PDC 2004

Artful Integration:

Interweaving Media, Materials and Practices

Proceedings of the eighth **Participatory Design Conference 2004**
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Volume II

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ARTFUL INTEGRATION AND PARTICIPATORY DESIGN

Preface to the Proceedings of PDC 2004 – Volume II

Participatory Design

Participatory Design (PD) is a diverse collection of principles and practices aimed at making technologies and social institutions more responsive to human needs. The central tenet of PD is the direct involvement of people in the co-design of the systems they use. Originally viewed as an approach to developing computer systems for specific groups of workers, PD has expanded outwards in philosophical, political and pragmatic ways. It is now part of an emerging movement that blurs theoretical and practical boundaries and integrates work from many disciplines -- in an artful way -- all in pursuit of relevance for people around the world shaping their own 'networked society'.

The Participatory Design Conferences have been convened every two years since 1990. These forums have brought together a multidisciplinary and international group of software developers, researchers, social scientists, designers, activists, practitioners, users, citizens, cultural workers and managers who adopt distinctively participatory approaches in the development of information and communication artifacts, systems, services and technology.

Participatory design approaches have been used in traditional application domains (such as computer systems for business, health care and government) and are also relevant in emerging areas such as web-portal design, e-government services, community networks, enterprise resource planning, public CSCW (computer supported cooperative work) systems, social administration, community development, university/community partnerships, tele-health, political deliberation/mobilization (e-democracy), digital arts and design, scholarship and teaching with mediated technologies (e-learning), cultural production and cultural institutions. PD is also being used in the development of ICT (information and communication technology) infrastructures like free software/open source projects, standards, protocols, new media, policy, broadband and WiFi (wireless fidelity) networks and the like.

Participatory designers of ICT-applications may learn from, and, hopefully contribute to, work in other fields, such as community and organizational development, architecture, urban planning, policy development, media, design and art, especially insofar as these fields increasingly use ICTs. Participatory design approaches can be applied in various social settings such as local communities, government agencies, civil society, NGOs, schools and universities, companies, trade unions, etc. each with its own distinctive stakeholder arenas and power relations.

Artful Integration

The overall theme of the 2004 conference, "Artful Integration: Interweaving Media, Materials and Practices" describes a central reality of participatory design. It recognizes that an essential ingredient in design practice is the working together of multiple, heterogeneous elements. Whereas conventional design approaches emphasize the role of the designer and the creation of singular 'things', artful integration calls attention to the collective interweaving of people, artifacts and processes to achieve practical, aesthetic or emancipatory syntheses. With that in mind the conference organizers inaugurated the "Artful Integrators Award" to recognize exemplary work in participatory design.

The award is intended to recognize outstanding achievement in the area of participatory design of information and communications technologies. The award goes to a group of people who together have worked out, in an exceptionally creative way, a new and useful configuration of technologies and practices. Where traditional design awards have gone to individual designers or singular objects, the Artful Integrators Award emphasizes the importance of collaborative participation in design, and a view of good design as the effective alignment of diverse collections of people, activities and artifacts. While no single element of the design might be particularly extraordinary in itself, the combination of design process and outcome can be.

The Artful Integrators Award 2004 goes to Randy Trigg and the Global Fund for Women. Through their ongoing project of participatory design, Randy and his organization have created an information and communications infrastructure that exemplifies, in process and products, the spirit of the Artful Integration Award. As an accomplished software developer and systems integrator, Randy's collaboration with members of the Global Fund has resulted in the design of a database system for nonprofits that brings together fundraising, grant making and human resource management in ways that accommodate the continually evolving work practices of the organization. The Global Fund's developing infrastructure weaves together Randy's longstanding commitment to cooperative design practices with the Global Fund's commitment to democratic forms of wealth redistribution. Receiving the Award with Randy is Kavita Ramdas, President and CEO of the Global Fund for Women, who will speak about the Global Fund's grant making philosophy and participatory practices.

