Design Laboratories as Everyday Theater: Encountering the Possible

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In this presentation I will try to get hold of some very special moments that have become almost an obsession for me in my work with what my colleagues and I call the design laboratory. These very special moments are not some that we can easily stage and though we have experienced them again and again they always come as a surprise and with a deep feeling of fulfillment. One of such moments arrived in the middle of an intense design research project where we were a group of colleagues working for the Sony Ericsson company to educate their UX team in codesign approaches to user research. Together with a small network of mobile phone users we had explored the everyday transition going to work and returning back home. We had played design games with visual materials gathered through our participation in these transitions and together we had enacted a small series of fictional video stories about how we imagined mobile phones in the future. At the end of one of the first workshops our small research group was gathering and one of my colleagues very nicely summed up one of those moments I am talking about, by saying that now it is like the lid has come off and everything is possible. What he pointed to was not (solely) a sense of alignment with the company or our user collaborators, nor was it (just) a feeling of knowing how to bring the project successfully to an end. It was a more specific experience of being at a point where the design and use of possible future mobile phones was no longer a blind search for openings in the company product strategy (or for that sake in the mundaneness of established user practices), but instead a completely open and contingent landscape unfolding in front of us. It is such moments of encountering the possible that I will address in the following, and though the remark of my colleague may well be seen as a reflextive thought on what had just passed, I will try to show that these moments are not moments of reflection or "breakdown" but rather moments of flow and becoming that bring different worlds

within reach. I will however start with a brief introduction to the design research practice that we call the design laboratory.

From participatory third space to design laboratory

As hinted at above I have a background in interaction design with strong roots in the tradition of participatory design. Working for a long time with information technologies, such approaches as prototyping, designing through the interface and bringing together ethnographically inspired exploration of contexts of use with committed involvement of future users are part of a heritage which is still vivid and productive in both design and design research. Where participatory design originally has been concerned with participatory processes as a means towards arriving at designs that more adequately respond to the aspirations and interests of those affected, the participatory design tradition has also provided a rich repertoire of tools and techniques for staging collaborative encounters between otherwise disparate communities (Brandt et al, 2013). From very early on those encounters have been foregrounded as a space of mutual learning (Lanzara, 1991), a coming together of language games (Ehn, 1988) or a third space (Müller & Druin, 2007) that whatever the specific conceptualization was seen as much more than a negotiation of interests between different stakeholders. In the work that I have been part it is precisely this third space that we have been interested in. Unlike researchers like Bødker et al. (2004) who have brought participatory approaches to systems design or Björgvinsson et. al (2010) who have explored the role of things or infrastructures in participatory community development we have not committed to a particular genre of design or a specific topical field. Instead we have made the staging of collaborative encounters and the formation of third spaces where everyday experiences are re-constructed through design interventions the centerpiece of our research. We have called this research practice design laboratories with a dual reference both to the Deweyian approach to open-ended experimentation that we have appropriated mainly through the work of Donald Schön (1987) and to the work of STS-scholars like Callon (2004) and Latour (2005) who have convincingly disclosed how the power of the (scientific) laboratory is inherently associated to its porosity of networked relationships between people and things. The design laboratory is not confined to a particular place or a particular event but is rather to be seen as a social space or a landscape of agency that

