OBJECT THEATRE IN FIELD STUDIES

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ABSTRACT

This paper explores how Object Theatre can work as a means to facilitate social engagement and storytelling in the early phases of participatory design field interviews. In the paper we draw on Object Theatre practice (Myatt & Watt, 2012) and on Theatre Improvisation (Johnstone, 1987) and present Object Interviews through two empirical examples. We address sensitive topics in research interviews with different participants by engaging them through 1) Revised Object Probe and 2) Object Classroom Theatre. Object Interviews function as mutual storytelling, interaction and improvisation between those involved serving the discovery of novel aspects to cover in design.

INTRODUCTION

Participatory Design relies on the early-stage involvement of various stakeholders to gain understanding about their needs or experiences related to a specific design theme. Sanders & Dandavade (1999) have emphasized the importance of going beyond what users say in qualitative interviews, and study what they do and make to discover unknown and unanticipated user needs, and eventually new design possibilities. Various design researchers have demonstrated the importance of materiality and objects in the studies, where they exploit methods such as 'make tools', 'design probes' and 'tangible tools' in the process of engaging with participants to gain user

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insights or inspiration for new designs (Gaver et al., 1999; Sanders & Dandavate, 1999; Mattelmäki & Battarbee, 2002; Buur & Mitchell, 2011).

In design research much emphasis is placed to the importance of crafted design artefacts in the design of encounters between designers and participants. Very little has been said about the nature of improvised storvtelling with objects, and the co-interpretation by the researcher and participants when engaging with the objects. We present a six-month study where readymade objects and techniques from Object Theatre (Myatt & Watt, 2012) and fundamental understandings of Theatre Improvisation (Johnstone, 1987) were explored in the early phases of participatory design research. The aim of these methods is to engage participants in conversations about their personal experiences and values related to sensitive research topics, such as citizen engagement in social work practice, and the dynamics of bullying amongst youngsters.

Our approach to field studies with Object Theatre is based on an abductive approach that acknowledges the process of co-inquiry, where the researcher(s) and the participants are continually drawing on their past experiences of life projected into the future (Brinkmann, 2014). To extend the concept of objects as material things, objects can be thought of as 'relational entities' or 'social objects' that can only be experienced through the enactment of particular social acts (Mead, 1934; Stacey, 2007). In this paper we make first a literature review on different ways of conducting field interviews with design objects and toolkits and then contrast those with two novel ways of using object theatre to elicit insights. We offer an alternative way of understanding object interviews as mutual storytelling, interaction and improvisation between those involved. With our contribution we wish to extend the understanding of field interview practices in Participatory Design, especially those that make use of tangible materials.

INTERVIEWS WITH OBJECTS

Participatory design studies often include, or even take a starting point, in ethnographic interviewing to stimulate and encourage users to provide insights on their everyday life. De Leon & Cohen (2005) describe how 'object probes', such as photographs, instruments, trophies, keepsakes and collectibles; and 'walking probes' that are particular locations or spaces, can evoke important memories of people, moments and events in historical or cultural context. They suggest that objects and spaces can help people talk about things and locations rather than about themselves and thus engage with a topic that is particularly sensitive, for example a historical crisis in a community. Different approaches exist, as several design researchers have developed ways to engage with users and stakeholders out in the field by introducing crafted artefacts or readymade objects.

PROBING TO EMPATHISE WITH THE USER

One of the well-known approaches is Gaver's et al. (1999) 'Cultural Probe' that values inspiration for design ideas over explicit information. It has been applied in a variety of research contexts for obtaining inspiration for novel product ideas or for social designs (Gaver et al., 1999; Mattelmäki & Battarbee, 2002; Mattelmäki, 2006; Boehner et al., 2012; Knutz et al., 2014). Contrary to De Leon & Cohen's (1999) approach, cultural probes are *crafted* design artefacts or objects that are introduced to participants to capture their dreams, hopes, fears and curiosities in their everyday life. A customised probe package is usually created by the researcher and might contain standalone 'task objects', for example diaries, cameras, stickers or cards, to record situations.

