

# P for Political?

## Some challenges to PD towards 2000

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### ABSTRACT

A complex mix of changes in society and in the technology has been cited as reasons why politics is no longer as current a concern for systems developers. This paper argues instead that these are arguments for a reconceptualisation of PD towards the political. A critical view of challenges to the field and responses to them necessitates reconceptualisation of what is the project of the field as a distinct research area. The explicit identification of PD as an arena for concern with societal, cultural, etc. effects of computer systems development, provides a much needed explication, and strengthens the distinct identity of PD.

### Keywords

participatory design, political design, CSCW

*"Over the last decades involvement of users in relation to system development has changed dramatically. (...) But what about the basic assumptions concerning this role -- the conditions for influence? Here much less has happened -- in some respects it seems that the political agenda of democratic oriented PD work hasn't progressed at all. Users (...) are not viewed as possibly influencing the overall requirements, but rather as contributing to meeting the goals set up by others." (Kyng 1994)*

### INTRODUCTION

This paper joins a debate on Participatory Design (PD) as a research area. It is addressed to members of a research community that subscribes to ideals generally put together under the heading of PD. Familiarity with the field may be an advantage to the reader. In particular, 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. Many of these

work under other headings too. However, for the purposes of this paper I am interested in the 'PD-ness' of the disperse pieces of work, and I take the liberty of talking about the collective as if a single body with a single purpose.

Participatory Design, or PD, originated from a conviction of the moral importance that computer systems professionals are concerned with the implications of their shaping of systems [Nygaard, personal communication]. The processes by which such design decisions are arrived at have become the target for PD as a research area. In recent years, PD has enjoyed growing interest both commercially and within an international research community. However, the success has brought new issues for the researchers in the field to adjust to. This paper points to some of these. Roughly they can be grouped into two: first, international aspects (PD as originally envisaged in Scandinavia was not perhaps easily exportable), leading to a question of how to expand, how to find an identity such that others can be inspired by the ideals also under other conditions. Second, within Scandinavia, where I argue that the current international attention is not being matched by a corresponding interest in the possibilities pointed to by PD. Any field may end up in a precarious situation if not continuously renewed. Renewal is taking place in PD, but the lead is taken outside Scandinavia. More inspiration and debate can only benefit the field.

This paper is intended to provide some impetus in that direction. It is organised as follows: in the remainder of this section, the need for a political argument in the latter half of the 1990ies is argued, and a brief history of PD as a research area is provided. In the next section, the move of PD interest to outside the Nordic countries ("Scandinavia") is outlined. In the third section, some implications of this move are treated. Sub-sections raise current issues in making an impact, target audience, network technologies, methods in PD, political risks for researchers, and technological determinism. The penultimate section looks ahead to the possibility for a distinct identity for PD as explicitly concerned with political aspects of design. Finally, a provisional conclusion is provided.

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### Connections: the need for a political argument

This paper picks up the thread from Bjercknes & Bratteteig 1995, who argue for reconceptualising democracy as an issue in systems design. In examining the conceptual grounds for some of the key projects in the (Scandinavian) work on PD, they argue that democracy was the motivating force. They extend their argument to the current situation by pointing to what they perceive as 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 more individualised notion of responsibility—in their words, a turn from professionalism to individualised ethics<sup>1</sup>.

Taking Bjercknes & Bratteteig 1995 as one of several expressions of a shift in emphasis in Scandinavian research in the area, in this paper I seek to add to a debate on what the field is, or could be, about. Specifically, I wish to re-engage an explicit political dimension in such a debate. Wishing to be constructive, I point to signs that 'things are not that bad'. The latter, however, relies on letting go of a notion of the locus of politically conscious PD currently being Scandinavia. In so doing, losing sight of the origins of the field in Scandinavia would be akin to 'throwing the baby out with the bath water'. The attempt is therefore made in this paper to suggest some lessons to be learnt from the original concerns, taking work that is already taking place as pointers to directions this might take.

