

Ethnographic findings in the organizational theatre

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In the quest for engaging ethnographic insight in organizations on a more fundamental level than mere ‘innovation drivers’, theatre offers ways of triggering a change in conversations through emotional engagement. This paper discusses the impact of using theatre with professional actors to convey the outcome of ethnographic ‘user studies’ to industry and academia. In a project on indoor climate control with five company partners, the field studies brought about controversial findings, like ‘Indoor comfort is what people make’ – as opposed to something fully controlled by technology and ‘provided’ to inhabitants. We explore how theatre improvisation can convey such findings and thus support the provoking role that ethnography may play in organizations. Based on the study of two theatre sessions, we will articulate the importance of balance between playful and serious, of explorative discussion, and of supportive event planning and space layout to achieve audience engagement.

INTRODUCTION

Design ethnography has explored appropriate ways of conveying the outcomes of user studies (Anderson 1994; Jones 2006). User research is expected to deliver actionable outcomes and provide insights that organizations can feed into their innovation processes (Buur & Matthews 2008). The chosen format to convey those findings has often been seen as ‘representations’, containing an ‘ethnographic message’ that entails some measure of provocation to the expected audience. Far from just collecting ‘user needs’, ethnographic studies may uncover that users say and do things that a company may not like to hear, as these observations challenge perceptions of self and company identity (Buur & Sitorus 2007). Because this itself can trigger innovation, such ethnographic messages need thoughtful preparation, to make them readily understood and acted upon within their specific context. This discussion within design ethnography has explored numerous representation formats, such as *personas* and *scenarios* in both academia and industry (Cooper 2004; Boyarski & Buchanan 1994). Diggins and Tolmie (2003) articulate a series of ‘organizational features’ (e.g. form, use and embeddedness) that they elaborate as observations, warnings and strategies for practitioners to consider when creating representations of ethnographic outcomes. Jones (2006) argues that *experience models* – diagrams that convey a dilemma embedded in use practice – can optimize the communication of ethnographic results. However, such representations ‘can also become reified stereotypes and constraints that inhibit design possibilities’ (Blomberg & Burrell 2008: 982). Ylirisku and Buur (2007: 92) encourage the use of *video material* to bridge and even merge ethnographic fieldwork and design, claiming that ‘video preserves action in a sensitive

and detailed fashion in relation to what originally happened'. This paper will investigate the use of *theatre* to convey results of ethnographic user studies to organizations. Rather than proposing yet another representation – one that purports to meet all challenges – we suggest that each project, with its own context and stakeholders, warrants specific ways of representing what was revealed during the fieldwork. This may be one of the representations mentioned above, a combination of some of them, or something completely different. Success depends upon how well the chosen representation fits the specific context, and how the design ethnographers manage to engage the project stakeholders with the material.

The context of this study is a project between five company partners within indoor climate control and two universities in Denmark. As the university partner, our role was to carry out ethnographic studies of how people perceive indoor climate comfort and how they seek comfort in their home environments. Over the course of three days, our researchers were participant-observers in the homes of five families and also following one parent along to work and one child to kindergarten. We uncovered that people think and act quite differently from what the company partners expected. We described two of the controversial findings with the headings '*Indoor comfort is what people make*' (as opposed to something fully controlled by technology) and '*Indoor comfort is about social relations*' (as opposed to an individual value scale to be determined by climate chamber experiments). These ethnographic studies were followed by the design of a series of *provotypes* (Boer & Donovan 2012; artefacts devised to challenge the informants' and the company partners' understandings of indoor climate systems), then by the development of products that support people in managing indoor climate themselves. The project findings were first shared with a wider audience of indoor climate researchers and practitioners at a 2011 symposium on 'Zero Energy Buildings'. Having seen how difficult it was for the project partners to accept the ethnographic message, the project team decided to use theatre at this event to generate discussion among the expert participants about people's 'indoor climate practices'. With the actors, we prepared three scripted scenes to convey what the researchers had observed in homes, kindergartens and offices; these were acted out as discussion starters at the event. A detailed analysis of that session helped us identify ways to foster audience engagement, which helped us greatly when planning a later event at which the same three scenes would be enacted for a different audience.

