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Jørgen P. Bansler
Copenhagen University, bansler@diku.dk

Philip Kraft
Binghamton University, pkraft@bingsuns.cc.binghampton.edu

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PRIVILEGE AND INVISIBILITY IN THE NEW WORK ORDER: A REPLY TO KYNG

Jørgen P. Bansler

Department of Computer Science at Copenhagen University
Universitetsparken 1, DK-2100 Copenhagen Ø, Denmark
bansler@diku.dk

Philip Kraft

Departments of Sociology and Management Information Systems
Binghamton University, Binghamton, NY 13902-6000, USA
pkraft@bingsuns.cc.binghampton.edu

"...we wish that we could have focussed more on how work could be made more cooperative, and on how issues of quality of work and democracy in the workplace could be brought to life. The book *Computers and Democracy* (Bjerknes *et al.* 1987) was essential background for many of us, and the issues of democracy that it raised have been swept to the side here as we focused on how to foster cooperation between designers and users. While we didn't explicitly address concepts of democracy in the workplace, it is clear to us that the issue of building cooperation is a first step on that path. For us, democracy in the workplace means expanding choices for workers and developing working strategies that allow more voices to be heard." (Greenbaum & Kyng, *Design at Work*, 1991, p. 276)

Introduction

Scandinavian Journal of Information Systems has invited us to elaborate on the points raised in our PDC'92 paper (Kraft & Bansler 1992) and by Morten Kyng's response. We are grateful for the opportunity to further discuss these issues.

Morten Kyng and his colleagues are pioneers in forcefully raising issues of workplace participation and the design of workplace technologies. No one disputes their influence on Scandinavian trade unions, the research programs of Scandinavian academics and the broader discussions of industrial reorganization now taking place in Europe and North America.

We agree with Kyng that CRA and related research approaches have not stood still. The place and function of CRA, of cooperative design and of other "Scandinavian" approaches today strike us as very different from their original form and focus. CRA in 1994 is not the CRA of 1977 or 1987. This was precisely the point of our PDC'92 presentation. We took the opportunity at that conference to compare the original goals and methods of CRA researchers to what they actually did. We concluded that early CRA "action research programs" confronted a corporatist Scandinavian industrial relations system which in practice made it difficult, if not impossible, to realize the democratic claims of early CRA strategists. We concluded, furthermore, that the CRA strategy as originally conceived had no chance of being implemented in the U.S. precisely because it assumed a centralized industrial relations structure which had absolutely no counterpart in the US. It is now time to address in more detail where the CRA has evolved beyond the point described in our conference paper.

We agree that the Collective Resource Approach has changed, as Kyng insists. We insist, further, that it is also necessary to spell out *how* it has changed. We agree that there are at least three distinct generations of CRA-related projects. We think it is obvious that each generation has gradually shifted its focus from strategies which advance the interests of workers confronting new technologies to the management and organization of designer-user cooperation. The Collective Resource Approach has, in other words, successively moved further away from the *politics of the labor process and of work organization* and moved *closer to the design of technology*. In practice this means an increasing preoccupation with design methods, user interfaces and other "artifacts."

At the same time, however, there has not been a parallel shift in language. For researchers like Kyng, designer-user cooperation means the same thing as workplace democratization. We don't accept this identity. The democratic potential inherent in one is very different from the other. Providing workers, at least a few privileged ones, with a greater selection of tools is a worthwhile project. In itself, however, such technocratic tinkering does little to address fundamental issues of power and control in the work place, for example, the pace and intensity of work—or whether there will be any work at all, and for whom.

Furthermore, sponsors of the Collective Resource Approach have recently shifted their geographic as well as their substantive focus. Originally conceived as a union strategy for dealing with Scan-

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dinavian employers, CRA techniques are now being exported to the U.S. We think it is appropriate here to raise questions about how well such a distinctively Scandinavian product travels. In particular, recent changes in U.S. industrial relations—notably the nearly total rout of U.S. unions and the emergence there of a growing contingent work force—raise the possibility that the consequences of applying CRA techniques will be very different in the American context than they have been in Scandinavia.

CRA Practice in Scandinavia

We agree with Kyng that it is tedious and unproductive to engage in an exchange of dueling quotations. Fortunately, the editors of Scandinavian Journal of Information Systems have reproduced our PDC'92 paper and readers can judge for themselves whether we have "misrepresented" CRA researchers. However, we feel compelled to directly address three matters, two general and one specific.