### A brief history

Originating in Scandinavia, PD as a research direction is generally held to stem from the first work joining systems analysis with Trade Union participation. The first project is usually cited as being the Iron and Metal Workers Union, with the publication (in Norwegian) of Nygaard & Bergo 1973, a handbook for the Trade Union movement. A concern was to ensure that workers, seen as disadvantaged in the struggle with management and capital, would be able to participate in shaping the means of production. Empowering workers and workers' organisations to engage in discussions about new technology at work was important to prepare workers' organisations for negotiations with management about technology (Nygaard & Bergo 1973). This was an effort to redress an imbalance of access to computing expertise between managers and workers. Training of trade unionists in the concepts and language of the technologies and their representatives was therefore an aim (Nygaard & Bergo 1973)<sup>2</sup>. Nygaard & Bergo 1973 was part of a series of reports from researchers to the trade union movement, and became a forerunner of projects focusing on worker participation in computer system design.

<sup>1</sup> Bjercknes & Bratteteig see ethics as synonymous with non-politics, hence an effort needs to be made to reverse this trend. An argument can be made, however, that ethics and politics need to go together (cf. the implications of a politics without ethics: pure power play?). The key point here is their observation of a turn away from the collective political perspective.

<sup>2</sup> Note contrast with an emphasis on the politics of technologies and their design.

Subsequent projects diversified the issues, expanding and extending work into issues such as skill among workers (e.g. women skilled workers, as in the Florence project, cf. Bjercknes & Bratteteig 1987), and specific techniques for involving users in design. Projects that became known were carried out mainly in the Nordic ("Scandinavian") countries, and the line of research under this broad heading was later known as Scandinavian Approaches, as interest in the area spread to outside Scandinavia. A milestone was the publication of Bjercknes, Ehn & Kyng's 1987 collection of papers in English: "Computers and Democracy-A Scandinavian Challenge". See Bjercknes & Bratteteig 1995 for a recent summary of key projects and the conceptual development taking place between and through them.

The emergence of the field of Computer Supported Cooperative Work (CSCW) lent a new audience to this emphasis on workplace focus, and a second milestone was papers presented at the CSCW'88 conference. Contributions to CSCW include the notion of cooperative design of systems for cooperation (e.g. Bratteteig, in preparation; Kyng 1991).

The next section takes a critical look at the relationship between the Nordic region as the origin of PD, and current developments. I argue that the locus of new thought on PD as an *explicitly political* enterprise can not at the moment be said to be Scandinavia.

### OUT OF SCANDINAVIA...

There are signs that PD is becoming more established internationally, i.e. outside Scandinavia. There is a biannual conference devoted to the field, in 1993 a special issue of the Communications of the ACM was devoted to PD (CACM 1993), and also increasingly, researchers devoted to PD and their arguments are acquiring a visible presence at other conferences such as CHI and the CSCW and ECSCW conferences. In the non-political extreme, user participation, once politically radical, is being picked up as a slogan for marketing, and, in the European Commission's call for proposals for the Telematics research programme, is used in reference to businesses being involved in systems development. In Morten Kyng's words, a development "From subversion to hype" (Kyng 1994).

Given the increased attention internationally, one might expect that Scandinavian research institutions would be a flurry of activity, basking in the international spotlight on a politically charged area. The increased interest in the field has not yet, however, been matched by a corresponding interest in politically oriented PD within Scandinavia. With the lack of political items from Nordic researchers at the Aarhus Third Decennial Conference in August 1995, the question begs itself why there appears to be little interest for a political PD in the region at the moment. Reasons cited in discussions around coffee tables are numerous. Many seem to stem from equating political concerns with support for certain structures, such as labour organisations, whose roles may be under question. Reasons cited include it no longer being "as simple as it was in the 70ies" to determine who to support: in recent years labour conflicts have been seen to occur between groups of employees as

much as employees vs. capital. Lack of interest from Trade Unions has also been mentioned (explanations being along the lines of "their interest is once again keeping jobs at all; how their systems are designed is a luxury problem"). A third point mentioned by some is the locus of systems development having been moved from in-house development teams to multinational software houses, thus apparently removing the location, and occasion, for PD (though some argue in-house design never was a typical feature).

The question then begs itself: in Scandinavia, if 'the old guard' seems a little weary—their experience may no longer be seen as relevant, other topics become more attractive—is there a new, politically concerned 'guard'? A wave of young researchers with energy and a healthy disregard for old ways, brushing aside the hesitation of the settled, bringing fresh approaches to the issues of the 1990ies toward the year 2000? 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>. Issues of interest very much 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, discussions of *political* perspectives as such cannot easily be claimed to be a key concern in this community at the moment.

