Use of blogs for studying users engagement with mobile telephones in museum environments
PRELIMINARY VERSION: DO NOT REDISTRIBUTE

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Abstract. This presentation discussed experiences with use of mobile phones and weblogs as tools for studying user engagement. The presentation reports from two experiments related to user engagement in museum exhibitions.

Introduction

In this paper we report from methods and supporting techniques used for studying users' engagement in museum environments by way of mobile phones and web logs (blogs). The methods and techniques are used in two field experiments at the Vikingship museum of Oslo: The first with a group of 13 year old visitors, and a second with individual and twosome adult tourist visitors. Two techniques was tried out; a) collecting clues and publishing them on a visitor blog during the visit and b) mapping the experience of the visit on experience maps. The techniques reported propose different approaches to studying user engagement in information

environments and we would like to discuss the methodological issues of the diverging techniques reported, as well as the status of blogs as empirical material.

Background

We are researching and designing digital environments for cultural heritage research mediation. Empirical accounts from a reconstruction of a Viking boat (e.g. video recorded discussions, model making, and explanations) are mediated by web based solutions and mobile terminals, communicated by means of proximity and location based technologies. The field experiments in the Vikingship museum are part of design related studies that focus on the role of the mobile phone as tools for appropriation. The level of engagement with the artefacts in the exhibition, and the visitors' interest in mediating the museum experience to others are understood as indicators of appropriation.

Understanding meaning making

Analysis and design of digital cultural environments is supported by a conceptual framework focusing on meaning making within networks of practices, media content, and artefacts. A combination of central theoretical concepts, such as alignment, configuration and negotiation, from Actor Network Theory (ANT), and the understanding of tool and sign from activity theory are proposed as a way of understanding the challenges and configurations needed to align networks of diverging practices, media content and agencies. This combination establishes a framework that is based on an understanding of the meaning making with digital media as relative to the objects designed and the practices involved.

Our interpretation of the networks and the actants that are involved in our case can be mapped schematically (See ill.). 'A' denotes the visitors; 'B' denotes the activity of the designers (aka the authors of this paper).
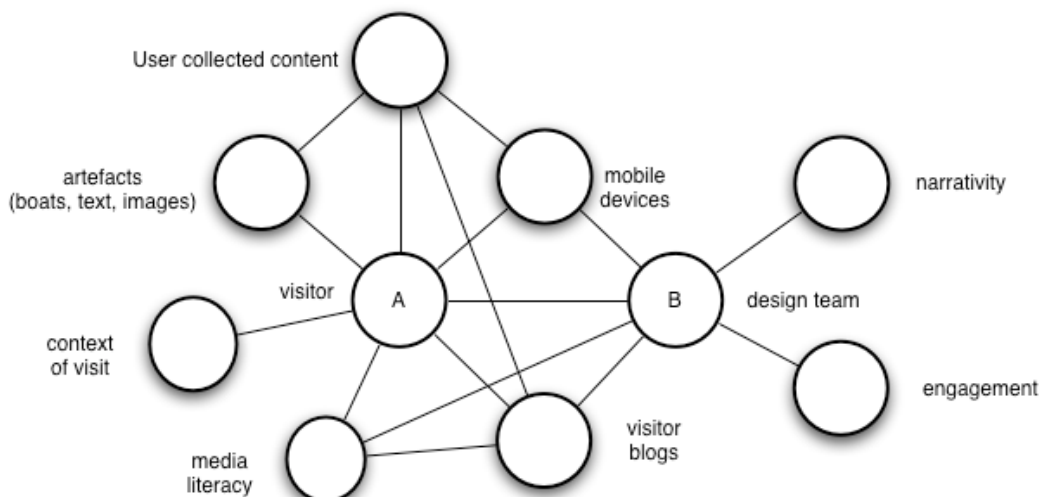
This understanding of the museum visitor using mobile telephones in museum environment as being an actor in a network of artefacts and actors that all have a role to play in the making of user experience and engagement is a departure point. The methodological challenge is to find techniques and methods that can help documenting the performative character of engagement in museum environments, since museum experiences is based on engagement with several factors – such as exhibited objects, texts and narratives told, media used as well as other museum visitors that are present.

Analysing engagement

Engagement is a concept that is difficult to study without breaking it into sub¬categories. We have chosen to focus on engagement understood as activity related to the content and artefacts in the museum environment. In particular we are interested in how this activity is mediated in the museum, and how the visitors in turn create their own mediation in the form of taking pictures, making narratives, and sharing the experience with others.

Field experiment 1: Participation in activities related to collecting and creating narratives

In our first field experiment the activity consisted of taking pictures and collecting clues and documentation. The departure point is that museum visitors take pictures, however museum research and interaction research related to museum design is giving little attention to this kind of activity of engagement. The method takes departure from this fact – in that museums visitors are asked to upload their pictures to a museum visitors' blog that is accessible in an experimental mobile media centre we installed at the museum (see photo and web page below).

