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Player-Centred Game Design: Experiences in Using Scenario Study to Inform Mobile Game Design

by Laura Ermi and Frans Mäyrä

Abstract

There is a need for systematic, research-based and tested game design methodologies that take the needs and preferences of different players into better consideration than the current industry practices. In order to investigate the future of pervasive game playing on mobile devices the University of Tampere Hypermedia Laboratory's research project *Wireless Gaming Solutions for the Future* (MOGAME) has developed a prototype of a persistent multiplayer game. Rather than starting from the research team's own game preferences or by analyzing or imitating existing games, the team decided to commence the game design process by researching different "real players" and their preferences. The player study used gameplay scenarios that were presented to the informants in a comic strip format. After analysis, the key findings were summarized into design requirements that were then adopted as goals for the game design. A player-centred game design approach like this can be laborious and has its challenges, but it also provided useful information and inspiration for design. Thus, we argue that players should be more involved in game design and development than is currently typical. This paper describes and evaluates the experiences gathered while using a scenario-based player study to inform pervasive mobile game design.

Introduction: Players' Role in Game Design

There is considerable research and literature in the area of user-centred design (see for example Laurel, 1990; Norman, 1988; Raskin, 2000) and traditional user-centred design offers several beneficial viewpoints that could be used in any kind of design processes. However, game design is, arguably, a much different task than designing utility applications. It is not just about minimizing the cognitive load of the user and making the software as simple as possible, as is usually the case in user interface design and evaluation (cf. Nielsen, 1993). The game design process can be related to the design of entertainment experiences, such as amusement park rides, some aspects of movie scriptwriting or storytelling techniques, as well as to issues native to interaction design. Instead of requiring low mental capacity, games should be challenging and entertaining and the goal of the design should be to create meaningful play. According to Katie Salen and Eric Zimmerman (2004), this requires making the game discernable and integrated. Discernability requires letting players know what happens when they take action. Also, integrating action and outcome into the larger context of the game is crucial (Salen & Zimmerman 2004, 34-36). These concepts do not diverge very far from the concepts of usability design. However, the player cannot be seen just as a user of the game: playability is not the same as usability (cf. Järvinen, Heliö & Mäyrä 2002, pp. 11-12). Because there are connections between the two, the design of utility applications can benefit from lessons derived from game design (see Malone, 1984) – and vice versa. Involving players more in the design processes of games is also important for the future of the games industry and for the diversity of game cultures in general. One of the crucial critiques of the current state of game development is the apparent lack of originality in design solutions: games are designed to appeal to a rather narrow, already existing player demographic. As long as the design of new games is based on the traditional model of individual game author or small team designing games based on their personal likings and vision, rather than on understanding derived from their potential new audiences, this is unlikely to change. However, the situation is continually developing, and particularly on large productions the practise of play-testing with the focus group at different stages of the game development is becoming more common. But based on our experience, the player-centred methods are by no means the standard yet. A move into player-centred game design is also an important step in the development of more systematic and evaluated game design processes. The major challenge of any user-centred design process is to bridge the gap between the user and the designer. While it is quite obvious that game designers also play games, it seems shortsighted to rely on designers as the sole informants in game design research. Designers may so easily fall in love with their own ideas and creations that they lose the ability to evaluate them critically. Also, if the target group of a game is not defined so

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loosely, that anyone who plays games can be included, it might be the case that designers are not actually part of the target group and therefore need to have information other than their own experiences as players. Of course it should also be noted that users and players are not designers, so the input they offer the design process should not be regarded as definitive, unquestionable truths. Data collected from player studies needs to be analyzed and interpreted by the researchers. Not even participatory design means that the users or players do the work for the designers.

