

From Empowerment to Enablement

An evolution of new dimensions in participatory design

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Abstract

Since the seventies there has been a legislation in Sweden on user participation in design of work-places. This paper will discuss how participatory design has developed during this two decades in Sweden. We argue that in the beginning participation was mostly a matter of *distribution of power* between the employer and the unions. This developed into a tool to *collect knowledge* to improve the quality of the design. In the eighties we see a new dimension of participatory design, that of organisational learning and development through *collective design*. The paper discusses this evolution of participatory design in terms of some relevant factors; *the actors, the mode of communication, focus of the design process, the goals, the roles of the actors, the context* and finally *the tools used and developed*.

Participatory design of work-places

This paper will discuss participation in design of work-space. Participatory design refers to a design process where different stake-holders, in some way, are involved in the design process to improve either the design process itself or the outcome of the design process. The background description goes back to late sixties and early seventies and the perspective on participatory design is that of architects, both practitioners and researchers. The Swedish architects' perspective on participatory design might be of interest to other design professions as the ideas of involving users in design of buildings were early an idea among Swedish architects. This also became a must in the seventies when new legislation on workers' participation in work environment issues was passed in Sweden.

Researchers in housing as well as work-place design had in the late sixties taken an interest in involving users in the design process. One of the first attempts was carried out by professor Johannes Olivegren at Chalmers University of Technology in Gothenburg. A group of tenants were designing a group of bungalows together under the supervision of professor Olivegren and his research assistants. In the early seventies a group of architect researchers at the Royal Institute of Technology in Stockholm started research projects in co-operation with the blue collar unions on user participation in designing work-places.

These attempts were in line with the new interest in work environment issues that in the mid-seventies resulted in a set of legislation in Sweden. There was a new Work Environment Act in 1978 and a Co-determination Act in 1976. Together these two gave the work environment concept a wide definition and stated the right for employees to take part in the planning of issues related to work environment. The legislation formalised a procedure for employee's co-determination that gave them opportunity to affect the results of a design process. However, a lack of knowledge and experience on the employee's side and a fear, on the employer's side, for not being able to handle the new situation made the first attempts to co-operate difficult. In some cases the co-determination became just a matter of procedure to fulfil the new legislation.

The legislation caused a lot of frustration among the participants in these early change processes and much of the time was used to discuss how to proceed rather than work on the actual design issue. This situation presented an intriguing problem to the consultant architects. It became important to develop methods and organise the process in such a way that the client still had full control and that the employees felt they had an impact on the result. This was a delicate matter and initiated

development of methods for communication, programming and project management.

From empowerment to enablement

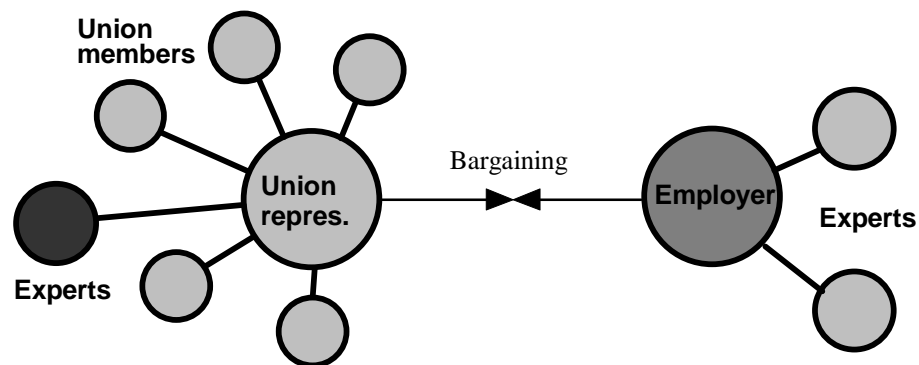
We will describe the development of participatory design since the beginning of the seventies as a development from "*empowerment to enablement*". The term *empowerment* has several meanings and is being used in as different research fields as feminist research and studies on work organisation. We derive our usage from the work organisational discussions. We might, however, simplify the term, in this text, to issues connected to distribution of power. We do this only for the reason of making the difference to *enablement* clear.