First, Kyng systematically describes our assessments of CRA implementation in Scandinavia as if they were merely our own opinions, with no evidence to support them. He summarizes "our" arguments, but neglects to point out that our appraisal of CRA successes and failures was based in large measure on the conclusions of Danish researchers, whose work was duly noted in our text. The assessment of CRA's actual practice is held by more Scandinavian researchers than Kyng cares to acknowledge. (See also the collection of articles in *Deltagelse i teknologisk udvikling* (Clausen *et al.* 1992) as well as the recent articles by

Lorentzen & Clausen (1990) and by Clausen & Langaa Jensen (1993).)

Kyng also knows—or should know—that our analysis of CRA in Scandinavia was also drawn from an extensive, long-term research project we conducted on the politics of technology introduction in Denmark. The original project report (Kraft & Bansler 1989) has long been available in Scandinavia and the revised version, now available as a journal article (Kraft & Bansler 1993), was cited in our PDC'92 paper.

Second, Kyng has the habit of rearranging chronologies to suit his case. For example, we described the early visits of CRA researchers to the U.S. and their reception by U.S. audiences in the late 1970's and early 1980's. We said, in effect, that these early visits were missionary-like in their zeal and optimistic projections. Kyng chides us because we cite, among several contemporary and historical reports, *Computers and Democracy* (Bjerknes *et al.* 1987). He quotes a cautionary paragraph from there to prove that CRA researchers were not naïve. We accept his claim. CRA researchers were properly cautious—in 1987. In 1980, however, "the Scandinavian Model" meant for Americans more or less the happy versions of DEMOS, DUE, and the original Norwegian Iron and Metal Workers Union project retailed by a steady stream of visitors from Stockholm, Aarhus and Oslo.

Kyng says that CRA researchers have always understood the limits placed on their political strategies by the Scandinavian industrial relations systems and the corporatist nature of union-employer relations. By way of proof, Kyng quotes from a well-known CRA report pub-

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lished a decade after the early visits to the U.S.:

> But there are basic obstacles as well. The most important one being the limited resources at the local union's disposal. The strategy is extremely resource-consuming from the trade union's point of view, and even if it does its best the local union cannot really compete with management. Sandberg remarks that 'in our type of society, it is seldom in the position to build up a knowledge base, or plans which compare to those of management in quantity and quality' even if it has the advantage of being better able to involve employees and use their experience. This is true even if management is not always the well informed protagonist it is sometimes assumed to be. (Ehn & Kyng 1987, pp. 42-43)

This is a ritualistic disclaimer. The sentences Kyng chooses to reproduce are prefaced with a very different assessment of the practical outcomes of CRA:

> In practice the strategy has proved workable and most useful, thus demonstrating strong support for the [union participation and negotiation] hypothesis above. (Ehn & Kyng 1987, p. 42)

Third, we did make a mistake in saying that the funding of early CRA projects came from the national unions and main organizations rather than from the Scandinavian governments. We should have been more precise, particularly when one of our goals was to acquaint US researchers with the corporatist nature of politics, trade unionism, and industrial relations—and industrial relations research—in Scandinavia. The best description of the actual funding process for the earliest CRA projects comes from Kyng himself[1]:

> We wrote a relatively detailed grant application [for the Council of Technology[2]], which was relatively explicit politically—at least compared with what the Council of Technology was used to getting. We therefore had a lot of problems getting the grant. The council was not keen on funding a project which was to be conducted in collaboration with labor. The reason we finally got the money was that we had a Social Democratic government at the time, and that the people from the Confederation of Danish Workers' Organizations (the LO) had notified the Council unofficially that unless we received funding then the Council's composition would be changed. (Bansler 1987, pp. 65-66)

This was the "meaning" of the paragraph Kyng urges the reader to ignore. (For the benefit of Scandinavian readers, we reproduce the original Danish-language interview in Footnote #1).

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The Export of CRA inspired Techniques to the U. S.

We now turn to the other main point of our original paper, one which Kyng has chosen to ignore. In his comment, Kyng is reticent about the export potential of the "Scandinavian approach" to cooper-

ative design. But, in *Design at Work*, Greenbaum & Kyng (1991) are considerably less reserved: "To us, it is clear that the time is ripe for mixing and matching the Scandinavian traditions discussed in this book with American projects that focus on user involvement (pp. 13-14)."

