Conflict as a resource in Participatory Innovation

Jacob Buur

SPIRE, Mads Clausen Institute University of Southern Denmark Alsion 2, 6400 Sønderborg, Denmark buur@mci.sdu.dk

ABSTRACT

In this paper we explore the role of conflict in innovation processes in which users are involved. We argue that the meeting of crossing intentions can create new insight and movement of thought and action, and thereby contribute to creating innovation. We use improvised theatre to investigate what happens in industrial (and other) organizations that embark on participatory activities, and which barriers that hinder such activities. By analyzing the improvised scenes and the way the audience reacts through the theory of complex responsive processes we show that goal-oriented, consensus seeking activities and facilitation does not seem to support innovation very well. Rather, we claim that we need to find ways of employing conflict as a resource in innovation processes.

Author Keywords

Conflict, complexity, participatory innovation, theatre, improvisation, power

ACM Classification Keywords

INTRODUCTION

In the early days of participatory design conflict was seen as an inevitable companion of the power struggle between workers and management. Researchers collaborated with trade unions to develop strategies for workers to articulate their needs and obtain influence on their tools and work conditions and thereby expand democracy.

"PD is not defined by the type of work supported, nor by the technologies developed, but instead by a commitment to worker participation in design and an effort to rebalance the power relations between users and technical experts and between workers and managers" (Kensing and Blomberg, 1998, 181)

In this conception conflict is seen as a driver in the development between the two parties, however, as the workers are seen as the weaker part their voice represented

Henry Larsen

SPIRE, Dacapo Teatret Kongensgade 66-68, 5000 Odense C, Denmark hl@dacapoteatret.dk

by their organizations must be amplified. Managers were frequently asked not to participate in workshops because their presence could make employees reluctant to express their views (Bødker, 1996). Early participatory projects took up conflicts between management and labor as a matter of principle, and contrasted it to the prevailing harmony perspective (Gregory, 2003).

In the historical materialist tradition conflicts are seen as structural, but also as driving forces of change (Engestrôm, 1999), and in participatory design the meeting between different parties create conflict that open new possibilities (Bødker, 1991). (Kyng, 1998) recognizes that the design process as such is 'a political one that includes conflicts at almost every step of the way'.

Overall this tradition offers a coherent understanding of how novel meaning, novel structure, and novel products emerge, namely in the structural conflict between the two parties mentioned.

Over time the way of talking about participatory design has changed. For years, a heated discussion was afoot between researchers arguing that the adversarial relation between managers and workers is unavoidable ("the collective resources approach") and those researchers who stress the need for cooperation between managers and workers (the socio-technical approach) (Kensing and Blomberg, 1998, 171).

With the move towards participatory design becoming a mainstream 'method', the importance of the power balance between workers and management has been downplayed in exchange for an all-encompassing involvement of any kind of users. In the broader, industrial version of user-centred design, the concerns about power relations seem to have disappeared entirely as participatory design methods are employed to establish collaboration between developers and the *potential* users of the manufacturer's products or services. 'Users' in this understanding are not organized in unions, and there is no structural (employment) relation between manufacturers and users.

There has been a shift towards seeing consensus as an ideal. Participatory designers tend to understand themselves not as part of a conflict or as involved in conflicting matter, but instead as neutral facilitators of a process where different perspectives should meet each other harmoniously. This

position, however, does not offer a similarly coherent way of understanding how innovation comes about.

With this paper we want to re-introduce the notion of conflict as the driving factor in innovation, albeit conflict in a relational view, rather than in a structural one. To understand innovation as the result of conflicting intentions in this way is to accept 'politics' as something we all do all the time with each other instead of seeing it as structural and mainly exerted by representatives.

In particular we focus our analysis on *Participatory Innovation* (Buur and Matthews, 2008), an approach that seeks to combine participatory design and design anthropology while expanding towards a business orientation. From a company viewpoint involving users is likely to generate knowledge that inspires company employees and also possibly generates novel business opportunities. But how user input is to gain a profound influence on company decisions is still a major challenge. We aim to conceptualize of the processes of innovation within companies in order to understand the dynamics in which user perspectives come or do not come into play.

Consensus and conflict

In organisational development it is often argued that a particular kind of conversation, a 'real dialogue' is necessary for development to happen, and that such a dialogue can happen through a process of co-sensing where people listen to each other's perspectives. It takes a certain attitude to become constructive together, agree to suspend judgement, be honest and try to build on each other's ideas. Sanoff argues that 'real' consensus comes about as a result of comfortably agreed-to outcomes achieved through real dialogue, where differences are creatively explored. Through shared discovery, where people listen to each other and identify points of agreement and disagreement, a process of co-sensing is achieved: "designing a clear, well managed collaborative process can lead to agreement where all participants are likely to receive wide community support during implementation" (Sanoff, 2008, 66).

Behind this thinking lies the ideal that innovation is born in consensus or at least in a controlled environment where intentions that not fall into these categories need to be suppressed. From working with user involvement in industry and with organizational change in general we do not find that this matches our experience. We experience that people have different intentions, frequently subversively expressed and very often conflictual towards each other, and that this is an unavoidable part of human interaction. We will take the argument even further and claim that conflict is an essential part of innovation.

