

2002

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### Recommended Citation

Beck, Eevi E. (2002) "P for Political: Participation is Not Enough," *Scandinavian Journal of Information Systems*: Vol. 14 : Iss. 1 , Article 1.

Available at: <http://aisel.aisnet.org/sjis/vol14/iss1/1>

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# P for Political

## Participation is Not Enough

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There can be no innocent positions

-Donna Haraway 1991

### Abstract

Is participatory design outdated in Scandinavia? Many would say it is. Yet, as Information Systems (IS) diffusion continues in familiar and new guises, IS researchers and developers face political dilemmas through the conduct of their work. These are precisely the original area of concern for the research area of Participatory Design (PD). How, then, to make PD better reflect contemporary concerns?

This paper argues the danger of complacency among Scandinavian IS researchers about the position and meaning of PD: Some researchers reject PD altogether; some who previously have contributed to PD speak of new circumstances making it harder or less relevant today. The paper critically examines a number of such arguments.

In a world made "global" by information and communication technologies (ICTs), political concerns remain on the minds of many. PD must encompass work motivated in political conscience which is expressed through a range of approaches and conducted at multiple points throughout the processes of computer development and adoption, not only participatory design. In this sense, PD needs to become broader. Further, participatory design work which does not contribute to challenging patterns of dominance or understanding how to do so currently remain within PD. This is another problem for PD and in this sense the area needs to become more focused.

In sum, PD must develop a stronger demand for analyses of societal/political/ethical consequences of ICT development, management, adoption, or use. Thus, systems design would be one of several foci contributors might address. To indicate the range of new possibilities for activism, issues are suggested that might benefit from enquiry motivated in concern for dominated groups.

### Keywords

Participatory design, Scandinavian Approach, user orientation, Computer Science and politics, Computer Science and dominance

## 1. The need for a political argument

How many developers of systems for industry or government have found their technical/scientific/craft assessments set aside by the internal politics of the organisation? How many have felt bad knowing they are contributing to a system that will put people out of work or make living or working conditions worse for some? Donna Haraway (1991) reminds us that there are no innocent positions.

This paper aims to incite Scandinavian junior and senior researchers in computer science to be more troubled by such issues, and to consider political aspects of the work integral to our craft. In doing so, this paper joins a debate on the research area(s) currently known as Participatory Design (PD). Loosely put, the processes through which design decisions are made have become a target for PD research, as have their consequences in use. Joan Greenbaum (1993) summarises the main motivations for conducting PD as pragmatic (e.g. for improving systems design), theoretical (e.g. for communication benefits of hands-on involvement of future users), and political (e.g. for furthering workplace democracy).

Much important work has been conducted under and inspired by PD. Many have had their eyes opened to the possibilities of different and more meaningful computer scientific practices through PD and related fields. PD has enjoyed growing interest both commercially and within an international research community. The success, however, has brought new issues for researchers in the field to adjust to. My concern is the paradox that within Scandinavian Computer Science PD seems marginalised. Further, considerable challenges have arisen to the established understanding of what constitutes political action through computing. While PD embodies power-challenging potential, this potential is not necessarily realised and approaches other than participatory design may equally contribute. Although it has inspired much important work, participatory design no longer suffices—if it ever did—as an index to contemporary political concerns of computer scientists.

In calling for a renewed focus on political perspectives I wish to inspire readers to address, on their own terms, questions like: What insights of previous political analyses seem relevant and important today? What new issues need to be addressed? Thus, this paper aims to inspire reflection

on what 'political' means or could mean in a systems development context. While this continually needs rethinking and recontextualising, in my own use in this paper 'political' means concern about dominance patterns (e.g. differential possibilities of influencing the shape of an "IT society" project). Such a concern may lead to investigations of influences on culture and on society of technical designs, their promotion, and their frequent association with specific ideologies regarding the organisation of society (e.g. the introduction of competition in the home help services). Likewise relevant are studies of ideologies of society and their influences upon computing research and development (e.g. the granting of exclusive intellectual property rights for software components and algorithms). Dominance serves to uphold the marginalisation or exclusion of some from aspects of society normed as beneficial, such as economic, democratic, health or other participation (Gino Germani 1980). Thus, one strand of political IS would strive to make visible marginality related to computing. This might be new marginality as a consequence of rhetorics and practices surrounding IS or reproduction of existing marginality and exclusion.

Concerns such as the above are embodied in three (or more) levels of a researcher's work: first, conducting studies exploring interactions between dominance patterns and technologies (including design, rhetorical powers, and funding structures for computing research); second, motivations at the level of "scientific," reasoned argument (e.g. Greenbaum's summary above); and third, the personal morals or ethics of researchers and developers. The paper touches on all three.

The next section provides a brief history of PD as a research area and outlines the development of PD interest outside Scandinavia. The third section looks at some troubling issues currently facing PD. Together, these sections constitute an argument 'from within' for the need to renew PD. The need 'from without' is argued in the next two sections, where alternatives are explored focused on understanding and action, respectively. Together they look to the possibility for a PD focused on political aspects of IS design, development and usages. The final section summarises key points and urges change.

## 2. Out of Scandinavia...

Scandinavia—or more properly, the Nordic countries: Denmark, Finland, Iceland, Norway, Sweden—is often considered the original home of PD. Today, however, many in Scandinavia reject PD without considering if there are aspects that might speak to them. Paradoxically—or perhaps because of this—few who were not themselves active reflect on what was done or why. Yet, the underlying idea(l)s behind putting political aspects on the agenda constitute a strong challenge today. This paper turns to these ideals for inspiration and brackets off consideration of the subsequent work conducted under PD. The pressing issue is to stimulate interest in addressing today's problems. Given such interest, the relevance of previous experience will emerge (and its emergence may be helped, especially by those who possess such experience.) For this purpose I next summarise some history for readers who are unaware of any background.