unfolds through a series of collaborative engagements. When we started to talk about the design laboratory it was often staged through a number of linked workshops where different people came together to explore overlapping issues through iterative cycles of staging, evoking and enacting what we called possible futures (Binder, 2007). Later we extended and expanded our repertoire of engagements in time and space to let design laboratories unfold in compressed formats like the one-day fieldshop (Halse in Halse et al. 2010) and in long-term collaborations similar to living labs (Brandt et al, 2012). In this move we also went further in embracing perspectives of emergence and performativity of network agency as we conceptually and practically loosened our emphasis on discrete events and instead sought to accommodate the frictions of collaboration (Tsing, 2005) among only partly overlapping networks (Binder et al. 2011). With this laboratory we have taken part in as diverse project themes as the configurability of distributed process control, employee involvement in workplace design, citizen participation in sustainable waste handling, horizontal service models for enhancing social networks among senior citizens and co-production of cultural events initiated by community centers. What makes the design laboratory coherent as a design research practice is a particular set of strategies and instrumentations that, with a reference to Rheinberger (1994) creates an experimental system that is able to produce difference without deteriorating. In Halse et al. (2010) we name the strategies: collaborative inquiry, generative prototyping and sustained participation and we suggest that the design laboratory is rehearsing the future. The implicit references to the world of theatre and performance studies become even more pronounced in the instrumentation of the laboratory where we from early on were heavily informed by the tradition of forum theatre (Brandt and Grunnet, 2000). Though alternating moves of enstrangement and familarization we intermingle the re-enactment of everyday practices with a probing for glitches and breeches through engagements with evocative props. The formats and media we employ range from video documentary, to puppet theatre and concept design games (Brandt et al. 2008) and though we here in a narrow sense can be seen as the design research group providing these formats and media, the 'we' of the design laboratory is always emerging through the collaborative encounter between researchers and the people who choose to join them in the lab. These are off course only coarse pointers to a particular research practice, but perhaps sufficient to indicate both the genealogy of our approach and my concern for coming to terms with the laboratory encounter also as encompassing moments of deliberation and change. In recent years we have seen important criticism raised towards the participatory design tradition in general and also more specifically towards design research approaches like the design laboratory for over-emphasizing the participatory event at the expense of all the work of alignment and mobilization of networks that goes into establishing such events (Pedersen, 2007, Clark, 2008). Similarly we have seen contributions that productively complicate the unfolding of collaboration and the emergence of outcomes in participatory processes in ways that point towards de-emphasizing the stagedness of such processes (see e.g. Kjærsgaard, 2011). I will not in any way dispute the relevance of these contributions, as they convincingly argue against any attempts to perceive of participatory encounters as strategically manageable modes of inquiry. Nevertheless I will in the following return to the discrete moments or episodes that in my view more often than not stand out in these encounters as the points of bifurcation through which the possible emanates.

Enacting a different (every-) day at the plant

Let me know move from the high flying overview to re-visit a very specific encounter with a group of industrial process operators that I and my colleagues worked with some years ago. As a research group we were interested in approaches to process control and instrumentation that let process operators configure their view of and interactions with operating process installations in ways that augmented their skillful practices of keeping the plant running (Nilsson et al. 2000). We also had a wider interest in expanding the interaction design for ubiquitous computing to encompass devices that transcended the separation between tools and automated systems. With this interest we negotiated a collaboration with a group of process operators at a local waste water plants, who agreed to team up with us for a number of visits and workshops. At the first visit I teamed up with Rolf a middle aged process operator, who received me with a friendly but also somewhat reluctant attitude to the project I wanted to involve him in. We had agreed to be together for half a day and I pursuaded him to have my video camera turned on all the time during my visit. At first he showed me the plant control room and his office and I did not have much to ask. The environment and what he did in it was overwhelming and I hadn't come to learn about neither his background, the central control room installation nor the community life in the office corridor. Eventually he went on his daily round and here something started to happen. He touched pumps, he listened to flow of tubes, he noted the smell of the waste water bassins and quit often he was also on the intercom to discuss or exchange information with his fellow operators. My questions started to come more fluently and with the directed camera as a very visible indication of my interests, Rolf began to tell stories about what he did, that posed him as the competent process operator in the field that I wanted to get aquinted to. Sometimes I got distracted and sometimes he got impatient and through these imperfections we soon found a mode of conversation that ran fluintly onto my video recorder. After the visit I and my colleagues who have followed other process operators edited our video material into condensed accounts of our visits, that we brought back for discussion and confirmation. The tone of our collaboration loosened up and while Rolf maintained his authoritative voice when the camera was on he also started joking and telling stories of what else process operator work was about.