The one-day experiment was set up in collaboration with a gender mixed group of 13 years old. 9 mobile phones were given to the children, and the museum visit was opened by a talk given by an ethnologist working with reconstruction of Viking boats. We asked the children to use the camera and video function on the mobile

phones to collect clues and arguments related to one of the ships during their visit, and gave them two tasks to choose between, which both gave them an opportunity to explore the existing exhibition in the museum in different levels. The children where divided in groups of two and three persons collaborating in the use of one mobile phone.
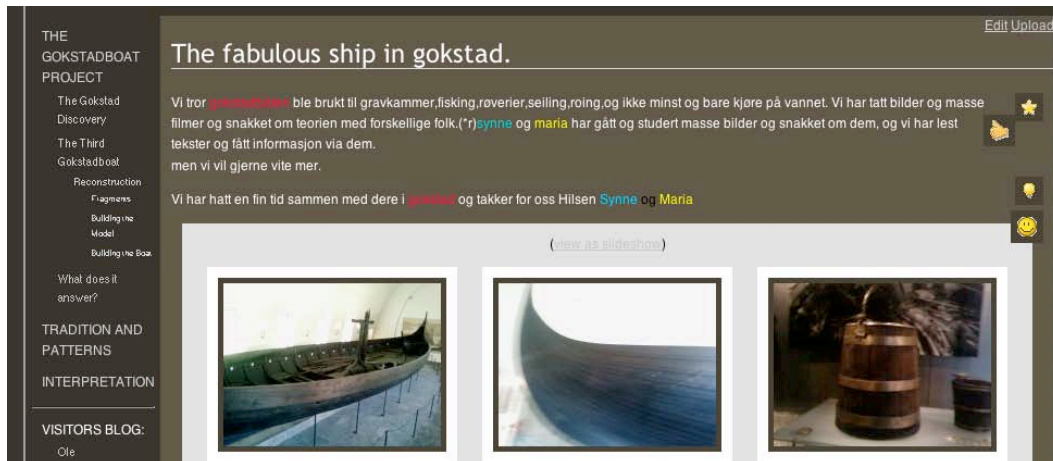

The blog mediates the museum visitors' engagement with specific artefacts exhibited, and also provides information about the Viking boat reconstruction process.

Field experiment 2: Adult visitor interviews with experience maps

In our second field experiment we focused on the visitors' intensity of experience, both related to time and place in the museum.

A one-day experiment was set up where we found individual or twosome adult tourist visitors that would volunteer for a post-visit interview. We interviewed a total of 10 persons. We used experience maps (see illus.) as a cultural probe (Gaver et al. 1999) to focus the conversation on cold and warm locations in the museum, and the role of artefacts and content in this respect.
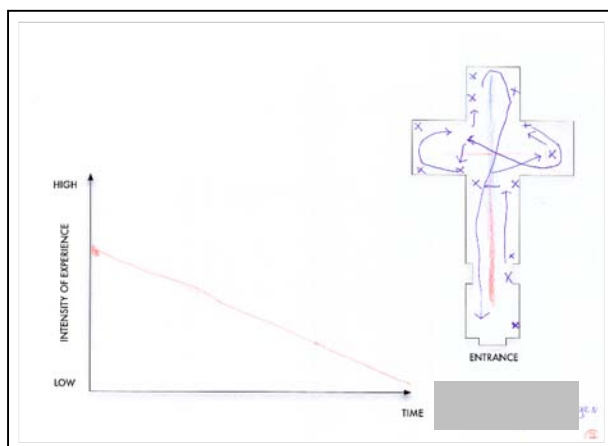
Ill: An example of an experience map (user identity hidden).

The maps was used by the museums visitors during the visit and was the object for a discussion with the researchers afterwards

Discussion for the workshop

Studying visitor engagement: Vom Lehn, Heath, Hindmarsh (2005) argues that information kiosks and mobile devises prioritize the individual user. Our experience is the contrary, that collaboration with mobile phone is happening, when the tasks are affording collaboration – as well as when the content of the museum is inviting to collective activity. We are using concepts from activity theory to distinguish artefact mediation as signs (focusing on orientation and communication), from tools (focusing on the production of narratives), and try to understand the engagement of museum visitors activity better from this perspective. The use of camera phones does invite young visitors to engage with the museums content by way of making their own interpretation and arguing for this on the museums blog. Meanwhile we see that the pictures they put on the blog to a lesser degree do support their argument. This we think can be related to the fact that the groups did not have any classes of analysis of pictures.

Another interesting point was that the groups used most time on making video clips with their camera-phones. Playing the role of a journalist and her camera team. The narratives was then carried by the stories told by the journalist. These improvised stories can also be interesting material for analysis. Meanwhile, the time for uploading these video sequences was not planned in the schedule for the experiment. And most of the video was published on the blog by us after the experiment. Therefore we have no comments from the young visitors related to these sequences.

Studying visitors experience: The use of experience maps was a simple technique for getting an understanding of the character of the content provided by the museum. It also did give a view of how museums experience is created collaboratively – as the groups of two visitors did discuss the maps and their experiences on different places in the museum. Still, the maps did to a lesser degree show the interpretations of the visitors of the museums content.

Combining analysis of visitor narratives with experience maps: We have not done a field experiment combining the creation of narratives and using experience maps. However, this seems to be a worthwhile effort, as for museum design it is important to understand what content and what objects that engages and gives experiences – as well as what supports visitors interpretations. We are interested in the way the visitors move around, their proximity to the artefacts, and their engagement in collecting information as well as their individual interpretations of the museum narratives. To capture this multiple methods has to be used – and a combination between maps and experimental methods might be a way to go. Still there is a question of what kind of empirical material these techniques actually establishes – can the maps and the narratives on the blog be understood as same kind of material as observation? Or do we have to consider the information we get out of our methods in relation to the context that our research methods and techniques do produce?

References

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