

Frog Race –

Social implications of involving non-players in pervasive games

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Any mobile service based on collaborative efforts suffers from bootstrapping problems: too little content and too few participants. One trick to overcome this problem is to integrate already existing assets into the application. This approach is very natural in pervasive games, since these games are played out in our everyday environment. Pervasive games can use both fixed structures and non-players as game elements. For example, in the “Uncle Roy All Around You”¹ game, the players are at one time asked to follow a stranger along a particular path. The player experiences this as an in-game element, although the person you are following takes no part in the game

From a philosophical standpoint, involving non-players challenges the very nature of ‘gaming’. According to early game philosophers such as Huizinga [1], the most basic requirement on a game is that the participants all agree that they are partaking in the game. As gamers, they agree to replace some of our everyday rules of conduct with game rules, and as gamers, they can also decide to step out of the game at any time. At the soccer field, it is okay to tackle other players. At the streets of a city, it is not. As a soccer player, you can decide to quit playing the game if the rules are too rough or the social context does not suit you. A non-player that gets involved in a game may have no choice about this.

At the Swedish Institute of Computer Science, we have recently initiated a game experiment that is designed to investigate this invisible division between players and non-players that just happen to be on the scene. We call this experiment the Frog Race because it is inspired by a children’s game, where you bet on live frogs, guessing which frog will be first to reach a goal line.

From previous experiments with the MobiTip system [2] we know that a lot of people in Sweden² have Bluetooth-enabled phones and that these are left with Bluetooth ‘on’. Our basic game idea builds on this observation. In our game, phone-equipped gamers will walk around in an area suitable for the game (a shopping mall is a good example), picking up signals from phones that have Bluetooth on. They select some of these signals and bet on which one will be the first to pass a particular landmark (e.g. an exit door of the galleria). If the same Bluetooth signal later on is picked up at the right place, you win.

It should be noted that in simplest setup, the game is completely invisible to the tagged non-players. The phones are not hacked since it is only the Bluetooth device addresses that are saved (on a game server and/or the players’ phones). Furthermore, nobody is actually traced as the individuals who carry the phones are not identified, and no information about their location is saved. Nevertheless, it is easy to see how the game can become very intrusive. One game element may be to attempt to identify the frog and influence him or her in different ways to walk a certain path. Another possibility is to turn the game into a hunting game,

¹ <http://www.uncleroyallaroundyou.co.uk/>

² Or at least in Stockholm where we are conducting our experiments.

where the players go searching for the tagged frog. The game may also be made less intrusive by adding systems of reward for non-players.

In our project, we are deliberately playing with these types of game elements to see where the limits lie. Our approach is scenario-based: we will perform a study of a range of potential game designs and ask a wide range of people for reactions to these, even before realising any of the designs. We do not expect that all people will find the same scenario intrusive: some people may react very strongly to all game setups, whereas others will not be bothered by any of the scenarios. Our workshop contribution will follow the same line: we will expose the participants to a set of game scenarios that vary in intrusiveness, and by this hope to provoke a really interesting discussion about using bystanders in games.

REFERENCES

[1] Huizinga, Johan. *Homo Ludens*. Beacon Press (June 1, 1971).

[2] Rudström, Åsa, Svensson, Martin, Cöster, Rickard and Höök, Kristina (2004) *MobiTip: Using Bluetooth as a Mediator of Social Context*, In *UbiComp 2004 Adjunct Proceedings (demo)*, Nottingham, GB.