The next turn to be taken was for us as researchers to bring in our ideas for a different kind of portable process control. At an afternoon workshop we brought very coarse card board mock ups of small, medium and large screens and devices that we suggested to be used to 'dress up' the plant. We introduced the mock ups by showing more closely editied videos from the earlier visits where we highligthed what we found to be salient aspects of operator work and we ended our presentation by asking what kind of use they could think of for our card board devices. There was very little discussion. The atmosphere was friendly but also somehow loaded with a sense of the researchers being at an exam that the process operators had not yet decided if they had passed. I asked if Rolf would be willing to take us on a tour where he could show us what the devices could do, and as he agreed I had very little idea of where he would take us. We started walking to some of the places where he had taken me before and as we walked we started talking again as on the first visit. The camera was on and as we went along Rolf showed where he may put the different screens and how he would use the device. There was no script but a probing and groping into what the things could do that was improvised as we took clues from the environment. We ended the day by agreeing that I should come back some days later to shoot a video story of the card board in use

The day of the shooting became again one of these moments where "the lid went of". I came with a colleague and a student and very soon the student was taken on the same tour as I was on at my first visit. Rolf moved around with the card board mock ups and willingly explained to the student how he was leaving messages for fellow operators, adjusting a faulty meter and setting up a monitoring unit for a part of the plant that were malfunctioning. Rolf had his authoritative voice that I already knew and he had no hesistance detailing the operation of the fictous devices or elaborating on an imagined collaboration with his colleagues. We later understood that Rolf had discussed at quit some length with his collegues how to use our card board products, but in the situation there was nothing that seamed scripted or make-belief apart from the little blushing of Rolfs cheeks and the sudden change of voice as he turned to us at the end of the walk and asked: "was it ok?"

For us as researchers it was more than ok. The relay had shifted and we had just witnessed Rolf enacting the story of distributed plant control that we had only vaguely envisioned. When the video of this tour was later screened for the entire group of process operators we felt that they as well as we looked into a sligthly altered world of process control that we would be able to do over and over again. I still only know very little about Rolf. I never interviewed him or followed up on the leads he gave me to how the work of process operators is also often long and boring hours in front of a computer screen where not much is happening. But for many years I have shown the video of Rolf to students, process operators and fellow researchers and still today more than 15 years later it seems to convey a world of working with computing in industry that is both still a vision and a very present realm of the possible for the spectator to step into.

Playing around in the office

Let me turn now to another example of how the rigidity of the well known everyday opens up towards a world of the possible not through distanced reflection or creative leaps "out of the box" but through playful explorations of the multiplicity of practices encountered in all the networks where people come together. We are in a project funded by the national foundation for the research of working life, where we together with other colleagues are commissioned to propose a methodology for employee involvement in office design (Binder and Lundsgaard, 2014). As a case we have gotten the opportunity to work with employees and management in one of the offices

of a municipality. Our research group has already visited the office several times and we have met most employees in the office at an introductory meeting. For this meeting we prepared post card size photos from the office that we had taken at our first walk through, and we prompted our first encounter with the office by asking people at the meeting to collect what they found to be interesting postcards and to talk to each other about why they thought we as researchers had taken those particular pictures. This made a good start for our collaboration and at the episode that I will go a bit deeper into we are all well aquainted with each other. This time it is not in a direct confrontation with the office but back in our research quaters that my colleague Christina and I experience an opening into a world of the possible. We have been processing a number of workbooks that the people at the office have filled out in pairs, providing us with visualization of how they move about following different paths and different rythms over the day as over the week and over the year. In the work book is also small portraits that the pairs have made of each other, using photos of typical places and typical activities supplemented with drawings and hand written text. As we go through the material we are struck by the plentitude of stories evoked by the photos and we also see how the office forms different landscapes spanning from the calm back office of the the municipal officers servicing the politicians to the intensity of preparing major sports events for the almost call center like group of office workers who are in direct contact with the citizens of the city. But the episode I want to get to is further down the line. We are preparing two design games, that will be played at the following workshop. One of the games is called the landscape game. It offers a small selection of game boards marked with various abstracted topological patterns (a series of circles, parallel lines, overlapping eliptical patterns), that the workshop participants can choose among when exploring their 'dream office'. On the game board the participants will be encouraged to take turns with placing and naming locations and activities as they envision them best accomodated in this office. Like before in other projects Christina and I try out the landscape game to see if we can get the game of work for us. It certainly does. We play for several hours, becoming more and more not role players simulating the imagined role play of our collaborators and not researchers and game designers trying out the mechanics of our game. We become adventurers of the game universe that presents itself to us increasingly real. What we here experience first hand appears to us as emerging similarly among the