### 2.1. A brief history

As a Scandinavian research direction, PD has one root in 1960ies Industrial Democracy projects (Peter Asaro 2000). The first project to address computing involved the Iron and Metal Workers' Union (Kristen Nygaard and Olav Terje Bergo 1973). Nygaard and Bergo document an imbalance of access to computing expertise between managers and workers, addressed by training trade unionists in the concepts and language of computing. This set precedence for TU collaboration in later projects. From 1981 onwards (Asaro 2000), PD projects focused on the politics of technology design. Researchers' attention extended into issues such as skill among workers (e.g. nurses and graphical industry workers) and specific techniques for involving users in design. Projects that became known were carried out mainly in the Nordic countries. As interest in such issues spread, these lines of research became known as Scandinavian Approaches. A milestone was the publication of two works in English: Gro Bjercknes, Pelle Ehn and Morten Kyng's 1987 collection of papers "Computers and Democracy," and in 1989, Christiane Floyd et al.'s translated report "Out of Scandinavia". For a discussion of approaches that evolved within Scandinavia—not all of which were politically concerned—see the latter and Jørgen Bansler 1989. Recent overviews include Gro Bjercknes and Tone

Bratteteig 1995, Finn Kensing and Jeanette Blomberg 1998, and Asaro 2000.

### 2.2. Going international

While different perspectives exist on the origins and spreading of PD, undoubtedly interest has spread internationally: cf. the growing biannual PD conference; a special issue of the Communications of the ACM (CACM 1993); and interest in PD at CHI conferences. The emergence of Computer Supported Cooperative Work (CSCW) lent a substantial new audience to certain PD perspectives from the mid-1980ies.

Have, therefore, political aspects of design become *comme-il-faut*? Not necessarily, as participatory systems design has come to include practices that have no interest in participation as a vehicle for empowerment. Asaro (2000) traces this strand to IBM of the 1970ies. The term itself, originally "owned" by the politically radical, has more recently appeared as a slogan for marketing and other purposes. For example, in the European Commission's 1995/96 call for Telematics research proposals 'user participation' meant the involvement of large corporations in systems development.<sup>2</sup>

An advantage of the focus outside Scandinavia is the opportunity for issues and solutions to develop differently. An example is the approach of the North America-based Computer Professionals for Social Responsibility (CPSR): While the form of organisation is individual membership, the CPSR has been able to make considerable contributions to important areas such as influencing public policy and helping conferences and research communities with social responsibility perspectives to thrive. Thus CPSR substantially supports the existence of arenas for critical voices.

The increased interest in PD outside Scandinavia has not yet, however, been matched by a corresponding increase in politically oriented PD within Scandinavia. One example is the lack of such items from Nordic researchers at the Aarhus Third Decennial Conference in 1995. The question begs itself why there appears to be little interest for a political PD in Scandinavia: If 'the old guard' seems a little weary is there a new, politically concerned 'young guard'? Taking the annual Information Systems Research in Scandinavia (IRIS) conference as an indication, signs are that at the moment, there is not.<sup>3</sup> Evidently, issues of interest to IRIS contributors include development

of participatory design as a technique, e.g. looking at methods for carrying out PD in various settings, making PD techniques more robust, discussing its relation to software engineering, and re-examining simplistic assumptions behind some of the early work. However, framing research so as to make visible or to change power differences cannot easily be claimed as a key concern of a community.

Nevertheless, the early work did establish political concerns as a legitimate area of systems developers in Scandinavia to work with. This is no small achievement. Additionally, the issue being occasionally raised vouches for the continued potential of Nordic researchers in raising political dimensions of systems development.

### 3. ...into lesser security: Shifting grounds for PD

"Out of Scandinavia" can be read as both "arriving elsewhere" and "leaving Scandinavia". By leaving I understand a sense of insecurity, of avoidance, of interest ran into the sand. The question of what may have rocked the ground of PD in Scandinavia is complex. This section explores some possible contributory challenges, including: Where to locate design in the face of off-the-shelf software and multiply distributed arrangements for producing it; who is to benefit; and relations between TUs and computing.

#### 3.1. Where does design take place? Where could participation take place?

Intervention requires a location. When the central concern was industrial democracy intervention focused on preparations for the negotiating table (e.g. Nygaard and Bergo 1973). With the shift towards the design of technology custom development was the locus of intervention: System designers within an organisation ('in-house') were to work together with the future users of the system being developed. Thus, the advent of ready-made ('off-the-shelf') software has been named as a reason for a reduced relevance of PD. Yet, some hold that in-house design never was the most typical; that in-house still is relevant (cf. Randy Trigg 2000); that mass produced software requires local adaptation (Susanne Bødker 1996); or that occasions for participatory design can be created in new 'hybrid' design constellations (cf. Cecilia Sjöberg 1996). These issues have been further complicated by

multiply distributed, outsourced, and/or globalised arrangements. Computing professionals themselves may be outsourced and dislocated, changing the relations to users and employers alike (Ulrike Schultze and Dik Boland 2000; Brian Nicholson and Sundeep Sahay 2001). Consequently the research area has faced methodological, political, and theoretical challenges from the contemporary emphasis on distribution of computer use situations and of development processes.