Proceedings Volume I

Volume I collects the full research papers presented at PDC2004. They are organized in three broad areas, corresponding to the main tracks within the conference. The first track deals with participatory design in various community contexts, reflecting the recent growth of interest in this emerging area. The other two are more traditional, dealing with methodological considerations and reflections on case experiences respectively. Within the tracks, the papers appear in the order of their presentation at the conference.

Proceedings Volume II

In this present volume are collected the diverse range of events convened at the PDC2004 in addition to full research papers. A highlight of any conference are the keynote addresses by invited

speakers. At PDC2004 we are proud that three distinguished scholars are sharing their insights with us: Tone Bratteteig, a PD pioneer and associate professor in the Department of Informatics, University of Oslo, speaks on "Participatory Design in Present Society", highlighting the challenges posed by such developments as the globalization of organizations and work processes. The conference closes with Jonathan Barker, professor emeritus of the University of Toronto, speaking on "Fearful Asymmetry: Terror, Power, and the Shape of Popular Action", in which he addresses the contemporary political context in which PD practitioners will likely need to take heed.

In response to the number and high quality of the submissions received, PDC2004 presents a wide array of short papers. Represented are research works in progress, field experiences / stories from reflective practitioners, and tools and techniques reports. Complementing the papers is a variety of conference workshops and panels, including a round table discussion of the conference's Art Installations. The installations, offering experiential immersion in technologically-enabled environments, combine outstanding aesthetic vision with a commitment to the principles and philosophy of participatory design. Half–day workshops round out the main conference program. Specialized break-out groups convened in full-day pre-conference workshops and tutorials, and, for the first time at PDC2004, a Doctoral Consortium. Among the various other venues for sharing PD ideas, the papers and related conference materials will all be hosted on CPSR's 'digital library' <cpsr.org>.

Our thanks

Any conference involves a great deal of work by many people. Here we highlight those who have made the most direct contributions to creating the research program, while recognizing that this is only a partial accounting. The steady commitment over many years by the Computer Professionals for Social Responsibility to the engagement between academic study and practical action has been a hallmark of PD research and provided a vital framework for this conference series. For this particular event, we are also grateful to the Knowledge Media Design Institute and the Faculty of Information Studies, both of the University of Toronto, for their early, substantial assurance of financial and institutional resources that has made holding PDC2004 a possibility. Behind the scenes, Scott Rose developed the on-line reviewing management systems, and got it to work well under stressful conditions, while a dedicated group of volunteers ensured that all the vital details of the conference came together. Our thanks go to Terry Costantino, Max Evans, Adam Fiser, Joseph Ferenbok, Luanne Freund, Christie Hurrell, Rachel Murray, Amelia Myers, Christy Rutherford, Maryam Tohidi, and Asim Qayyum.

We also deeply appreciate the solid and careful efforts of the authors, whose papers constitute both volumes and provide the core of the conference.

Finally, whether you are reading these Proceedings in Toronto in the company of conference attendees or on your own well after the event, we thank you for your interest in PD, and your concern for the development of systems that meet human needs. We look forward to your engagement and contribution to the PD community worldwide!

Adrian Bond, University of Toronto, Canada

Douglas Schuler, The Evergreen State College, USA

Fiorella de Cindio, University of Milan, Italy

Andrew Clement, University of Toronto, Canada

Peter van den Besselaar, NIWI, Royal Netherlands Academy of Arts and Sciences, Netherlands

July 2004

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Participatory Design in Present Society

Keynote Address

Tone Bratteteig, Associate Professor, Informatics (Information Systems), University of Oslo, Norway

Abstract: Participatory design in systems development refers to involving future users in systems development work activities in ways that enable them to influence decisions that will affect the resulting system and through this the activities in which the system will be used. Participatory design is aimed at improving the quality of the system through better access to use knowledge represented by users when designing the system. However, the start of the participatory design tradition in systems development research in the 1970s was to increase human autonomy with respect to technology; to strengthen the weak users in their struggle against strong capital interests. Participatory design is basically about including more than one voice in the design decisions, which requires cooperation and mutual learning over time in order for the community of designers and users to develop the necessary openness and trust of a shared collaborative space that includes and appreciates differences between the community members. Some characteristics of present society (like global work life and work organizations, shifting and flexible work relations, standardization of information infrastructures and systems) create very different conditions and constraints for participatory design decisions. The talk discusses some of the challenges and dilemmas of participatory design processes possible in present society, and presents suggestions for characterizing them.