group of office emploees playing the game a few days later. The dream office could be like this, but it could also be like this and in the fluidity of game moves and repeated replay it is as if a mastery of the work space is played out in a way that makes I hard to distinguish if what emerge on the game boards is how it is or how we would like it to be. This mastering of an emerging world of the possible is perhaps even more pronounced in the other design game played at the same workshop. In this game, called the office scrabble the same photos of people and locations in the office is used to tell important stories about office life based on series of at least three photos lined up in a row on the game board. The stories do not have to be true in any strict sense. The available photos both set limits and call forward new stories when the turn is passed to the next participant, who has to make her story cross the first like in the well known scrabble game. Once again it is not the individual proposals brought forward by each participant that matters the most, but the growing reliance among the game players on their capacity to improvise and weave a string of narratives that may (re-) enact the office landscapes of the everyday in still new formations. Similarly to the process operators and researchers in my first example the office workers and our research group in the design game inhabit and dwell in emergent landscapes of design. The experience may very well be very different between acting out a possible reality in scale 1:1 and moving indexical photos from a work context around on a game board but across these differences I see again the possible stand out not as choices between options nor as agency to be either taken on or not taken on, but as contingent landscapes that can be travelled and transversed with grace and ease.

But it is all aready here!

My last example comes from a series of encounters that my colleagues and I had with a loose network of senior citizens and municipal officers concerned with how the municipality may support community building around mundane everyday activities like shopping and out door work out. In our research group we got introduced to different community centers where many seniors were active. Here we met Ketty and the women she gathered with once a wek to knit sweaters for poor children in Bela Rus. Part of our job in the project was to propose re-designs of social media and mobile technologies to make those technologies relevant and appealing for seniors for

getting together with old or new aquintances (Foverskov and Binder, 2011). To recruit people for project workshops we had prepared a visual dialogue tool that invited minuature accounts of what we termed 'a good day' and the dialogue tool also exposed and invited commentary to our initial design ideas. Ketty and a number of her friends accepted our invitation to be part of three workshops, though she very persistently made it clear to us that 'mobile phones was not something for her'. At the workshops we worked again with the staging and enactment of fictous stories of how seniors may come together built implicitly or explicitly on top of the collected stories of 'good days'. In mixed groups of researchers, seniors and municipal officers we produced doll scenarios about getting together, and the scenarios were imidiately video recorded and screened to all participants towards the end of the workshop. Between workshops the research group visited some of the participating seniors to pursue ideas or contexts raised at the workshop. At the second workshop the researchers had prepared new doll scenarios that elaborated on what was produced at the previous workshop but now bringing in generic communication tools that allowed the user to address several separate networks of friends that she saw herself as part of. Again the scenarios were commented upon and reworked tentatively. Ketty was still skeptical when it came to mobile phones: "my children say I should get one, but I really don't want to", but despite this she grabbed the messenger, a large card board tube, and started to call her friend across the table to suggest an imagined trip to the local shopping mall. For the last workshop we prepared a 1:1 enactment of the polished scenarios, this time acted out in a forum theater format by the research group and the municipal officers with the seniors as the audience. Also this time there was a lot of commenting but towards the end of the session we believe that Ketty had one of those opening moments as she declared to the group that "all this is already there!"

Actuals and the necessity of being two places at once

The moments I have tried to bring you close to in this paper are not moments we can plan or control. They grow out of the design anthropological encounter as a mutual experience of becoming at the same time knowledgeable and in possession of agency to enter emerging landscapes (Binder et al, 2011). This experience is not as suggested by for example Bødker (2011) a breakdown in the flow of the everyday that sets us off from acting in the world. Neither is it a moment of setting into motion a journey

towards accomplishing a goal (though this may very well come later). Instead I see these moments as what Schechner has called actuals (Schechner, 2011) – the outcome of staged encounters where the subjunctive "what if" touches upon the real. Actuals are performing the possible as a potentiality that becomes almost tangibly present. In the design laboratory it is this actualization of the movement of the present that is at the same time exposed and held back as an experience of difference. It is not action neither as a cause nor an effect of networks but a moment of becoming that paradoxically is at the same time both imagined and real. Eugenio Barba (1994) talks about how the professional actor on stage must always be in two places, on the moon and in his hometown. Schechner similarly talks about how we experience and perform the actual not as *me* and not as *not-me* but as *not-not-me*. It is precisely when we happen to encounter this extended presence between several here-and-now's that knowledge is produced in the design laboratory.

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