THEATRE IN DESIGN

Since the early 1990s, there has been increasing interest in using performance to help design interactive systems. Role-play has been extensively explored in the early stages of both academic and industrial design projects. This technique typically aims at providing user perspective on new technical solutions through informal, improvised acting of use scenarios. Burns et al. (1994) suggest that performance can help designers by activating imagination; facilitating empathy with users; communicating within and outside their team; and encouraging less self-conscious contributions. They improvised team role-plays to trigger discussion and evaluation of early design ideas, in sessions that they call 'informance design'. Sato and Salvador incorporated professional actors in their method 'focus troupes' to engage an audience in a richer conversation about design concepts and with sketches based on

ethnographic studies. They also identified that the presence of designers can help to ‘facilitate the session rather than fostering an unrelated conversation’ (Sato & Salvador 1999: 37). They proposed a number of techniques that can be used for product development, and recognized that such sessions are not always organized to evaluate specific ideas but can also be exploratory, to provide insights before the actual design process starts. Svanæs and Seland (2004) propose a workshop setup in which users take the main role, observed by designers and developers.

Indeed, by offering the audience an opportunity to actively contribute throughout the session (Sato & Salvador 1999), performances can play a transcendent role in eliciting knowledge that would not otherwise emerge (Iacucci et al. 2002). In their review of past studies on performances within the user experience, participatory design and embodied interaction areas, Macaulay et al. (2006: 951) point at the improvement of ‘quality and utility dialogue within design’ and suggest that ethnography is capable of shifting discussion in that direction. Buur and Sitorus (2007) similarly point to the unique ability of ethnography to challenge conflicting conceptions within organizations, and argue for new representations of ethnographic material. We find this well aligned with the exploration of live performances within organizations that helped Buur and Larsen (2010) recognize how ‘qualities of conversations’ may steer innovation.

In summary, theatre within design has most commonly been used as an active way of harvesting user requirements and user-centred ideas in specific goal-oriented activities. Such performances tend to be ‘happy stories’ of how technology eases the lives of users and solves all eminent problems. They help projects progress in a given design direction, but may also gloss over fundamental conflicts between different perspectives of who ‘users’ are and what they do. In contrast, ethnography’s capability of generating impact should not be underestimated. Performances that represent ethnographic findings offer the possibility of generating insightful discussion within organizations before focusing work efforts in particular design directions, allowing teams to open up fundamental issues that arise only through such conversations.

ORGANIZATIONAL THEATRE

The kind of theatre we employ here derives from another tradition – that of theatre in organizational change, in particular forum theatre (Boal [1979] 2000). Developed by Boal in 1970s Brazil to encourage people to escape oppression (indeed, it was known as the ‘theatre of the oppressed’), forum theatre enacts a situation with built-in dilemmas to a point of impasse; the audience is involved in suggesting the next moves, either by telling the actors what to do or by trying out their own intentions on stage. For instance, the actors might play a conflict between manager and employees that deteriorates into chaos; the facilitator will then invite the audience to intervene in the next enactment, stressing that ‘Unless you do something, the situation will end just as desperately’. While the actors repeat the play, anyone from the audience can stop it at any time to change the course of events by instructing an actor to act differently, or even by going onstage and taking over the role of manager or employee. Forum theatre has been taken up in several strands of organizational change (Jagiello 1998; Meisiek 2006; Nissley et al. 2004). There is, however, ongoing debate around

how theatre performance contributes to change. While some authors claim that theatre requires adequate change management activities to follow up on the experience (Schreyögg 2001), or that change depends on audience reflection after experiencing the theatre performance (Meisiek 2006), others maintain that the sense-making process does not result from theatre, but is itself part of theatre activities (Larsen 2006). In our use of theatre, the focus is less on oppression than on disagreements within the audience, the actors bring out the different perspectives present and play them out against each other.