Enablement is a term originating from the American work-scientist Hy Kornbluh who used the term *enabler of learning* to describe the kind of *facilitators role* that Swedish architects researchers as Granath, Henriksson, Steen, Ullmark and others developed in different design cases during the seventies and eighties. He means that this is a new role for professional designers. This is aiming at development of the participants and the organisation rather than the artistic fulfilment of the designer. [Granath 1991, Clipson 1992, Clipson & Kornbluh 1993]

We argue that in the seventies participatory design was mainly a *matter of democracy*. There where however, in the mid-seventies, a growing interest to develop methods and tools for participatory design that would turn into something more than just a matter of *distribution of power*. Researchers had since the beginning of the seventies worked on methods to educate the employees so that they would be more proficient when they took part in work environment projects. [Gustavsen 1990, Håkansson 1995] With growing proficiency among the employee's representatives and an growing awareness of this new proficiency among employers the participatory design became a tool to increase the quality of the design. Participatory design had become a method for *collection of knowledge*. Before we go on what we call *enablement* we would like to elaborate a little further on these first attempts to participatory design.

For the sake of discussion we will sketch the typical situations for each stage in the development of participatory design, using a number of issues that we find relevant. Those are: *the actors, the mode of communication, focus of the design process, the goals, the roles of the actors, the context* and finally *the tools used and developed*.

The early stage - distribution of power

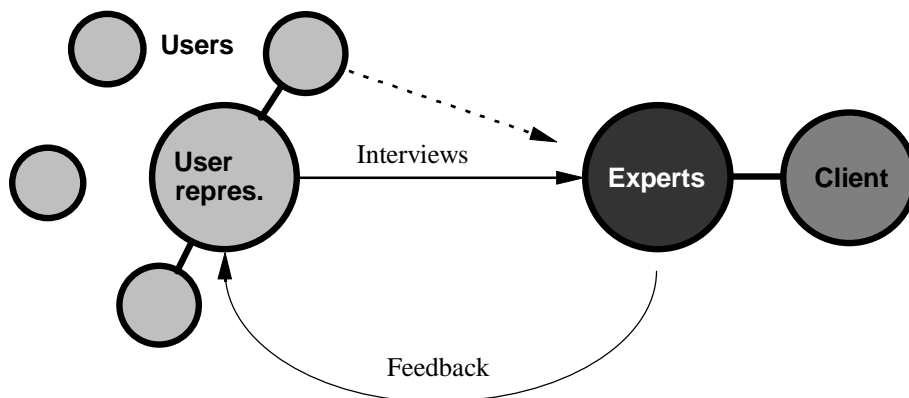


The above diagram shows a situation that might be seen as a result of the seventies' legislation on work environment and co-determination. The communication mode is *bargaining* and takes place between the *employer* and the *union representatives*. The *users* are formally those employees who are *members of the union* and they had their influence through the internal union democracy. Both *external and internal expert* are contracted by the employer's side. There were however situations there even the unions could use experts. Some architect researchers in Sweden volunteered to this role in the seventies and employee consultants were consulted especially in economic and organisational matters when a company were in difficulties and in danger of closing down. The process of participation were however very *formal* and followed the *procedures* stated in the legislation. The focus of the whole process was often rather *power oriented* than oriented towards other qualities and the goals were mainly *distribution*

of power from a *democratic* point of view. The most powerful tool was the legislation, but handbooks, manuals and check-lists were developed mainly to be used by the employees. These tools were meant to narrow the knowledge-gap between the employer and the employees' representatives.

Some attempts were also made to arrange a more direct contact between the external experts and the users in the design process. In some cases it turned out successfully but in other cases it came to conflict either with the employer's right to have control over his company or the union's wishes to represent the employees. [Henriksson et al. 1980, Granath 1991].

A change to collection of knowledge



The next step in the evolution of participatory design is what we call *collection of knowledge*. The first stage of mistrust and fighting for power had then developed into a mutual insight that the users have important knowledge that, from the user's side, could be a better tool to influence the process than bargaining and procedures and from the employer's side, that this knowledge could increase the *quality of the final product*. It is important to state that, in some companies, this way of co-operating in design was common through the whole seventies.

The actors were very much the same but their roles were somehow different. The employer put the external consultant in the front line, often an architect, and even if the union had a strong legal role, they mostly elected groups of representatives from different departments in the company to communicate with the expert. The communication were very much a matter of the architect "picking the users brain". The architect *interpreted* this information according to his own professional and cultural values into illustrations and plans that he fed back to the users to react on. In fact it was very much a one way communication where the users' possibility to decode the architect's designs were limited.

The focus of the process was towards the *work-place as an object* and the process was aiming at a high *quality of that very design object*. The expert liked to see himself as an objective, listening and interpreting person who could understand the users needs often better than themselves as they were biased by their existing situation. The user was a *source of information* and the client was an *investor* who trusted the expert to produce the best possible product to the given price.