Boehner et al. (2012) emphasise the separate interpretations of the probe by the participant and the researcher. It is not a method to gain knowledge or data, but to disrupt participants to relate to their surroundings in unforeseen ways to trigger creativity. Other researchers suggest collaborative ways of projecting meaning into probes. Mattelmäki & Battarbee (2002) have created 'empathy probes' to combine desing probes with interviews and projective tasks in a continuously evolving process. They argue for establishing an emphatic contact with the participant by using the probes as a starting point for interviews that touch upon personal issues, such as health and wellbeing. On a similar note, Knutz et al. (2014) have used probes in a project with cancer patients to establish personal dialogue by unpacking and repacking a suitcase full of pre-selected objects to represent personal values. The interviews turn into discussions of the values that are important to the participant by explaining their choices of objects and their materiality.

TOOLS AND ARTEFACTS TRIGGER CONVERSATIONS There are other acknowledged ways of engaging objects into conversations. Within welfare design and sustainable design Møller et al. (2016) have developed 'tangible dialogue tools' as mediating objects (Dant, 1999), to combine tangible means of expression with semi-structured interviews. The researcher can use materials, such as pieces of fabric, to trigger the participant to express personal preferences of garments and clothing based on tactile and visual sensations. The method is informed with Dant's (1999) understanding that mediating objects pass knowledge between the people that are not together.

Buur & Mitchell (2011) counter this understanding: "What an object communicates is a social construct that is in fact dependent on the ongoing social actions in an interaction and the social order that needs to be established or maintained between conversational partners." Based on this stance they suggest 'tangible tools', a series of techniques that rely on tangible materials to encourage conversations about business innovation with participants, who have varying levels of business understanding (Buur & Mitchell, 2011). This approach is inspired by an understanding of physical objects as 'boundary objects' (Star, 1989) and 'thingsto-think-with' (Brandt, 2006).

Sanders (2006) provides yet another take and suggests co-design 'make tools' where the action of making physical artefacts is a means to access people's latent needs for new products or services. It is a way of conducting generative research with the participants making use of drawings, images, craft materials and tools for building. Through the action of making artefacts the participant is encouraged to project his or her own needs and desires onto imagined experiences to tell a story. Brandt (2006) has taken this idea further in her studies with design games to spark dialogue with those involved. A design game setting usually consists of game board, arteifacts and rules that do not necessarily resemble real life.

MATERIALITY MATTERS

While developing methods to conduct design field studies, several researchers have reported insights into the material qualities of the selected objects and artefacts. According to Gaver et al. (1999) aesthetics of the probe is significant for the interpretation. Each probe package should contain a variety of objects and tasks to include ambiguous stimuli, invite to playful exploration and enable different ways of engaging for the participants. Some feel more comfortable with drawing, others with writing, some like to express with pictures. Similarly, Sanders & Dandavate's (1999) Make Tools combine different visual means depending on the context and participants. The materials vary from pictures and stickers to three-dimensional cardboard and foam models.

Personal preferences might be significant, but so is the domain that you are in. Buur & Mitchell (2011) reported on business people responding well to a kit with similarly colored objects (silver and metal) presented on a clean black surface instead of plastic animals and figurines that are not usually seen in a business environment. Also the similarity of the pieces, such as Lego bricks, was not seen supportive for the dynamics of the conversation. Brandt (2006) emphasises the process of designing the design game, as the artefacts should not resemble real-life objects but be rooted in ethnographic field studies. Design games use pictures, videos, cards or props from familiar locations or practices, which trigger multiple reactions from the participants.

FROM TOOLKITS TO OBJECT IMPROVISATION

We find variations of empathy probes, tangible tools and make tools very beneficial for gaining inspiration and insights into peoples' preferences, values and language. In most of the examples provided, it is the designer who creates or collects the tangible artefacts brought to the participants. The idea of 'the designer's toolkit' is interesting, as it also incorporates the feeling of control and planning ahead, that might comfort the designer. However the engagement with participants is often everything else than controlled and requires constant improvisation from the researcher.

