On the importance of designer sensitization in context mapping studies

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ABSTRACT
This paper reflects on the role of study result recipients in context mapping studies, with an emphasis on designers as those recipients. As context mapping studies become more common, the people performing them will be more specialized. This means that the people designing the products or services often will not be the same people performing the study. I argue that in these cases the recipients of the results of the context mapping study need to be sensitized in order to effectively use the results of the study. Doing so will enable them to put the results of the study in context, and will improve their understanding of those results.

Keywords
context mapping, techniques evaluation, generative studies

INTRODUCTION
In recent years, there has been a strong interest in involving users in the creation of products and services. One of the factors influencing this shift is the growing belief that products should be more just than ‘containers for technology’. As already alluded to by Laurel in the early nineties[5], the experience a user has with a product is at least as important. Laurel (in her book Computers as Theatre) dismisses the old-fashioned way of designing by narrative and instead proposes creating “dramatic experiences”. These experiences extend beyond the product itself; they are found in it’s context[3]. Another reason for examining the context is the fact that the ideas a user has of a product use is the fact that the ideas a user has of a product can be very different from those a designer might have[6]. They have different expectations of what would appear to be the same thing[2]. Taking these points into account, it follows that an exploration of the context in which a product is to be used will benefit it’s users.

In learning about the context of a product, users are involved in what has become known as participatory design[7]. A main goal of the techniques that are used in participatory design studies is create context awareness in participating users. A lot of the knowledge that designers are after is either tacit or latent; emotive, generative methods can be used to unearth this knowledge. The practice of using generative methods to create a context around a product is known as context mapping[9]. The mapping metaphor is used since the results of these methods are often visual, resembling a geographical map of a given product's context.

Figure 2. Generative methods access the deepest levels of knowledge.

One key aspect of context mapping, and participatory design as a whole, is that the interpretation of what participants do and say is very important. This interpretation shapes the results of the study. In most studies, the person making these interpretations is either a researcher or a designer (and oftentimes, these are actually one and the same person). Even though the literature acknowledges the importance of these interpretations[11], little research has been done on what the role and responsibility of the product designer is in participatory design.

In this paper, I present a case in which the designers of the actual product were not involved in the study, which is uncommon[10]. This aspect makes this study suitable for a critical reflection on how the results of generative methods are interpreted by an audience that does not have much knowledge about the origins of those results. It is important to gain insight into these factors as context mapping becomes more popular. Increasingly, studies will be carried out by separate companies or research institutions, which may make a direct collaboration with designers (or other end-users of study results) less obvious. Research is needed to
determine how the results of generative studies can be communicated effectively.

THE ROLE OF DESIGNERS

Contextmapping studies generally involve a sensitizing phase. This phase aims to prepare participants for the kinds of questions the researchers plan to ask. A set of assignments is given that are very broad in theme, and these are sent to the participants of the study. These assignments not only sensitize the users for the upcoming generative sessions, but the process of creating them also sensitizes the research team[11], helping them to make interpretations later during the generative sessions.

Most of the research on generative methods assumes one of two scenarios. One where the person conducting the study (the researcher) is also the designer of the product, or one where the designers and researchers are different people, but both present at the generative sessions[11,8]. In both of these scenarios, the person (or team) designing the actual product was present during the generative sessions, giving them a deep understanding of how the final conclusions of the study relate to what was said during the sessions. Existing literature on contextmapping often states that the creation of the participants’ sensitizing assignments will also sensitize the researcher to the specific domain being studied. But even if the designer did not participate in the creation of those sensitizing assignments, being present at the sessions will tell the designer how the participants relate to this area. This experiential knowledge, combined with his unique analytical knowledge about the product being created, puts the designer in a unique position to interpret the what, how and why of the users participating in a generative session[10].

It would be interesting then to look at a case where the designers and researchers were also different people, but in this case the designers were not present during the generative sessions.

CASE: CONTEXTMAPPING BAMBOO SPACE

In 2008, Wacom Europe was working on an online tool that would allow informal organization and annotation of visual materials\(^\text{13}\). The author was part of the design team. Inspiration came primarily from Ianus Keller's Cabinet[4], but also from other related research, such as the Bumptop[1] system. The product started out as an environment for professionals to work on their ideas, transforming them into presentations. These presentations could then be annotated in real time as they were given to an audience.

As concept development furthered, focus shifted towards consumers instead of professionals. Amongst other reasons, the number of consumers using a Bamboo Tablet far outnumber the professionals, and the presentation market is one tightly controlled by Microsoft Powerpoint. It was decided to refocus our efforts on developing a tool that would allow consumers to annotate and organize their visual material into collages. These collages could then be shared with friends and family.