In the same paragraph, Greenbaum & Kyng make the following observation about the potential for exporting the "Scandinavian approach" to the US:

> Some American systems designers have said that although they like the Scandinavian approach, they feared that it wasn't applicable in the United States because of the weak trade union movement. Scandinavia's high degree of union membership, however, may only be a partial blessing for participatory design, for in those countries, as in the U.S., established unions sometimes tend to be stuck in their ways. On the other hand, American discussions about cooperative work and team approaches to work tasks, while perhaps overstated in the business press, nevertheless point out some fertile ground for planting seeds for cooperative design (Greenbaum & Kyng 1991, p. 14).

Here we have it: a more or less final rejection of unions as the locus of participation and of cooperative design and the suggestion that fertile ground for CRA in the U.S. is being prepared in the *business* press. Unions are no longer crucial. The political-strategic component of the Collective Resource Approach is no longer the organizing principle. The "Scandina-

vian approach" is now safe for export to the union-free U.S.

We refer the reader to our paper for our analysis of the Scandinavian industrial relations system and its impact on the practical implementation of CRA. We think it might be useful, however, to specify a bit further the cultural and political contexts in which CRA-inspired techniques are likely to be organized and implemented in the United States.

Power and Privilege

First, some background. In the U.S., competitive pressures have forced managers into a painful reassessment of long-standing and widespread Taylorist work organization. European and especially Asian competitors have caused U.S. employers to undertake drastic reorganizations in order to compete in global markets. U.S. managers are in the process of transforming their organizations to be adaptable, flexible and responsive to constant change—"lean and mean." In particular, senior U.S. managers are now convinced that intellectual and conceptual delays, not restrictive work practices on the shop floor, are the main obstacles to timely production of competitive products. For management theorists and practitioners, the most threatening problem facing U.S. industry is the *unreliable and sporadic nature of intellectual and administrative value-adding activities*. Value-adding workers directly contribute to the process of transforming a partially complete product into a deliverable commodity. Those who do not, in contrast, only police and bookkeep goods-in-process.

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In short, the new culprits in the competitive/quality dilemma of American industry are designers and middle managers. More quickly operationalizing their intellectual production—or eliminating those who merely guard or bookkeep—is the key to the survival of the firm, the industry, and even of U.S. manufacturing as a whole. Managers are not very concerned, by contrast, with the work force of production and service workers. They don't need to be. The huge U.S. private sector has a union density of about 12% and work stoppages of all kinds have reached a post-World War II low.

Managerial criticisms have therefore focused on rigid hierarchies, linear product development cycles and the hidden organizational costs of employees who do not "add value" or add value quickly enough. Although they may not cite Perrow or Gouldner, management and engineering literatures reflect a keen awareness of the contradictions of trying to control and inspire at the same time (Cf. Klein & Kraft 1994).

Increasingly, U.S. managers have settled on a combination of normative control strategies, in the sense described by Kunda (1992), and organizational/ technical strategies which rely heavily on pushing supervisory and some design decisions down the chain of command on to "self-directed teams." These are, however, special sorts of teams, very different from those found in Scandinavian work places. The American teams are based on Total Quality Management (TQM) principles, which combine a set of engineering tools, including statistical process control and process and product simulation, with a new organizational strategy. The organizational strategy is called "empowerment." Although managers claim that "empowerment" constitutes a rejection of Taylorist fragmentation, in practice it means little more than work intensification, administered by a combination of sophisticated monitoring systems and what Parker & Slaughter (1988) called "management by stress." No unions are present to advocate for workers: they are no longer needed because the interests of employees are identical to the interests of the enterprise. This, too, is corporatism, but a different sort than the kind found in Scandinavia.

It is against this background that we must raise several questions:

First, *who will use CRA tools and techniques in the U.S.?* In other words, who will be the customers? It is difficult to overstate the difference between European participation systems and those which are called by similar names in the United States. Given the almost complete absence of formal state-labor-management collaborative structures in the U.S., what constitutes "cooperation," "participation" and "empowerment" is decided by employers, not workers. This is a very peculiar kind of participation. Even in industries with a relatively high density of union members, such as auto, union participation is effectively shaped by management. For example, in the Paid Education Leave (PEL) program, which laid the foundation for TQM-based projects at General Motors, union involvement in the design and content of the program was on GM's terms. The agendas and definitions were set by the auto company (cf. Leary & Menaker 1993)[3]. The "customers" for CRA in the United States, then, are employers, not designers and certainly not ordinary workers.