Improvisation is a vital part of this form of theatre. Improvisation draws the audience into the action; it encourages spectators to see that they too can influence how a situation develops. Keith Johnstone (1981) suggests that new creative ideas emerge and develop in the relationships between players, rather than as a result of an individual genius. Improvising is relational; it is not about acting, but about re-acting. Larsen and Friis (2005) link Johnstone's work to Mead's understanding of communication as gesturing and responding (Mead 1934). According to Mead, the gesture of one person provokes a response in another, but the response simultaneously gives meaning to the gesture in a relational process; thus, improvised theatre can be seen as actors and audience in a mutual sense-making process that can lead to novelty. In our theatre events, the actors first act our scripted scenes to trigger discussion with the audience. They then improvise responses from the figures they enact, or even jump into new, improvised roles to explore the audience's suggestions for resolving the situation.

THREE INDOOR CLIMATE SCENES

For the first event, the researchers and actors together prepared three scenes based on fieldwork findings in homes, kindergartens and offices. The controversial findings are clearly embedded in the scripts, conveying how contradictory someone's behaviour can seem in different environments, and showing that technical low-energy systems may not align well with people's practices (Figure 1).

Home: Closing doors – A young couple, Marianne and Paul, rented a zero-energy house six months ago. Paul took that initiative, because he values being environmentally conscious. A wall display indicates how much energy they use, and tracks air humidity, temperature, etc. Paul likes to keep an eye on energy consumption, making a game of achieving the best possible figures. In this scene, we see Paul asking Marianne to keep the door closed to maintain a balanced indoor climate; but with the kids playing outside, she is not happy being told what to do. She has just hung clothes outside in the spring weather, and enjoys the fresh smell and the contact with the outside...

Kindergarten: Waving goodbye – One morning, Paul drops off his son at the kindergarten. The child usually waves goodbye to his father from the corridor between two front doors, the inner door intended to eliminate drafts. However, the children like to follow their parents to the outer front door and wave goodbye through the glass, so a bucket usually holds the inner door ajar. Noticing that the inner front door is closed, Paul tries to

squeeze the bucket in place; but the teacher Ellen stops him, explaining that the draft isn't healthy and increases energy consumption...

Office: When is Cold cold? – Marianne works in the open-plan office of an insurance company. Though it is 27°C outside, both Marianne and Lis, her colleague at the next desk, feel cold inside as the ventilation is turned on. They want to call the janitor; but Søren, the head of the office, who arrives sweaty after a 15 km bike ride, feels warm and does not understand why the ventilation should be turned off, given that the temperature in the room is a perfect 20°C...



FIGURE 1. Images from three scripted theatre scenes on comfort practices

FIRST THEATRE EVENT

The three scenes were staged at the beginning of the event, with a few minutes in between for group discussion; after this, the floor was opened for general discussion across table groups, and the actors would improvise several new scenes based on the suggestions from the audience. The event took 90 minutes. The audience included 35 indoor climate experts from industry and academia, and the event was organized by three professional actors, a facilitator with over ten years' experience in organizational theatre, and three of the project researchers. Also among the audience were three industrialists from the project team, who were familiar with the ethnographic findings. The theatre group has worked intensively in organizational development in industrial and public settings, and have also performed with ethnographers at EPIC (Buur and Arnal 2008). The room was set up with six group tables (each seating five to seven participants), with an informal theatre stage at one end, and a screen for presenting fieldwork results at the other (Figure 2). The programme was documented with two synchronized video cameras, which captured both the scenes and the audience discussion.

A key theme to emerge from the discussion following the three scenes was to what extent people should adjust their behaviour in accordance with what an indoor climate system is designed to do. In particular, this was fuelled by one of the actors' lines:

Actress 1 (as Marianne): 'I'm someone who likes to put on different clothes in the winter and in the summer. In this office you have the same clothes on all year because of the temperature. It is so boring.'

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This led to a discussion of whether the system is designed ‘right’. One audience participant – an indoor climate professor – suggested a new system design to remove the problem of individual preferences:

Participant: ‘I would propose the clever man [the head of the office] should go to a meeting with the designer and tell him that he wants a better system that could take care of this problem. [...] And [the designer should] create individual controls, so you can come in your nice summer dress.’

At this point, the facilitator suggested that they enact a scene where the head of the office approaches a specialist designer:

Facilitator: ‘Can I ask you [professor] to be that guy [designer]?’

Participant: ‘Sure.’

Actor (as office head): ‘So, I just told you about the problem we’re having. What can we do about it? I mean, I get really annoyed with these two ladies.’