The change in direction prompted Wacom to seek some verification of our assumptions, goals and envisioned use. To gain better insight in what our prospective users wanted, Wacom decided to hire a usability firm (Muzus) to assess our prototype. Muzus proposed the use of a contextmapping study.

The researchers opted to perform the study at their own discretion. No-one from the design team was present at the sessions or otherwise involved in the study. This approach differs from the one taken in most of the available literature, where designers are usually present during the generative sessions.

Figure 3. The first prototype of the application.

CASE: COMMUNICATION OF RESULTS

Muzus’ conclusions were communicated in a 130 page booklet filled with participant quotes, drawings and photographs taken during the sessions. Also, a chapter of conclusions summarized the results of the study, based on the researcher's interpretation of what the participants said and did during the sessions.

The inclusion of the quotes suggests to the reader that these have meaning. Of course, they did – during the session. However, now that the session is over and the context of the quotes is gone, it is extremely difficult to understand them. Most of them are quite ambiguous (see figure 4). Our (the design team) problem was that we had no idea where the people saying these things were coming from.

Figure 4. A few quotes from the final report.

Since many of the quotes were hard to interpret, the reasoning behind the conclusions that were drawn from them was also difficult to reconstruct a posteriori. Only

\(^\text{13}\) Released as Bamboo Space in september 2008. See http://bamboospace.eu
the most specific remarks led to conclusions from which the reasoning could still be deduced by the design team. More generic arguments, originating from the kind of tacit and latent knowledge contextmapping studies aim to unearth, were very difficult to understand and put in context.

In hindsight, it would have been beneficial for the design team to have been sensitized in a similar fashion to the participants in the study. Especially after already working on the product, a sensitizing phase might make designers more open minded and willing to accept change. It might have made it easier for them to understand where users were coming from with their comments.

CONCLUSION
The case above shows that while contextmapping studies yield interesting results, it is important that all parties are on the same page. In the Wacom case, it would have been beneficial for the designers to have been present or otherwise sensitized.

Research in the field of contextmapping hardly ever mentions the need to sensitize the recipients of the results because in most literature those recipients are assumed to be present at the sessions, which in effect already sensitized them for the resulting data. I argue that the recipients always to be sensitized, either by participating in the sessions, or by participating in a sensitizing phase, just like the participants of the study. Care should also be taken to communicate the results of the study in such a way that the recipients can relate those conclusions to their sensitizing phase.

When given the choice between sensitizing recipients or having them present, being present at the sessions undoubtedly is the favorable one. Not only for their insights but also for the later interpretation of study results, but also for the effectiveness of the sessions. Research by Vaajakallio and Mattelmäki[10] emphasizes the role of the ‘expert’ (designer or other study result recipient) in the generative sessions by suggesting that experts are often the ones initiating the moments of reflection. Also, they state that in order to further develop the ideas afterwards, study result recipients need to have a detailed picture of the reasons and functionalities behind the ideas. They need to know about their context, one could say. This is in support of my hypothesis that recipients need to be sensitized, before being able to place the presented results in their appropriate context and use them effectively.

Another question of importance is whether development of the product or service has already started or not. When there already is a prototype (as in the Wacom case), there is the potential danger of experts being overly protective of their existing work, should they be present at the sessions. Whenever experts participate, they should be open to the ideas of others, however strange and ‘unprofessional’ they may seem at first. Also, they must be willing to essentially ‘kill their own baby’, should the results indicate so. Since this could prove difficult, having experts present will not always be an option.

DISCUSSION
The available literature almost universally hints towards designers being present at generative sessions, without really stating the matter clearly. However, especially as these techniques become more pervasive, this will not always be the case. More and more, the contextmapping phase will be carried out by independent design-researchers, who will in turn deliver the results of their study to a design team, much like the Wacom study that was discussed.

While in the Wacom case, it would have helped to simply include the designers in the study, this is not always practical or possible. Also, more and more, contextmapping studies are performed in service design. In such settings, the recipients of the results are in fact decision makers or consultants, and not designers. Research is needed into what the role of these experts can be in the generative process. While traditional designers are accustomed to dealing with visual materials and are able to abstract from the visual material created by the participants and draw holistic conclusions, these other experts have vastly different skills and backgrounds.

I think that within generative research, there is a universal need to be sensitized for the context being studied. While the need to sensitize participants and researchers has been widely acknowledged, I deem it crucial that designers and others who deal with the results of a contextmapping study are also sensitized.

How exactly this can be done most effectively is up for debate. I think that having designers participate in a sensitizing phase similar to the one participants already experience will be a significant benefit.

Second, it should be ensured that the final results of the study are communicated in such a way that the recipients can relate to them. While the inclusion of off-hand remarks or collages can be of value, there should be no gap of understanding between those elements, and the conclusion drawn from them.

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REFERENCES


