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Abstract
This paper will examine how probes can be useful for game designers in the preliminary phases of a design process. The work is based upon a case study concerning pervasive mobile phone games where Mobile Game Probes have emerged from the project. The new probes are aimed towards a specific target group and the goal is to specify the probes so they will cover the most relevant areas for our project. The Mobile Game Probes generated many interesting results and new issues occurred, since the probes came to be dynamic and favorable for the process in new ways.

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Introduction
Mobile phones are becoming a common possession for almost everyone in the modern world and acts as a tool for social interaction. This media is currently subject to our research in the area of social adaptable games [1] and we are working on designing pervasive mobile phone games.
Users, being the players of the future game, have been the foundation for the process of designing the games. Therefore we decided to obtain inspiration from Cultural Probes since they were originally “designed to provoke inspirational responses” [2].
We have invented new dynamic probes aimed for urban citizens in the age from 15-25 years old. The major difference between the original probes and the probes we invented was the fact that the target groups are highly distinct from one another, one being elderly in communities and the other being young adults as individuals in our project. We decided to convert the original probes into new probes that are addressing our target group. The paper will illustrate these probes and demonstrate our benefits.

Development of probes
The pervasive mobile phone game has to take place in public spaces where the user has a mobile phone as a facilitator for the game. Therefore we wanted to learn

about the users' habits and thoughts for these matters. The intention was to collect information about the users' daily life, use of and connection to mobile phones and their utilization of public spaces. Furthermore we wanted to catch a sense of practices with games and sensations connected to gaming. The responding group consisted of four urban citizens aged 17-24 years. They where only known by second hand and we therefore didn't have any pre-interpretations of the participants. We developed four probes to be used by the respondent for a week. The probes consisted of:

- A logbook with a page for each day during the week. The respondents were to fill out which activities they where doing and mark their use of their phones in a parallel row. The main goal was to gain information about the use of mobile phones, but we also found it interesting to collect information in context of activities. The logbook was also a good approach to learn about the respondent's daily life and routines.
- Seven Postcards in relation to mobile ethics, emotions concerning phones and acting as a motivation for telling stories with mobile phones involved. This probe evolved from the assumption that the young people have developed unexplored ethics on the use of mobile phones. Each postcard had a question on the back and an inspirational image on the front. The intention with this probe was to gain knowledge about the unusual situations in contrary to what we learned from the logbook.
- Daily SMS question regarding the respondent's use of public space and urban environment. The questions posed aimed towards subjective opinions about public spaces and was written in a friendly, informal tone. One of the questions was directed towards specific use during the week. The idea for this probe appeared when the original camera probe inspired for an MMS probe, using the familiar media [3] for communicating on a daily basis. This later evolved into an SMS probe with other advantages, being fast and easy to use in dialogue and open for answering when the participants have time for it. The MMS probe had potential but has still not become common use and as trustworthy as SMS'ing and was therefore rejected for this project.
- Game Sheet about the respondent's game habits and associations to games. The sheet consisted of a blank front cover for a creative illustration of a favorite game situation. The backside was a questionnaire exploring what games where played and how often.

Figure 1: The four probes prior to being put in use

These probes were designated because they all appealed to young people and especially the SMS probe was designed on their premises using the familiar and implemented device. Apparently all probes were carefully designed with effort and the respondents received them with great interest. The four probes were

delivered and set to use for a busy week for the four engaged people.

Achievements

We achieved 100% response on the probes. Every hour (twenty-four-seven) in the logbook was colored to illustrate activities done, every postcard and SMS was answered and the game sheet was carefully decorated with drawings. Earlier experiences with using probes of our own have not at all been as duly filled in as this one. Gaver et al. [2] seemed to get about half of the probes filled in return. The rationale for this enthusiastic participation might be the result from several factors, but we claim that the main reason for this was the use of the SMS probe which would daily remind the respondents of being in the project.

The SMS probe also turned out to have more qualities than first expected. We discovered that it was a very dynamic probe which was changeable during the week. This has been beneficial since some of the questions were misunderstood by one of the participants during the week and it was possible to change the wording in order to get answers to the relevant question. The participants seemed a bit insecure in the beginning, doubtful about how to answer right. But they soon relaxed more, realizing there were no wrong answers.