Although the majority of participatory design methods tend to encourage equal sharing of perspectives and building of consensus, there are exceptions. Mogensen's concept of *provotypes*, for instance, suggests mock-ups used to provoke conflicting ways of thinking about practice (Mogensen, 1994). Even more pronounced is the critical

design work of (Dunne, 2005) and Redström (2006), where specially designed artifacts help pinpoint the conflicting dilemmas in the way people organize their lives. The concept of *ethnographic provocation* is based on the observation of resistance in companies against user perspectives that are in conflict with the prevailing understanding not just of 'use' and 'users', but also of company identity (Buur and Sitorus, 2007).

To understand the role of conflict in innovation, however, we will need to reconsider the term 'innovation', as it implies that there is a goal-oriented effort leading to radically new product and service ideas.

We want to introduce a different way of understanding innovation than the one that lies in the original participatory design tradition, but yet as consistent in the causality. We see innovation as the 'emergence of novelty' that comes about in local interactions between people with crossing intentions.

The politics of ordinary and everyday life

In their effort to fundamentally understand the emergence of novelty, Stacey et. al. point out a dilemma in mainstream organizational thinking: Several different notions of teleology or causality are at play at the same time (2000). Behind scientific management lies a natural law teleology (change is caused by natural laws) and systems thinking is based on a formative teleology (like the acorn that becomes an oak). In both cases the manager's choice is understood according to a rationalist teleology (change is a consequence of human choice). It is taken for granted that new ideas are born in the mind of individuals (the managers) and then communicated into an organization that works after a different causality or teleology. This understanding does not give room for a free will for others than the manager, and 'participation' means to participate in maintaining the organization.

With their theory of complex responsive processes of relating, Stacey et al argue for a teleology, which is transformative: Novelty is understood to emerge in human interaction. Drawing on the work of the American pragmatist George Herbert Mead (1934) and the process sociologist Norbert Elias (1991) they see human identity as essentially social, and communicating with each other is the basis of all what we do. As humans we are conscious and self-conscious, which enables us to cooperate and reach consensus while we at the same time conflict and compete with each other in our processes of relating.

Stacey understands consciousness as arising in the communicative interaction between human bodies. In our vocal gestures to another we evoke our own bodily responses. In our acting we take the attitude, the tendency to act, of the other. It follows that consciousness, knowing and mind, are social processes where meaning emerges in the social act of gesturing and responding.

Furthermore, gesturing cannot be seen independently from responding (Stacey, 2001; 2007b). The local interactions among humans are processes of relating in which we continuously respond to each other. We meet each other with different intentions, which create a complexity that none of us can foresee. Therefore we need to improvise in ways that over time change our own intentions. At the same time novelty is created in the interplay with other's intentions.

The life of an organization is seen as the sum of ongoing concrete relating among people, at the same time paradoxically conflictual and consensual in its nature. In these processes certain themes of conversation emerge and others disappear. Some people become excluded and some become included. To explain this, Stacey and Griffin use the phrase 'the politics of ordinary and everyday life' (Stacey et al., 2000, 9).

As in the original participatory design tradition conflictual intentions are seen as a driver in the emergence of novelty. However, the conflict is there in every ordinary conversation. In the perspective of complex responsive processes, innovation is negotiating of meaning between people with different intentions, as processes of relating in which conflict plays an important role. In these processes of relating, people do have different influence; power relations are in play. We will use this theory to explore what happens, when a company attempts to adopt a participatory innovation practice.

IMPROVIZATIONAL THEATRE AS RESEARCH METHOD

In our work we use improvisational theatre as a laboratory for inquiring into the social interactions between stakeholders in a participatory process. Rather than experimenting in actual company settings, we establish imaginary situations, but take care to ensure that they resemble industrial practice. We then study how alternative acts may change people's relating, and how novelty emerges in the process.

To utilize theatre in participatory design is not new: Theatre methods have been used by designers to experience use, and to invent and evaluate new systems in use. Burns et al. (1994) acted out situations in a hair dresser saloon to understand applicability of new technologies (a mirror with head-up display). They termed the activity 'informance' to indicate the potential mix of information and performance. Laurel showed how theatre as a metaphor can help conceive computer interfaces in novel ways (Laurel, 1991). Some of the important concepts we use to explain participatory design activities stem from theatre: 'Staging' and 'props' (Binder, 1999; Bødker, 2000)

Our use of improvisational theatre (Larsen, 2005) is influenced by *forum theatre* (Boal, [1979] 2000). Forum theatre was invented by Boal, who used theatre in Brazil in the seventies to encourage people to break free of suppression – "theatre of the oppressed" (Boal, [1979] 2000).

In participatory design forum theatre techniques have been used for instance in designing digital television systems for older generations (Rice et. al., 2007). They conclude that "live theatre established a 'common ground' between participants and actors in the facilitation of new ideas".

