PROPS TO EVOKE 'THE NEW' BY STAGING THE EVERYDAY INTO FUTURE SCENARIOS

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ABSTRACT

The use of design artifacts throughout the design process is widespread, but they differ in purpose and use. In this paper, we focus on the use of technological probes in creation of scenarios of the future. The props are used as a central actor in a co-design workshop to evoke the future and open up the space of possibilities. We analyze the role of the props in the collaboration between senior citizens and project partners. Illustrated by different snapshots from the workshop, we show how the props make the participants enact and traverse between the known everyday and the transcendence of the future. Finally, it is illustrated how props play a central role in introducing the technology to the senior and how it makes them reflect upon the possibilities in relation to their own everyday.

PROPS AS EVOCATIVE TRIGGERS

Many before us have explored the use of design artifacts as props, prototypes and tangible models in co-design to initiate improvisation in prototyping sessions and development of scenarios (Brandt & Grunnet, 2000). One example of applying prototypes is the rough "cardboard computer" as suggested by Ehn and Kyng (1991) to simulate future products' appearances.

The digital artifacts play diverse roles and are brought into the design work at different times and with different purposes. In the following, we will outline some of the different types of design artifacts, starting with prototypes and prototyping as an activity; it has been widely used as a process of developing and refining ideas and concepts of products. The artifacts' tangible presence makes it possible for different participants to partake in the process by reacting and responding directly with the prototype. Prototypes come in many variations from the two-dimensional diagrammatic representations of what could be, to more rich and detailed forms of possible directions. The materials of the prototypes are often easy to manipulate and change. The forms are simple and often ambiguous and the material is cheap or easily available. This indicates and requests appropriation, adaption and modification like cutting, drawing, adding or removing. Bill Buxton (2007) differs between prototypes and sketches, where the former are the design artifacts closest to the final product.

However, even closer to the final product is the design artifact called Mock-ups. Compared to props and prototypes, it has often been used as more realistic representations of what to come. The mock-ups can be useful to interact with and can also have a great variety with different levels of details (Brandt 2006). Mock-ups could be used to explore more specific issues of size, form, functional principles or interaction.

Probes also deserve to be mentioned in this range of design artifacts. Mattelmäki (2006) emphasizes how probes address a recent shift in focus from plain products to experiences. Probing kits are carefully designed to embrace and contain the responses from participants regarding a specific topic. One of the aspects differentiating probes from the prototypes and mock-ups is their more individualistic use. Probes are primarily used in relation to the inquiry part of the design work and are defined as self-reporting tools. The outcome of the interaction with the probes works as inspiration material for the design work (Gaver et al. 1999).

"Provotyping", a term defined by Mogensen (1991), explores the notions of provocation through concrete experience by 'provoking' everyday practice by exposing current problems, calling forth what usually is taken for granted. Similar artifacts are critical design artifacts, which have been used to sparkle

discussions, challenge assumptions and twist the familiar everyday to raise awareness, often of political or technological issues. Researchers as Dunne and Raby (2001) have designed artifacts that look like existing products, but have more ambiguous functionalities. The provotypes and critical design artifacts are not user oriented in the sense of accessibility. They are static objects made with a high degree of finish, in genuine materials.

Finally, props, which are design artifacts that are designed to manifest enactments as a representation of the properties of actions. It relates to a heritage of performance and can be central in role-playing. Brandt and Grunnet (2000) have described how props and drama together can be used not only as "things to think with" but also as "things to act with". Iacucci and Kutti (2002) have reported from their experiences with props as "magic things" to sparkle imaginations and open up a space of possibilities where users are defining usage according to certain situations. The props are not manipulated themselves since their intentions are the means of "prototyping actions" rather than "prototyping objects". With a prop like a magic wand the issues regard where and for what purposes the wand is used - not how it appears in the hand. The props are used in the collaboration to balance the relation between science fiction and plausible fiction. They provide the performance with constraints and at the same time they can trigger innovative ideas (Howard et al. 2002).