The results of the probes gave a pretty clear picture of the respondents in the areas we situated our focus. This was a good set off for further concept development. Each participant was shortly described in the focus of a general perspective, relationship with the mobile phone, gaming perspective and a description of the participant's urban life. This gave a clear picture of the participants from the relevant point of view. We used the description and quotes from the participants in brainstorm sessions. The people at the brainstorm workshop had not met the four participants nor seen the probes and that resulted in a change of the perception of the participants which now changed more into personas, meaning that they became more stereotypical. Grudin & Pruitt (2002) describes personas as "(…) a method for enhancing engagement *and* reality" [4]. These personas were later combined with experiences from observations in public, which together made a good solid foundation for idea development in particular situations.

The first brainstorm session gave the outcast of hundreds of ideas, from which we collected the most interesting ones and they were later the foundation for the storyboard workshop where we utilized the same personas, as we now found to know them better and could imagine how they would act and how they would feel in different situations. The personas had now evolved into caricatures like Bødker [5] argue in favor of when building engaging scenarios. Yet they were still based on real people.

Discussion

The probes we developed worked very well and it turned out that they had more qualities than first assumed. Especially the SMS probe appeared to be of great interest with the possibilities it awoke. The dialogue and the changeability of the questions during the week made it into a very dynamic probe, not earlier seen alike. It opens a question about whether or not it is to intrusive for the participant's life. It didn't seem to bother these participants and they answered when they had time, differing from a couple of minutes after the question posed to a whole day later. An interesting

evolvement of the probe could be the MMS probe, consisting of MMS templates send daily to fill out with words and pictures. This is at the moment of bigger effort for the participants, since few are as familiar with the MMS as with the SMS and there is more work to writing and taking pictures than just writing SMS. The SMS probe was very appropriate for this particular user group, but might not be for other groups who do not have the same high level of familiarity with the phone and SMSing.

After having completed the use of the Mobile Game Probes, we became familiar with similar way of using probes in the preliminary phases of designing like we intended. The Game Box [6] was a probe designed like a game, delivered to the players/participants in the starting phase of the process, focusing on game play and the player's relationship to gaming. This was an interesting way of using probes that gave different empiric results than we obtained. We focused on relationships to games too, but we also got information about the relationship to mobile phones and urban environment, which in our case was also of great importance in our case.

Conclusion

Then what is new when using Mobile Game Probes? Well, first of all we designed new dynamic probes that can be reinterpreted in many ways. We had succeeded on responding, which we read as very positive feedback. Secondly we utilized these probes in the design process and applied the obtained empiric material in new ways that other designers can draw inspiration from. We also illustrated the benefits from combining probes with personas and scenarios.

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References:

[1] J. Peitz, D. Eriksson, & S. Björk, : "Socially Adaptable Games", In: Proceeding if DiGRA, 2005

[2] B. Gaver, T. Dunne, & E. Pacenti: "Design: Cultural Probes", *ACM Interactions,* Vol. 6., pp 21-29, 1999

[3] A. S. Taylor & R. Harper: "Talking 'Activity': Young people & Mobile Phones", CHI 2001

[4] J. Grudin & J. Pruitt: "Personas, Participatory Design and Product Development: An Infrastructure for Engagement", PDC 2002, pp 144-161, 2002

[5] S. Bødker: "Scenarios in user-centred design – Setting the stage for reflection and action", Interacting with computers, 13, 1, pp 61-75, 2000

[6] O. Sotamaa, L. Ermi, A. Jäppinen, T. Laukkanen, F. Mäyrä, & J. Nummela : "The Role of Players in Game Design: A Methodological Perspective", DAC 2005

[7] E. Paulos, & T. Jenkins: "Urban Probes: Encountering Our Emerging Urban Atmospheres", IRB-TR-04-018, 2004

[8] H. Hutchinson, B. B. Bederson, A. Druin, C. Plaisant, W. Mackay, H. Evans, H. Hansen, S. Conversy, M. Beaudouin-Lafon, B. Eiderbäck, S. Lindquist, Y. Sundblad, & B. Westerlund: "Technology Probes: Inspiring Design for and with Families", SIGCHI, 2003