We want to complement the idea of tangible tools and probes with approaches from improvisation and object theatre. We suggest that it is necessary to re-consider the role of researcher as co-creator improvising in these situations, being one who takes part and is deeply involved in collaborative storytelling with the participants.

IMPROVISING IN INTERVIEWS

In ethnographic interviews there is a paradox of preparing in advance and improvising in the moment. Larsen & Friis (2018) have conducted several studies where they use improvised theatre methods in early stages of research. Rather than coming up with a readymade plan or an interview guide for the field studies, they have developed a skillset of approaching the interview situation as improvisation between the researcher and people involved. Inspired by Johnstone's (1979) improvised theatre, we suggest that preparing for an interview is like rehearsing an improvised theatre play. When an actor enters the stage with another actor they are dependent on each other, on the spontaneous actions and reactions unfolding in that specific moment, while they rely on the skillset of listening and accepting the offers from the other actor.

Instead of starting from a guideline for a perfect scene, Johnstone (1979) works with the idea of 'blocking' and 'accepting' in the improvised play. When inexperienced improvisers start a scene together, they will probably talk a lot and try to get their own idea through to the other player, while blocking any possibility of action developing. This resonates with an inexperienced interviewer, who is too occupied with asking 'the right questions' and thus blocking the surprises. Following Johnstone's advice, it would be better to accept the interviewee's offers for new openings to build on. Another fundamental idea of improvisation is the cocreation of stories together. Creating a story is a series of real or fictitious events that can be narrated for the entertainment of the hearer. In improvised storytelling the skill of an actor is to re-incorporate the elements of the story to the story again (Johntstone, 1979). Everything that is happening in the story is expected to be significant. If the story is about a boy who goes into the woods and suddenly meets a bear, we expect to hear what happens to the boy in this encounter, not to change the topic to an owl that passes by. This gets challenging when an actor is improvising a story together with other actors, because none of them can predict the course of the story. But if they manage to resuse the earlier materials within the story, it usually gets much more interesting. If we draw an analogue to interviewing again, it is the interviewer's task to accept the offers from the interviewee and build on those to tell a story together. If the interviewer merely follows a pre-made order, instead of building on the events mentioned by the interviewee, then the story may not develop at all.

OBJECT THEATRE FOR DESIGN EXPLORATION

In our urge to engage participants in design research through improvised theatre, tangible tools, objects and materials, we started studying the theatre form called Object Theatre (Buur & Friis, 2015; Ryöppy & Skouby, 2015). We have, for instance, developed a technique of working with object-characters to explore power relations between an elderly person and a moving aid, by manipulating helper objects and an object that is being helped to move (an egg) (Ryöppy et al., 2017). To continue our exploration we are interested on how the aesthetics of the object, combined with manipulation and symbolic meaning, can trigger stories about lived experiences.

In Object Theatre the 'use' of an everyday object, often taken for granted, is challenged and made quite different, in order to tell stories with objects (Myatt & Watt, 2012). Object Theatre has evolved from different forms of modern puppetry as well as from a form of fine arts called 'object trouvé' (Callesen, 2005: 110). This has later developed into performative art forms, such as 'performing objects', 'inanimate objects' and 'ephemeral animation'. In exploration phase the performer aims at new stories to emerge from creative improvisation with readymade objects, such as bottles, toys, household objects or souvenirs; and/or shapeless material, which can be sand, cloth or trash (Callesen, 2005: 112).

In connection with field interviews, we find the substyle of 'performing objects' particularly inspiring. It is theatre of readymade objects, where the object is not made to walk, talk or breathe like a puppet, but rather, is charged with symbolic power. This form of Object Theatre relies on metaphors, images and previous experiences that can help to articulate the unspoken through interaction (Ghosh, no date). In her example of object theatre, Ghosh (2016) tells a story of Romeo and Julia with a ball-point pen, by projecting a story to the pen, turning the object into a symbol and performing simple actions with it. "Just by being there, an object can evoke a thought or a feeling (Ghosh, no date)." Objects enable people to connect with past experiences and approach those in a different way through materiality.