Forum theatre has found its use in organizational change (Jagiello, 1998; Meisiek, 2004; Nissley et al., 2004; 2006) also, but a critique put forth has been that when managers pay forum theatre will inevitably turn 'Boal lite' because it can never be 'theatre of the oppressed'(Clark and Mangham, 2004). There are striking similarities between this discussion and the discussion in participatory deign mentioned previously between the 'collective resources approach' and the 'socio-technical approach'.

There is a parallel between the theatre improvisation of Keith Johnstone (1981) and the understanding of human interaction as complex responsive processes. Working with theatre improvisation is paradoxically fictitious and real at the same time, because the actor's fictitious work is constantly met by a real response from the audience – real in the sense that people react based on their own experience. By experiencing this together, power relations are immediately changing – not as a result of the work, but as a part of it. Theatre improvisation serves as an invitation to spontaneity, an invitation to be aware of changes in each other's reaction. The apparently fictitious character of the work makes it appear safe to do so (Larsen, 2005).

We are interested in understanding what happens in (industrial and other) organizations that embark on participatory activities, and in particular in pointing out and working with the barriers that hinder such activities.

Over a period of a year we have developed a theatre piece, or rather a set of acts that allow us to explore some of the most crucial moments in introducing and carrying through participatory activities in an organization. Short dialogues between professional actors on stage serve as invitations for an audience to discuss and engage in exploring what happens, and how one might introduce changes. The actors can re-enact new versions, and members of the audience can come on stage and improvise new actions or roles. New conversations emerge in mutually improvised relating of people with different intentions.

We ensure that the scenes mirror an actual industry practice in three ways: (1) The scenes are built on the authors' many years of experience from, respectively, participatory design in manufacturing industry and organizational development in both private and public organizations, and they are updated with input from a range of recent participatory innovation projects. (2) The actors themselves have extensive experience from theatre events in private and public organizations. (3) The audience includes industrialists, who are asked to react on whether the scenes realistically mirror their own experiences.

The empirical data for this paper stems from two theatre events in Denmark. The first one (Event 1) ran for three afternoons as part of a PhD summer school, in which some of the 30 participants had industry or consultancy experience, others had had their first experiences from collaboratory projects with industry. The second one (Event 2) ran over a full day with a mixed audience of 70 industrialists, public sector employees and researchers. As both audiences had non-Danish speakers, acting and discussions were conducted in English. We documented both the scenes and audience discussions with three synced video cameras.

The theatre scenes

The play is constructed around the imaginary company Coins Inc, a manufacturer of coins and modern payment systems. The new CEO presents his vision to introduce Participatory Innovation. He also sets the goal for Coins Inc. to complete a 6-month pre-study solicited by the tax authorities: The development of a new, digital payment system for 'unregulated markets', i.e. flea markets and other informal businesses that still largely use coins — and pay little tax!

SCENE 1: The opening scene provides glimpses of how the business operates - and how various players react to the CEOs speech. We invite the audience to investigate, which institutions are at play.



Figure 1. Three design concepts of a handheld digital payment terminal developed for the theatre act.

We chose this imaginary context for a number of reasons: The 'user' setting is complex, with lots of stakeholders and 'users' who aren't immediately happy about the product, yet the flea market context is one that most people can relate to on a personal level. We wanted to make certain that the 'product' in question is a physical IT product, well away from the office machinery experience of most participants, yet entirely realistic. To step up realism we even produced a set of design proposals and product mockups that entered the play in one of the later sets.

STAKEHOLDER WORKSHOP: CROSSING INTENTIONS

SCENE II: To get the ball rolling, the CEO wants to invite all the relevant stakeholders to meet and discuss the digital payment system. But who are the users? Who should participate? We invite the audience to identify participants through a value network mapping activity: The stallholders and shoppers, the consumer association, the tax authority, various company departments, the American owner, etc.



Figure 2. How might the consumer association react? The audience and actors play the roles of various stakeholders to see if they might take an interest in the planned innovation.

We then open the 'stakeholder workshop' with some 10-11 different positions filled by participants and actors, who have had a few minutes by themselves to prepare for their role (E.g. how would a representative from the stallholder association react to such a proposal? What arguments would he or she bring forward?). The actual scene was fully improvised and went on for about 20 min. At event 1 the entire audience was part of the 'workshop', while at event 2 it was played by 11 'representatives' on stage in front of the audience.

Perspective lock-in

In their opening lines at the first event, the stakeholders state what they have planned to say, and what people would expect them to: The 'tax authority' finds civil ways of formulating the proposal as a positive opportunity. The 'stallholder association' expresses hesitation about the overall idea, afraid that the new system will destroy the fleamarket business. The 'company CEO' is forthcoming: "What is it that you want from this mini-terminal that we will build?" The 'marketing manager' thinks in USPs (Unique Selling Points): "We can make your life easier". The 'shop steward' is concerned about job security for the manufacturing employees.

For a while, participants establish their positions in relation to one another, they say what they have planned to say. An extreme example is the 'chemical supplier', who at some point finds an opportunity – without relating to the ongoing theme – to present his company's new green delivery system; "When we were invited we thought we were here to make business". It seems that roles are created as much by perceived expectations of the other players, as they are by what the participants bring along. Although the play is entirely improvised, the participants clearly draw on personal experiences: The 'shop steward' has been in union negotiations in a former job, the 'CEO' has run courses with company managers etc.