Participant (as designer): ‘You have an old-fashioned type of cooling system, you are using air for cooling. You spend too much energy to do that. You have to have a new system where you cool the room by radiant cooling in the ceiling. And this we can divide so you can have a cool place, you can turn it on. And the lady over there will have her own individual controls so she can turn it off. So you will both have what you need to have.’

Actor (as office head): ‘That sounds very good, but we just put up this new ventilation system. That was quite expensive.’

Participant (as designer): ‘That was a bad consultant.’ (*laughter*)

Actor (as office head): ‘So now I have a new consultant. So I mean there is this problem about – technology and these two girls is just, I mean, they can ruin everything.’ [...]

Participant (as designer): ‘I have a very nice, competent lady in my company. She’ll go and take care of instructing them how to behave.’ (*laughter*)

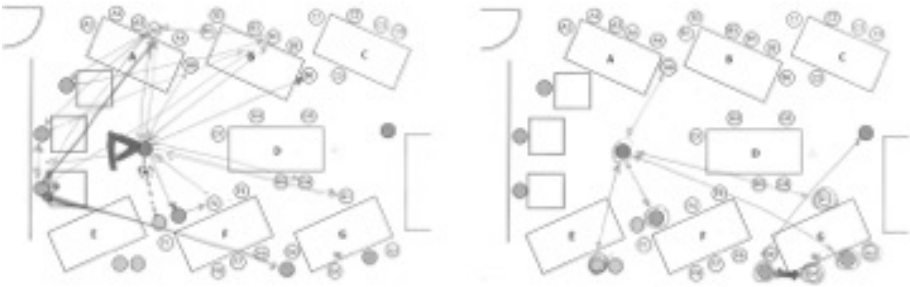


FIGURE 2. Mapping of audience interactions in the first theatre event. Lines indicate interactions between participants in stages 4 and 5 (L), 6 and 8 (R).

This improvisation leads to a longer discussion about who is ‘qualified’ to adjust indoor climate systems and improvisations about what role people can play in deciding for themselves. Towards the end of the session, the audience reprises the discussion about user behaviour, with one participant concluding:

Participant: ‘I think it’s very important that we don’t count on changing their behaviour. We also have to make room for the mother, who leaves the door open all the time, even though it is April. [...] We cannot expect her to change her behaviour. I think that would be wrong.’

The actors here seamlessly move in and out of fiction. They tend to stay in role, participating in the discussion from their characters’ viewpoints. Also, the barrier for audience participants to act is very low: they simply take the role from where they are seated. At first, the facilitator urges participants to act; but eventually the merest suggestion from the actors triggers contributions from the audience. To analyse the dynamics of the session, we started with ‘unmotivated looking’ at the video recordings (Sacks 1995), using a timeline transcript in which facilitator, actor and audience activities are registered in parallel but separately. Because actors and facilitator often improvise in response to input from the audience, considering them separately helps interpret the flow (see excerpt, Figure 3).

The activities could be summarised as follows:

1. **Introductory slides:** The research head introduces the project.
2. **Perspectives:** The facilitator interviews a second researcher about her literature study of what ‘comfort’ means – actors voice a range of perspectives (engineer, psychologist, architect, sociologist etc).
3. **Theatre:** The actors perform the three planned scenes (home, kindergarten, office), with a couple of minutes between scenes for small group discussions.

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4. **Impro demo:** The facilitator invites the audience to respond to the scenes – the actors incorporate short improvisations to demonstrate how the audience may ‘use’ them.
5. **Discussion and impro:** The facilitator encourages the audience to elaborate their observations and engages some participants in deciding what the actors could do in those situations. The actors improvise new scenes to prompt further reflections.
6. **Slides:** The research head returns to present data from the questionnaire study, leading to a longer discussion of the ‘concrete’ findings of the project.
7. **Prototypes:** The third researcher presents the work with prototypes, demonstrating how they work.
8. **Closing discussion:** In-depth conversations, mostly with or between the industrial project partners.

A surprising observation is that throughout the discussion the audience almost exclusively referred to the office scene (the last one performed). The home scene (the first) was brought up only once during the discussion, while the kindergarten scene (the middle one) was not mentioned at all. Perhaps the last scene was more easily recalled; or it may be just that most of the experts present were concerned with office conditions.



