Rousseau 2012 : Designing a historical location-based mobile cinematic game

Michael Lew

Media x Design Lab EPFL CH-1015 Lausanne, Switzerland michael.lew@a3.epfl.ch

Hendrik Knoche

Media x Design Lab EPFL CH-1015 Lausanne, Switzerland hendrik.knoche@epfl.ch

Jeffrey Huang

Media x Design Lab EPFL CH-1015 Lausanne, Switzerland jeffrey.huang@epfl.ch

Copyright is held by the authors.

ACE 2011, November 8–11, 2011, Lisbon, Portugal.

ACM xxx-x-xxxx-xxxx-x/xx/xx.

Abstract

In this paper we describe the design of a location-based mobile cinematic game that will be deployed in the city of Geneva, Switzerland, for the 300th anniversary of philosopher Jean-Jacques Rousseau.

Keywords

Mobile computing, context-aware multimedia, distributed story, audience experience, physical navigation, GPS art, mobile cinema, augmenting place, ARG, smartphone, interactive storytelling, location-based, mixed reality, public space, audiovisual guide.

ACM Classification Keywords H.5.1 [Artificial, augmented, and virtual realities]

General Terms

Design, Experimentation, Human Factors.

Introduction

Museums and other entities that make cultural history accessible to the general public have been struggling with the problem of creating experiences that are appealing, yet deep and meaningful. With recent developments in mobile devices, a new range of fun experiences can be delivered to the visitors but ultimately the search is on for making visits to cultural

sites more exciting as an experience beyond the used media channels. The gamification of a visitor's experience is one interesting possibility but so far there is little knowledge on how to successfully incorporate and enmesh game elements into cultural content. We believe that mechanisms from alternate-reality games (ARGs) can infuse museum visits with a new flavor that has appeal for the public. In this paper we will describe a project that aims at leveraging ARG properties to make a mobile location-based cinematic experience more attractive.

Historical context

In 2012, the city of Geneva will be celebrating the 300th anniversary of the birth of writer and philosopher Jean-Jacques Rousseau. For this occasion, the municipality is coordinating colloquia, round tables, online databases of manuscripts, operas, a puppet show, concerts, theatre plays, historical reenactments, exhibitions, films, promenades and interactive installations. It is the occasion to rediscover the work of the precursor of the French revolution, early theorist of modern democracies and of interactivity, author of numerous books on education and the social contract. but also figure of Romanticism and of psychoanalysis [15]. Although some his monographs were judged scandalous and censored by the authorities later in his life, J.-J. Rousseau was born in Geneva and spent his formative years there, until the age of 16.

Description

For this special occasion, we are designing, curating and producing a promenade and collective treasure hunt across the city, in the footsteps of Rousseau. Viewers will download a custom-made application to their GPS-enabled smartphones, and indications on

their screen will guide them across the city, with the objective of looking for a collection of original short films that will be made by about a dozen visual and sound artists from Geneva and around the world.

An ARG about Jean-Jacques Rousseau

ARGs, who have emerged in the context of viral marketing campaigns (for the A.I. Spielberg movie, the Halo 2 video game or the 2008 Olympic Games), are characterized by: 1) blurring the boundary between reality and fiction, using the «This is Not a Game» (TINAG) strategy; 2) being extremely addictive; 3) requiring the collective, collaborative and self-organized work of many online players to solve a series of puzzles; 4) being cross-media and using multiple communication channels.

We propose in our project to combine these properties of ARGs with mobile location-based storytelling [14], to entice the viewer on a treasure hunt to find a collection of short films illustrating the life and philosophy of Rousseau in his home town.

Previous work

Concerning the mediatic adaptation of Rousseau's life, it has already been done for television by the Swiss filmmaker Claude Goretta in a 1962 short B&W documentary and a 1978 color biopic. As for non-linear media, French interactive filmmaker Jean-Louis Boissier has made two CD-ROMs on Rousseau, that are commercially distributed and regularly shown as art installations; they are authored with Macromedia Director and the Quicktime technology, and their content is based on two of Rousseau's late autobiographies: «Les Confessions» and «Les Rêveries d'un Promeneur Solitaire». They were shot at the

precise locations that Rousseau mentions in his memoirs, 250 years later, with local casts.

As for museums, several places where Rousseau has lived have been turned in small museums or public galleries: essentially in Geneva, Montmorency, Môtiers. The first two are currently equipped with classical audioquides.