#### 3.2. When workers are consumers are home users: Who is PD to benefit?

Politically concerned PD in the 1970ies and 1980ies focused on benefits for workers as opposed to management. While the underlying concern for those in a weaker position remains pivotal for socially engaged computing, it is hard today to sustain an expression of the concern that requires workers to be 'workers' as opposed to, e.g., persons who possess a PC at home. The latter suggests that workers' views on computing technology are likely to be influenced by mass media imagery and experiences within the family as well as experiences with workplace computing. The Scandinavian countries at the turn of the millennium reportedly have proportions of internet connections in the world top and high densities of PCs. Thus, many employees will be internet users at home. As consumers many have become aware of the proliferation of computers in their homes through chips in domestic appliances and bank cards as well as PCs. Computers appear to be accepted, enthusiastically or otherwise, as part of the lives of the white middle classes that constitute much of the populations of Scandinavia, as well as indigenous peoples, more recent arrivals and poor people. Meanwhile, people are exposed to mass media coverage of intangible dangers and promises of the new technical possibilities. Concerns of the public, then, are complex and workers may share these.

If once, the prospect of introducing a steel robot to replace a person on the factory floor was a tangible change to rally people against; introducing computers may similarly have meant "machines instead of people." Now, with incremental changes and computers already in use in homes and at workplaces it is harder to see what would be the rallying cry of a critical movement. As the basis for an argument for a politically motivated mass movement, computers may be outmoded. Although conjecture, this line of

analysis may indicate reasons why would-be political researchers, if wishing to identify with workers, may be experiencing a double-bind situation unlike before. As consumers of ICT-based and other media filled with marketing drives for which few of us are prepared, in what direction to even wish for change is a difficult question. Researchers and non-researchers alike may find it impossible to take a principled stance on appropriate action. Insecurity about the possibilities of having any influence may further contribute to a sense of powerlessness.

To complicate matters further, the general political picture may be "no longer simple." Influential critical voices are arguably harder to come by at the turn of the century than they were in the 1970ies

### 3.3. The question of Trade Unions... what questions, whose questions

Lack of interest from Trade Unions in participatory design projects has been mentioned as a reason for a perceived failure of research projects to make an impact. While Trade Unions (TUs) fulfil invaluable functions of representation, it is harder in Scandinavia today to carry an argument that working with established institutions of representation such as Trade Unions ensures a critical angle on existing power structures. TUs have shown themselves to embody a multifaceted set of concerns. Professionals have established TU style organisations, arguably contributing to an expansion and blurring of the edges of TUs as safeguards of the interests of the less powerful. Other TUs do keep raising issues for the less privileged. Complex conflicts emerge, however, including jobs vs. protection of the environment. TUs are also struggling to develop responses to the intensification of work explored in a US context by Greenbaum (1995) and increasingly an issue in the Nordic countries.

TUs have retained power of influence as well as an interest in computing. The Norwegian Labour Organisation (the LO, which includes most TUs) has offered members PCs at discount rates. The Swedish LO has apparently done likewise. The thinking behind and the influences it may have remains to be explored. The uneven access to computing resources is an important issue for the socially concerned, and the LOs are in this way taking action to help broaden access. They have, further, shown willingness to use their powers of influence to address the changing work arrangements following network computing: TUs

have involved themselves in the work of developing regulations to protect new groups of home workers. Thus, TUs are using their established positions to address topics that in new ways relate computing and employee conditions. A focus on participatory systems design, however, seems to capture neither these computing related labour issues with which TUs are working, nor certain societal changes which TUs might address. For the latter, consider the following example.

In Norway in recent years, labour conflicts have been seen to occur between groups of employees as much as employees vs. capital. Yet, in 2000, the national negotiations between the LO and the employers' federation resulted in LO members voting down an agreement recommended by LO negotiators, causing the largest strike for years. One explanation of the vote was as an outcry against a series of astonishing "golden handshake" agreements for CEOs (i.e. bonus payments upon leaving). Suddenly, the "old" issue of unfair difference had re-emerged sufficiently strongly to make an impact. The issue was appropriate for mass media consumption and media support was widespread. In a complex turn, then, these employees/TU members staged a small rebellion against both of their "leaderships", TU and employer.

Voters, however, had scant opportunity to express desires outside the dominant economic rationalities focused by both sides of the conflict. If "political PD" were to question the economic perspective as a dominant source of values, challenging questions would arise also to parts of TU activity, particularly those undertaken on behalf of members with a solid income. In such a case, political PD research might work with TUs in engaging such issues and e.g. exploring solutions made possible by the computational and distributional powers of new ICTs.

### 3.4. Debating the future of PD

There were several expressions of a shift in emphasis in Scandinavian research in the late 1980ies/early 1990ies (including Jørgen Bansler and Philip Kraft 1994, Morten Kyng 1994, Randi Markussen 1994, Erik Stolterman 1995). Agreement that changes have taken place appears more widespread than whether or not they are welcome, necessary, or of what they are constituted.

Bjerknes and Bratteteig (1995) call for a renewed emphasis on democracy as an issue in systems design.

They examine experiences from key PD projects and argue that democracy was the motivating force, thus advancing a broad view of PD. They are concerned about a shift in the locus of democratic concern in systems development projects: from being seen as the realm of systems design as such, to a notion of responsibility resting in individualised ethics. Democracy, however, is another central notion in PD which has lost its evocative power and even become somewhat discredited as a general ideal. To the extent that an aim is to re-engage more (Scandinavian) researchers in exploring the political in whatever they are doing, other approaches are needed. For example, Ina Wagner sees a political potential in ethics, arguing that: "conflicts between participants' values and norms of conduct often point to underlying basic differences between their positions in the organization, their interests, and, consequently, their assessment of certain design decisions. In this regard, ethical problems have a strong political content." (p.94). Issues bridging to Bjerknes and Bratteteig's position are the willingness to face the political consequences of taking an ethical stance and how to foster a less individualised ethics perceived as relevant to the conduct of computer science.