A design process can be described as a process that combines information and logic (de Bono 1996, 64). The information on which designers base their logic can come from several different sources: research literature, statistical data, player research and designers' own previous experiences or visions, just to mention a few. Taking the paradigm of user-centred design as a starting point means that the potential users of the software – or future players of the game – are considered a major source of information throughout the design process. Andrea Botero Cabrera et al. (2003) have described three general strategies that designers use: "brief," "use" and "context." In the first, users are typically represented as abstractions and there is usually poor communication between the users and the designers. For example, in the field of game design this could mean that designers take advantage of previous research that has been conducted on player types. In use-oriented approaches users appear as more concrete actors that can be called to validate, test and inform in certain phases of the project. A typical example of this is having people play-test a game. This kind of research approach can be seen as human-centred, but not necessarily player-centred if the potential players of the game participate only in the evaluation of the game. The last approach expands the role of users and designers: users and their social contexts are an integral part of the design process. Allison Druin (2002) has presented a similar classification when defining the roles that children can have in the design of new technology. Children are "users," "testers," "informants" and "design partners," and each of these roles shapes the design process and its outcomes. From a game design perspective it is essential to be aware of what possibilities exist to involve players in the design process, so that the kinds of roles players have actually undertaken can be defined.

In this paper, we will describe and evaluate the experiences we gathered while using scenario-based studies of players to inform pervasive mobile game design. First we will briefly explain the aims of the research and prototype development. Then we will describe the scenario method in general and describe the way we applied the method in the research. Finally, we will briefly discuss what kind of results we gained and how we were able to use them and evaluate the approach in general. Our focus here is not on the provision of detailed results, but rather on the evaluation of the method in a more general way: to answer the question "Can information, that would be useful in designing new game types be derived by using a scenario approach?"

The Aims of the Research

The increased ubiquity of mobile phones has raised interest in how mobiles can be used for entertainment applications such as mobile games. Our interest though was not in the traditional portable type of mobile games on handheld devices, but rather in truly mobile gameplay possibilities. These kinds of games would make use of a player's locational position and thus make the real-world environment, and moving in it, a central and meaningful game element. Staffan Björk et al. (2002) suggest that truly unleashing the potential of such games may require new kinds of end-user devices because even the Java-enabled mobile phone has inherited most of its characteristics from traditional telephones. We have approached this issue from a somewhat different angle and focused on developing mobile game concepts that are most suitable for contemporary kinds of wireless and mobile terminals. This involves taking advantage of these devices' unique characteristics such as communication possibilities, mobility and positioning. In a previous research project on interactive television we have observed that communication with other players, especially those unfamiliar to each other in real life, may help in making the play experience feel more adventurous and interesting. Persistent communicative contacts are also important when developing persistent social networks, i.e. communities. Communication is thus an important component of social playability. Using a mobile phone as a communication device in the game also offers possibilities for telecom operators to take advantage of other sources of revenue than just the download price of the game.

It should be noted, that even though the goal of our player study was to support prototype development, the prototype was not developed to become a commercial game product but, rather, to serve as a tool to explore a research hypothesis, to provide us with something concrete to play-test and, thereby, gather more information on pervasive game design issues. We conducted two types of research: basic research on games, players and playability and applied research on the design of location-sensitive services and applications. A pre-study analyzing five different games was conducted prior to launching this research project. The analyses and observations from these cases were contrasted with findings from research

literature to create a typology of the main dimensions of playability (Järvinen, Heliö & Mäyrä, 2002).

In order to examine the new field of pervasive gaming, it appeared necessary to conduct background research before undertaking the actual prototype development. Background research helped us identify interesting aspects of mobile gaming that we could implement into the prototype and research during the project. Rather than starting by analyzing existing games, and thereby possibly copying some of their features, we decided to start the design from as open a starting point as possible, and by researching players and their preferences. At that time, 2003, the field of pervasive gaming was rather unexplored - and mostly still is - and we felt that by conducting a player study we would be able to gain valuable knowledge on those potentials in peoples' lives for persistent pervasive mobile game playing. We use the term "player study" as the designation for this kind of approach in the context of this paper. A player study involves human-centred research into the experience and meaning of games as perceived by different real players.