EXPLORING TECHNOLOGICAL FUNCTIONALITIES

The props dealt with in this paper are about exploring technological functionalities. Howard et al. (2002) have described props as *"physical instantiations of intended form factors. Like the artist's blank canvas, they have a physical form that constrains their function in general terms. However they are stripped of detail and just as the artist creates the painting in the interaction between sensibility, skill and materials so the actor and the designers discover the detail of the prop in the interaction between scenario, actor and designer."* (Howard et al. 2002, p. 2)

When we make use of the term prop and not mock-ups or prototypes, it has to do with the aim of our co-design workshop of prototyping new ways of technological possibility into new service models and not only the technological solutions itself. Prototypes and mock-ups are visualizations of a product whereas props support and trigger the performance of possibilities of the future. We draw on a definition described by Binder (1999) where *"dramatizing use scenarios with various 'props' taking the role of 'the thing we yet don't know how to design."*

The term "prop" also relates to a performative heritage of drama and acting that is significant in role-playing and improvising scenarios. A prop used in a theatre play supports the actor both in expressing the actor's character and behavior, but also more specifically in the actions that are important to explain and enact the story convincingly to an audience. In our case, the props are acting as mediums for exploring and giving directions regarding possibilities of the technologies to a reflective dialogue, and to open up the space of possibilities. The props we will introduce in the following have the aim of scaffolding and staging the dialogue for evoking enactment of possible futures.

NOTIONS OF PERFORMANCE AND PROCESS

Bridging the gab between the anthropology of the known and designing for the future has long been a topic for discussion. Within the tradition of participatory design, the notion of design-anthropology has encouraged blurring of the boundaries and exploring new collaborative ways of engaging participants in enacting and rehearsing the future (Halse et al. 2010). Looking at performance literature can support this fruitful connection and the journey between the known everyday and future possibilities. Resent design researchers as Iacucci (2004), Clark (2007) and Halse (2008) have been using a performative perspective to look at co-design processes. The performance process with time and space sequences can provide a focus at the different levels of the process. Schechner (1985) divides the process into a three-phase sequence consisting of proto-performance, performance and aftermath. Proto-performance is the initiating phase where participants leave behind their everyday setting and rehearse the possible enactments. Performance is the event and the session itself as the play at the stage. Aftermath in general embraces reflection and lead participants back to their ordinary lives with a memory of the experience.

PROPERTIES OF PROPS

The props in our case where brought into play in the creation of scenarios. There were to versions of each prop. The maxi version of the technological props consisted of three different forms – a cardboard cylinder, half round ball of polystyrene and a paper frame. It was the messenger, the seeker and the screen. The mini versions of the props had the same form, but were all made out of paper. The props had the openness to be defined and used in the way it suited the actors, but their names, which were made up by some of the seniors before the workshop, indicated some kind of functionality. Another concept brought into play in the workshop was The Super Dots. It is foam dots in different color and the concept is about being connected to each other in different ways and with different purposes. The abstractedness and openness of the design made it possible for the performers to add their own interpretation of how the community around the Super Dots worked.

One of the parameters we find interesting to look further into is the span in scale from using a mini-size to a maxi-size. By means of scaling (changing size) it is possible to manage the level of attention to for instance details. By using sizes that apparently do not match natural scale the impression of the props are not misinterpreted as representing real artifacts. At the same time as we will see in one of the snapshots – the size matters and it is being taking seriously in the performance.

Another parameter is "the conceptual and mediating use of props" contrary to a more "concrete naturalistic representation". The space of the more conceptual mediating usage is left more unexplored than it's opposite. The prop becomes a medium for dialogue and trigger the stories, which is outcome of the interaction.

Other interesting details not comprehensively dealt with concern how the

Figure 1: Bo receiving the messenger and placing it in front of Robert

props are brought into and stimulate the action. There seem to be some interesting division of roles where props can invite all participants into the process. The turn taking with the initiations of the authors - the designers of props – can be compared to the role and movement of probes going from author to receiver, like from performer to audience.

CASE SENIOR INTERACTION

The empirical basis for this paper is snapshots from a workshop within the Senior Interaction project. The 3-year long co-design project focuses on developing technology and new services to support seniors in maintaining and extending their social networks. We engage with different people like seniors, people working with seniors e.g. from the municipality, and the project partners. The workshops are central in the research of the project and contain a dialectic process between exploration of the known everyday and designing of "the new". It is the second workshop in the project, which is central in this paper. Before creating the scenarios and performing with the props, the participants have made a landscape of everyday networks for each of the senior participants. The landscape and the story of the landscapes are being use in the following exercise with the scenario and the props.

The following part outlines the introduction of the props and the concept of the Super Dots provided for the workshop participants. The introduction had the aim of providing a common understanding of what we were all going to work with. Following that part of the paper comes a a series of snapshots of how the props were brought into the play in the collaboration. Here we focus very specific on how the props are being used in the interaction and what this give rise to. We end the paper with some concluding remarks of what the props entails in the collaboration with the seniors.