Nevertheless, the early work did establish political concerns as a legitimate area of systems developers in Scandinavia to work with. Such issues can now be raised without risk to one's career. This is no small achievement. Additionally, the issue being raised occasionally—Bjerknes & Bratteteig 1995 being a notable example—vouches for the continued potential of Nordic researchers as sources of raising the political dimensions of systems development in a way that may be too politically risky elsewhere.

How well the current level of interest in PD outside Scandinavia matches interest within the Scandinavian countries therefore remains uncertain. Notable examples of Scandinavian researchers taking a clearly political stance can be found. I contend, however, that these have the character of individual persuasion and are no longer a product of a *community* concerned with politics (a possible exception being the work of Yrjö Engeström and his group in Finland). Examining why this has become so, may lead to insights into challenges facing PD as a research area.

Below, then, I explore what may be some contributory reasons for this apparent chasm of interest within the Nordic countries and the sense that the ground has shifted.

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<sup>3</sup> Few if any papers at IRIS 18 (1995) raised 'political' issues; in IRIS 17 some such contributions are evident. At IRIS 19, there were politically oriented keynote speeches and one paper contribution, but all from well-established researchers and among them only one Scandinavian—a welcome encouragement to the younger researchers, the effects of which remain to be seen.

In so doing, I begin to point to potential avenues for developing the field in the future.

### ...INTO LESSER SECURITY: SHIFTING GROUNDS FOR PD

This section examines some of the issues that may have contributed to a sense that the ground has shifted. Relocation of design out of user organisations poses challenges to an assumption of collocation of users and developers. In other words, potential participants, whether seen as members of organisations or individuals in their homes, can no longer be assumed to be available to designers either as participants or consultants. Consequently the research area faces methodological, political, and theoretical challenges from an increased emphasis on distribution of computers, of computer use situations, and of the people potentially taking part in a development effort. The relationship of PD to parts of another field, Computer Supported Cooperative Work, is examined.

#### Re-establishing points of leverage

As mentioned above, the advent of off-the-shelf software has been named as a reason for reduced relevance of PD, as in-house or other custom development of software is giving way to purchase of ready-made ('off-the-shelf') systems. Custom development was the locus of participatory design, as system designers within an organisation ('in-house') or dedicated to one were to work together with the future users of the system developed. In other words, a loss of an important point of leverage. Other points, however, may be identified. For example, much of the PD research has problematised the conceptualisations of 'users', and inequalities in the situation (e.g. how to ensure the voices of people who have less control over their work situation are listened to). This needs to be no less current even if it is the case that a dissolution of the possibility of collocation of developers with the users of the system is taking place. The situation is complicated, as attention to multiple points of design, including local customisation (e.g. Mackay 1990), lead to ambiguities of identifying a single point when the design takes place. Concerns in PD as to who would be legitimate participants influencing a design process, add to the complexity. The question begs itself whether PD as, literally, Participatory Design, is the most appropriate name for the research field struggling with these issues.

A term such as Political Design might be a more appropriate phrasing of the concern<sup>4</sup>, leaving it open for approaches other than direct participation to be used. Kristen Nygaard, widely hailed as the inventor of participatory design, has commented on PD originally having been 'merely a technique', not the conceptual crux of the workplace democracy movement. One could reason, therefore, that an eventual passing of PD as a term need be no political backlash. Other arguments may exist, though, for maintaining the term, including the protection of

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<sup>4</sup> The political wisdom of making such a change explicit may be debated, cf. later discussion of political risks. My intention here is to raise the issue for debate.

researchers who may be wanting to contribute to the discourse on politically responsible system design, but who need to or want to have limited attention drawn to this fact.

If a project is for computer systems development to contribute to democracy, the further issue arises of whether, and what, points of leverage can be identified to this end. In other words, research that points to lines of action (and non-action!) that in some sense can be seen to further democracy in society, according to current conceptualisations. (This is not to suggest agreement on what these terms might mean, either as concepts or as bases for practical action. On the contrary, what researchers and others mean by such terms will no doubt continue to show the healthy variation that is evident in debates today.)