Mobile audio guides as artforms can be traced back to the use of the Sony Walkman by Antenna Theater or the Audio Walks of Janet Cardiff [20]. The first Video Walk was made by this same artist for the Carnegie Museum of Art in 1999; it was linear and recorded on tape. Other recent location-based audio pieces in a city include Murmur [17], Soundwalk [22], and Sound Delta [21].

In 1994, British filmmaker Peter Greenaway created a public space installation in the entire city of Geneva for 100 days consisting of 100 staircases that visitors could climb to see the city from a different point of view. Greenaway has been arguing for a new kind of cinema that would take viewers outside of the dark room, into the physical world [9].

«Mobile cinema» was coined in a 2003 paper at MIT in the Interactive Cinema Group [4, 13]. It is defined by:
1) the ability to watch moving images with a synchronized sountrack on a small handheld device; 2) the necessity to physically move around and discover the real world; 3) the location-specific nature of the media played, whose content is tied to a geographical spot. This form of locative entertainment was exemplified in an urban environment by Nisi in her «Media Portrait of the Liberties» [11], and in a wild setting by Wood in her «Nature Trailer» [5], both set in Ireland.

Our second line of inspiration is the genre of mobile chasing games that require an active involvement and

coordination of online and/or physical players to find characters or treasures in a real physical space. It was pioneered in an academic environment by the team of Falk and al in 2001 [2,6]. The same year, artist collective Blast Theory with the Mixed Reality Lab of the University of Nottingham performed the seminal piece «Can You See Me Now?» in which online players could move their avatar in a real city, chased by real performers [1]. Finally, in 2004, at USC, «Tracking Agama» proposed a narrative-based exploration of Los Angeles, in pursuit of a mysterious missing urban researcher called Agama, using SMS messaging, voice calls and blog entries [16].

Design and technical considerations

What matters mostly in our design philosophy is the point of view and particular trajectory of each player, in terms of the partial knowledge and partial view each of them has of the entire game board. In literary theory, it is common to talk about focalization. The narrator (for stories) or puppetmaster (for ARGs) is omniscient (god's eye view), in the sense that he or she knows where all the media are located, and how to find them. But the player, when he or she starts the game, knows nothing, and has to follow the hints and cues left by the game designers and by other players, as well as personal intution and heuristics, to progress in the game. A good design consists in revealing step-by-step the whole terrain, by constructing puzzles whose difficulty are adaptive to the skills of each player while at the same time maximizing their enjoyment and flow in the experience [3]. For our design decisions, we have used the questions posed in this paper [18]. To deploy our project, we will use readily available commercial smartphones such as the Apple iPhone with built-in GPS sensor. We are not thinking of using other

types of sensors, but have been considering the possible use of QR codes. To follow the metaphor of Lalya Gaye in Sonic City [8], we will use the «city as an interface» to navigate the game. The natural and artificial geographical boundaries of the city, created by more than five thousand years of urban development is the environment in which the visitors have to uncover the many layers of the city and how they relate to the philosophical and political topics addressed by Rousseau in his writings.

Since network availability is dependent on the coverage offered by mobile operators and since their services can be very expensive, we are leaning toward the implementation of a compiled mobile application that would not depend on the network, only on GPS. Nisi and Pan relied on local 802.11b, which is possible in a restricted urban environment, or on a campus, but not in a city-wide experiment. We are considering to use the technology developed by Ulrich Fischer for his project «Walking The Edit» [7,19].

In order to allow the viewers to watch the complete collection of films they have found during their walk, we will create a special web site. After returning from their journey, viewers will be able to see what trajectory they have taken in the city, and replay all the films they have collected, in high resolution, on a desktop computer. During the walk, they will watch a small version on their phone of each film «nugget», which all have a duration comprised between 30 and 240 seconds. For users that have a physical disability or for those who want to experience the project from a distant city, there will be a simulation mode whereby a user can create an avatar to virtually walk in the city.

Part of the clues about the location of the films will be provided by putting stickers and graffitis in the city of Geneva, as well as planting real actors in the environment who will need to be questioned by the visitors. For online players, a network of TINAG-style web sites and fictional Facebook characters will be created.

The questions that remain unanswered are:

- Will physical and online visitors be able to see each other and to exchange messages ?
- We were thinking of allowing visitors to leave GPS tags and annotations, for others to see.
- What kind of navigational cues will be displayed on the user phone, in between two content nuggets? At EPFL, Nicolas Nova, in his usability experiment «CatchBob!» [12], allowed players to see each other and to draw arrows in order to point each other in a certain direction. Whereas Blast Theory used a simple chat system between the players, so they could share information about the state of the game and the position of the runners.