INTRODUCTION TO THE CONCEPT OF SUPER DOTS AND THE PROPS

The visual introduction of the concept of Super Dots and the props presents still images of a doll scenario, commented with short narrative texts of an everyday story mixed with explanatory introductions of the different tangible props – the seeker, the messenger and the screen - and their functions. The story introduces how people who are in the same community can communicate and be in touch with each other by using the Super Dots. It is a way of marking that you are in a community, and that you can be part of different communities with a new color for every dot representing a community. By presenting the props in relation to an everyday story about shopping, meeting friends and exercising, we are trying to make it more present and easier to relate to for the seniors. In the introduction, all the props are being introduced one by one in relation to the action in the story and it provides an overview of the concept's ideas and possibilities. The style of the presentation with backdrop images from the senior's own context and the small dolls is something familiar to the participants since they all worked with doll scenarios and the same material at the previous workshop. The new elements are the tangible props, which are presented in two versions; a mini size to fit the dolls and a maxi size that is presented and shown as part of the presentation. At the end of the presentation a slide explains how the Super Dots work. The Super Dots is an open concept and provides many different possibilities – it is just a matter of asking "what if…?".

EMBODIED EXAMPLES WITH THE PROPS

Informal chatting is evolving in the group where seven people are seated; Robert, Amy, Jytte, Bo, Pernille, Markus and Signe, where the first three are senior participants and the last four are project partners. Signe is placing the maxi-props so everybody can reach them. After some initiating talk about the dots and the props around the table, Bo suggests Robert to use the Super Dot in his sailing club, so he creates a sailing community and refers to the conversation he has just had with Robert, while patting the dot he has placed on his chest, like everyone else around the table. Pernille leans forward and looks excited at the collage that Bo and Robert have made together: *"Which color is Robert's sailing club network there?* (Pointing at Robert's landscape of networks). Bo replies *"Yellow"*, Pernille grabs a hollow cylindrical prop – the messenger – and add a yellow dot. *"What if this yellow dot represents your sailing community with your friends and you can send messages to the people in this community with the messenger?"* She explains while shaking the messenger and hands it over to Bo, who places it in front of Robert. Pernille is tapping her finger on the prop, while looking at the others and explaining how Robert could receive information about activities in the club by using the messenger. Robert reacts to the comment: *"I actually come there almost every day. And there's a bulletin board just inside the door, where you can read what is happening"*. Markus looks at Jytte, who has been talking to Robert about the sailing club: *"you've told that many are sitting at home, so what if we address the people that don't come in the club that often?"*. Markus takes the messenger in his hand *"one could imagine; what if they got this?"* *"Yes exactly! Those who don't get out, that could be good!"* Jytte exclaim. Pernille continues about how Robert could be the one telling the others about the activities in the club. She is pointing from Robert to Markus who

Figure 2: Signe and Amy holding the screen

Figure 3: Signe taking the seeker from the table.

both have a messenger in their hand. They continue by introducing the screen as a way for friends in Robert's community to get messages.

Signe is now holding a screen and adding a yellow dot while involving Amy sitting next to her. Signe and Amy present themselves as Bent and Kirsten – two of Robert's friends from the club. They pull a yellow string from the yellow dot at the screen to the dot at the messenger to represent the connections and the channel of communication between the props.

FAMILIAR EXAMPLES TO EXPLAIN THE PROPS

The tangible props are used by the project partners in the embodied conversation to explain and manifest the possibilities of the props. The project partners are trying to make the introduction of the props more familiar for the seniors around the table by using he maxi-props and the Super Dots in relation to Robert's everyday network – the sailing club. The props are circulating around the table, but mostly in the hands of the project partners and are brought into play whenever they have a role in the story. The seniors' stories inspire the performance, as Robert's sailing club and Jytte's story of people not getting out much, and the props are becoming solutions of technology to enhance the communication. The seniors, though, mostly comment on the performance going on and do not directly relate to the props at this moment.

Figure 4: Jytte and Amy commenting on the scenario.

A SKEWED INTERCHANGE IN THE PERFORMANCE WITH THE PROPS

The next session is starting up after the lunch break. Still placed around the table, the group is going to perform a doll scenario. There is a dialogue and negotiation going on along with the performance. The story of the doll scenario is in short about Bo, Amy, Robert and Jytte (the three seniors and one of the partners) meeting for a trip in Valbyparken – a park in the area of Copenhagen. The group is discussing how they can find each other in Valbyparken, when they are going on their trip. Signe is asking if they could use one of the props, and she picks the almost round maxi-prop – also named "the seeker" - from the table.