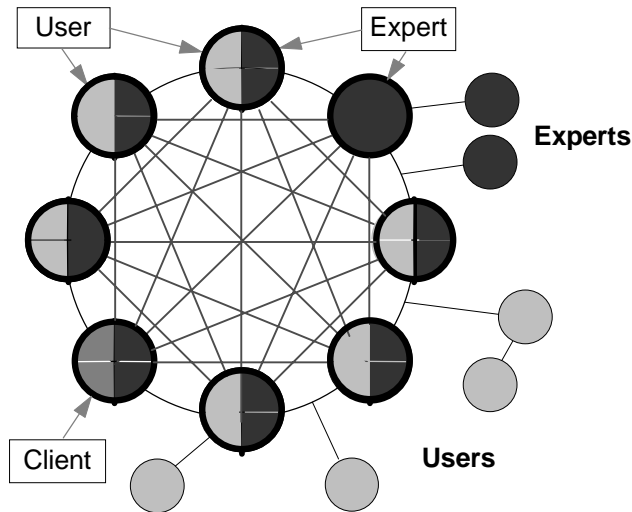
The process in itself was often fragmented and hierarchical i.e. the architects was the only person who had any idea of the whole design concept and the project was often organised in such a way that different user groups and different external expert were unable to have a dialogue about overall design issues.

The tools used in the process were designed to *collect data* that was collected and stored in a structured way. Programming techniques, checklists for different aspects of the design and interviewing techniques were developed to be able to speed up the process without losing control over the flow of information.

A collective design process

The concept *collective design* was introduced by Granath in early nineties to separate a new dimension of participatory design from the way it had been looked upon during the seventies and

eighties. [Granath 1993] A collective design process is a participatory design activity where the people, or actors, concerned and affected by the design result take part. Their respective expertise, knowledge, values and interests in a collective way formulates the design result. They affect each others knowledge and values in such a way that the common knowledge and objectives of the organisation is both questioned and developed. The design activity also generates *new knowledge, goals, repertoires and language*. Collective design is something more than contributory influence and just participation. It is not a process aimed at compromising in order to find the smallest common denominator. Rather it is a process where knowledge and values confront, complete and modify each other leading to something new.



The roles of the actors in a collective design process is somehow different from what we have discussed earlier. All actors in the process are regarded as *experts* and their participation is therefore based on their relevant knowledge rather than on their roles as representatives for different interests. External recourse persons and consultants are called in to complement the internal competence or to encourage or stimulate the design process. All internal actors are also *users*. This puts them in an interesting dual situation. As experts they are listened to when they act from their professional point of view and their expertise are not easily questioned. Likewise they do not question other experts when they act in their professional role. But, as users they can question almost anything and comment on other expert's and user's suggestions and solutions. This *duality in roles* makes the design work very creative and generates new solutions and insights on many problems. We use Clipson & Kornbluh to make this clear by suggesting that as experts the participants are *co-learners* i.e. they share their expertise for the benefit of the whole organisation and they synergize their own knowledge with what others know. As users the participants *enable themselves* to learn by encouraging and stimulating each other to learn in the design situation. They do this by bridging over professional values and languages and interrelate physical and human aspects in the design process. [Clipson & Kornbluh 1993]

The communication mode of a collective design process is the *dialogue*. The dual roles of being expert and user are important for the dialogue. Another important thing is using methods for design and communication that bridges over differences in language among the participants. [Granath 1991] The design situation is multi-disciplinary but also multi-hierarchical. [Adler, Granath & Lindahl 1995]

Conclusions

The different stages of participatory design described above are all valid and exist at the same time. The democratic aspects and the unions' right to bargain is still important in Sweden and the process described as *collection of knowledge* is still the most common participatory design process at least among architects, even if the use of systematic programming tools often are exchanged by the architects own ability to merge the different aspects together in a final design. Collective design methods are powerful tools to deal with unknown situations and situations there something new must be

invented. It is also a powerful tool in complex designs situations there we need synergy between technical, organisational and spatial systems. Through collective design activities the organisation learn how to adjust to the ever-changing environment . Recent research shows that collective design of single artefacts, like a workplace, can result in further insight and awareness of more complex issues in the organisation and hence the ability to deal with this. [Adler, Granath & Lindahl 1995, Birgersson 1996]

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