FIGURE 3. A portion of the transcript that tracks the actions of facilitator, actors and audience in the theatre event.

To examine in more detail how audience, researchers and actors interacted with each other, we mapped the distribution of participants in the room and drew lines between conversation partners (Figure 2). The facilitator was constantly addressing the audience in general, so audience reactions were directed to him. The mapping allowed us to see that many participants were involved in the initial discussions immediately following the three

scenes. However, only a few were engaged towards the end, when conversations were longer and more closely related to the scope of the project. Here the three industrial partners in the project were the most active ones; the actors were less involved, as the specialist nature of the discussion made it difficult for them to contribute. Another observation is that there seemed to be an exaggerated contrast between the ‘fun’ theatre part and the ‘ordinary’ slide presentations of research results, which may have been emphasized by their taking place at opposite ends of the hall – rather like a game of ‘ping pong’ between theory and practice; so perhaps the anticipated integration was not fully realized.



FIGURE 4. *The second theatre event - three stages in a triangular setup.*

SECOND THEATRE EVENT

We wondered whether participation might be distributed more evenly at the second event if we allowed more discussion time throughout. Also, to avoid discussion focusing on the last scene acted, we developed the idea of the ‘spatial map’ to allow each theatre scene (Home, Kindergarten, Office) its own location in the hall, so that participants could point at the relevant area. Finally, in the hope of integrating research findings more into the activities, we invited the researchers on stage, rather than including disjointed slide shows.



FIGURE 5. Room setup for the second theatre event: left, first scene

Each of the three scenes was performed on its own informal stage (Figure 4); immediately after each scene, time was set aside for discussion, improvisation and active involvement of the researchers in the theatrical improvisation. The audience was seated in chair rows in the centre of a triangle of stages, changing orientation twice to face each stage in turn (Figure 5). This time the participants included entrepreneurs, researchers and graduate design students engaged in a ‘Prototyping Week’ event in a business incubator facility (the iFactory) in Denmark. Two facilitators moderated the session, both seasoned organizational change consultants; one was the same as before. As they often exchanged roles during the event, we will not differentiate between them when referring to the facilitator in this section. The session was again documented with two synchronized cameras

The sequence of activities during the second event was as follows:

1. **Intro:** The facilitator runs a brief interview with the research head to introduce the indoor climate research project.
2. **Theatre – Home:** The actors perform the home scene.
3. **Audience involvement and impro:** The audience is invited to form small groups and make sense of what they see happening, then discuss.
4. **Researcher involvement and impro:** One of the researchers is called on stage to demonstrate how he deployed a provotype with the family. The actors improvise their reactions after the researcher has left their home. The facilitators encourage the audience to discuss the role of provotypes.
5. **Theatre – Kindergarten:** The actors perform the kindergarten scene.
6. **Audience involvement and impro:** In small groups, the audience is asked to think of a provotype that would help address the situation, and to share their ideas afterwards. The actors improvise the characters’ reactions given the audience’s input.
7. **Theatre – Office:** The actors perform the office scene.

8. **Audience involvement and impro:** The audience is divided into three groups; each actor joins a group to discuss how the character should develop. The actors then return to the stage to incorporate the audience input into new improvised scenes.
9. **Researcher involvement and impro:** A researcher is invited on stage to demonstrate provotype work with the industrial partners. The actors improvise partner reactions. The audience comments and discusses.
10. **Closing discussion:** The facilitators invite the researchers to share their thoughts regarding the use of theatre to share the knowledge generated throughout research projects, and the audience joins the discussion.

This time, instead of formally sharing research findings in a slide show, the researchers were actively involved in the on-stage activities and could thus demonstrate their research roles in the project. This seemed to give room for the audience to grasp the research team's approach throughout the project, and to appreciate the connection between fieldwork, provotypes, and research findings (Figure 6).