OBJECT THEATRE IN FIELD INTERVIEWS

We present a six-month study (during winter and spring 2017) where readymade objects and techniques from Object Theatre (Myatt & Watt, 2012) and fundamental understandings of Theatre Improvisation (Johnstone, 1987) were explored in the early phases of participatory design research. We utilised object interviews, which were grounded on a series of six workshops facilitated by Object Theatre expert Sean Myatt from Nottingham Trent University. Together with researchers and design graduates we explored the materiality of things through Object Theatre techniques, such as 'The family tree' (Figure 1). In that exercise the idea was to make object couples from a wide selection of objects spread on a table. We told stories of how one object finds another one attractive and why did they want to mate. We sensitised ourselves to multiple qualities of the objects, like size, texture, colour, shape, as well as our interpretations of the functionality, use, and symbolic meaning of the object. We also considered the kind of offsprings these objects might have, and from which parent an offspring would inherit its qualities.

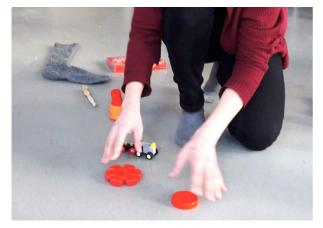


Figure 1. The participant presenting one generation of the family tree.

In the Figure 1 one of the workshop participants is presenting her family tree that started from great-great grandparents: a grey woolen sock and a red box of chocolate. The tree evolved from fabric through wood to plastic materials, ending up to an offspring, which was a red round shape plastic cap. This exercise not only sensitised us to explore object attributes and to attach symbolic meaning to the objects, but also triggered to ponder what could be recognisable 'frames for storytelling', such as the family tree that all of us could understand and were able to fill in with object attributes.

TWO OBJECT THEATRE FORMATS FOR DESIGN

In this section we unfold the process of conducting Object Theatre field studies through two practical approaches and include an analysis of the social interactions with objects. Two formats are introduced: 1) Reverse Object Probe - interviews with social workers and students, and 2) Object Classroom Theatre - workshop with pupils from elementary school. The first interview format develops ways of conducting oneon-one interviews with objects and theatre improvisation. The second format develops the object interviews to include more people and interactive ways to gain insights through object storytelling. We conducted the planning, facilitation and analysis of two instances of Reverse Object Probes and ten group sessions of Object Classroon Theatre. These sessions were video-recorded to capture the multitude of expressions going on and to enable revisiting the material later on.

Our approach to the analysis of the video material is pragmatic and makes use of abduction – "a form of reasoning that is concerned with the relationship between a situation and inquiry" (Brinkmann 2014, p. 722). According to Brinkmann (2014), the data is created in situations of breakdown, surprise, bewilderment, or wonder in our understanding, which we try to understand by sense-making. We acknowledge our experience of being in the interview and take that as a starting point for investigating particular situations in the interviews that struck or surprised us.

CASE 1: REVERSE OBJECT PROBE

Inspired by the Cultural Probes (Gaver et al., 1999), we experimented with the idea of the participants bringing everyday objects to the interview, as opposite to how Cultural Probes were created by researchers. We invited the study participants to bring their own objects to the interview and co-interpret these with the researcher. The context was social work and social worker students' perception in making interviews. Four social work students (aged 22-40) and a teacher were interviewed.

At the first encounter, the researcher interviewed the participant (thematic interview) and noted down what to reflect upon. In the end of the interview the researcher presented the participant with a green box that had a chocolate bar and these five themes inside:

- 1. Something that is concrete
- 2. A description of a difficult conversation
- 3. The pain that a citizen has
- 4. Your incertainity and frustration
- 5. The colour of a good conversation

The task for the participant was to find an object related to each theme for the next interview. The aim was to learn how this would influence the way the participant articulates their memories of lived experience and expresses their values in conversations with citizens. The participant (K) used the box to cover the contents from the researcher (S) (Figure 2), which created suspense and triggered curiosity for S. The act of covering the contents functioned as a suggestion for S to start inquire about the reasons behind hiding the objects.