**When workers are consumers are home users: who is PD to benefit?**

The apparent lack of interest of the Trade Unions in participatory design projects, e.g. in Norway, has been mentioned variously as reason for failure of the research projects to make impact, a perceived irrelevance of PD, etc. The image of a politically concerned participatory design project as one benefiting workers as opposed to management, arguably carries assumptions about seeing workers *as workers* as opposed to, e.g., persons who when they get home, may have access to the internet. The latter perspective suggests more clearly that the workers' image of computing technology is likely to be influenced by mass media imagery of the internet—and perhaps experiences within the family—as well as their experience with computers at work. In fact, as the Scandinavian countries today are said to have proportions of internet connections in the world top, and high density of PCs, we can extrapolate that it is likely that many employees will be internet users, or have been exposed to computers in such uses. If once, the prospect of introducing a steel robot to replace a person on the factory floor was a tangible change for Trade Unions to rally people against, introducing computers may similarly have meant “machines instead of people”. The situation is more ambiguous today, including the use of styles of argument in marketing drives and from management which speak to liberation etc. of those *using* these systems (not only managers).

Additionally, as people *as consumers* may be becoming increasingly aware of the ‘back door’ proliferation of computers in their homes (e.g. as a chip inside their washing machine, or their children’s demands for PCs), the issue is much complicated. PCs are widespread. One would assume computers are largely accepted, enthusiastically or otherwise, as part of the lives of white, middle class Europeans and North Americans. At the same time, the same groups of people are exposed to mass media emphasis on the rather intangible dangers-and promises-of internet-in-the-homes. What to think ‘about computers’ cannot be easy.

Hence, assuming a connection between people as consumers of home computing and (the same) people as workers, an argument can be made that workers may share concerns of ‘the public’ (whoever they may be). When

changes are incremental and computers are already in place and in use in the homes and at the workplaces, the issue is complex. It becomes harder to see what precisely would be the rallying cry of a critical movement. The locus of any concern of ‘the public’ is possibly no longer the tangible placement (or purchase) of machinery in the offices and factories. As the basis for an argument for a politically motivated mass movement, computers as such may seem outmoded.

This line of analysis, although pure conjecture, may provide pointers to reasons why would-be political researchers, if wishing to identify with workers, may be experiencing a double-bind situation unlike before. As consumers of mass media filled with marketing drives for which few of us are prepared, workers (people) may be highly susceptible to at least insecurity about what computer technologies, networks, etc. are about: are they for the good or the bad (or both)? In what direction to even wish for the development to move is a difficult question, and 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 on the general development if one were to take action, may further contribute to a sense of powerlessness. To complicate matters further, the general political picture may be, as has been said, “no longer simple”. Influential critical voices are arguably harder to come by in the 1990ies than in the 1970ies.

The uncertainties described above need not render us passive, but can be addressed. In my opinion, the following three points are worth considering: the realisation that we need not start from scratch but can build on previous work; that whatever we can do, matters. Finally, we need to develop our trust that with all our differences of opinion, interests, etc., each of us will, in a given situation, have a sense of what we think would be for the better and what not.

In more detail: at the conceptual level, critical analyses do exist that show alternative views. Notably, Greenbaum (1996a, b) argues that cutting through the marketing language of empowerment through the computers requires a deeper understanding of the underlying economics. Researchers with a political and ethical conscience could do well to examine such work, and do what we can to transfer those lessons that are convincing to us into action.

In terms of concrete action, the sense of powerlessness seems to depend at least in part on the fallacy of believing that only large statements matter (hence a small statement is not worth making). News media continuously proclaim the importance of big events. Behind, however, are numerous unremarkable ones. Our lives mostly consist of ordinary events. Changing these is what can bring about big changes. The power of examples in the everyday should therefore not be underestimated.

The third point, uncertainty about *where* to put in effort, requires trust in our own capacities to react as responsible persons. We mostly do know when we feel something is

not right in a concrete situation, even if we are unable to formulate principled stances in the abstract. The key is not to ignore such feelings, but look at what we can do to improve the situation. It may require raising unpopular issues for debate, or even, as Joan Greenbaum points out [personal communication], walking away from a project. (Even if someone else takes over, the example has been set, and the ripples will spread.) When we are in a situation, we will know what needs to be done. Not necessarily in terms of universal 'truths'—in fact, in the same situation most of us would probably *not* agree on when the limit has been reached, or what is most appropriate to do about it. Each of us then needs to dare to take action, with the trust, discussed above, that eventually our 'small' actions will have some effect.