The research team for the project was multidisciplinary, with expertise in the areas of cultural and media studies, psychology, computer science and visual arts. From the design research perspective, the multidisciplinary basis of research work has a particular advantage that could be described in terms of methodological triangulation. Basically, triangulation means approaching the issue at hand from multiple viewpoints. In our case, we have aimed to combine the humanistic and constructive approaches. The strength of classical humanistic or socio-culturally oriented media research is in generating a broad understanding of the phenomena it produces. On the other hand, it sometimes has a tendency to be so dissociated from professional practise that the insights it could provide become difficult to see. Since our approach has also involved the constructive dimension, where we actually create prototype demonstrations of new technology, it has forced us to marry these two viewpoints. Triangulation in this project meant combining top-down (heuristic media research approach) with bottom-up (empirical implementation and testing) methods.

To summarize, MOGAME was conceived as a future-oriented applied games research project that would show some of the ways the wireless gameplay of tomorrow might be feasible, both in terms of actual gameplay content and also in terms of understanding the related business considerations. The latter issues were investigated in collaboration with economics and information management experts and fall outside the scope of this paper. The main research questions of the project are related to a heuristic understanding of the future character of mobile games. Divided into subtasks, the project researches the possibilities that persistent-world mobile games have for delivering engaging and novel gaming experiences and encouraging players to communicate with each other. The goals written in the original research plan reflected a combination of interests from all partners - those of the research team as well as those of the company partners. Interests, which, in turn, represented different parts in the mobile game value network. The research plan was particularly focused on acquiring a better understanding of the use of a persistent multiplayer game world, rich with communication and interaction possibilities, linked with the positioning of mobile players, while also examining the feasibility of combining lottery gaming or betting mechanisms within the framework of an online multiplayer game world. The wide range of research goals proved challenging, particularly as the efforts of the research group needed to focus on developing the technology and art needed for implementation of the fully functional prototype.

Using Scenarios in Game Design

It would be possible to utilize for example different role-play methodologies in generating various kinds of concept ideas (see Iacucci, Kuutti & Ranta, 2000). On the other hand, there are methods like group interviews and focus troupe (Salvador & Howells, 1998) that can be used in concept evaluation in case there already is a somewhat detailed and finalized concept idea to be evaluated. In our research project there were several research goals listed in the research plan that set the aims and starting points for the design of the research prototype, but otherwise the game design was left open. Therefore we were actually situated between concept idea creation and concept evaluation, and there was a need for a method that combined elements from both of them. Furthermore, mobility and persistence provide challenges for the design, since the general context of the gameplay possibly varies more in such mobile games than in traditional games.

Scenarios have become one of the prevalent ways to bridge the gap between users and designers. They are short fictional narratives that describe a use situation and the interaction between users and proposed systems, and can be used to discuss and picture different kinds of future-use situations of technology. Scenarios are usually developed by the design team and presented to users for feedback. In game design, use scenarios or gameplay scenarios are not commonly used methods. Typically a commercial game design production will start from

technology, gameplay idea or story (Rouse 2000, 42–50), usually presented in a playable demonstration and summarized into a game design document.

We chose to use gameplay scenarios as a basis for the player study for several reasons. First of all, the concrete nature of scenarios helps to create a common understanding of the proposed system's use and functions. This was seen especially important in the case of pervasive mobile game design since at the time it was practically impossible to find any informants with any previous experience of such games. For the same reason, we considered it important to involve players early on in the design process; namely, before we had any finalised idea of the prototype we would be developing. We also assumed that gameplay scenarios would be especially relevant in the case of "truly mobile" games, where the gameplay may involve movement and other physical activities. Thereby, in contrast to traditional video or computer games, the playing situation was a more varied and noteworthy part of the game itself. On the other hand, since we had some predefined boundary conditions for the concept design, there was a need to concentrate on certain topics in the player study also, and scenarios can be helpful in that. So the role we gave to the players was more contextual than a traditional play-tester role, in Druin's (2002) terms the role of an informant.