Figure 2. The participant hiding her objects from the researcher.

Before revealing the first object (Figure 3) K gave an introduction to the thought behind choosing the object in terms of being concrete (Transcript 1).

01	K:	Because I thought about what is concrete and
02		what do I do to make something concrete
03	K:	That I can do by either place it in my head or in
04		a form * place it in a box that will give a mutual
05		conceptual framework *swings her hand in air
06	K:	So this is my first thing *
07		*opens the lid and laughs heartily, takes a plastic box
08	K:	*This is my box!
09		*holds the box in the air and flips it in her hand
10	S:	That is your box!
11	K:	Yes, and it's very hard.*
12		*Taps the box with her index finger nail, making
13		a 'tick-tick' sound.

Transcript 1: The story of a concrete box.

K explained how she makes concepts concrete for herself by locating them into places of her mind, as into boxes. She used words such as a 'form' and a 'framework' to describe the conseptualisation of her thoughts before introducing the box. She appeared to create a coherent story by giving cues of the physical manifestation of the box. After revealing the object, she was very explicit on the choice of a hard box, a quality she emphasised by tapping the surface (Figure 3).



Figure 3. Tapping the concrete box.

The concrete shape and material of the box functioned as an offer for the researcher (S) to probe into specific qualities of the object, i.e. it being open, plastic and transparent. K considered the openness, which would not allow locking thoughts inside the box. She also referred to a crisis of life, where everything melts and transforms, like plastic can be melted and shaped again. K made clear she had considered the identified qualities in her choices of the object. Together with S they cocreated circles within the story by referring to the object in different ways, digging deeper into the topic while developing further symbolic meanings through the concrete object qualities.



Figure 4: Participant with the blue cup

The third object 'the colour of a good conversation' (Figure 4), which was an aquamarine plastic cup without handles, suprised the researcher (Transcript 2).

01	K:	Oh well, the colour of the good conversation is
02		Blue*
03		*Picks up a blue cup made of plastic and holds it
04		upside down in the air
05	K:	For me.
06	S:	And a cup?
07	K:	Yes.
08	K:	And a cup because it can have this good
09		conversation, and work together to fill it up
10		And it is round because there are no squares in it
11	S:	So it is ^there is no handle either?
12		[^] Takes the cup and moves it in his hand.
13	K:	No. Because there is no-one that decides
14		who is taking control.

Transcript 2: The blue cup of a good conversation.

K began with explaining the colour blue (Transcript 2), but instead the appearance of the cup made S to suggest a new direction for the story. S blocked the K's opening by concentrating on the cup rather than the colour blue. K, however, picked up on this and focussed on how the appearance of the object played a role. The cup became a metaphor for holding the good conversation without control, which was an insight into K's values towards the qualities of a good conversation. A blue piece of paper might have led into a different discovery.

K used the green box itself as her final point. She explained how the box beheld her uncertainity and frustration. It contained all the things she wished for and feared in a consultation. Through the activity of carefully selecting and discussing the objects, the box became very personal and sensitive to K.

CASE 2: OBJECT CLASSROOM THEATRE

Our second experiment related to a research proposal to create design games for schools and public institutions to address cyber bullying in the life of youngsters. Inspired by the family tree exercise, we developed the 'Object Classroom Theatre' format to understand how youngsters relate to bullying and cyber bullying. The following extracts were collected from two mixed groups of the 8th grade science classes (aged 13-14) in the Danish primary school. Two Object Theatre workshops were conducted with a total of 24 participants of both genders. The pupils were sitting in groups of three or four, and they knew each other as they attend the same classes in school.