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Second, *in what ways will the product be modified for American tastes?* When CRA-inspired techniques are introduced unilaterally by managers, the goals must be different than when they are negotiated between organized workers and employers. For U.S. managers, teamwork and participation are ways to increase output by refining command and control strategies, not abolishing them. Thus U.S. managers are likely to "cherry pick" those aspects of "the Scandinavian model" they find useful for their own ends and integrate them with familiar strategies—"mixing and matching" in Greenbaum and Kyng's apt phrase. The likelihood, in other words, is that selected CRA cherries will be added to other favored techniques, such as "management by stress," which seem opposed to the liberatory intent of CRA. (Even where there are unions, as the Aftonbladet experience illustrates, employers are tempted to ignore the implicit social contract which calls for substantive rather than ritual participation.)

Third, *what are the likely practical effects on work place organization and labor-management relations?* It seems to us there is a fundamental difference between self-organization and self-policing. "Empowerment" in the U.S. means establishing behavioral guidelines and measurable outcomes for employees. It means substituting peer-pressure and team-based group pay for direct coercion by middle managers and supervisors. This is the purpose, for example, of elaborate Statistical Process Control systems, continuous feedback loops, real-time monitoring systems, user-friendly workstations and the other "design aids" which define "self-directed high performance work groups" in the U.S. U.S.

design workers, given the nearly total absence of both unions and a cultural tradition of *autonomous* workplace cooperation, therefore can be little more than passive consumers of the most recent management import. CRA, in other words, becomes just another in a long line of technocratic quick fixes of which U.S. managers are so fond.

Still, CRA-inspired tools have the potential for making *design* work more interesting for relatively privileged technical workers. They may even help make better systems. But in the American context, these cooperative tools will almost certainly also be used by managers to *reinforce* distinctions between designer and user, not blur them. Users will remain objects of the design process, not active participants, except in the most formal way. Users and other ordinary workers will find their work analyzed and reorganized to change their behavior for greatest "efficiency" (cf. Klein & Kraft 1994).

In this respect, the articles by the Scandinavian and U.S. researchers in *Design at Work* (Greenbaum & Kyng 1991) provide a striking illustration of these divergent approaches to "participatory design." The Scandinavian authors write about cooperation between designers and users. The U.S. authors write about studying work and work place relations. This is precisely what U.S. managers do when they "reengineer" workplaces to maximize output, reduce cycle time and get rid of workers who don't add value fast enough.

Fourth, *who is likely* not *to be affected by CRA-inspired tools and techniques?* In the Scandinavian countries, the definitions of a skilled worker—indeed the very concepts of skill and com-

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petence themselves—reflect a complex process of negotiation between the trade unions, the Ministries of Industry and Education and the employers' associations. In the U.S., definitions of who and what skilled workers are reside entirely with employers and managers in non-union workplaces. Today you are a high value-adding professional, tomorrow you are so much deadwood. The unilateral power to define skill as well as participation, usefulness as well as empowerment, is unchecked by contract or custom. The selective adoption of some CRA design and management techniques may make the work of some designers and other relatively privileged workers more effective and even more fun, but in the absence of real structural changes in American industrial relations, CRA tools and methods can only intensify, not ameliorate, the rapid polarization now taking place in U.S. workplaces.

Such trends, obviously, are not unique to the U.S., but the effects of massive economic and political realignments are more pronounced in the U.S. than in most of Western Europe precisely because of the unorganized and fragmented nature of labor-management relations. Clausen & Lorentzen (1993), for instance, talk about "rationalization-winners" with the most interesting jobs and "rationalization-loosers" who get the most boring jobs with unattractive working hours. The privileged are getting more privileged while the vulnerable are made conveniently invisible.

Summary and Questions

The Collective Resource Approach in Scandinavia began as a political move-ment, not a technological one. It was this original political content—that local workers could and must challenge management definitions of skill and technological legitimacy—which threatened a cozy system of centralized industrial relations which valued historical and political collaboration almost as much as productivity and profits. The collective resistance of Scandinavian unions and employers forced a change in the original concept of the CRA to a much more narrowly defined technocratic focus on design and interfaces rather than worker control and an independent vision of technology.