But although well prepared, the participants cannot stick to the plans they made, as the meeting develops. The 'stallholder association', for instance, consists of the chairman and two members, and they get into an internal discussion, when one of the members openly disagrees with the chairman about entering into collaboration about the new system. She maintains that her association should boycott the work.

At the outset of the meeting he 'stallholder chairman' (incidentally played by one of the authors) had no intention of bringing this internal conflict out into the open. He assumed the group would stand in unity at the meeting, but this woman now undermines his position by taking an opposing position in 'public'. For the 'stallholder chairman' this provided a strong personal experience of how his planned intentions got challenged in the local interactions.

In this way every participant at the meeting has his or her own intention that is formed by their local relations and the interdependencies they are part of also outside the meeting, interdependencies that constrain but also enable movement of the positions at the meeting as we saw here.

Of course this incident weakens the voice of the 'stallholder chairman', but for the company the fact that the conflict comes out in the open provides new insight into the different perspectives among the stallholders, an insight that can become very helpful in the process of creating the miniterminal.

As the participants start to challenge each other, the positions start to move. For instance, the 'shop steward' puts pressure on the management of the company:

- "We have serious concerns about (how this new technology will influence) the situation of the workers, Mr. Stryker, you should have an idea about this?"
- "Today, we are mainly here to listen" ('CEO')
- "Does this mean that you are risking the destiny of this company without having a concept?" ('shop steward')
- "We do have a concept; we made our homework" ('CEO assistant')
- "Then it would be nice to have an idea of the concept, instead of sitting around talking". "I would like to have a concept that ensures the future of my people" ('shop steward')

After some discussion the 'stallholder association' steps in:

- "I was curious about this - do you have a concept already?" ('stallholder chairman')

It appears that the CEO and his aids feel challenged by the union representative (have you called a meeting without having a plan?) to respond that they do in fact have a concept: that they have 'made their homework'. This brings the 'stallholder chairman' to wonder, then why are we here, if you have decided already? So the dispute with the shop steward, which definitely was unintended from the CEO's position brought forward a question among other participants: Why are we here? We see the emergence of a novel theme in the interplay of different intentions crossing

each other, and we see how this organizes the next theme for the conversation.

But in this conversation we also sense an underlying theme: Although the act is completely improvised, in the way that people are responding to what is just said, the conversation seems to be co-organized by a shared fantasy: that there 'must be a plan', an intention that governs what is going on.

As humans we do not only take the attitude of a particularized other, we also have a capacity for generalizing. In our action we take an attitude of what Mead calls the generalized other (Mead, 1934).. We create fantasies of and are concerned about what a group or a society may think about us. This is an often unconscious but powerful form of social control. Here Mead, and also Stacey present a perspective of communication not as a simple tool to transmit an already thought message but as complex, social processes of self-formation in which meaning and society-wide patterns emerge.

From our experience, the notion of a 'plan' very often structures conversation among people in organizations. The point is, however, that even if someone had a plan, the crossing of different intentions have as a consequence that what happens will never be the exact result of any plan. The novel themes emerge out of crossing intentions.

Clarity of the user's voice

At some point, the 'stallholder chairman' invites the 'shopper' to give her view ("Who will pay for this? Are the consumers ready to pay extra?") and she responds with an emotional talk about the delight of going to flea markets:

- "Please don't touch the magic of the flea markets" ('Shopper')

This statement said in this particular context constitutes a move in the conversation. It is taken up by others and so gets an influence in the following conversation, and even in the following sets. There might be several reasons why: The expression 'magic' probably rings with people's own experiences of flea markets, and it is a strong metaphor. In the particular situation it becomes a lively and influential input, emerging from the particular patterning of the conversation, where the focus has so far been on conflict in the stallholder's organization, followed by the conflict between the shop steward and the CEO.

The understanding of 'magic' seems so influential that there is a slight turmoil in the second theatre event (with some of the same actors and some overlap in audience), when the 'shopper' there chooses to take a very different stand:

- "I have a feeling I am cheated by the vendors. What I would like, is set prices and a receipt. Not too much hassle, we want to be able to use our (credit) card." ('Shopper')
- "(But) what is the most exciting for you in a flea market? Can you describe your emotions?" ('Designer' played by one of the actors)

- "We were actually talking about the spitting in hands stuff (...) but we don't want to pay overprices. It's a balance between economics and irrational feelings" ('Shopper')

The voice of this user draws a response from the 'market organizers representative': He states, quite frankly, that according to his experience, this view is not representative of the 'ordinary' shopper. A conflict arises: Can we believe this user, when the former one said something more in line with our own experience?

Allow one-self to moved

An interesting opening emerges at the second theatre event, when a retired tax official say

- "We have tried this before, it will not work"

At this event we have the tax minister, and she has to respond do this:

- "These vendors have to pay tax"

This calls forth a silent response from the vendor

"I have a job"

This voice from the vendor is a protest, that expresses a position that is not completely legitimate, a voice that usually would be expressed in informal conversations, however he obviously feels so stressed by the development that he needs to bring in his voice.