The workshop started with warm-up activities of object improvisation in pairs to get the pupils to explore objects and their materiality in different ways. First, each participant was asked to present themself through an object. Then they were asked to create a fictional class with a set of pre-selected objects so that each object was representing one pupil. Based on objects' characteristics, form, and functionality, they started to envision the type character (e.g. a nerd, a cool guy, a popular one, funny) and friendships of each objectcharacter. The pupils created imaginative situations of bullying between the objects. The last exercise was an inquiry into sharing real personal bullying experiences through enacting with objects.

THE SHY FAN BLOSSOMS

The pupils demonstrated their personal stories and characteristics to others through the objects. Transcript 3 illustrates an example of two girls (G1 & G2).

01	G1: It has ups and downs like I have in my life –
02	I have my *good time and not so good time.
03	*follows the edge of the vase with a finger
04	G2: When I meet new people I'm very shy
05	sometimes* <i>*the fan folded away</i>
06	but when I get to know the person then I
07	blossom* *opens up the fan
08	and become very xx person*
09	*makes a hand gesture over the table and smiles

Transcript 3: The vase that has ups and downs, and the shy fan that blossoms.

In the hands of G1, the vase turned into a rollercoaster of life with ups and downs. The fan, in turn, became a representation of G2's shy personality that blossoms in a familiar company. The pupils were able to relate to the objects as representations of their personal characteristics, and used various aspects of the objects as well as embodied interaction to support their story. The other group members were the 'audience' for this short object play, and had an important effect on the interaction, as they were listening and reacting to the person at the centre of attention. The smiles, critique, and comments by the others served to fuel the presentation.



Figure 5: The vase and the fan

WHO IS THE POPULAR AND SWEET?

When building the object classroom the pupils coconstructed a story and negotiated the positive and negative qualities of each object-character. The example from the group of four girls (G1, G2, G3 and G4) was somewhat surprising for us (transcript 4).

01	G2: *This is him who
02	*holds the whisk in her hand
03	G4: why always him?
04	G2: This is she, who really can like
05	G3: She is the bitch.*
06	*touches the whisk
07	G2: No, don't you think *she is a bitch
08	*points to the duster
09	G3: No, she's the popular and very sweet*
10	*shakes the duster in the air
11	G2: No, this *one is the popular and so sweet
12	*holds the candle holder

Transcript 4: The objects triggered pupils to express strong characteristics, such as being a 'bitch'.

The participant G2 (Transcript 4) started immidiately to pose characteristics to a whisk she was holding. Suddenly new suggestions emerged about the gender and characteristics of the whisk and the other objects. They discussed, which one of the obejcts was a 'bitch', and a 'popular and sweet'. They got into an argument, and did not succeed in developing the character together as they kept on blocking each other's suggestions instead of building upon them. We are amazed by the bold language and direct interaction this group had. Things happened very quickly as the girls grabbed and took things from each other in a lively dialogue. They also started to refer to the objects with gender: "this is she, who really can.", "she's the popular and very sweet". This developed further later, as the participants were instructed to take the role of an object-character when enacting bullying situations in the class. Some groups, however, struggled to get started. They had difficultes with object manipulation, and we observed them also not building on each other's cues.

02	*takes the fan and closes it
	iukes the fun und closes li
03	is sitting like: 'I would like to, I would love to' and*
04	*opens up the fan
05	the bitch comes*
06	*puts the open fan into the candle holder
07 0	G1: Yeah, it's Anna. It's funny.
08	G2: Excuse me? ^
09	<i>^takes the fan</i>
10	This is Anna?
11	We like Anna. I think she is cute.
12	G1: She hates me! Over other things. She has
13	seriously said that she hates us.
14 (G2: But she's sweet to me.



IT IS ANNA

When moving towards the real experiences of bullying, object-characters began to attain personal concretness. Couple of groups associated the object-character with a real person. Transcript 5 is in the middle of a preparation of enactment of a bullying situation between four girls (G1, G2, G3 and G4 (silent)). We observed one of the participants (G3) manipulating an object (a fan) and describing a fictious situation where the 'bitch' appears. Another participant (G1) however associated this personality to Anna (name changed), who seemed to be a real person that they all knew. This trigged confronting reactions from G2, as she started to question G1's interpretation. G2 was holding to the fan through the argument about Anna.