A similar concern is voiced in Stolterman's critique of an over-focus on improving the practices of designers. Instead he calls for critical technology studies:

"[Information Systems researchers] should ask questions such as: What is information technology, where is the technology shaped, decided and produced, what are the driving forces ..., how do large scale implementations of information systems change society and the basic structures in organization and people's everyday life, etc.?" (Stolterman 1995, p.126).

Stolterman is calling for analyses of dominance patterns within and surrounding IT. His is a radical question: How is Information Systems (IS) research shaped by alignment with commercial interests? In my view, reflection may start from any position with respect to "commercial interest IS" but it needs to take place, in PD and in other arenas.

#### 4. P for 'power'? Understanding the powers of computing

The two preceding sections argued the need for development of PD. This constitutes fertile grounds

for exploring other relations between IT and the willingness to challenge power differences. Young IS researchers and practitioners, if supported, may be particularly suited—and may feel the need—to think afresh about the meaning of addressing the politics of their (our) work. Answers may differ substantially from mine. Examples of new linkages might, however, help start such processes. Thus, the following two sections suggest potential topics and ways of generating questions.

To address IS relevant power differences we need some understanding of reproductions of dominance patterns in which computing, IT, and/or computing professionals are involved. While understanding and change interrelate, analytic differences may be worth making for clarity of thinking and the development of theory. This section addresses understanding, arguing that computing and power is a worlds-shaping mix.

##### 4.1. Questioning participation, re-establishing points of leverage

Undoubtedly, PD has achieved pivotal insight through questioning "design," opening multiple interpretations and viewing it as an arena for political processes. Authors have also questioned "participation," pointing to difficult issues of representation, power, scope, etc. As research has shown (e.g. Asaro 2000, Morgan 1993) "participation" is not a sufficient condition for changing power relations: forms of participation exist and presently thrive that do not question, but further, dominant power patterns around the development of IT. An undercurrent of PD is therefore how to improve participation, or when to apply it. This discussion needs to be extended to include the central position of "participation" in delimiting the field.

PD questioning of design was motivated by a more general concern. Kristen Nygaard, widely hailed as the inventor of emancipatory participatory design, has commented on PD originally having been 'merely a technique', a vehicle rather than the core of the workplace democracy movement [personal communication ca. 1995]. PD was one response to the concerns with domination and inequality; an appropriate point of leverage at that time. Improving the position of marginalised groups was at the core. Such concerns have produced other approaches as well as participatory design. Rather than participation, concern with power and dominance needs to be stated as the core of the research field of PD. Thus, analysis

and development to be published as PD should be motivated in serving the dominated (and may or may not involve participatory design).

Some such changes are already taking place. How, then, to denote the reorientation? (I am persuaded by objections that 'Political Design' is poorly suited; it simultaneously over- and underspecifies the issues.) Roles played by information and communication technologies in dominance patterns are the point of leverage which needs to be placed at the centre of 'solid academic research.' Terms are needed for discussing combinations of head, heart, and hands; of insights and courage; of compassion and scientific curiosities; of sensitivity and methods development; of the building of theory that helps trace 'disappearing' voices. How to specify all this in a name?

#### 4.2. Whose problems?

Marginalisation and cultural bias favouring dominant groups in access to and decisions over technology were early topics in PD and remain so. Yet, their specific expressions change as do responses to them. There are complex issues of voices in technical design and adoption; of historical wrongs and of (post-) modern, complex, and conflicting sympathies.

The power to define certain problems as legitimate for research or development has in some forms been an issue in PD from the start. Presently issues arise that challenge also previous grounds for research. Examples include rationalist scientific dominance (e.g. Toni Robertson 1997 applies such epistemological questioning in PD and CSCW) and cultural dominance over what counts as technology and technical research, and from whose world views these are taken. Consider John Sherry's argument that "the democratization and decentralization which have been held up as goals in CSCW and PD may rely on degrees of formalization and documentary practices which are not necessarily universally shared" (1995, p.76) and the implied challenges to all PD but particularly in 'Third World' countries (e.g. Jørn Braa 1996, Mikko Korpela et al. 1998).

A politicised agenda for PD would need to centrally address, then, the legitimacy of anyone not only to propose solutions, but to suggest what the problems are. What are the agendas for research, and who gets to influence them? They connect to the deep question of what politics is considered to be.

#### 4.3. What makes PD research?

PD as political design poses issues of justifying such work as research. As well as a political argument about its relevance, a "scientific" argument about the validity of the methods employed must be sustained by relating to already legitimised methodologies or by establishing new ones. By methodology here I am referring not to a collection of methods but to the underlying epistemology (belief about what constitutes truth, or where or how to look for it; hence, what goals for research are considered legitimate).

An important part of the impact of PD research has been the innovative methodological work in the "Scandinavian approach." The breaches with established norms of methodology in (computer) science must have been an issue from the start but was, I suspect, partly deferred, partly addressed as a political issue in its own right. Today this means that new methodological challenges have a better chance of meeting creative solutions in PD than in related fields such as Human-Computer Interaction (HCI) and CSCW (though the influence may go both ways, cf. discussion below). The influence of PD on these fields has entailed, among other things, a methodological enrichment of especially HCI. I believe the reason to be the different stance from which PD work was undertaken, and the willingness to let the aims determine means. This is a valuable heritage.