In the ongoing negotiating of the politics we also negotiates which arguments are valid, and which argument cannot be spoken out loudly. It was first when we reviewed the video from this event that we heard this response. So in looking at the video we are in a similar way negotiating the meaning of what happens.

The market organizer representative:

- "If this is going to be implemented we will administrate it so that the authorities do not need to – and so this can be a new business for us"

So the emergence of the conversation enables the market organizers to express a new business perspective – which obviously also is important for the company to know in their ongoing work.

The processes of relating involve responding to each other in recognisable and yet surprising ways, that is, with spontaneity. Spontaneity can be recognized as liveliness: one finds oneself in spontaneous activity when one becomes unsure of the response the other will take to one's gesture. Daring to be spontaneous is essentially risky because it challenges power relations, which themselves are maintained only by continuously responding to each other in ways that are mutually expected (Larsen, 2005).

The urge to control participation

Before we move on to the next scene, let us pick up some of the audience comments in response to the 'stakeholder workshop':

- "It is wrong to arrange a meeting like that - we should not bring so different perspectives together" This is a remarkably strong normative statement. At both theatre events this view was expressed with much emotion and from the reaction we could see that it did not evoke others to object against this view in either of the groups. We hear a consensus oriented view in this statement. Maybe the view also expresses an uneasiness with the role of being the one who should organize such activities in 'real' life?

"People are not so honest in real life"

Playing a role evokes a response with some to take a more extreme standpoint than usual. However, we have argued how the crossing of intentions brings forth themes that no one would have thought of, and no one would have wanted. Bringing a larger number of different perspectives together than anyone can overview and control creates new conversations. We would like to emphasize that we do not take all of what happens in the emergence of the crossing intentions for 'good'. In the interplay of different intentions what emerges can be highly destructive and it is more the rule than the exception that the processes of relating at the same time is destructive and brings up new possibilities (Stacey, 2001).

- "We see locked positions where people hardly listen, but only use each other's point of view in their own argumentation"

This is obviously the case, but at the same time the interplay also leads to a move in the position. So paradoxically we see locked positions that at the same time have a potential to move. This is in line with the thinking of complexity where we have to accept paradoxes; that apparently contradictory positions emerge at the same time. Also this is in line with Stacey (2007a).

- "There are many strategies in play. People are harvesting other's arguments so they can be used at a later time."
- "It shows how important it is to listen to all perspectives" Taking a stance of paradoxes we can recognize both these statements. We can attempt to encourage that we listen to each other but we also need to recognize that people at the same time will use what they hear for their own intentions, which is not in itself good or bad, it is just happening.

PROJECT STARTUP: INNOVATIVE CONFLICTS

SCENE III: After the large stakeholder workshop management decides to go forward with the pre-study, and three employees from engineering, sales and design have been appointed to organize a project to complete the task in 6 months. The project team struggles with the CEOs wish to introduce participatory innovation to ensure an innovative product that really fits user needs. The team members discuss the perspectives they heard at the stakeholder workshop, and the engineer suggests the reuse of a piece of hardware from an earlier project. The designer contests this and suggests they study 'real' users first. This leads to a discussion about which methods the team can employ: Ethnographic studies, lead-user investigations, user workshops?



Figure 3. Team start-up - the engineer has a proposal for technology already. But shouldn't we study users first?

This was a scene that was written after the first stakeholder meeting. Based on what was said – and also based on our experience with industrial organizations – we have written the scene to expose the following constraints: (1) Development projects assemble many legitimate stakes in the team. (2) The composition of the team is a management decision based on practical constraints, it is seldom the individual choice of the employees. (3) Designers are not awarded a special status, they need to fight for their views same as everybody else.

We invite the audience to discuss what happened in the meeting between the engineer, the designer and the sales employee:

- "This is a turf war between three different competencies. They don't really get closer to each other; they talk from each their position (...) They are fighting about who's perspective should win."
- "They should be more accommodating all together. Just to recognize the fact that they are a team."
- "The designer is the only person in that constellation that is trying to build bridges, and the others show a real hard exclusive unit thinking (...) This is so innovation unfriendly and innovation destroying, as there is no integration, and no 'we feeling' there."

Behind this we sense that there is an assumption with the audience that if the team members were only more accommodating, if they were able to listen to each other's perspectives, if they had a stronger sense of being a team, they would be innovative! But the question is, then, how does such a team spirit emerge?

The myth of the shared goal

Several of the participants point out that the team does not seem to have a shared goal:

- "What I can see is that everybody is going from their own perspective on the same level as well, because they don't really have a consensus on what the goal is. If this is the core team, then where is the project leader, who can say this is the way we are going? Is it the tax office that's important? Is it the shop owner? Or is it the customer? It doesn't really matter which one you pick, as long as you have somebody who sets the direction we are going."

The participants do not recognize any of the three actors as taking the role of project leader, as one, who can represent a goal given from 'above', and who can prioritize between conflicting user interests: Those of the tax office and those of the stall owners. That a 'shared goal' may be a socially constructed entity, and that 'goals' are highly problematic in a project aiming at innovation does not enter the discussion at this point.