DISCUSSION

We named our Reverse Object Probe to highlight a departure from the Cultural Probes as described by Gaver et al. (1999), as we wanted to put the 'users' as the designers of the probe kit including all the objects inside. The objects, selected and brought by the participant, became elements of mutual storytelling between the participant and researcher. The interviews took the form of improvisation, essentially similar to how Johnstone (1979) presents it, as activity, where each participant accepts and builds on the suggestions of each other, and circles through the topic by re-using what has been stated earlier. The physical permanence and tangibility of the objects give concrete reference to both keep the story grounded in a single anchoring point as well as serves to suggest various meanings that the participants may build on. Like Ghosh (2016) suggests, in this way the objects were not utilised as functional products, but as symbols and metaphors that enable storytelling. For example, the blue cup without a handle became a story of a good conversation withouth anyone being in control.

What is particular to Object Theatre is that both the objects as well as how they are interactionally presented, may be utilised as suggestions to be accepted. The warm-up exercises and explicit instructions to focus on the perceptible qualities of the objects enabled the participants to effectively accept their characteristics and build stories on these. However, what seemed more challenging was the accepting and building on the interactive suggestions in real time. This aspect puts pressure on the participants of the interaction, as they have to carefully pay attention to what is being offered and avoid forcing their personal preconceptions that would essentially block the suggestions. In contrast to the Reverse Object Probe, the objects and activities in the Object Classroom Theatre were prepared by the researchers. However, as the activity was based on the improvisation of multiple pupils, who were simultaneously engaged in reflecting on the qualities of the objects, their personal experiences, and relating to what the others say, the facilitation of the activity became more challenging as compared to the Reverse Object Probe. The objects seemed to encourage some of the pupils to be harsh about the qualities, such as the 'bitch' and a 'popular pupil' (a silver candle holder) as well as their 'followers,' which provoked intense debate about the attiribution of real persons to the objects. The characteristics also enabled the pupils to elaborate on desirable and disruptive qualities of object-characters in the class room. In some groups the participants were able to share very personal stories about bullying in class. We also witnessed groups who were not able to relate to the objects at all. It seemed too difficult and useless for them to try to imagine an object as a character. Thus we suggest that this way of working with object theatre is not suitable for everyone, but requires skills and quick reaction from the facilitator to engage themselves in the groups, accept the offers from participants and make suggestions of possible alternatives with the objects to build upon the line of story. We found the engagement of the facilitator also important in situations when people started to share personal stories, as those stories became more sensitive for the participants to handle. However, more work is needed in order to develop the formats further and test them with different participants and different objects. The objects that we had selected to the Object Classroom Theatre were too similar in size and materiality, and more transformable, soft and elastic objects would have been needed for a greater variety.

CONCLUSION

Inspired by improvised theatre and object theatre, this paper presented two formats for conducting design field interviews: Reverse Object Probe and Object Classroom Theatre. The work draws from a long tradition of participatory design studies, where design artefacts and tools are utilised to elicit insights. The Object Interviews in the early stages of design, can be understood as improvised storytelling, where both the researcher and the participant(s) co-create stories by accepting or blocking each others suggestions. Objects that are introduced to the interview, work as means of symbolic expressions and elements of storytelling between the researcher and the participant(s). Both parties take part in interpreting material properties (such as colour, form, functionality, materiality) and relating it with the theme at hand.

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REFERENCES

Boehner, K., Gaver, W. and Boucher, A. (2012). 'Probe', in Lury, C. and Wakeford, N. (eds) *Inventive methods: the happening of the social*. New York: Routledge. pp. 185–201.

Brandt, E. (2006). 'Designing exploratory design games: a framework for participation in Participatory Design?', in *Proc. of the conference on Participatory design*. PDC 2006. New York: ACM Press, pp. 57–66.

Brinkmann, S. (2014). 'Doing Without Data', *Qualitative Inquiry*, 20(6), pp. 720–725.