Jytte, who is sitting on the other side of the table, reacts to the action: *"But we can't bring the big ones"*. Pernille suggests that they use the mini-props instead and picks one of the small ones from the table. Amy continues by saying: *"But everyone needs to have them turned on, so we can find each other and points around the table."*

Everyone agrees and the conversation continues about how they can find each other when they arrive at the park from three different places. They decide on using the prop called the seeker and a practical problem arises. They only got two mini-props of the seeker in the workshop material the group have accessible, and they need three. Jytte emphasizes that she really needs one because she is getting there by bus and the three others are biking. Pernille addresses the problem by making a new seeker of some of the material provided to the group in this exercise.

A MORE EQUAL INTERCHANGE ARISES

The props are slowly becoming a part of the story, also in the awareness of the seniors. The tangible presence and performance with the props evoke reflection. Like Amy's thought of the seeker being turned on, and Jytte's opposing reaction when Signe is taking the maxiseeker, because the size does not fit the small dolls. Furthermore, the negotiation of who should have a seeker when they realize they only got two makes Jytte argue for her sake as if there is something at stake in the performance. They are taking turns; moving from exploring issues of everyday stories

into staging them in future scenarios of what this could be. The improvised stories are initiated by "what if" and the performance of what this could be leads to new issues for exploration. The first snapshot showed how the project partners were bringing Robert's everyday life into the "what if" question by performing it and using the props to add something new, twisting Robert's story with elements of the future. The experience from the project partner's performance with the props feed into the everyday life of the seniors and later make Amy and Jytte conscious about the props in the performance of the trip to Valbyparken. There is a time lag in the interchange and the response from the seniors, which can illustrate their reflexivity on the things going on with the props.

Bringing in props as examples of technology adds a twist of the future to this part of the performance "meeting in the park". A twist that is initiated by Signe and Pernille performing with the props and Amy and Jytte following, and asking questions. The props facilitate a transcendence of the seniors' everyday life. The first two snapshots illustrate how the interchange slowly finds a balance. In the beginning, it is primarily the project partners playing with the props and performing the story. It changes slowly into a more equal interchange, where the seniors are following and the props are becoming a part of their story as well. They are conscious about their presence and their possibilities. It naturally takes time to adopt the props and to be able to appropriate them to your own everyday life. The props are new elements in the collaboration between the seniors and the project partners and their presence need some adaptation.

Figure 5: Pernille and Markus connected with a blue string.

Figure 6: Signe holding the maxi-messengers and Bo sitting beside.

FULL-BODY PERFORMANCE AND MINI-SCALE PROPS

The scenario of the trip to Valby is still in progress, and in this snapshot there is an unexpected twist in the story: more people wish to join the trip. Pernille and Markus are playing the role of two new people coming from an activity center called Madam Blå.

They have heard about the trip to Valbyparken. There is some discussion about who these new people are and how they can get in contact with them and agree on where to meet up in the park.

Signe is standing up touching the two maxi-messengers on the table with her hands. They are connected with a string from the earlier performance about Robert's sailing club. She lifts one of them and asks the others: *"if you should tell the people from Madam Blå where you are and how to meet, should it be with the messenger?"* The others agree on the messenger and decide that it is Amy and Bo on the tandem bike that has the messenger. Pernille hands over a mini-messenger to Bo, who tries to put it in one of the dolls on the tandem. Amy's doll is now on the tandem bike with a seeker in one hand and a messenger in the other, so Amy tells Bo to drive carefully. Amy continues: *"So can we read the messages on the screen?"* and points to the maxi-screen on the table. *"But do we all have one of these?"* Jytte asks and Signe replies: *"Yes, we can say that you all have one in your home?"*. This makes Amy react and add that they need to have some portable ones in this situation, if they should be able to talk to the people from Madam Blå. *"Do you wish to speak or write to them?"* Signe asks. Amy thinks it is easier to talk, and Pernille hands over a mini-messenger to Signe, who gives it to Amy.

While holding the small prop, Amy starts to speak into it. She performs the session of the play where Amy and Bo invite the people from Madam Blå to the park, and tell them where to meet. After speaking, she looks at Pernille and Markus. Pernille is holding a mini-screen in her hand, she pretends to read Amy's message and type a new one on the small paper screen with her fingers. Amy is still holding the mini-messenger up to her lips, ready to speak into it again.

HIT A DUCK

The props are exchanged between the participants, and the snapshot shows how they are now more convincingly used in the performance. The seniors primarily comment on how they like to use the technology represented by the props in the different situations, and when Amy is handed a mini-prop from Signe, she uses it in the embodied performance of the given situation. In this snapshot, there is a blend of the full-body scale with the mini-scale props in the performance of the participants. They are playing full-body but are using the mini-props, which in size fit the dolls better. Their positions around the table make especially Pernille, Amy and Jytte distanced from the dolls and the stage placed on the other side of the table. At the same time, it is perhaps more straightforward for the participants to make an embodied performance. Despite the full-body performance, they are referring to the dolls and maybe therefore using the small-scale props, even though they are very small to hold in their hands and to show things with. The full-body approach is also distinguished in the following part of the story. Here, Jytte intertwine with the stage of the doll scenario by playing against the backdrop.