Taken together, the above indicate a further point of leverage, an area for socially engaged researchers to work with and potentially make a great difference in: to record, point to, analyse, discuss etc. *ways in which people can, and do, change the course of technology*. Note that a politicised agenda for PD would in the 1990ies need to address the legitimacy of anyone not only to propose solutions, but to suggest what are the problems.

Another area of concern for PD in the future, is relocating discussions of democracy into groups of people one considers it important to focus on, whether as workers or not. Work in the area includes concern with the internet and its limitations as an agent of democracy.

For example, Sherry 1995 discusses the constituting of unequal power relations through the design of technologies based on a Western document paradigm. His ethnography of a group of Navaho grassroots activists demonstrates how the use of seemingly 'ordinary' (to a European/North American readership) technology such as fax revealed and reproduced cultural and political inequalities. There was a tension between documentary practices expected from the white community (including forms of evidence of "accountability" as an organisation), the consequential necessity to route communication through members with access to electric power and telephone connections, and "what members considered traditional Navaho patterns of cooperation, including an emphasis on local autonomy, decentralized authority, and trust built through human interaction." (p.76). In this situation, "The fact that technology was right in the middle of this tension suggests 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." (p.76).

In Western societies such as the Nordic countries with increasing visibility of people of non-local origins, such issues of cultural bias cannot be discounted. Part of future visions for political sensitising must include these.

Concern with community networks (e.g. Schuler 1994) is an example of work outside Scandinavia which constitutes a reconceptualising of the legitimate concern of PD as including non-work issues of democracy. I would argue for

the necessity of such an expansion, and contend that only by accepting such changes to the identity of the field, will it be possible for PD to continue in the role as an arena for political debate. As such, the lead from outside Scandinavia is to be welcomed.

#### **Facing the net: PD and distributed work**

The geographic distribution of work has become increasingly possible with network technologies. This has had an impact on the apparent relevance of PD in a number of ways. The argument is frequently heard in research papers and in mass media that time and space are becoming less important. This may be the case in some limited senses, but evidence exists (e.g. from my own field study, Beck 1996) that time and space are not eliminated although CSCW technology is introduced. Challenges arise from the emphasis on distribution and the potential for loss of, alternatively redistribution of, workplaces. CSCW's response can arguably be couched in terms of providing improved design of the new workplaces, whereas key issues to those affected are job losses and increased pressures without adequate compensation (Greenbaum 1996b).

The challenge to a research community that aims to be sensitive to societal impact of computing, is what may be alternatives, how to support those facing the challenges. This may take the form of collaboration with organised labour, but perhaps other avenues also will need to be explored.

#### **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 methods employed, must be sustained. Originating from a discipline without methods for dealing with people (technical design), and having become highly interdisciplinary, methodological homes are multiple.

The focus on distributed work settings and technologies for distributed work groups raises methodological challenges to all involved in the analysis for and design of computer systems. Little work has been done to address the issue of distribution at this level, though some exists in HCI and in CSCW (Beck 1994; Cooper, Hine, Rachel & Woolgar 1995). This is an issue which, to the extent there is a concern for inclusion of multiple parties, will have to be addressed on its own terms from a PD perspective.

PD as a research area was developed by systems developers at a time when, apparently, interdisciplinary collaboration between researchers from different faculties was not common (nor acceptable?). Political engagement, however, may have been acceptable, at least in these milieus. It seems reasonable to guess that at the time, few criteria had been developed for evaluating what would constitute "good" research in the area. Pioneers chartered their own way.

Taking this perspective as inspiration, it is worth examining the current situation: Technologies of distributed work, entertainment and maybe even shopping, may appear on the face of it to have wiped away the connection with some of the foundations of PD. This may render some of

the specific techniques and methods that have been developed as PD techniques vulnerable to being seen as, or becoming, out of date. Researchers in PD may be in a weak position to appeal to any general methodology (i.e. system of thought on method) in times of change.

The continued development of an argument about methods is therefore a necessary and interesting arena for strengthening PD as a distinct field.