It cannot be assumed that the informants participating in the study would be able to anticipate their future gameplay experience on the basis of the scenarios. Instead, the idea is to present them the game concept ideas in order to make the issues of the discussion more concrete and explicable by nature. Even though the informants might not be able to define what kind of games they would actually like to play, the scenarios may help them recognize and discuss their previous experiences from traditional games, digital games and mobile devices. In this way researchers and designers can gain information regarding what kind of games and game elements players are interested in and what game elements give them pleasure or displeasure. It should be remembered that it is only possible to play-test the game, the interface, the game mechanics and the rules after some kind of a prototype has been created that will provide the players with an actual playing experience. This, of course, does not have to be a functional prototype like that used in MOGAME, and in many cases a simple paper prototype might be also helpful (cf. Snyder 2003), but these kinds of questions cannot be satisfyingly answered by utilising scenarios alone.

In order to gain a comprehensive picture of players' gameplay experiences, we integrated features from both qualitative and quantitative data gathering and analysis methods. The project started with a creative phase where the research group developed several preliminary concept ideas together with the research partners. Besides using the concept ideas as a resource for the prototype design, we also used them in the scenario-based player study that will be described in more detail in the next section.

The Scenario-Based Player Study

The game scenarios were created on the basis of several game concepts that were brainstormed collaboratively by the research team and the research partners. Scenarios were realized in a comic strip format that was considered illustrative and quite easily comprehended by the informants. An example of the scenarios can be seen in Figure 1.



Figure 1. An example of the comic strip format game scenarios used in the player study.

The first phase of the player study was conducted via a web-questionnaire that was targeted at

children and young adult players of different kinds of digital and non-digital games. Respondents were recruited by advertising the research to different groups of game players and to students of several colleges in Tampere. Most of the respondents found their way to the questionnaire through a Finnish game-related news group and an advertisement published on a website of a Finnish computer magazine. From the respondents of the questionnaire we selected two groups of informants for the scenario-based study. Most of the web-questionnaire respondents were 15 to 25-year-olds, which was in accordance with our predefined target group of approximately 16–30 year-old players. Unfortunately, a majority of the respondents were male, but for the scenario-based study we selected an equal amount of both male and female players. There were three 17 to 23-year-old informants in both interview groups. Most of them played traditional role-playing games at least sometimes, which was not our original intention but a consequence of few last minute cancellations, and might have had some effect on the results obtained.

The main function of the web questionnaire was to collect informants for the scenario based player study. From the questionnaire we were also able to gather quantitative data of the playing habits and playing contexts of the target group. We presented the respondents (n=1917) with a questionnaire with questions including the kind of games and game genres they preferred, their favourite game and how often and with whom they played. We also made inquiries into the nature of the social gameplay situations in which they partook. Respondents were also asked how they perceived the field of mobile gaming developing and if they had any particular hopes or desires for the mobile games of the future. In the scenario-based interviews we asked questions that focused on mobility and mobile phones as playing devices, using player movement as a central game element, relations of the gameworld and the real-world environment and combining lottery gaming with the fictional persistent gameworld.

We carried out two group interview sessions lasting about two to three hours each. In addition to the interviews and discussions based on the scenarios, the informants were also asked to evaluate each concept individually. They got a quick overview of the concept by reading through the comic strip scenario. After that they were given a short questionnaire where they were asked to rate the concept at ten different scales according to their first impressions (see Figure 2). Similar scales have been used in Hypermedia Laboratory's previous studies with different kinds of prototypes and demonstrations in order to assess test user's emotional responses. Informants were also asked to write down what they felt were the most interesting and most problematic aspects of the particular game concept.

Boring				X		Interesting
Harsh			X			Sympathetic
Frightening		X				Safe

Figure 2. An example of the rating scales used in the player study.

