PDC'96
Proceedings of the Participatory Design Conference

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Conference Co-chairs Welcome Message

Welcome to the Fourth Biennial Conference on Participatory Design

Since their inception in 1990, the conferences on Participatory Design have become the principal North American gathering place for a growing international community concerned with making users' expressions of their own needs central to the development of information systems. Within the wider field of systems design, the PD conferences offer a distinctive orientation to the key issues of whose voices get heard and how they enter the design process.

We feel it important that the notion of participation be considered in the fullest possible sense. In particular, it derives from the democratic ideal that people have an influential say in making those decisions that affect them most. During a period when exercising choices in ones' life is increasingly presented as choosing from among predetermined options in a consumer marketplace, the PD conferences offer a vital, even refreshing space for keeping open a lively discussion of positive alternatives. For us, the PD ideal calls for all who would be affected by a system to be part of its creation -- from initiation through ongoing redesign in use. This requires not just construction, but also challenging conventional assumptions and practices. The very basis of our research and our practice demands critique.

This notion of participation applies of course to the conference itself. We ask that you not only listen during the next three days, but that you question. And that you join us in providing, if not answers, at least good directions for further work. We encourage you to take an active part in the rich array of scheduled events as well as the many possibilities for informal exchange. We hope that you will come away with a deeper appreciation of PD issues and stronger connections with others who share your concerns. It is through such engagement that the PD community will grow and thrive. (You may even want to help in organizing a future PDC!)

This conference has been made possible through the generosity of many people. The organizational and financial support of Computer Professionals for Social Responsibility continues to be critical. We also appreciate the financial assistance of Xerox Corporation, and we thank Apple Computer, Inc. for producing this year's proceedings. Most important are the contributions of time and energy of the numerous chairs, organizers, committee members, student volunteers, authors, and ultimately conference attendees.

Welcome to PDC'96!

David Bellin
North Carolina A&T State University

Andrew Clement
University of Toronto

PDC'96 Conference Co-chairs

Program Co-chairs Welcome Message

Welcome to PDC'96

We welcome you to PDC'96 and invite you to listen to stimulating presentations and to participate in three days of lively discussions. We hope the papers, panels, and workshops at this year's conference will provide an opportunity for you to reflect on the diverse perspectives and varied approaches represented within the participatory design community.

We received almost twice the number of papers as were submitted to PDC'94 and so we expanded the conference by a full day to accommodate the large number of quality papers that we received. We also were able to include, for the first time, a doctoral consortium. This increased interest in the PDC is encouraging and suggests that the general themes of participatory design are of continuing interest and growing importance. Some of the pioneers in participatory design are among the authors of the papers in this year's conference, and new voices and viewpoints also are represented in the program.

This year we have paper sessions dealing with local community participation in technology design, technology design and introduction in lesser developed countries, and participatory design in small organizations. As with other PD conferences papers address the relation of organized labor to technology design and implementation, and the value of re-energizing participatory design's political agendas. There also are papers that report on experiences (both successes and failures) in applying particular participatory methods, techniques and tools.

The keynote speakers for this year's conference also reflect the diversity of our community and our interest in reaching out to other disciplines for insights and support. One of our keynote speakers, Mark Nichter, is an anthropologist who has worked for a number of years developing participatory approaches to the design and delivery of health care systems and technologies in lesser developed countries. Our second keynote speaker, Elaine Bernard, is the director of the Trade Union Program at Harvard. Her work has focused on the implications of technological change for workers' jobs and employment.

This exciting program is, as always, the result of the efforts of many people. We thank the authors, members of the program committee and chairs of the various committees for dedicating their time and energy to this collective effort.

We hope the next three days will revitalize your commitment to participatory design as well as challenge you to think in new ways.

Jeanette Blomberg
Xerox Palo Alto Research Center

Finn Kensing
Roskilde University

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Computer Professionals for Social Responsibility

CPSR MISSION

CPSR is a public-interest alliance of computer scientists and others concerned about the impact of computer technology on society. We work to influence decisions regarding the development and use of computers because those decisions have far-reaching consequences and reflect our basic values and priorities.

As technical experts, CPSR members provide the public and policy makers with realistic assessments of the power, promise, and limitations of computer technology. As concerned citizens, we direct public attention to critical choices concerning the applications of computing and how those choices affect society.

Every project we undertake is based on five principles:

We foster and support public discussion of, and public responsibility for decisions involving the use of computers in systems critical to society.

We work to dispel popular myths about the infallibility of technological systems.

We challenge the assumption that technology alone can solve political and social problems.

We critically examine social and technical issues within the computer profession, both nationally and internationally.

We encourage the use of information technology to improve the quality of life.

CPSR is a democratically organized membership organization. Our accomplishments result from the active involvement of our members, supported by the CPSR staff and computer professionals across the country.

HISTORICAL HIGHLIGHTS

• CPSR published the first papers and held the first public debates on the computing aspects of the Strategic Defense Initiative, or "Star Wars."

• CPSR members testified before a U.S. Senate subcommittee on the feasibility of SDI.

• CPSR/Boston produced an award winning slide show and videotape called "Reliability and Risk: Computers and Nuclear War."

• CPSR members produced the first book for general audiences on the ways in which computers revolutionize modem weapons systems, Computers in Battle: Will they Work?