Studying and influencing geographically dispersed phenomena is presently a major challenge in IS research. Insight has been gained through various studies, including of large scale infrastructures (e.g. Leigh Star 1992, Geof Bowker and Star 1999, Ole Hanseth et al. 1996). The politics are chiefly about the differential distributions of power and of suffering through infrastructures and standards, and these authors point to the multiple intertwining of computer systems with the evolutions of standards.

Within research, quality 'standards' are closely tied to notions of science. A central consideration for the legitimating of PD work as research is therefore the justification of its products as those of science. 'Scientific quality' has since the start of experimental science been predicated on the withdrawal of those claiming status as 'scientist' into a position of neutral observation (Haraway 1997, ch.1)—or 'Modest Witness'. Modest Witnesses could not be women or workers (ibid: 26-32). While such attitudes have shaped science to this day (ibid.), PD, crucially, arose



from a desire to break with them. Substantial successes notwithstanding, the underlying issues continue to pose challenges to PD method.

One challenge is how to include in discussions of method the development within the analyst of deep respect for the skills and knowledges of marginalised people. Another is to include within the realm of PD explorations of the power of computing science itself. Questions include: What dominance patterns—in familiar as well as new guises—are being furthered, legitimised or de-legitimised through links with IT? How are such links established and recreated? Who benefits, who does not, and what are the consequences? How would Computer Science (or IS) research need to change for these concerns to be central?

The above discussions illustrate within methodology the key points of the paper: First, the dual challenges to PD of “scientificity” and of perceived irrelevance are positive stepping stones for new thinking. Second, such ground breaking can itself be seen as integral to PD. The continued development of arguments about method is necessary and interesting and will benefit PD and probably other fields.

#### 4.4. Curses of conveni-ents

Consumerism—buying well beyond what we need—is a major problem for the use of world resources. In 2001, despite the material wealth of the majority of Norwegians there is no sign that people are satisfied. An investigation into reasons might transfer to IT research: Consider concerns among the Nordic middle classes at the turn of the millennium that some spend too much time surfing the internet. The reasons are poorly understood but seem to involve most of society: Entertainment is designed to engage, and we are seduced into spending hours watching TV or surfing the net. Clicking away between web pages may be a manifestation of enjoying the push-and-pull of convenience and entertainment; “conveni-ents.” The politics in this is, first, the consumerism of computer hardware and software; the fast turnover for new computing equipment, and the reasons for it. Second, this points to the roles of computing technologies in the evolution of new means for making money. Third, the problem expresses differences in resources of power; both as to internet access and (Northern) media interest. In every country, parts of the population have costly, unreliable, or no internet connections (in 2001, reports are that internet connection costs are higher

for an average citizen of an African country than for one of USA even in absolute terms<sup>4</sup>). The first two are expanded on below.

With respect to computers as a commodity, more complicated “standard” programs such as word processors demand higher capacity machines while fast machines afford complex functionality. One result is that many computers are sold to people who already had a working system. Computer scientists are in a particularly strong position to raise a warning and raise questions about for whose benefit the additional functionality is developed: we, if any, understand the issues and we have a status that accords weight to our words.

At a seminar in Oslo in May 2000 on representations of users, Andrew Clement and Lucy Suchman reminded listeners of the multiple and intertwining roles of computing technology in marketing (see forthcoming edition of Suchman 1987). An immediate issue is who decides what appears on your screen, for example adverts on the pages of search engines. In the representation of the user/customer as consumer generated by traces of electronically detectable activity, what kind of “you” gets represented? How can we ensure that we, about whom the information is gathered, get a say about what is represented when there is no single agency that can be held responsible? Interestingly for the present paper, this line of enquiry places participation at the centre of contemporary concerns. Yet, the individualised causes and effects introduce new complexity.

Such critical analysis holds promise for the future. “Voluntary Simplicity,” sitting still, refusing fast-paced entertainment can be political “consumer” actions. A politically sensitive computer science could do well to include for consideration cultural-individual-collective-technical-financial processes that sustain structures promoting short term self interest rather than concern for others.

#### 4.5. Computing and money

Computing and money making are so intimately intertwined that a vocabulary of non-separation has been constructed: “The [global] Network Economy” (Castells [1996] 2000), “techno-economics” (Björg Aase Sørensen 1982). Computing history since the 1950ies (e.g. in Castells *ibid.*) has relied on the reality and expectation that computing makes money for some.

The apparent necessity of the linkage with generating wealth has, however, been contested within computing. Such contesting produced and sustained PD. While important as a reaction against consequences of this link, PD's longer term contribution has been weaker on exploring the connection itself. A non-PD example of widespread contesting of a specific money-computing link is the movement against the patenting of software. Software patents have multinational-global and specific effects on specific people (including computer scientists and small companies) and has roused considerable dissent among programmers.<sup>5</sup> Other contesting expressed in practical action includes many community computing initiatives. Recent analyses that place centrally the link between computing and economics include Castells [1996] 2000 on the integral role of networked computing in the establishment of a world wide but not all-encompassing global economy. In computing, examples include Greenbaum 1995 (analysis of the interests served by computing systems over several decades) and E. Beck 1997 ('techno-responsibility' as an alternative rationality to techno-economics).

Might our understanding of the contemporary roles of computing be deepened by viewing patents arguments as political activism? Or by making links between the turbulent financial valuations of internet companies, lack of organisation among computer professionals, and their burnout? Or between differentials in internet access prices and the reproduction of familiar dominance patterns?