Following this individual processing of the concept ideas, a group discussion took place. The idea behind this kind of an arrangement was that once participants had been given the opportunity to evaluate the concept idea on their own, it would be easier for them to engage in a discussion with others. The group discussion followed a thematic interview framework that consisted of several themes related to the research interests of this project. After the discussion, informants completed the second part of the questionnaire which asked them how well they thought different aspects of the game were integrated in the concept, if they would be willing to play the game and what kind of improvement ideas they would suggest. The questionnaire provided us with background data that informed our understanding of each participant's final evaluation of the concept; however, the discussions were by far the most important source of data. Altogether six concept scenarios were administered, one after another.

Two researchers were present at the interviews and they also analyzed the data from the group discussions. The goal of the analysis was to pull together the crucial factors regarding the gameplay experience in a mobile context that emerged from the interviews. The key findings were reported in a research report, which contained several illustrative direct quotations from the interviews and also summarized the main findings into design requirements in order to make them easily memorable to the whole design team. The requirements mainly fall into categories of

general playability and players' security:

Playability

- Ensure that movement will not become too much of a burden to the players
- Allow different modes of gameplay and support various player types
- Allow as much free communication between the players as possible
- Support the forming of teams and alliances
- Design the interface so that it requires only a minimum amount of handling of the device and pressing of the buttons
- Integrate all the game elements (backstory, mobile device, lottery gaming etc.) as seamlessly as possible
- Integrate some aspects of the game world with the real environment.

Player control and security

- Support the players' control and feeling of control regarding lottery gaming
- Enable the players to control when they play and thus make it possible for them to separate the gameplay and real life
- Ensure players' security and give them the possibility to stay anonymous to other players.

In conclusion, the information that can be gathered by this kind of scenario-based player research provides the designers mainly with general ideas and guidelines, and helps them to prioritise those aspects of playability that seem to be most relevant in the given context. From the research perspective the design requirements also reflect some of the most prominent areas of future mobile multiplayer game development, as set out by the experts of the research consortium partners during the planning phase.

Applying Design Requirements in the Design Process

Transforming the design requirements presented by the player study and the research partners into design solutions in the actual game is probably one of the most demanding parts of the creative process. While the player study provides researchers and designers with general ideas and guidelines, it does not offer actual design solutions. However, the results from the player study have to be taken into consideration in all of the different areas of the game design process, including the design of the structural and functional as well as audiovisual and thematic elements of the game. At the same time, seamless integration of the different elements and coherence of the gameplay experience have to be taken into account. The challenge is being able to connect the empirical data and results from the player study to the design process of the game. Design aims to bridge the gap between gameplay experience and the formal structures of the game. The challenges arise both from the problems of interpretation of the data and from the application of the results in the design. As mentioned earlier, players are not designers and therefore their statements cannot be considered as such. For example we noted that even if players told us they do not consider the theme of the game important as long as the game is otherwise of high quality, they rejected a game concept totally on the basis of the uninteresting theme. Another problem in the interpretation of the data is that informants' opinions may be contradictory. For example, in our study informants on the one hand stressed the importance of free communication between players and on the other hand wished to stay anonymous in order to feel secure. The conflicting or ambiguous priorities provided by the informants have to be reinterpreted by the researchers. Similarly as in any kind of research where people are interviewed, the researcher cannot just ask the informants research questions directly, but she has to operationalise them further into interview questions and then, by analyzing the answers, come up with answers to the research questions as well. In our case this meant that we did not ask the informants what kind of a pervasive game they wanted to have but presented them with several different and also a bit provoking scenarios that enticed them to discuss the subject matter and reflect their own ideas and opinions on that basis. In other words, the research should also aim to go beyond the apparently conflicting desires and fears, and find out what the actual fundamental needs and priorities they reflect are. Next we will briefly describe some of the design requirements and solutions that we initially came up with.

The prototype game we started to develop in the MOGAME project after the player study is called *The Songs of North*. It is a prototype of a persistent multiplayer game that is designed to investigate the future of mobile gaming. The detailed description of the prototype falls outside the scope of this methodologically oriented paper, but, in brief, the game is a mixed reality game where the player is in contact with a spirit world that is laid over the physical environment. The spirit world is invisible and the mobile device works as a shamanic drum by which a player can interact with the spirits and also hears the sounds of that other world. The game also includes some lottery game elements. (See Lankoski et al. 2004.)