#### **A theoretical concern: technological determinism**

One can argue that much of the argument in the media about the internet has a flavour of *technological determinism*. This is commonly thought of as taking 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 (e.g. Mackay 1990), is part of PD's concern (Muller and Kuhn 1993). This alerts us to the multiple avenues many have, and use, to change the technologies they are in contact with. By extension, such examples strengthen the sense that technology is shaped and can be shaped by people. Although the theoretical concern may seem far from practice, it is highly relevant to the current debate in mass media on the internet. With a sense of having possibilities for influencing the future society critical voices may be more readily listened to. Opinions may differ on what ideal to strive for, and whether the possibilities of influence are great or small. Either way, a view that we are not merely passive subjects of the technological development renders people active and leaves a chance of engagement (cf. Øgrim(1996) polemic encouraging trade unionists to engage in a debate on the use of technologies of distribution to enable job creation in small communities). This is and needs to remain a central concern of PD.

The next section looks to a future for PD in strengthening its explicitly political perspective. Researchers in Scandinavian countries are seen as being particularly well placed for carrying that responsibility.

#### **P FOR POLITICAL: A CREDIBLE ALTERNATIVE?**

In this section I further develop the argument of the need for a political forum. In its current form, PD may be open for malappropriation, in the sense of PD research without a political angle passing for political work purely because of the tradition from which it comes.

While Trade Unions fulfil many invaluable functions of representation, it is harder to carry an argument that working with established institutions of representation such as Trade Unions ensures a critical angle on existing power structures. PD has the potential to be a ground for raising awareness and exploring complementary avenues. This could, further, provide the kind of peer support Greenbaum

(1996a) points to as important. For those who do not risk their careers by doing so, and those who are willing to take on that risk, a clear conception of the field as an arena for political research, may encourage such a focus in Scandinavia.

#### **PD and CSCW**

Computer Supported Cooperative Work, or CSCW, is a research area with considerable overlaps with PD. Starting from a 1984 workshop, the field has grown rapidly into a distinct, interdisciplinary research area. An issue much in evidence in parts of CSCW research, is a concern to understand how work takes place between and with people. This has facilitated a mix of disciplines to be represented in CSCW research, including publications on what might be considered PD topics.

One respect in which I believe PD is benefiting from an exchange with CSCW, is the extensive effort in CSCW to address methodological issues. Some of these overlap with those pointed to above (section "What makes PD research?").

Concern with situated action entered CSCW with the interest in Suchman's "Plans and Situated Action" (Suchman 1987), now an icon of the line of argument. Authors including myself have argued that although the focus on the situatedness of action provides an invaluable approach to understanding action in practice, there is an inherent tension between taking a strong stance on situated research and the requirements of systems development. E.g. Beck 1994 raises the conflict between the descriptive nature of qualitative research results and the predictive guessing inherent to systems design. This issue is highly evident in a number of CSCW papers (e.g. Bentley et al. 1992, Hughes et al. 1993). Interestingly, the issue was raised in a different form in the Florence project (Bjerknes & Bratteteig 1987), in the guise of the systems designers' struggles to 'pin down' the work organisation so they may design to it. Grounding political research in local conditions may be fraught with difficulties in persuading one's colleagues of the validity of the work, either on methodological or political grounds. Yet it is hard to imagine an alternative route. Thus, researchers doing such work can benefit from recourse to a community in which these are considered legitimate concerns.

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.

However, if the strength of PD lies in the idea of a political focus, the weakness of CSCW is, arguably, a lack of such. PD techniques may have been adopted, but not PD politics. Greenbaum, e.g. 1994, argues that CSCW research focusing in improving systems for the individual team misses the greater picture of political changes. "The media-crafted scenario that paints a high-skill, high-wage future has little to do with the way work is being restructured. [...]"

work is being spread out over time and space, with more and more of it being done outside the boundaries of traditional employment contracts and, indeed, outside of organizational walls." (p.62). This can be taken as a note of caution about the scope of issues addressed in CSCW, and is worth considering.

As CSCW papers rarely address political issues, CSCW does not seem to be filling a role as the 'home' of concern with the political implications of computer systems design. There is a case for another arena for researchers who are interested to raise and debate such issues.

#### **Looking to the future**

I have argued for the need for a forum for research oriented to the politics of computer system design, and that PD has potential to be such an arena. Further, PD as a research field is facing changes which existing techniques fall short of answering. PD as a distinct research area therefore depends on the development of some new turn. Restating PD as an arena for explicitly political considerations could address both concerns.

