Mapping design practices: on risk, hybridity and participation

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ABSTRACT

In this paper we reflect on MAP-it: a participatory mapping method and toolkit, containing a map, sticker sheets, a scenario, etc. It enables designers to moderate participatory design processes through workshops in which people from different backgrounds collaboratively reflect on and set up new projects. In several test mappings during our research, we observed that participants in participatory contexts were often too eager to please the group. Furthermore, especially ‘makers’ – being designers, engineers, etc. – had difficulties with releasing control over the participatory process, thus allowing the process to evolve in unexpected ways. This led us to conclude that MAP-it should encourage participants to take risks in the participatory process.

Our research identified three types of risk-taking in participatory design processes, which we integrated in MAP-it. First, MAP-it allows people to express their differences in opinions. Therefore it is deliberately created as a hybrid form, borrowing elements from various disciplines, methods and media. Second, it permits making friction between participants explicit by using ‘risk-stickers’ and game rules. Finally, its open characteristics force the designer and participants to give up a part of their control over the design process.

Author Keywords

Mapping, risk, hybridity, participation

ACM Classification Keywords

H.5.0 General

INTRODUCTION

MAP-it, developed by the research group Social Spaces, is a mapping method and toolkit that allows participants – both ‘makers’ and ‘users’ – to take risks in participatory design processes. During an extended, iterative research- and development trajectory, we experienced that although participatory processes are often concerned with reaching consensus, a great deal is about taking the risk to negotiate dissonance as well. Therefore, we developed several case studies wherein the risky traits of MAP-it were developed and tested in participatory set-ups (Huybrechts, Coenen, Laureyssens & Machils, 2009).

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PDC '12, August 12 - 16 2012, Roskilde, Denmark

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In this paper, we start with describing one of these case studies, illustrating how MAP-it works and explaining the elements of the toolkit and method. Next, we clarify how MAP-it is positioned within the field of participatory practices. Then, we discuss the three forms of risk-taking that were integrated in the method. Finally, we mention some points for further discussion.

Figure 1: ‘Risk-stickers’ and other MAP-it elements on a background map

MAPPING A FABLAB

MAP-it works as follows: while sticking to a well-defined scenario, the participants – guided by a moderator – try to answer a research question or design a project by placing (and (re)positioning) stickers on a background map (Figure 1). For the start-up of a FabLab – fabulous laboratory or fabrication lab – in Genk (BE), MAP-it was used to organise the space designated for the lab. The intention of this mapping was to place different elements of a FabLab (machines, work spaces, etc.) on a blueprint of the building, keeping in mind the different obstacles of the space and limiting conditions for the machinery (size, forced ventilation, etc.). Prior to the mapping, all participants were given a guided tour through the building, during which the architects explained the possibilities and restrictions of the space. For example, since the building is classified as cultural heritage, intervention to its façade is prohibited.

The group of participants was diverse, consisting of managers and employees of other FabLabs, (potential) FabLab users, architects responsible for the adaptation of the building, designers, delegates from the city council, researchers, etc. During the mapping, the participants were divided into three groups, each led by a moderator. The moderator keeps track of the scenario and timing, keeps the participants focused and explains the different elements of the mapping kit.

All participants were seated around a table, which had a

paper map on it. This map – in this case, a blueprint of the building in which the FabLab would be housed – provides people with an idea of the social context they are mapping for. This makes the discussion more tangible and grounds it on an existing infrastructure (Muller, Curley, Greif, et al., 1999). During a mapping, participants can (re)move elements on the map in the form of an open and adjustable set of stickers. In this case, each participant received a prefabricated list of values that are linked to the set-up of a FabLab in Genk (BE), specific stickers representing machinery and other icons related to the FabLab. However, some were left blank for participants to write on. This – i.e. providing participants with blank materials to fill in themselves – is a strategy often used in Participatory Design (Sanders, 2000) (Muller, 2001) (Murray, 2004).

The mapping followed a pre-defined scenario of two rounds. A scenario orders the mapping tasks within a well-defined time schedule and ensures that at the end of the workshop the research question is covered. In the first round of the FabLab mapping, participants mapped different aspects of a FabLab (values, people, infrastructure and machinery) and placed them on the map. The participants discussed the value of the FabLab for their own person/organisation and the positioning of some machines within the space. They also shared their ideas and experiences on related issues, like safety.