• At the request of a House subcommittee, CPSR studied the FBI's proposed National Crime Information Center upgrade (NCIC 2000). CPSR's report was widely credited for the FBI's subsequent decision to drop a proposal to track individuals who had not been charged with any crime.

• CPSR co-produced a "Special Report on Computers and Elections" for the 1988 Presidential Campaign, highlighting the potential for errors in electronic vote-counting systems.

• CPSR filed lawsuits under the Freedom of Information Act to force the FBI and Secret Service to reveal whether they monitor computer bulletin boards and electronic mail.

• CPSR/Portland hosted a conference on Computers and the Environment.

• The CPSR Workplace Project organized PDC'90 - the first U.S. conference on participatory design, in which users work together with software designers to ensure that systems meet workers' needs.

• CPSR helped lead a successful grassroots campaign to convince the Lotus Development Corporation not to release their proposed Marketplace: Households product, which would have included data on 120 million Americans.

• CPSR/Berkeley organized a media campaign to register our concern over the deadly role of computing technology in the Persian Gulf War.

CPSR PROJECTS

By sponsoring both national and local projects, CPSR serves as a catalyst for in-depth discussion and effective action in key areas:

The National Information Infrastructure

Civil Liberties and Privacy

Computers in the Workplace

Technology Policy and Human Needs

Reliability and Risk of Computer-Based Systems

In addition, CPSR's chapter-based projects and national working groups tackle issues ranging from he implementation of Calling Number ID systems to the development of nanotechnology and virtual reality, from the use of computers in education to working conditions for computer professionals, from community networks to computer ethics.

HOW TO BECOME A MEMBER

Just fill out the membership form attached as the last page of this volume, enclose a check, and mail it to CPSR, P.O. Box 717, Palo Alto, CA 94302.

MEMBERSHIP BENEFITS INCLUDE:

As a member of CPSR, you are joining a nationwide network of concerned people who are committed to bringing a public interest perspective to all aspects of information technology.

- Access to an international network of people who can provide expertise and well-researched support for progressive positions concerning information technology policy.

- Access to on-line information and discussion groups on key topics concerning the socially responsible use of information technology.

- The chance to participate in local and national work groups on issues of particular interest to you.

- A quarterly newsletter containing in-depth analysis of major issues as well as updates on CPSR activities and action alerts.

- Invitations and discounts to CPSR events and publications. CPSR sponsors conferences on Participatory Design (PDC), Directions and Implications of Advanced Computing (DIAC), and Computers, Freedom and Privacy (CFP), among others.

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Keynote Speaker:

Participation in Community Health Care programs: Are we ready to move beyond rhetoric to consider methods and the politics of the possible?

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ABSTRACT

Participation in Community Health Care programs: Are we ready to move beyond rhetoric to consider methods and the politics of the possible? Community participation was heralded as the cornerstone of primary health care in the 1980's. Community health committees and worker programs were advocated to serve as links between the "community" and the health care infrastructure. A decade later, evaluations revealed that community health worker programs were largely a bust given the rather naive way they were implemented and the politics of local patronage systems as well as vested interests of professionals with "the system". The path of the least resistance which generally characterized program implementation, involved the community in only token gestures of participation. At present, development planners have become enamored with low cost techniques of "reading the community" such as focus groups and rapid assessment procedures which are largely replacing surveys. None of these approaches however foster active community participation. Largely unaddressed by all of them are forms of embodied knowledge and emergent behavior which are situational and influenced by sense-environment based memory.

As a participant observer in the international health field involved in mobilizing and monitoring community participation, I will discuss some of the lessons I have learned while working at both the grassroots level as well as among groups of professionals attempting to collaborate in the name of development. In my talk, I will invite a rethinking of the concept of community and encourage a reframing in terms of "action sets" (people brought together by activities), the social relations of critical thinking and skillful interaction, and what Jean Lave has termed "communities of practice". I will outline a continuum of participation ranging from low-end compliance and securing of end-user feedback to projects (products) already in the development stage to high-end participation as an ongoing process in which resources once generated are envisioned to be appropriated, re-used and/or redesigned to fit circumstances. As a means to mobilize middle to high end participation I will advocate for 1) new opportunities for participatory research as a space/time in which "community" members are able to explore options, raise concerns and articulate needs, and 2) the development of ways of assessing "community response" to interventions (inventions) so that midcourse corrections are enabled and new course thinking is possible. I also will emphasize the need for fostering a transdisciplinary perspective to problem solving which goes beyond multi and inter disciplinary thinking and argues for paying as much attention to the social relations of performance (on the job, in the community) as the social relations of production and consumption. Finally, I will raise questions about the politics of democratic Participatory Development-Design approaches given: cultural norms in more and less hierarchical social structures, the micropolitics of professions as this effects the protection of boundaries and the distribution of capital (economic, social, symbolic, cultural), and anxiety about job security given flexible accumulation trends. Participatory design has sought to emphasize the need for including the user of systems in the full design process as equal partners. While this is an important step forward, it has not always included a full analysis of power in the workplace and society. Users need organization, not simply individual rights to participate. Real change will mean redistribution of power and that rarely takes place without an organized challenge to existing hierarchies and institutions. Designers can not be neutral on the issue of power inequality in the workplace.

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