The performance of the trip continues. They have all had lunch and are now discussing if the should do something else or if they are too tired. After some talk about how tired they are, the group comes up with the idea of "hit a duck" as a small activity, so they at least exercise their arms. Jytte seems a little ambiguous about it; she tries to convince herself and the others that it does not hurt the duck. Pernille encourages her to try. *"I've never been good at hitting, but ok I'll try"*, Jytte throws a small piece of tulle after the ducks at the pic-

Figure 7: Amy and Pernille performing with the mini-props.

ture on the backdrop: *"oh, it was upset by the bread but it wasn't injured"* she exclaims, referring to the duck.

Jytte's embodied interaction with the scenario provides us with an insight into how she relates to what is going on at the table. The relation and use of the maxi- and mini-props is indefinite throughout the snapshots. The maxi-props are mostly used in the beginning when the project partners are trying to make a local embodied example of the use of the props in relation to Robert's everyday. In the following, they are mostly used when the project partners want to exemplify or enhance something in the story being performed. But the more they get into the doll scenario the more the mini-props are brought into play. As mentioned earlier, it leads to a blend of full-scale body performance with the mini-scale props, which is distinct in this snapshot.

AMY'S AFTERMATH: WHAT WOULD IT MEAN FOR ME – IN MY HOME?

The creation of the scenario is finished and there is a cooling-off atmosphere around the table. There is chit-chat going on, but suddenly Amy looks serious and directed towards Signe she asks *"but couldn't we use the screen, so we can see each other"* referring to the screen they have just decide to have in their home, so they can share pictures after the trip. Jytte laughs loudly and shouts to the other side of the table *"Did you hear that, Robert? Amy wants to see what you are doing at home after the trip"*. Robert replies *"But I will just take a nap, so at least I'm not doing something private like singing"*. Jytte

Figure 8: The aftermath: Signe and Amy's conversation.

and Robert are both laughing, but Amy is still serious in her conversation with Signe, who in the meantime has asked if she would like to be seen by others through the screen.

They continue the conversation on how Amy would like to use a screen to let her daughter know she is all right, so the daughter does not have to call her everyday. Because Amy is not interested in being monitored all the time, they have a reflective dialogue on how she would prefer to use the screen: send text messages, still images or live streaming as communication possibilities. They decide on the screen being something Amy can turn on and leave a daily video message to her daughter, who can then log on to the screen and see the message whenever she wants.

NEW THOUGHTS EMERGES WHILE COOLING DOWN

This dialogue reveals some openings of possibilities after the staged performance is over. Amy has begun wondering how she could use the props and hereby the technology in her everyday life. Signe already knows about Amy's daughters' daily routines and can easily understand Amy's request.

The participants' performance is cooling down and they are moving to a juncture, where the scenario has just ended and the aftermath has just begun. The props are still present on the table, but are not an active part of the conversation anymore. They are all discussing the consequences as if the narrative of the story continued, initiated by Amy who projects reflections from her own everyday life. An important issue of surveillance, which is being acknowledged by the rest of the group, is raised in the light of using especially the screen and camera of the props. The experience is that the aftermath gives rise to new considerations and ideas upon the performance with the props. The performance with the props and the creation of the future scenario have evoked new ideas and reflection among the seniors, which is made explicit in the conversation around the table in the aftermath.

CONCLUSION

The embodied enactment by the participants gives an indication of their relation to what is going on. Following the scenario, they gradually enter the performance and put themselves in the position of not only talking and referring to the props, but also acting with them. The props make the participants reflect on the use of the technology in their lives and how to appropriate it to their everyday. The focus on the interaction with the props in the collaboration in the group has provided us with an understanding of the role of the props. The props become a smooth way of introducing the technology part of the project without letting questions like accessibility and knowledge about the use of technology block the dialogue, which we have experienced earlier in dialogues with the seniors about the use of technology. At the same time, the open form of the props provides a possibility of performing and reflecting upon the functions. The seniors end up defining how they want to use technology in relation to their everyday. The performance with the props has opened up a space of possibilities for the future – and a dialogue about technology and their everyday lives, which we have not experienced earlier.

ACKNOWLEDGMENTS

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