From where would such a turn come, however? While taking onboard Bjerknes & Bratteteig 1995's argument about the demise of political concerns in Systems Development (see above), I believe the seeds are already present for engaging researchers in Scandinavia and elsewhere in an explicit politicising of perspectives on systems development. In this process, ethics can become a useful ally of politics. Wagner 1993 raises the issue of ethics as part of a methodology, 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).

Extrapolating to researchers, the issue becomes not so much a problem of ethics vs. politics, but a willingness to face the political consequences of taking an ethical stance. Furthermore, one might extend Bjerknes & Bratteteig's argument further: that we may see a lack of (even) ethics as an alive issue in systems development. There seems to be plenty to take issue with for a politics (or ethics) of computer science, whatever one's particular preferences are. For example, Norway appears to have joined others in increasing the differences between the haves and the have-nots (with regard to access to jobs, levels of income, access to computing resources, the right gender, colour of skin, etc.). In this development, job losses—rightly or wrongly—are frequently blamed on computing technologies. Issues of a blurring of the line between military funded research and other are as current as ever. Teleworking and surveillance are issues that concern many. For schools, one could imagine taking the lead among those focusing attention to the access of poorly resourced schools and small communities to the internet, vs. appropriate use of scarce resources. Engagement in political issues related to our profession need therefore not reduce even if the currency of PD as a technique may be regarded as diminished.

#### **Political risks for those involved**

We are not free to choose whether our actions carry political meaning. Conforming to a commonly held norm also sends a signal. What we may choose is whether to pay attention to these meanings, and whether to let that influence our future actions. This is as true in the 1990ies as it was in the 1970ies.

Presumably focusing on the political in systems development was once a hard stance to defend also in Scandinavia, although the idea is now fairly well established in these countries. Many researchers and practitioners would have had to face considerable personal career risks in choosing no longer to ignore the political implications of their work. Personal communications indicate that similar situations are currently being faced by researchers elsewhere, whose work in the area is putting their careers at risk.

For researchers engaged in PD, a strengthened focusing of the field on the political may therefore have different consequences depending on e.g. the culture in which they work. To a Scandinavian academic, it may reduce the possibilities of having non-political work published under the heading of PD. This may be an encouragement to (re-)turn to the more political. To e.g. an American employed in a company increasingly concerned to finance research through internal "business value", a turn to the overtly political may be career suicide.

Non-research participants in politically oriented research projects, whether as workers, workers' representatives, or others, also may be taking on risks. Issues such as these have been themes from the start of PD, and are still with us. Much can be learned from previous PD efforts, but no easy or complete answers exist. There is thus no cause for complacency in taking on a political turn. The question is, however, what would be the alternative?

#### **CONCLUSION**

PD, as other fields, is in continuous change—and must be, as new challenges are unearthed. Challenges arise from a number of sources, including those seen as originating in technological development, conceptual and methodological.

I have argued in this paper that as the concept of involving users in design has spread to outside Scandinavia, a gradual reconceptualisation has been taking place. Partly, the field has become somewhat depoliticised in Scandinavia, and partly ideas have been appropriated and applied in new contexts outside Scandinavia. There is a real sense in which PD appears to have moved outside Scandinavia. To avoid the danger of Scandinavians believing our work is political work because "it always was", I have pointed to weaknesses of PD in Scandinavia as I see them, and the danger of complacency about the political focus. Concerns for a turn away from the political (e.g. Bjerknes & Bratteteig 1995), must be taken seriously inside Scandinavia. Realising PD's potential requires a renewed conceptualisation of areas and means of impact of politically motivated systems design research.

This paper has merely skimmed some of the issues of the political potential for the future. Topics of politically-oriented PD research include identifying points of leverage for a political activism in and through systems design (in particular, taking onboard the argument for the importance of the everyday). This could also include identifying new ways for researchers to enter the public debate). Notions of democracy connected with computer networks are being explored, and will benefit from further work (e.g. pointing to different effects for different people, and examining how agendas are set for the debate as well as whose voices are heard). Looking for *topics* to work on that would bring about change (e.g. schools) may not be sufficient; we need to work on improving the *ways* we do what we do. We could do well to examine and politicise our own roles in constructing computing technology at all (e.g. whether schools would be as well off not to have computers, or not to be 'on the net').

The argument about the relevance of the political aspects of computer system design needs to be made again and again, as circumstances and concerns evolve. And we must dare to risk a less smooth career for ourselves in 1996, 1997, and beyond.

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