#### 4.6. A theoretical concern: Determinism technological and otherwise

In the mass media, much of the argument about the internet has a flavour of technological determinism. This commonly takes one of two forms: technology optimism, when the internet is being seen as inherently democratic, and technology pessimism, when the internet is seen mainly as an agent of control, a provider of pornography, etc. Learning from the field of Science and Technology Studies (STS), technological determinism may render people passive recipients of the technology. Work that points to people's appropriation of technology is part of PD's concern (Michael Muller and Sarah Kuhn 1993). This alerts us to the multiple avenues many have, and use, to change the technologies they are in contact with. Such examples strengthen the sense that technology

is shaped and can be shaped by people. Opinions may differ on ideals to strive for and possibilities of influence, but a view that we are not merely passive subjects of the technological development renders people active and leaves a chance of engagement. This is and needs to remain a central concern of PD, irrespective of specific means.

In a 1998 paper, Marc Berg discusses underlying notions of politics in several research areas placed on the (conceptual) intersections between technology and society. He is concerned with not only various forms of technological determinism, but also a human determinism that he sees appearing in a variety of 'technology critical' research areas (including PD). Berg sees attention being paid to more or less pre-defined patterns of relations between pre-defined categories of people and labels this 'modernist politics.' Emanuel Schegloff (1997) also examines 'human determinism.' In championing meaning for the informants as opposed to analysts' preconceptions (such as the relevance of gender), he provides examples of to him appropriate and inappropriate usage of gender in the analysis of conversations. Schegloff, then, starts raising for explicit discussion relations between 'modernist politics' and newer sensitivities to complexities of everyday living. Implicitly, Schegloff provides one way of combining what he champions with what he criticises: a 'modernist' category (such as gender) can provide theoretical sensitivity (Anselm Strauss 1987) for analysing observable exchanges.

Related themes are discussed by other writers including Leigh Star, who consistently demonstrates the multiplicities and heterogeneities of which our lives consist; Lucy Suchman, on the interfaces between expectations of systems designers and actual use (1987, 1993); and Donna Haraway (1991, 1997). The multiple sensitivities suggested and demanded by these authors pose a considerable challenge not only to systems design, but to what 'politics' and 'participation' can mean.

Understanding the multiple ties that link 'computer' (in its variety of senses) with dominance (in its variety of senses) would be one of two pillars of a rejuvenated PD. Developing approaches for decoupling some of those links—the focus of the next section—would be the other.

## 5. P for 'political action'? Changing the powers of computing

Having gained some understanding of how in specific circumstances computers mediate dominance patterns and unevenly distribute power, we can explore appropriate forms of action to redress, counteract, or prevent this. While insight on appropriate topics and approaches emerges from the combined work of numerous people, this section argues for taking action and suggests some topics.

### 5.1. Taking action

The uncertainties facing the PD field (cf. the third section) as well as the substantial challenges requiring a renewed focus on understanding (cf. the previous section) need not render us passive. In shaping appropriate action, three points are worth considering: we need not start from scratch; whatever we can do, matters; and the importance of trust across different approaches.

First, new critical analyses can build on the considerable body of work that exists (cf. review papers cited above and Greenbaum 1995, 1996). Researchers with a political and ethical conscience could do well to examine such work and do whatever we can to translate into action—on our own terms—those insights we find inspiring.

Second, regarding concrete action a sense of powerlessness may depend in part on a belief that only large statements matter, hence a small statement is not worth making. Most lives, however, mostly consist of ordinary events. Changing these can be radical, and the power of example should not be underestimated (further discussed below).

For the third point, uncertainty about where to put in effort requires trust in our own capacities to act as responsible persons with compassion for others. We need to develop each others' trust that "when in a situation, I will know what I need to do." This situated notion of trust may require agreement on general values but not on precise limits. Each needs support to take action when our own threshold is reached. It may require raising unpopular issues for debate, or even, as Greenbaum points out [personal communication ca. 1996], walking away from a project.

Successful movements exist. At the time of writing, it seems that "consumer" demands for labelling genetically modified foodstuffs can no longer be

ignored—because the protest has affected share prices (in 2000, a German bank was advising customers no longer to invest in the big "gene" companies). Ironically, many of the protesters may pay into pension funds that contributed to the rise of these companies. As Kristen Nygaard put it [personal communication 1996], the challenge is to make TU members see that their pension funds are maintaining the economy which hurts them. In what ways are information and communication technologies co-creating such situations as status quos, and how could this be different?

In Norway, an interesting example is Cultura sparebank, which combines basic financial services with responsible social action. This is taking place within a framework of co-ownership, transparency of investments, an interest policy implying a partial transfer of costs from borrowers to investors, and a statement of purpose which fairly unambiguously delimits the bank's activities to specific areas seen as contributing to a better society. The bank operates in the ordinary banking market as far as attracting customers are concerned and offers less favourable terms (in the narrow economic sense) to account holders; yet has grown considerably since its establishment in 1997. What is PD to learn from this? First, as political action it is a hybrid: a vision of changing a key site of liveshaping power—the circulation of money—combined with a sense of pragmatics. While conventional in its alignment with banking it is radical in how it does so. Specific action is combined with continuous, open discussion about why and how to operate this way. Second, realising the bank's vision relies wholly on people's willingness to commit to reduced 'convenience' (interest) to help someone else. This faith in people's willingness to contribute to change is to me a radical aspect of the bank.