Buur, J. and Friis, P. (2015). 'Object Theatre in Design Education', in *Proc. of the Nordic Design Research Conference*. Sweden, 2015.

Buur, J. and Mitchell, R. (2011). 'The business modeling lab', in *Proc. of the Participatory Innovation Conference*. Denmark, 2011. pp. 368–373.

Callesen, J. (2005) *Beyond the Screen–The Puppet Theatre as a Model for Communication, Representation and Aesthetics.* PhD dissertation. Aarhus University, Denmark.

Dant, T. (1999) *Material culture in the social world: values, activities, lifestyles.* Philadelphia: Open University Press.

De Leon, J. P. and Cohen, J. H. (2005). 'Object and Walking Probes in Ethnographic Interviewing', *Field Methods*, 17(2), pp. 200–204.

Gaver, W., Dunne, T. and Pacenti, E. (1999). 'Design: Cultural probes', *interactions*, pp. 21–29.

Ghosh, C. (2016). Ordinary Objects in Theater: Breaking Norms | Choiti Ghosh | TEDxMDAE. Available at:

https://www.youtube.com/watch?v=FDLAx3dd_LU.

Ghosh, C. (no date). 'Interview with Choiti Ghosh'. Available at:

http://www.mumbaitheatreguide.com/dramas/interviews /choiti-ghosh-interview.asp#.

Johnstone, K. (1987). *Impro: Improvisation and the theatre*. Theatre Arts Book.

Knutz, E., Markussen, T., Mårbjerg, S. T., Ammentorp, J. (2014). 'Designing for Democracy: Using design activism to re-negotiate the roles and rights for patients', in *Proc. of the Design Research Society*. Sweden, 2014.

Larsen, H. and Friis, P. (2018). 'Improvising in Research: Drawing on Theatre Practice', in Freytag, P. and Young, L. (eds) *Qualitative methods in business research*. Springer Verlag.

Mattelmäki, T. (2006). *Design Probes*. University of Art and Design, Helsinki.

Mattelmäki, T. and Battarbee, K. (2002). 'Empathy probes', in *Proc. of the Participatory Design Conference*. Sweden, 2002. pp. 266–271.

Mead, G. H. (1934) *Mind, self, and society: From the standpoint of a social behaviorist.* Edited by C. W. Morris. University of Chicago Press.

Møller, T., Ravnløkke, L. and Bang, A. L. (2016). 'Tangible Dialogue Tools: Mediating Between Nonverbal Users and Everyday Experts'. Work paper.

Myatt, S. and Watt, D. (2012). 'From Frozen Sponges to Plastic Bags: Object Theatre - A Developing Network', *Puppet Notebook*, pp. 19–22.

Ryöppy, M. and Skouby, A. H. (2015). 'Object theatre -A playful understanding of design', in *Proc. of the Participatory Innovation Conference*. Netherlands, 2015. pp. 47–50.

Ryöppy, M., Ylirisku, S. and Knutz, E. (2017). 'Exploring power with object theatre', in *proc. of the Nordic Design Research Conference*. Norway, 2017.

Sanders, E. B.-N. (2006). 'Design for Effective Communications: Creating Contexts for Clarity and Meaning', in Jorge, F. (ed.) *Scaffolds for Building Everyday Creativity*. Allworth Press.

Sanders, E. B.-N. and Dandavate, U. (1999). 'Designing for Experiencing: New Tools', in *Proc. of the International Conference on Design and Emotion*. TU Delft, Netherlands, 1999.

Stacey, R. (2007). 'The challenge of human interdependence: Consequences for thinking about the day to day practice of management in organizations', *European Business Review*, 19(4), pp. 292–302.

Star, S. L. (1989). 'The structure of ill-structured solutions: boundary objects and heterogeneous distributed problem solving', in Huhns, M. (ed.) *Distributed Artificial Intelligence, Vol. 2.* San Francisco, CA, USA: Morgan Kaufmann Publishers Inc., pp. 37–54.