Bio: Prof. Bratteteig has had a longstanding interest in communication and cooperation between designers and users in systems development, placing her among the (second generation) pioneers of Participatory Design. Since the early 1980s, when she began working with Kristen Nygaard and the research group he founded in Oslo, she has focused on systems development as a political and social process. One of her early major contributions came through her co-leadership of the path-breaking Florence Project. She has also been active in advancing systems development education within the informatics field. Bratteteig advocates that theory about systems development must involve studies of both design and use practices, and their interaction over time -- a theme that is prominent in her recent Doctoral dissertation, "Making Change: Dealing with relations between design and use" (Oslo, 2003).

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Fearful Asymmetry: Terror, Power, and the Shape of Popular Action

Keynote Address

Jonathan Barker, Professor Emeritus, Department of Political Science, University of Toronto

Abstract: The deeper argument for participation holds that through participation in the decisions that affect their lives, people exercise and develop the best of themselves as full human and social beings. Participation takes further meaning from its potential for pushing social reforms that reduce injustices within and between societies. Today these positive qualities of participation are challenged by core features of globalization. Participation requires spaces in which equality of voices is recognized and protected, yet globally and in most economies and large-scale organizations inequality of social and economic power is on the rise. The most complete forms of participation take place in settings that make decisions for whole communities and encompass all the features of social life, yet power tends to become more fragmented and dispersed with the deliberative bodies losing power in relation to military machines, corporations, and administrative bureaucracies. New technologies of violence threaten participation from the mighty via bombs and security police, and from the margins via terrorist acts. New information technologies strengthen the strong, but also give new capacities to the weak. The fear inspired by terrorist acts and the so-called war on terrorism has skewed the field of action sharply in favour of the holders of economic and military power. Those who work for the deeper benefits of expanded participation in particular activities are well-placed to assess this new fearful asymmetry and to act against it. Many of the most committed and creative participatory initiatives are local, but their success is not assured by only local strengths. Local participation works best when it is linked to wider networks of technical and political knowledge, when it gains some support from higher political and administrative officials, and where basic political rights are protected by laws and customs. Spreading the benefits of participatory design under today's conditions will require new kinds of "artful integration" to make the necessary linkages.

Bio: Jonathan Barker's teaching, writing, and research have focused on issues of participation and political change in the developing world. His research on rural policy and politics in Senegal, Tanzania, and Uganda shows how political action is related to a crisis of livelihood and complex survival strategies (Rural Communities under Stress: Peasant Farmers and the State in Africa, Cambridge: Cambridge University Press, 1989). He developed a conception of political settings that can be used in field research on grass roots political action. The ideas are explained and put to use in a series of case studies in India, Pakistan, Nigeria, Uganda, Nicaragua, the United States, and England he carried out in collaboration with graduate researchers. That work showed how people with little power and few resources often can create and use political space to defend their livelihoods and to assert their identities (Street-Level Democracy: Political Settings at the Margins of Global Power, Toronto: Between the Lines, 1999 and West Hartford, Connecticut: Kumarian Press, 1999.) Most recently he has tried to understand the ways popular political action is affected by terrorist acts and the war on terrorism (No-Nonsense Guide to Terrorism, Toronto: Between the Lines and the New Internationalist, 2003 and London: Verso, 2003). Jonathan Barker is Professor Emeritus of Political Science at the University of Toronto.

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