We noted in the player study, that using player movement as a central game element may easily become too much of a burden for the players. Especially in a persistent game, designers have to take the daily lives of their players into consideration and try to intertwine the game

movement to the daily routines or routes of the players to a certain degree. Otherwise the players will probably not have enough energy to keep on playing, possibly for several months in the persistent, mixed reality game world. One solution we came up with, besides taking advantage of the naturally occurring movement of the players, was providing support for team play. When playing in teams, players can easily reduce the amount of their movement if they jointly communicate and coordinate their gameplay. This was also in harmony with the aim of enticing players to communicate with each other – and informants' wish to be able to form teams in games.

Contemporary mobile devices did not appear as very promising gameplay devices from the point of view of the player study informants. They felt mobile games often required too much concentration on the small device when trying to control the game using cramped buttons, and thus might take the attention away from the actual playing. Therefore we are emphasising the role of the auditory world of the game (see Ekman et al. 2005) and trying to keep the interface as simple as possible. We are also aiming towards seamless integration of all of the game elements, including the mobile device and the real-world environment, so that the mobile device, for example, would not feel separate from the game. This is largely achieved by thematic integration. Players are not required to imagine a completely different world on top of the real environment where they move, but to imagine that there are also different kinds of invisible spirits that move in the same environment with them. The mobile phone is meant to be imagined as a shaman drum that the player can use for communicating with the spirit world.

It also became clear during the player study, that players' feelings of control need to be supported both in the actual gameplay situation and, especially, regarding lottery gaming. In a persistent game world this means that there is a need to support different kinds of player types and playing modes, so that players themselves are able, to some degree, to control for example when to play and how to separate the playing from their real life. From a game design angle, strong holding power of the game can be seen as a desirable quality to produce. But while being captivating, the game should also support the feeling of control and let players make decisions about their own playing style.

In lottery gaming, the possible addiction problems are even better known than in the context of entertainment in general. On the other hand, it seems that there will probably always be a certain group of players who will not want to engage themselves with lottery games at all. Therefore the game should be designed so that no one is accidentally made to play with real money. This clearly contradicts what was just said about seamless integration of all game elements. Lottery games should be an integral part of the game's thematic framework and game mechanics in order to be interesting and relevant in that context, but on the other hand they should also be somehow kept separate. In MOGAME this problem was solved by making lottery gaming a game element of its own called "sacrifice" and visually differentiating it from the other actions in the game interface. After all, the sacrifices are made in the physical world, not in the spiritual one.

Conclusions and Future Work

The methodology of the study was developed according to the needs and resources of the project. We noticed a couple of weaknesses in the design of the player study that made the interviews and also the interpretation and use of the results more difficult. What kinds of scenarios are used in the study is of great importance. Based on our positive experiences, we consider the comic strip format to be advantageous because it makes it possible to give the informants a good overview of the concept by quite a concise amount of information. However, it would be better to design the comic strip scenarios especially for the purposes of the scenario-based study, because in that way they would have the clearest possible link to the research questions of the study. In our case, the scenarios were at first developed to serve the needs of the internal design workshops of the research project. This resulted in the fact that we could make good use of only a fraction of the scenarios in the interviews and also in that they were not always implemented in an optimal way from the viewpoint of the interviews. There were for example some unnecessary overlaps and details in them that misguided the informants from the issues we were especially interested in. It would also have been easier if the research questions had been more specific, but we needed to cover a broad area and we wanted to be open to various kinds of input from the informants. The scope of research questions we tried to cover in this study was so extensive, that the interviews tended to get very long and it was still difficult to devote enough time to get deeper into any individual discussion theme.