Conclusion

Although our design process is still in progress, we seriously think there is a lot to learn about today's marketing techniques such as ARGs, for the design of audiovisual guides and city walks. If official cultural institutions in Europe could learn from advertisement agencies, the museum experience could become fun and interactive, instead of being stiff and boring, and risking to keep at a distance the young audiences, which are the ones that most need to learn about and be aware of our collective past.

Acknowledgements

I would like to thank the Media x Design Lab, its fantastic team and Prof. Jeffrey Huang at the Ecole Polytechnique Fédérale de Lausanne for hosting me as a Visiting Researcher for this research.

References

- [1] Benford, Steve; Crabtree, Andy; Flintham, Martin; Drozd, Adam; Anastasi, Rob; Paxton, Mark; Tandavanitj, Nick; Adams, Matt; Row-Farr, Ju; «Can you see me now?». ACM Transactions on Computer-Human Interaction, Vol. 13, No. 1, 2006.
- [2] Björk, S., Falk, J., Hansson, R., and Ljungstrand, P. «Pirates! using the physical world as a game board». Proceedings of IFIP TC.13 Conf. on HCI, Tokyo, Japan, 2001.
- [3] Chen, Jenova. «Flow in games». Communications of the ACM, 2007.
- [4] Crow, David; Pan, Pengkai; Davenport, Glorianna; «M-Views: A System for Location-Based Storytelling». ACM UbiComp, Seattle, 2003.
- [5] Donovan, B; Wood, Alison; Davenport, Glorianna; Strohecker, Carol; «Nature Trailer Physically Navigate Stories in the Wild». Workshop: Design Methods for Ubiquitous Computing in the Wild, MUM. Norrkoping, Sweden, 2003.
- [6] Falk, Jennica; Ljungstrand, Peter; Björk, Staffan; Hansson, Rebecca. «Pirates: proximity-triggered interaction in a multi-player game». Proceedings CHI extended abstracts, 2001.
- [7] Fischer, Ulrich. «Walking the Edit A Research Project of the Master Cinema Network in Switzerland». Interactive Storytelling. Lectures Notes in Computer Science. Springer Berlin, 2008.
- [8] Gaye, Lalya; Mazé, Ramia; Holmquist, Lars Erik; «Sonic City: The Urban Environment as a Musical Interface». Proceedings NIME, Montréal, Canada, 2003.

- [9] Greenaway, Peter. «Cinema Militans Lecture Toward a re-invention of cinema». petergreenaway.org.uk, 2003.
- [10] McGonigal, Jane. «This is not a game: Immersive aesthetics and collective play». DAC Streamingworlds Conference, Melbourne, 2003.
- [11] Nisi, Valentina; Oakley, Ian; Haahr, Mads. «Inner City Locative Media: Design and Experience of a Location-Aware Mobile Narrative for the Dublin Liberties Neighborhood», Intelligent Agent 6, no. 2, 2006.
- [12] Nova, Nicolas. «The influences of location awareness on computer-supported collaboration». PhD thesis, EPFL, 2007.
- [13] Pan, Pengkai; Kastner, Carly; Crow, David; Davenport, Glorianna; «M-Studio: an Authoring Application for Context-Aware Multimedia», Proceedings of the tenth ACM international conference on Multimedia, Juan-les-Pins, France, 2002.
- [14] Ruston, Scott. «Blending the Virtual and Physical: Narrative's Mobile Future?», refractory: a Journal of Entertainment Media. Vol.9, «Traversing Narrative Media: Histories, Identities, Futures», 2006.
- [15] Starobinski, Jean. «La Transparence et l'Obstacle». Paris, Gallimard, coll. «Tel», 1971.
- [16] Stein, Jennifer; Ruston, Scott; Fisher, Scott S. «Location-Based Mobile Storytelling», International Journal of Technology and Human Interaction, 5(1), 41-50, January-March 2009.
- [17] Wershler, DS. «[murmur], the Refrain, and Territoriality». Canadian Journal of Communication, 2008.
- [18] Wood, Alison; Davenport, Glorianna; Donovan, Brendan; Strohecker, Carol. «Stories for Remote Places: Content, Structure, Device, Trials», International Conference on Hypermedia and Interactivity in Museums, 2004.
- [19] http://www.memoways.com
- [20] http://www.cardiffmiller.com/artworks/walks/

[21] http://www.mu.asso.fr/

[22] http://www.soundwalk.com/