The above indicate a further point of leverage for socially engaged researchers: to record, point to, analyse, discuss etc. ways in which people can, and do, affect the courses of technologies, including those of genetics and of money movements.

### 5.2. Users stropky and otherwise

Theorising computer scientists' too narrow perceptions of users has been a concern of Participatory Design at least since the Florence project (Bjerknes and Bratteteig 1987), which insisted on using terms denoting the professional competencies of the

participants (nurses).

Toni Robertson [personal communication 2000] has raised the issue of users' position in terms of "how can we develop 'stropy' users?" In other words, why are not more people who have poor experiences with their systems being, difficult, 'demanding better tools? What are the roles of computer scientists as experts in recreating this situation? We could do well to bring out the politics in our own roles in contributing to constructing computing technology (Markussen 1994). We might ask also how to develop politically "stropy experts" who use their possibilities for political action. Such milieus exist, cf. the free software movement. Such individual action may be "political" irrespective of whether it is participatory (though one might desire both).

### 5.3. PD and CSCW

PD can only exist in relation to other research areas. CSCW has overlaps with PD: Is PD therefore superfluous?

Some of the concerns raised in a PD context have become evident in CSCW, such as demonstrating skills of workers, involving users in design, and to some extent concern for making evident the link to societal developments. In this sense, CSCW with its greater audience has become an outlet for parts of the PD argument. (Kensing and Blomberg's (1998) review relates also to CSCW).

The extensive effort in CSCW to address methodological issues with social scientific rigour benefits PD. While many of the issues overlap, answers would be framed differently in PD. CSCW is closely tied to the argument frequently seen in research papers and in mass media that time and space are becoming less important. Yet, challenges arise from the situation of distribution itself (documented in much CSCW fieldwork), the development situation, and consequences of the systems. Although some much publicised sub-cultures do truly transgress geographical boundaries place still matters. Place, in fact, matters differentially—therein the new politics of place (Arif Dirlik 1998). While CSCW has provided improved design of the new workplaces, key issues for many affected employees are job losses and increased pressures without adequate compensation (Greenbaum 1996).

If the strength of PD lies in the idea of a political focus, a weakness of CSCW is the lack of such. PD

techniques may have been adopted but CSCW papers rarely address political issues and CSCW does not seem to provide a 'home' for concern with political implications of computer systems design.

### 5.4. Facing the net: geographically dispersed relationships

Networking has brought deeper challenges than those addressed in CSCW. The reproduction of dominance patterns in and through the net pose a host of new challenges that urgently need to be addressed from a computing perspective. While considerable resources of computing R&D have gone into technical development, IS researchers such as Sundeep Sahay 1998, Greenbaum 1996 explore dominance issues with the changing notions of time and space. In communities the changes are being felt. Researchers such as Doug Schuler (e.g. 1994) and Agneta Ranerup (e.g. 1999) work with these from a democracy perspective which is broader than the previous workplace focus. I contend that only by accepting such changes to the identity of the field will it be possible for PD to continue as an arena for political debate.

Uncertainty surrounding individualism and globalising capitalism may underlie much of the hesitance discussed in the third section. The influential analyses by Manuel Castells and Ulrich Beck shed light on these issues. Castells argues the intrinsic nature of information and communication technology to the processes that have established a "network society." This network society is global, but not all-encompassing; pockets of exclusion (marginalisation) are everywhere ([1996] 2000). Castells thus speaks of "the rise of the Fourth World" ([1998] 2000). Practices of and rhetorics surrounding globalisation therefore ought to be a proper part of the concerns of computing professionals. The global and the local constitute each other, as do the networked and the marginalised.

U. Beck 1994 examines, among other issues, the changing politics in a contemporary Europe marked by increased individualization. He argues that the reduced interest in the Political is a misframing of the issue (p.14), an inability to analytically see the successful mass movements that exist. The mistake is equating political engagement with engagement in the established institutions of politics (or Politics). Women's liberation and ecological concerns bypass the conventional boundaries of Politics and have been and continue to constitute major, society-changing

movements. U. Beck can be read to support an argument that in the contemporary climate, collective and individual action overlap. Insights such as those of Castells and U. Beck, then, can contribute to renewed analyses of movements for change. While new collective forms may be needed, measures taken by individuals or small groups will aid their development.

### 5.5. Political risks for those involved

We are not free to choose whether our actions carry political meaning. Conforming to a dominant norm—"not raising your head"—also constitutes a statement; also co-constructs society. What we may choose is whether to pay attention to these meanings, and whether to let that influence our future actions.

Presumably focusing on the political in systems development was once a hard stance to defend also in Scandinavia. Researchers and practitioners who chose not to ignore the political implications of their work would have faced considerable career risks. Personal communications indicate that similar situations are currently being faced by researchers elsewhere. A strengthened focus of PD on dominance patterns may therefore have different consequences depending on the environment in which contributors work. For many academics in Scandinavia it may be an encouragement to either (re-)turn more political or publish elsewhere. For many employed in a corporation concerned to justify research on internal "business value" a turn to the overtly political may threaten their careers.

Non-research participants in politically oriented research or development projects may also be taking on risks. In PD, these are familiar issues, and no easy or complete answers exist. Thus, there is no cause for complacency in taking on a political turn. The question is, however, what would be alternatives?

### 6. Conclusions: What's in a name?

The overwhelming association of the technical-rhetorical powers of computing with the short-term interests of dominating elites worldwide, places particular responsibility on 'computing experts' of all flavours. PD research has shown that political and power issues are part-and-parcel of what researchers and practitioners do. We need to broaden the awareness of strengths and weaknesses of the approaches chosen

by computer scientists—including the choice not to be concerned. The further integration of politically relevant aspects into the academic writings of one research area might be a cause and a result.