Overall, the audience was more active than in the previous event. Actors' improvisations were evenly distributed throughout the session, and were based on audience input as well as knowledge shared by the researchers. This time, the high number of actively involved participants was consistent throughout the event. Compared with the first event, this session had less depth in the discussion of the key issues – probably because the audience wasn't composed of indoor climate experts. In this respect, there was less resistance to the findings brought forward, as the audience wasn't part of an innovation effort and was thus less committed to the indoor climate agenda. As each of the three scenes were played, it was clear that the theatre successively added new dimensions when the previous was exhausted. There were interesting aspects to think about and discuss in the first two scenes, which had been lost in the first event. The 'spatial map' of three scenes to point to had only limited success, but differentiating the stages for each of the scenes did ensure breaks in the format and the triangular setup reduced the barrier between the stage and the hall, strengthening the connection between audience and actors.



FIGURE 6. *Actors improvise how industry partners react to a provotype presented by one of the researchers.*

IMPACT

To gauge the long-term impact of the theatre method, we conducted telephone interviews with the participants of the first event to see what they remembered from this session two years later. The initiative to do this sprang from conversations with the actors, who in Dacapo work as organizational change consultants. Where consultants will usually be expected to deliver a report to the client with findings and proposals, Dacapo does not: ‘If people can’t remember the discussions we started years after the event, we haven’t done our job properly!’ commented one of the consultants. The interviews were qualitative, conversational, and structured around the following questions:

- What do you remember from the theatre event, if anything?
- What were the dilemmas that came up in the discussions?
- Have you talked with others about this event later on (when, where)? Did it have an influence on how you think of ‘indoor climate users’ now?
- How effective do you see the theatre method in conveying findings?

Respondents were given no warning to prepare their responses, as we assumed that a spontaneous reaction would be more significant than a planned one.



FIGURE 7. Actors improvise the role of the ‘office janitor’ in deciding room temperature levels, based on suggestions from a participant.

Surprisingly, of the 12 respondents we contacted, all remembered the theatre event with positive feelings. The words they use – ‘excellent acting’, ‘live images’, ‘very entertaining’, ‘lots of fun’, ‘provoking’ – indicate that the theatre event did indeed trigger emotional engagement. While the participants recall having attended the theatre event, not all of them can remember all three scenes. Their descriptions range from very general statements, such as: ‘There was a scene set in an office environment’, to very detailed ones, such as:

‘There was one [scene] where the man kept turned things off and closing the windows to save energy, while the female counterpart was not as concerned with the energy issue, but thought that people should not be freezing or that one needs to let fresh air in and so on.’

Some respondents remember the scenes in vivid detail. One indoor climate professor, for instance, describes the office scene quite precisely, especially the dilemma of how to relate to the janitor:

‘There was a janitor who had problems – what should he do? He was directed from someone in the office, but others were dissatisfied [with him] as they had no influence on how he set the temperature.’

The dilemma here was that people’s experience of hot or cold isn’t simply an individual value assessment, but socially constructed as well. People talk about how they feel and influence each other. But as adjustments in an indoor climate system in a workplace are often made by professional technicians, the decision of turning up or down becomes a power play between different stakeholders – between managers and various groups of employee. While this may be a mundane observation of practice, it is nevertheless surprising for indoor climate engineers, who tend to see the adjustment of climate parameters as rational decision making based on calibrated values. As one of the respondents remembered it: *‘Who is to decide when there are several people together? Then you need to discuss it.’* This theatre scene wasn’t actually scripted, but an improvisation added on the spot in response to the audience discussion (Figure 7). From the video recording, we can see that this particular participant was very active in the discussion that led to the ‘office janitor’ improvisation.

The office scene was the one most participants remembered, followed by the scene set in the zero-energy home. The kindergarten scene, played in the middle, was hardly

remembered by anyone. One respondent suggests that the scenes related to professional interests are best remembered, because they have more obvious relevance; this may be the case, given that many participants work professionally with indoor climate in office settings, be it in industry or academia. On the other hand, another respondent feels that this is exactly the reason why he cannot remember much: 'No, I've got to confess I can't remember much, but that's because it was about something I work with already'. Perhaps a more likely explanation is that the actors stayed in the 'office characters' both during the discussion following the scene and during the hour-long discussion that followed the presentations. This may have helped participants to remember the office scene particularly well. The head of the zero-energy building research centre was quite firm that this event had an influence on conversations within the team later on:

'It has changed the way we talk about it [user behaviour], because we suddenly got another frame of reference to discuss the things from. Normally you discuss based on something you've read in a book (...). Sometimes things stick better in your mind if you can relate them to a special event or an experience you've had.'