In the U.S., the absence of a formal system of centralized industrial relations, of universal union membership, and of a strong overlap of unions and political parties, means that the technocratic, not political, components of CRA will be selected or rejected by employers solely on the basis of their utility to managers. The terms "cooperation," "participation," and "empowerment" will all be used to describe this process. None of these, however, can have anything to do with work place democratization.

Even in Scandinavia, with its very different traditions of industrial relations, cooperation and participation for the few cannot mean, as Kyng would have it, that "democracy in the workplace means expanding choices for workers and developing working strategies that allow more voices to be heard." This is little more than dressed up—and discredited—sociotechnical "participation" in its most elitist form.

If the Collective Resource Approach is to advocate genuine democracy—and seriously address the issue of power and control in the modern work place—we

think it must confront directly and forthrightly at least the following issues:

How will the CRA advance or retard a new polarization of the work force in both unionized and nonunion societies?

In unionized work places, how can the CRA avoid the danger of the shop steward becoming the management's "hostage" because of the disparity in union and employer resources?

What can be done to check the trend towards company corporatism, where workers' loyalty is directed towards the company (or "team") and away from the union and labor movement?

We do not believe the outcome to these questions is determined. On the contrary, the ongoing changes in technology and work organization are open to policy-oriented initiatives—by researchers, employees and unions. In particular, Scandinavian trade unions are being challenged to develop a new and more powerful strategy to deal with issues of technology and organization.

The question then is whether unions will be able to develop a new role in relation to the transformation of working life caused by the rapid development of technology and new forms of work place organization. This is mainly a question of strategy—not of tools. There is an obvious need for a revitalization of the debate on these strategic issues. Our paper was an attempt to reopen that discussion.

Notes

[1]This quotation comes from an interview with Morten Kyng, conducted by Bansler in November 1985. The original Danish-language interview, in which Kyng describes the funding process of the DUE-project, reads as follows:

Vi skrev en forholdsvis detaljeret projektan-

søgning [til Teknologirådet], som nok også var forholdsvis eksplicit politisk—ihvertfald i sammenligning med, hvad de var vant til i Teknologirådet. Der var derfor store problemer med at få pengene. Rådet brød sig ikke om at støtte et partsforskningsprojekt i samarbejde med fagbevægelsen. Grunden til, at vi i sidste ende fik pengene, var vel, at vi på det tidspunkt havde en socialdemokratisk regering, og at LO-folkene sørgede for, at det uofficielt blev meddelt rådet, at hvis der ikke blev givet penge til det her projekt, ville rådets sammensætning blive ændret. (Bansler 1987, pp. 65-66)

In an interview with Kristen Nygaard, conducted in December 1985, Nygaard similarly explains the funding process with regard to the NJMF project in Norway:

Der var ingen problemer med at få støtte fra NTNF? Selvom det var Norges første parts-forskningsprojekt for fagbevægelsen?

Nej, egentlig ikke; men de fik jo også at vide, at hvis denne ansøgning blev afslået, ville det se ejendommeligt ud, og det ville være et afslag, som mange stortingsmedlemmer ville være interesserede i at høre en nærmere begrundelse for. (Bansler 1987, p. 42)

Pelle Ehn, in an interview conducted in November 1985, says about the funding of the UTOPIA project:

Hvordan stillede svensk LO sig til UTOPIA?

Fra LO's side var støtten til UTOPIA meget valen. Det hænger formodentlig sammen med, at ved slutningen af DEMOS-projektet havde LO ændret sin officielle politik og var begyndt at kritisere os. De var derfor ikke så varme på at støtte et nyt projekt med de samme mennesker. (Bansler 1987, p. 59)

[2]Teknologirådet (The Technology Council) was a government institution that sponsored research and development projects to promote technological development in the Danish trades and industries. It was abolished in 1991. The Technology Council consisted of 12 members appointed by the minister of industry and trade. Council members were private and public employers, researchers and consultants as well as worker representatives.

[3]At a recent IFIP conference in Vienna, Libby Bishop presented a case study of a high tech firm in California whose employees had begun using the company BBS to criticize management personnel policies. Managers responded by pulling the plug on the BBS. The Europeans at the Vienna conference were incredulous and asked, "where were the

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unions? where was the works council?" The Americans in turn asked, "what unions? what works council?"

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