Besides creating good scenarios, there is the question of how they should be used in the research situation. We found our procedure to be quite heavy and time-consuming. The questionnaires we presented the informants with before and after the group interview appeared to help the informants to figure out which key concept elements in which they were interested. Thereby the

questionnaires facilitated the group discussion and encouraged informants to express their own opinions. But they also took time to be filled in and their value in the data analysis was much lower than the value of the interview data. So we feel that the questionnaire needs to be developed further in order to make it a more useful method for scenario-based player studies.

It can also be asked, whether we could not have ended up with similar design requirements without the scenarios and the player study. It is of course possible, but the interviews helped us to find the key requirements to be met in our game concept and especially to determine the emphasis of different factors that are important to consider in the design process. We did not for example consider the integration of the device to the game world to be as important as it turned out to be in the interviews. According to our experiences, scenarios are an efficient way to concretize and illustrate the possibilities of a new technology or concept of which the informants have no prior experience. They also provide a flexible context that is open for discussion. When the concept is defined loosely enough, it is easier for the informants to use their own imagination and possibly invent new usages and ideas on the features of devices or services. Informants have the liberty to define what is relevant and how it should be conceptualized.

According to Edward de Bono (1996, pp. 65–66) the usual way to design something is to set out the requirements to form a “mould” and try to come up with something that fits into this matrix. Results will probably be adequate but also very ordinary. Another way would be to generate free-form concept ideas, and only after this free-form ideation phase to shape a concept idea to fit the requirements. It must be admitted that our approach has been more like the former one. It would also be interesting to try out methodologies that would push the player-centeredness of game design even further and let the potential players participate in the design process even at a larger scale than we did. Players could also take part in the creation of the concept ideas and design of the scenarios, even if there were requirements for the game to be implemented that derived from the research plan. It would then be the designers’ task to remould the concepts to fit in these prerequisites. For example, scenarios can be acted out or roleplayed (Iacucci, Kuutti & Ranta, 2000; Iacucci & Kuutti, 2002), which can also be supplemented or assisted by props (Howard et al. 2002) or videotaping (Binder, 1999). Moreover, it has been suggested that the target group could take part in the development of the requirements (Chin, Rosson & Carroll, 1997). Also, even if it is decided that the research team produces the concept ideas and scenarios, it could be beneficial to use more active and contextual methods than traditional brainstorming. This might lead to original concept ideas that would otherwise be left out because they are too far from the mould constructed by the requirements, typically arising from the initial research plan and the interests of the financiers of the research. This might also open up new unexplored possibilities for player-centred design to develop into something other than just user-centred design applied to games.

Nevertheless, it is always important to consider carefully which method is the most suitable for the particular research question or aim. Especially in game research and design it seems that it is very easy to get confused with the methodological issues. One example of this is the case of *The Sims*. The early game concept was presented to a group of informants that rejected it completely. Regardless of the rejection by the focus group, the game was developed and published – and it became a huge success (e.g. Cambron, 2002, Taylor, 2003). It might be, that the focus group of young men being introduced with a concept called “Doll House” had something to do with the results, but the example also helps to clarify another central methodological issue of player-centred game design research: it is a totally different thing to do design research than play-test a game. Scenarios are not a way to actually play-test a game, since there is no game to be played and tried out. So the questions to be asked should not be related to whether a certain concept is good or bad but rather the scenario should induce the informants to reflect on and discuss themes that are of interest to the researchers/ designers. For example in our study, we were interested in themes like mobility and pervasiveness in the context of entertainment, so the scenarios were chosen so that they would draw attention to these issues. None of them represented the actual concept that we later implemented. In the player study of the MOGAME project, the various game scenarios were just starting points for the design process. After the prototype development phase we have been assessing the gameplay experience and playability of the implemented game in actual mobile gameplay context (see Ekman et al., 2005, Ermi & Mäyrä, 2005). Repeated design-testing cycles (cf. Zimmerman, 2003) will provide us with more information both on the game prototype being developed and also on the methodological aspects of player-centred game design and probably game design in general as well. To summarize, player-centred game design is not about asking the potential users what kind of a game they want to have, but a way of providing the design process with information that the design can be based on and inspired by.

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