The point of this paper is neither being "for" nor "against" PD in Scandinavia. However, PD is facing a two-fold problem. One, while PD continues to embody great potential for practices that challenge structures of dominance surrounding ICT, an assumption that PD necessarily does so—also when implicit—is a problem. Approaches other than participatory design may contribute as much to this. An assumed lack of interest in political action is the second problem. This stems in part from stifled expectations to the meaning of "political" and correspondingly to appropriate forms of action. Thus, the complex mix of changes in society and in computing technology has been cited as reason why politics is no longer as current a concern for systems developers.

This paper has argued for facilitating new forms of politically-aware IT development practice and theory by encouraging new ways of drawing on the underlying ideals of PD. While participation remains an important approach and a useful reminder it is less appropriate as the focus of such a research field. Rather, concern with patterns of dominance—and therefore, power, marginality, and exclusion—at the intersections of computer systems development and use with societal-cultural and international power relations PD would be an appropriate focus.

A changed emphasis would have practical consequences on at least the three levels presented in the introductory section (conducting studies, reasoning about links between motivation and the approach chosen, and the personal morals of researchers). First, the present emphasis on a single approach to conducting studies would be broadened. Second, further discussion of motivation may lead to new ideas on approaches. A renewed emphasis on dominance patterns in PD might, for example, include a requirement for PDC submissions to explicitly discuss the motivations for the studies with respect to understanding or challenging dominance. Finally, while morals in certain senses must remain a private matter, how these are collectively fostered is an important question. Reflection on and exploration of this could be encouraged in PD.

Maybe participatory design is outmoded—if perceived (by "observer" or practitioner) in a 1980ies form. In a world with ever increasing, multiple and

complex dependencies of individuals and collectives on computers, however, the project of PD is needed more than ever. This project—as I see it—is to understand, support and encourage IT development and use projects that in big or small ways counter the reproduction of marginalisation by challenging dominance. Realising this potential requires encouragement of renewed conceptualisations of areas for and means of impact of politically motivated IS research.

What's in a name? I am using the rhetorical-political device of questioning the name of the research field to capture the dual need for change and the fact of changes. Pointing out the limitations of the name is easy as experience has shown participation to be insufficient as a condition for society-changing activity (whether a necessary one remains an open question). Returning to the title, participation is not enough. That is, for an individual study or for the life work of a researcher, it may be more than enough—if the aim is counteracting dominance patterns. 'Participation' without qualifiers, however, has become 'not enough' to foster politically sensitive IS research and development. My argument, then, is highly pragmatic.

Hoping to inspire activism, this paper has skimmed many issues for future research. Arguing the integral

relevance of the political aspects of computer system design needs to be renewed and repeated as circumstances and concerns evolve. Identifying points of leverage for a political activism in and through systems design is never completed. My rhetorics of renaming make sense if and when real consequences ensue:

'P for Political' must be made a credible alternative. This job is on us, the researchers in Scandinavia, more than on researchers elsewhere.

### Acknowledgments

Many of the ideas in this paper stem from others in conversations for which I am grateful, including with Yvonne Dittrich and Tone Bratteteig. Feedback on the PDC'96 version provided much useful input. The current version has also benefited from time for ideas to settle and from helpful comments from Margunn Aanestad, Svein Myreng, Jesper Simonsen and three SJIS reviewers. Thanks to the Systems Development Group at Ifi, University of Oslo, for hosting me, and to Svein for looking after Kyrre.

Funding: grant no. 116072/432 from the Norwegian Research Council.

### Notes

- 1 A previous, shorter version of this paper appeared in the Proceedings of the Participatory Design Conference (PDC) 1996, and a longer one as Research Report 294, Dept. of Informatics, Univ. of Oslo, Norway (2001). Some familiarity with the field may be an advantage to the reader, as I have lumped together under the heading of PD a diverse collection of researchers and systems developers with different agendas, working styles and working conditions.
- 2 A Special Advisor to the University of Oslo on EU research proposals told me that in phrases such as "User involvement at every stage of the proposed project" (European Commission DG XIII Telematics Applications Programme (1994-1998), 15th December 1994, p. vi) the "users" were large businesses, such as Unilever. It is telling that a professional "lobbyist" with close ties to Brussels thought this the most likely interpretation.
- 3 At IRIS 17 (1994) some such contributions are evident, while the year after, few, if any, papers raised 'political' issues. At IRIS 19, there were politically oriented keynote speeches and one paper contribution. These, however, were all from well-established researchers and among them only one Scandinavian. In the Proceedings of IRIS 20, named "Social Informatics," I am heartened to find 4-6 papers (of 56) that seem to directly or indirectly make use of the 'political' sensitising of early PD. In 1998, IRIS 21 had a non-Scandinavian keynote that unambiguously encouraged seeing political aspects of our work. Counting one of my own, I find 3-4 papers out of the 68 in the IRIS 21 Proceedings that might be inspired by such perspectives.
- 4 An article in Folkevett, 2001, gave average access prices from African cities as above US\$50 per month for 5 hrs. access and from the USA, US\$29 per month (20 hrs. access). [No years stated. Folkevett's source: Mike Jensen.]
- 5 For key arguments against the patenting of software, see the Free Software Foundation and the League for Programming

Freedom: <http://lpf.ai.mit.edu/Patents/patents.html> (address valid as of January 2002). Haraway 1997 discusses some political context.

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