Another participant makes this recommendation to the designer on stage regarding how to relate to the engineer: "You need to transform it into sort of a technical challenge. Maybe tell him: I want you to make a virtual shake and spit in the hand thing!"

She has the support of an engineer in the audience "As an engineer I would feel a bit lost here. What's my part in that? Just give me the specifications, and then I'll go out and do it."

I.e. the assumption being that it is possible to turn a complex change in user practice into a clear-cut development goal. There are several suggestions that the team ought to discuss the overall goal of the project before they start planning what to do:

- "The goals set for the output need to be reconsidered."
- "I think they should take a discussion about what the goal is here: Is it to sell something in the short term, or to think in the long term, can this product really work in practice?"

Challenged to help the team, she accepts to try to initiate such a discussion by playing the part of a consultant invited in by the team leader. She does a mind-map exercise at the whiteboard. When the team falls back into the discussion about which technology to go with, she tries to maintain a focus on the goal setting: "Sorry to interrupt, but I think we should stick to these goals..." ('consultant')



Figure 4. Let's hire a process facilitator: Two participants try to help the team in a role as consultants. – Let's write your individual goals on the whiteboard.

Behind this discussion we detect a particular view of organizations: That organizations are *systems*. A system is defined by the purpose it is designed to fulfill. In this

understanding the team, being an organization in itself, must have a goal, or, only if the team members know where to go, they will actually be a team. Stacey observes that as a consequence of this systems view, one must ascribe top management with the ability to step outside the system to define a goal that then can serve as a common goal for the system. Stacey claims that this belief in a shared goal that links the organization together is a fantasy, and that likewise it is a fantasy that anyone can step outside the system for a moment and act as if they were free of the interdependencies that they have in their relations with others (Stacey, 2006). 'Participation' in the most prevalent versions of systems thinking means to join a shared attempt to fulfill the goal of the system. In Stacey's thinking of complex responsive processes participation means no more than to join in the ongoing conversation in the local interaction. It is in the ongoing conversations that new meaning emerges, which become (sufficiently) shared among enough people to create a difference.

Another discussion among the audience relates to the role of structure:

- "They seem to come in with different understandings of what the meeting is for. Is it for finding solutions or doing further explorations? If the meeting had been structured differently, so that they know, why they are there."

The view expressed here is that the structure defines the outcome. But who decides the structure? A structure imposed by an outsider would inevitably also be influenced by the interactions between the people involved, We will claim that also the structure emerges when people interact.

A consequence of seeing the team as a system is that systems have boundaries: Something is inside, and something is outside the boundary; you are either part of the team or you are not. Stacey provides a different view of this, based on the work of the process sociologist Elias: In the interaction between people there are constant processes of inclusion and exclusion, very often at the same moment (Stacey, 2003) (Elias and Scotson, 1994)). An example comes up in the second event: One participant suggests that the designer ought to be better at inviting her colleagues into the discussion with questions that challenge their diverse experiences. She accepts the invitation to try out her suggestion on stage, but finds that in her attempt to include the sales employee on her left side, she unconsciously comes to exclude the engineer on her right side at the same time. In the view of complex responsive processes there is no absolute definition of being 'inside or outside' the team, it is an ongoing negotiation in the interactions between people, with inclusions and exclusions happening constantly.

This is not to say that managerial intentions do not have any impact. In the ongoing negotiations we take into consideration the power differentials. There might be many situations where the view of an individual which is perceived as influential actually becomes key in the mutual

creation of meaning and movement. The point is, however that no one has the power to implement his or her ideas as such, these kinds of negotiation will be part of it, overt or covert.



Figure 5. An attempt to build bridges between perspectives by asking accommodating questions. But this leads to inclusion of the sales employee while excluding the engineer.

The facilitator as a conflict preventer

With an audience full of participants, who themselves have experience with involving users in various formats, the participants call for a facilitator to smooth out the harsh arguments on stage:

- "It should have been the designer, she is the process facilitator. The designer should have taken the role of changing the stakes."

After the scene in which a participant acts as facilitator (depicted in Figure 3), the audience reacts in general positively: "They weren't talking to each other directly, rather they had a mediator there, who made sure everyone got represented, and then tried to organize what they were saying. They weren't convincing each other directly but going via someone else. And that can be helpful."

Reflecting on her her own experience in this role however, the participant-facilitator also recognized the dilemma of the 'neutral' facilitator: "Maybe I was trying to put words in your (the designer's) mouth, but that was simply because I needed somebody who opposed the 'right technology', 'fast to market' and so on (positions). I wanted somebody who represented what I represent."

The ideal of facilitation expressed here is in line with Schein's ideal of "process consultancy": The consultant takes care of the process and does not interfere with the content (Schein, 1988). As Stacey mentions, this inevitably means a doubling of process, because at the same time as he takes responsibility for what he thinks is process, there will be another process that he is a part of and cannot excape or stand outside of. In her critique of Schein, Shaw (2002) suggests the metaphor of improvising ensembles as a better way of seeing collaboration between people. In her view, the consultant must be seen as a participant in line with others

Also, when we observe the Figure 5 improvisation closely, it becomes apparent that the designer-facilitator doesn't actually listen to the answers that her colleagues try to provide to her questions. Questions become a tool – a trick – for drawing colleagues into the cozy conversation, rather than a genuine attempt to interact.