In general, the respondents found the theatre event to have worked well because it was a refreshing alternative to traditional presentations of numbers and graphs. The content of the scenes was not new or surprising to the participants, as they represented scenes from everyday life and highlighted an aspect of indoor climate and energy consumption, which the participants have professional knowledge about (or perhaps the professional engineering code does not encourage admitting to 'surprises'...). However, theatre can challenge the audience to think of well-known practices from a different perspective, as it presents them in a sometimes exaggerated fashion and therefore, in the words of one participant, shows 'how dumb what you do really is'.

ASPECTS THAT SUPPORT ENGAGEMENT

The analysis of the two theatre events, sharing the same ethnographic findings but with variations in session format, served to identify key aspects that encourage audience engagement – and hence, arguably, impact. Theatre with professional actors has potential to act as drivers for innovation teams to acquire knowledge from ethnographic studies. It encourages discussion of important issues that can sometimes controvert the values or approach of the organization. We have identified these aspects as central when conveying the results of ethnographic studies through theatre:

- **Plans vs. spontaneity:** Supporting a movement of thoughts, so that the participants (including the theatre) leave the session with new understandings, can only be partially planned. New insights appear in the relations between participants, and these cannot be predicted because they emerge throughout the session.
- **Balance between representation and provocation:** As a starting-point for the event, the team that carries out the ethnographic studies must work together with

the actors and facilitators in generating scenes that are representative of the findings and relevant to the goal of the session. However, the planned scenes also need to have an 'edge' to work as a starting-point for discussion and set the atmosphere of the session.

- **Explorative atmosphere:** The work of the theatre beyond scripted scenes may take unexpected directions, because the audience decides how the work should develop. The actors need to make themselves available for these explorations by improvising what the audience suggests. A skilled actor in this work will take ideas from the audience, and not just play what they suggest but also – in collaboration with his fellow actors – unfold the possibilities and dilemmas that the suggested situation offers. However, for theatre improvisation to work, it is also essential for the audience to actively offer opinions and suggestions on how the action in a scene can be moved forward. Audience members could even go on stage to try out their ideas and confront the characters that the actors are playing. When doing this, they must be prepared for their intentions to conflict with the character's intentions; but it is precisely in the crossing of intentions that new ideas and innovation can emerge (Burr & Larsen 2010).
- **Reflective researchers:** For the researchers, there is value in exposing their methods to questioning from the audience. This requires a certain measure of reflective self-critique, but also provides the audience with a unique opportunity to observe and appreciate the relations between method and findings.
- **Supportive space arrangement:** Managing the room layout of the event can make a considerable impact on the session. This study showed how arranging three different stages for the planned scenes instead of one changed the dynamics of the room, creating a more casual setting and closeness between participants, actors and facilitators and thus facilitating the overall improvisation.

DISCUSSION

Theatre is an emotionally engaging format for conveying ethnographic findings. It encourages participants to discuss, and it helps focus on what people do, rather than what technology might do. We have shown that a theatre event of this kind is highly memorable for its entertaining and provoking character – especially for those participants who engage passionately in the discussions. Indeed, some participants have assured us that the event influenced the way they later talked about 'users' of indoor climate; but this is as much as we can ascertain of organizational impact, based on post-event telephone interviews. Is this use of theatre fun or serious? We'll claim that it is both – and that this is precisely the point: Combining the emotional engagement with rational argumentation increases the likelihood of the ethnographic findings – in particular the controversial ones – making a real impact. Is it applicable to other contexts and organizations? In collaboration with the Dacapo actors, we have so far gathered experience with conveying ethnographic findings through theatre events about hearing-impaired people, about train passengers, and about diabetes patients, to assist with design processes in related manufacturing industries. The results are very positive, similar to those from the indoor climate context. Our research has convinced us that theatre

is certainly ‘effective’ in this form. To show that it is also ‘cost effective’ – professional actors aren’t inexpensive – requires other methods of research to scrutinize actual practices in the industrial organizations.

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