At the end of this first round, the group decided which items on the map to lock, using a 'lock-sticker'. Locking something means that participants feel that the particular element is important. The 'lock-sticker' is a so-called 'risk-sticker', since it forces people to express what is valuable and important to them. By locking an element on the map, they protect it from being 'bombed' by the next group who will work on the same map. To express disagreement the participants can place 'bomb-stickers' on parts of the map or place 'like-stickers' to express their agreement. We introduced these 'risk-stickers' to evoke constructive friction, which playfully discloses points of difference and offers an opportunity for a mutual process of interpretation. In the second round, a presenter from one group joined another group with her/his group map and explained the content on the map and the preceding discussion. The members of the other group were confronted with a different interpretation of FabLab Genk, but had the opportunity to express their opinions on it by 'bombing' or 'liking' parts of this map and adding new elements to it.

The mapping session was concluded with an overall presentation of all presenters explaining the contents of and changes to the maps. One of the conclusions of the mapping – next to more constructive ideas – was that all participants felt that the designated space was not suitable for housing the FabLab. This illustrates that MAP-it allows the agency of participants to question the basic ideas and elements of the mapping. The resulting map served as input for the architects' reconsideration of the space and as a starting point for the search for a more appropriate building for the FabLab.

MAP-IT AND PARTICIPATORY PRACTICES

MAP-it can be framed within Participatory Design (PD), a set of theories and practices related to the concept of involving end-users as full participants in the design/research process (Slocum, 2003) (International Fund for Agricultural Development, 2009) (Ehn & Badham, 2002). The research group Social Spaces developed MAP-it from a belief in the political, technical and cultural benefits of participatory practices.

From a political viewpoint, MAP-it starts from the conviction that people have the right to participate in the design of the technical system of their (potential) concern (Ehn & Badham, 2002). PD stimulates an approach of designing *with* (instead of *for*) people (Sanders, 2001). In the line of this political view on participation, MAP-it is created in a participatory way: people from various disciplines and end-users were engaged in the creation process of the method and toolkit.

From a technical viewpoint, MAP-it entails the idea that collectively designing leads to – at least a perception of – better systems/products/projects (Ehn & Badham, 2002). Involving all project-stakeholders in the process creates a feeling of shared ownership of the final product. MAP-it's toolkit functions as a medium for the participants to jointly map their interpretations, knowledge and experiences in a visual language and come to a collective design (Ehn & Badham, 2002) (Sanders, 2000).

Finally, MAP-it formulates a cultural critique (Schäfer, 2008). It is conceived as a cultural intervention that wants to engage people to participate, acknowledging that they have different viewpoints, life worlds and approaches (Ehn & Kyng, 1987). The clashes, negotiations and compromises that arise from debates between participants contribute to the understanding of all stakes involved in a project. Therefore, MAP-it helps creators in taking the risk to confront their viewpoints with those of others.

THE RISKY FORM OF MAP-IT

As our case study pointed out, the main challenge of our research was to design MAP-it in a way that it stimulates risk-taking by working outside the borders of the own discipline, by confronting different viewpoints and releasing control, leading to interesting results. To gain a deeper understanding of this concept of 'risk', we explored sociological literature on this subject.

Contextualising risk

The sociological literature on risk can be divided into several theoretical perspectives, each based upon different bodies of literature (Lupton, 2006) (Zinn, 2004). The most well known approach to risk is that of 'risk society', closely related to Ulrich Beck (Beck, 1992).

In Beck's (1992) view, risk has changed in nature over time. This all has led to a new paradigm or a new stage in modernity, which Beck calls 'risk society'. Risk society is characterised by efforts to know and control risk. A major point of critique on Beck's notion of risk society is that it might be more appropriately labelled as a 'risk-averse society':

"Risk, according to Beck [...] is associated with the potential for loss, injury, harm, fatality or destruction,

which negates the possibility of a positive risk, defined as a risk worth taking because of the potential for a beneficial outcome” (Eckberg, 2007, p. 362).

This means that, excluding all forms of risk-taking, Beck’s risk society obscures the possibility of an ‘acceptable risk’, which implies that some level of risk can be tolerated and is even desirable (Eckberg, 2007).

MAP-it is designed from the perspective that in social processes risk is an unavoidable and even desirable factor. It plays with this concept of acceptable risk by offering a framework for dealing with it. The notion of acceptable risk is a.o. reflected in three main aspects of MAP-it: (1) it allows participants to express themselves in diverse ways via its hybrid form, (2) it introduces friction in the participatory process via ‘risk-stickers’ and certain game rules and (3) its open qualities stimulate the participants – and especially the ‘makers’ – to release control over (parts of) the process.