Conflicts often arise in spite of a deliberate intention of something different. Even when entering the set with best intentions, conflicts seem to start when one says something 'inappropriate'. One of the participants in the summerschool tries the role of the designer in the team. As a way of introducing a radically different idea, she starts out: "I think you guys are so conservative! I'm so disappointed."

This opening line seems to prevent a useful dialogue from developing, and we sense a growing uneasiness with the audience, being spectators to this 'embarrassing' conflict developing on stage. Not surprisingly, a participant immediately observes: "I think she made a mistake. She criticized them in the first sentence for being old-fashioned. Its totally the wrong way; they automatically form an opposition against her." "The small window of openmindedness they had in the beginning, she closed it!"

And the participant herself reflects: "When I said this about conservative, I thought oh no, undo, undo undo. It was difficult to erase my comment. You should actually invite their skills into this, that was my intention, but then I just lost it in my first remark."

The very same thing happened in a scene in Event 2 – this time for one of the professional actors. When challenged to try make the engineer and sales person see each other's perspectives, she opens: "Now you are talking about your prototype, and you are talking about how to sell it, and I feel that we are completely stuck. Sitting and talking from each our perspective, nobody moves."

And the reaction from the audience follows promptly: "I think she started this session in the wrong way, because she started attacking her colleagues, saying that what they said and what they did was wrong. So they went into some kind of defensive position." "You should have asked more questions, shown more interest in their areas, so you could ask the sales guy What are your experiences out in the market? How do you see the users?

(Said by the participant, who shortly after tries her strategy on stage in Figure 5.)

What is expressed here is a view that a meeting needs a facilitator who should work as a conflict preventer. If he or she by coincidence contributes to creating a conflict it is a mistake. But it could also be an invitation to a creative conversation, by serving as a provocation. 'You are so conservative' could serve like this, and maybe it did, at the same time as the visible reaction seemed different.

The idea of complex responsive processes implies that the facilitator cannot see him/herself as being outside. He or she is a part of the processes of creating meaning and will consciously or unconsciously bring in his or her own intentions. This is constraining in the way that the facilitator cannot just be another. However, as the facilitator participates in the ongoing conversation it can also be enabling because it can bring new perspectives. To what degree this can happen will depend on the *quality* of the relation that can be established in the present moments. The facilitator's ability to be reflexive about his or her own contribution is important (Larsen, 2005)

DISCUSSION

The theatre piece continues with scene IV, a fleamarket study (study or experience use practice?) and Scene V, a hand-over meeting (barriers in accepting ideas from outside the organization).

Our work with improvised theatre has served as a way of exploring the role of conflict in participatory innovation. Based on Stacey's complex responsive processes of relating we have seen how new meaning and new ideas emerge in the interaction of a multitude of crossing intentions. Although the theatre activity works as a kind of laboratory we are able to gain insight into the dynamics of how users and other stakeholders may interact with company employees the interaction of users and other stakeholders with people from companies, who already are in enabling and constraining interactions with each other.

Understanding innovation as a result of the negotiation of crossing intentions brings forward new perspectives on participatory innovation. An attempt to reduce complexity or control conflicts between perspectives may impede innovation. Thus there is a need for developing new formats of collaboration for large, complex contingents of stakeholders that need to improvise their interactions. This would expand the well-known participatory design workshop format – and would mean suspending the ideas of control and consensus seeking facilitation.

To us, participation means simply to take part in an ongoing conversation with others, not to subscribe to a higher organizational goal. Shared goals may emerge through ongoing relating, but people are capable of collaborating never the less. The quality of participation becomes crucial, if we aim to support innovation. Although we as humans improvise in our conversation because we cannot foresee the response to what just happened, not all improvisation has equal quality. The Dacapo Theatre has introduced 'working live' as an approach to improvisation that has a certain quality of spontaneity, which implies that conversation moves in a direction that is felt unsafe for the involved because themes are talked about in a way where the next response cannot be foreseen. (Shaw and Stacey, 2005).

Also, the understanding of facilitation needs to be reexamined if subscribing to the idea that conflict and crossing intentions are drivers of innovation. As a facilitator, one cannot maintain a role as neutral consultant outside the process. The facilitator enters in constant relating to the other actors.

We believe that this work can serve as invitation to further understand the role of user involvement in innovation processes in companies. We have — influenced by the thinking of Stacey et al. presented what is going in the ongoing interactions as 'the politis of everyday life'. This is helpful if we want to understanding why the voice of the user sometimes disappear in the continued conversation in the organization, and sometime takes quite another turn.

ACKNOWLEDGMENTS

We would like to thank the Strategic Research Council for funding the SPIRE Centre. We are indepted to our research colleagues and the audiences in the two theatre events for willingly playing along and providing insightful comments on the play. Also, we'd like to thank the actors from the Dacapo Theatre for their splendid efforts to entice people into discussing and engaging.

