaluation of what metaphors make central and peripheral, has been influential in HCI discourse on the shape of the discipline [1].

Goals

Although HCI researchers and practitioners have engaged with critical reflection on their discipline for a long time now, HCI still lacks a systematic critical agenda. Most of the social and human sciences develop a systematic critical and integrative strand as part of

their research, practice and educational activities (e.g. [3],[16] in psychology). So, as well as amplifying previous calls for the need for a critical-reflective stance in HCI, the main aim of this workshop will be to attempt to develop a systematic agenda for a critically reflective HCI, taking what is currently a set of interesting issues explored at CHI conferences into a vibrant and coherent program. Although the specific issues to be addressed will be developed through the submissions rather than set a priori by the workshop organizers, some examples of what such issues might be are as follows.

Values questions: Around what values and commitments will emerging critical practice in HCI be organized? For example, should HCI be about describing or changing practice and experience? When we organize research and practice around ideas like 'the workaday world' [12] or 'everyday life', are we seeking to describe lived experience or to elevate our understanding of lived experience to the status of critical knowledge [8]? Is our interest in describing and analyzing the ways in which people experience and fit into a social world or is there an emancipatory, quality of life dimension to HCI's orientation to design and use of technology in everyday life? What ethical positions does a critical stance inspire for HCI? How do they affect practice?

Ontological questions: Does a critical approach reconstruct the object of research and practice in HCI? For example, does HCI become more influenced by the humanities? Also what orientations to subject or subjectivity are available in the disciplines appropriated by HCI? Can we imagine a HCI oriented toward

enriching self or subjectivity? What about units of analysis, validity, etc.?

Questions about who we study: What is the perhaps changing role of the user in an interdisciplinary, critical HCI? One of the emblematic contributions of HCI to design and evaluation has been to make 'user-centeredness' a foundational value. Is this value being lost or just changed in the development of a stronger design orientation in HCI, especially in the artistic and ludic influences, where users seem to be used to inspire design?

Questions about the role of theory: What is the relationship between theory and practice in reflective HCI? How does a critical HCI orient toward theoretical and practical knowledge? How does it see relationships between them? What are the implications for HCI in adopting some of the theoretical lenses from cultural and media studies, e.g. Freudian or Lacanian theories?

Practical questions: Where and how should this work be situated with respect to the mainstream of traditional HCI? How might that relationship be developed?

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