(1) MAP-it allows diversity via its hybrid form

Design researcher Michael Muller (2002) places methods that are used in participatory design processes on a continuum. The abstract end of the continuum forces users to enter the world of the designers (e.g. a usability lab) and the concrete end demands experts to enter the world of the users (e.g. ethnographic observation). Methods with in-between, hybrid qualities have the largest potential for participation, since they move in the uncertain zone with a hybrid language that does not belong to the experts, nor to the end-users. This hybrid zone deliberately puts every role or discipline on a similar level of learning, since it is unfamiliar to all. Participatory methods create this hybrid zone by introducing various uses and meanings of elements that are negotiated by the participants (Muller, 2002).

MAP-it’s hybridity is reflected in its form. The toolkit is a hybrid combination of visual and verbal aspects of many disciplinary and daily life domains, as well as participatory methods or toolkits that engage people in a participatory process. For instance, MAP-it combines traits of card-based practices and scenario-based card methods (Murray, 2004) (Muller, 2001) (Muller, Curley, Greif, et.al., 1999) with various mapping methods (IFAD, 2009), like blueprint mapping (Bødker and Madsen, 1998). Blueprint mapping methods – like MAP-it – often use a blueprint map of a building or area as a background to ground the discussion on a specific situation and prevent discussions becoming too abstract. MAP-it also works with low-tech elements, inspired by Sanders’ (2000) generative tools. Generative tools are toolkits of pre-made visual and verbal elements, that participants can (re)combine into collages, maps or stories that express their feelings and ideas. In the case of MAP-it, the result – a map – becomes a hybrid zone itself, stimulating the challenging of assumptions and established procedures. Next to this hybrid form, we developed other explicit ways to encourage risk-taking in a MAP-it process.

(2) MAP-it provokes friction

MAP-it deliberately stimulates participants to take the risk to provoke friction. Our test mappings showed that it is not enough to create harmony, connection and

understanding to change a social situation. Social friction implies, according to Jensen and Lenskjold (2004), a process of confronting different expressive behaviours and contexts.

MAP-it’s ‘risk-stickers’ and certain game rules – coordinated by the moderator – introduce friction to the workshop in a playful manner. The stickers, rules and role of the moderator push people to share their opinions and give feedback, as they see this as an element of the game. For instance, the moderator can indicate that the participants can ‘bomb’ an element on the map that they do not like. In the FabLab mapping this was illustrated by the architects who ‘bombed’ the idea of the managers and employees of other FabLabs to replace a staircase with a slope. The latter pled that this would be easier to move large materials, such as big, wooden plates. However, the architects disagreed, claiming that such a slope, in order to be effective and safe, takes in too much space.

Friction can shift the viewpoint of the participants and help them to start an interpretative process. In the FabLab mapping this is demonstrated in the radical choice for a new building in which the FabLab would be located on the ground floor (so that no stairs or slopes would be required).

(3) MAP-it encourages releasing control

Another form of risk-taking in participatory design processes is openness (Clark & Oiticica, 2006). This can include open access to materials and thus taking the risk to hand over part of the control over the design process to other participants. MAP-it aids the designer to put all – or her/his selection of – ideas on the table in the form of a background map and stickers, that are then open for remixing, changing or critiquing. They can be transformed and personalised by the participants for new, unexpected contexts.

Many ‘makers’ are not used to release control over their creation process and products. In the FabLab mapping, the architects were hesitant to open up ‘their’ procedures and thus allow the participation of outsiders (such as the FabLab managers). By putting people in a situation that other people can contribute to or change, MAP-it aims for facilitating this process of releasing control.

Inspired by the open source philosophy (Open Source Initiative, n.d.), participants can also freely download existing toolkits via the MAP-it website (www.map-it.be), use and adapt them for their own goals and contribute to MAP-it by uploading their adapted maps and stickers. Furthermore, adapted versions of the MAP-it toolkits and their creative re-uses in concrete contexts are visually and textually documented on the website.

DISCUSSION

Our MAP-it research pointed out that there is a great need for risk-taking in a participatory process. We identified three ways in which MAP-it stimulates risk taking: (1) its hybrid form encourages diverse viewpoints to be placed on the table, (2) the moderator, the game rules and ‘risk-stickers’ encourage participants to express (dis)agreement and (3) the open characteristics of MAP-it (the adjustable stickers, the open source way of downloading and reworking the toolkit) force the designer to release part of

her/his control over the design process.

For every mapping session, the question of “when we can speak of acceptable risk” remains. To what extent can we, as ‘makers’, integrate these three forms of risk-taking? When do we introduce which type of risk?

These questions are related to the design of the toolkit prior to the workshop session and to the choices of the moderator. The definition of the research question, the choice of the background map and the selection of stickers, already defines the amount of control one wants to exercise. However – as the FabLab mapping clearly illustrated – the agency still remains with the participants who can decide to question and deviate from the basic ideas and elements of the mapping at any given time.

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