REFERENCES

- Binder T Setting the Stage for Improvised Video Scenarios. *Proceedings of CHI 99*. Pittsburg, 1999.
- Boal A, *Theatre of the Oppressed*. Pluto Press, London. [1979] 2000
- Bohm D, On Dialogue. Routledge, London. 1999
- Burns C, Dishman E, Verplank W, Lassiter B Actors, Hairdos & Videotape - informance design. CHI '94 Conference Companion. ACM, Boston, 1994.
- Buur J, Sitorus L (2007) Ethnography as Design Provocation. In: Ethnographic praxis in Industry Conference (EPIC 2007). Keystorfe Colorado.
- Buur J, Matthews B Participatory Innovation. *International Journal of Innovation Management*, 2008, 12(3):255-273.
- Bødker S, Through the interface: a human activity approach to user interface design. L. Erlbaum, Hillsdale, N.J. 1991
- Bødker S Creating Conditions for Participation: Conflicts and Resources in Systems Development. *Human-Computer Interaction*, 1996, 215-236
- Bødker S Scenarios setting the stage for reflection and action in user-centered design. *Interacting with Computers*, 2000, 13(1):61-77.
- Clark T, Mangham L Stripping to the undercoat: A review and reflections on a piece of organization theatre. Organization Studies, 2004, 25(5):841-851.
- Dunne A, Hertzian Tales: Electronic Products, Aesthetic Experience, and Critical Design. MIT Press, Boston. 2005
- Elias N, *The society of individuals*. Basil Blackwell, Oxford, UK, Cambridge, Mass., USA. 1991

- Elias N, Scotson JL, The established and the outsiders: a sociological enquiry into community problems. Sage Publications. Thousand Oaks. CA, 1994
- Engestrôm Y Communication, Discourse and Activity. *The Communication Review*, 1999, 3(1,2):165-185.
- Gregory J Scandinavian Approach to Patricipatory Design. *Int J Engng Ed*, 2003, 19(1):62-74.
- Jagiello J Organisational Theatre of Continuous Learning: The application of the Forum Theatre Technique to Continuous Improvement. Enschelde, 1998.
- Johnstone K, *Impro: improvisation and the theatre*. Eyre Methuen, London. 1981
- Kensing F, Blomberg J Participatory Design: Issues and Concerns. Computer Supported Cooperative Work (CSCW), 1998, 7167-185.
- Kyng M Users and computers: a contextual approach to design of computer artifacts. *Scandinavian Journal og Information Systems*, 1998, 10(1,2):7-44.
- Larsen H, *Risk and 'acting' into the unknown*. In: Experiencing Risk, Spontaneity and Improvization in Organizational Change (Stacey R, Shaw P, eds). London: Routledge.2005
- Laurel B, Computers as Theatre. Addison-Wesley Publishing Company, Reading, MA USA. 1991
- Mead GH, Mind, self & society from the standpoint of a social behaviorist. The University of Chicago press, Chicago, Ill., 1934
- Meisiek S (2004) Dissonance, Awareness and Aesthetization: Theatre in a Home Care Organization. In: Learning Lab Denmark.
- Meisiek S, Dissonances, Awareness, and Aesthetization: Theatre in a Home Care Organization. In: Aesthetic Leadership: Managing Fields of Flow in Art and Business, (Sjöstrand S-E, Gustafsson C, Guillet de Monthoux P, eds). Hampshire
- Palgrave Macmillan.2006
- Mogensen P, Challenging Practice: an approach to Cooperative Analysis. PhD Thesis, Århus Universitet. 1994
- Nissley N, Taylor SS, Houden L The politics of performance in organizational theatre-based training and interventions. *Organization Studies*, 2004, 25(5):817-839.
- Redström J Left To Our Own Devices. Artifact, Journal of Virtual Design, 2006, 1(1):26-128.
- Rice, Newell and Morgan, Behaviour & Information Technology, 2007, 26, 4, 323-331
- Sanoff H Multiple Views of Participatory Design. International Journal of Architectural Research, 2008, 2(1):57-69.

- Schein EH, *Process Consultation*. Addison-Wesley Publishing Company, Reading Massachusetts. 1988
- Shaw P, Changing conversations in organizations: a complexity approach to change. Routledge, London, New York. 2002
- Shaw P, Stacey R, eds Experiencing Risk, Spontaneity and Improvisation in Organizational Change. London: Routledge.2005
- Stacey R, Strategic Management and Organisational Dynamics. Prentice Hall. 2007a
- Stacey R The challenge of human interdependence. European Business Review, 2007b, 19(4):292-302.
- Stacey RD, Complex Responsive Processes in Organizations: Learning and knowledge creation. Routledge, London. 2001
- Stacey RD, Complexity and group processes: a radically social understanding of individuals. Brunner-Routledge, New York, NY. 2003
- Stacey RD, Griffin D, Shaw P, Complexity and management: fad or radical challenge to systems thinking?: Routledge, London. 2000