

Chapter 15

Augmented Reality Game in the Hybrid Urban Environment

Alena Mesárošová

Universidad Politécnica de Valencia, Spain

Manuel Ferrer Hernández

Universidad Politécnica de Valencia, Spain

ABSTRACT

In this article the authors will present the uniqueness of the Augmented Reality game technology within the context of the process of hybridization of contemporaneous city and its derivative changes in the relationship between citizen and city. The authors will review the Augmented Reality game by approaching it from the different focuses. They will discuss the themes like aesthetics, gamification, gamespace classification and mobile application development challenges related to the Augmented Reality games. The own project ARecycleNOID, the Augmented Reality art game in the hybrid urban space will be presented and analyzed in the terms of the creation of the experimental urban interactive environment. A new form of game experiences the city.

INTRODUCTION

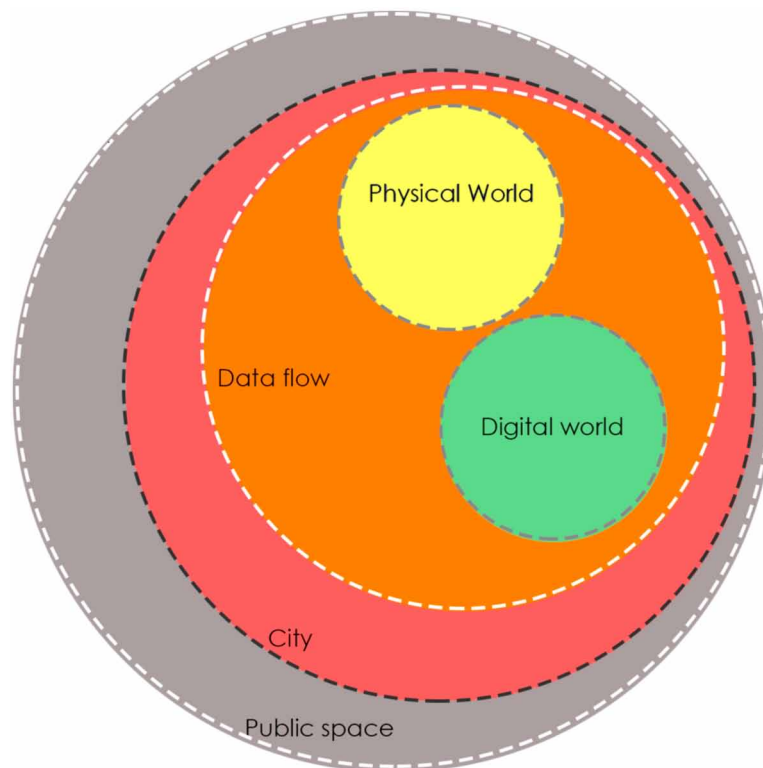
In the ARecycleNOID Application the act of playing a game in the urban space is the main characteristic of this interactive intervention. We place an Augmented Reality game on the street, which for us is a plausible representation of the public space. We understand a street as a free, social and cultural space, and not only a space of transit. Our aim is to return the ludic function to the street which in the nowadays city is commonly lost due to its traffic saturation. Another significant factor that marks the street as a not proper place for play is the enormous popularity of the videogames which are performed on the computer or similar devices. Contemporary society finds itself in the “digital age” and every “digital” action usually happens behind the screen. So we make the use of Augmented Reality technologies for Smartphones that allow us to move the action of a digital game right into the street. We vindicate the importance of the act of playing in a public space and pay tribute to Huizinga’s *Homo Ludens* and his idea of a “magic circle” (Huizinga, 1971). Huizinga’s theory states the play as an elemental feature of

DOI: 10.4018/978-1-5225-5469-1.ch015

every culture which contributed to the development of the society and its culture. The boundaries of the “magic circle”, a space destined for a play, can be represented as a real world boundaries, or the limits can be immaterial, a result of the rules and pacts previously agreed among the players. Salen and Zimmerman (2003) expanded the Huizinga’s theory and made their own contribution to the definition of the magic circle as “...the idea of the special place in time and space created by a game. In a very basic sense, the magic circle is where the game takes place” (pp. 95). In these terms we create a unique “magic circle” within the game, which is no longer just an “Imaginarium” a sort of a virtual space, but creates a new form of the space, where the virtual components and real components have to be present as an elemental condition of creating a space for the game. Mixing the “virtual” with the “real” world leads to a new form of physical space, which could be called as an augmented urban space. Where virtual and physical elements do not represent two opposite elements, but create together a unique urban space as define Aurigi and De Cindio (2008).

By visualizing a Geo-located digital content in the urban space we are moving into the augmented urban space, which has a capacity to acquire multiple dimensions, due to an intangible material property of the virtual elements. It is possible to locate several “layers” of digital content in the same physical space, which grants the user the possibility to choose a personalized urban space. We create a new type of physical space, the “Augmented Space” with a dynamic data overlaid, according to Manovich (2006). In today’s society the implementation of new technologies within the everyday life has produced significant changes in the extension and the way of understanding the public space. The mixture of the physical and the digital worlds breaks the boundaries of the public and the private (Figure 1).

Figure 1. Hybrid public space



10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/augmented-reality-game-in-the-hybrid-urban-environment/199692

Related Content

Visual Culture Versus Virtual Culture: When the Visual Culture is All Made by Virtual World Users

Hsiao-Cheng (Sandrine) Han (2017). *International Journal of Virtual and Augmented Reality* (pp. 60-71).
www.irma-international.org/article/visual-culture-versus-virtual-culture/169935

On Being Lost: Evaluating Spatial Recognition in a Virtual Environment

Tomohiro Sasaki and Michael Vallance (2018). *International Journal of Virtual and Augmented Reality* (pp. 38-58).
www.irma-international.org/article/on-being-lost/214988

Visual Culture Versus Virtual Culture: When the Visual Culture is All Made by Virtual World Users

Hsiao-Cheng (Sandrine) Han (2017). *International Journal of Virtual and Augmented Reality* (pp. 60-71).
www.irma-international.org/article/visual-culture-versus-virtual-culture/169935

An Exploratory Study Examining Group Dynamics in a Hackathon

Alana Pulay and Tataleni I. Asino (2019). *International Journal of Virtual and Augmented Reality* (pp. 1-10).
www.irma-international.org/article/an-exploratory-study-examining-group-dynamics-in-a-hackathon/239894

Using Social Image Sets to Explore Virtual Embodiment in Second Life® as Indicators of Formal, Nonformal, and Informal Learning

Shalin Hai-Jew (2023). *Research Anthology on Virtual Environments and Building the Metaverse* (pp. 458-490).
www.irma-international.org/chapter/using-social-image-sets-to-explore-virtual-embodiment-in-second-life-as-indicators-of-formal-nonformal-and-informal-learning/316108