The Castle of Asterion

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ABSTRACT

In this paper, I present The Castle of Asterion, which is a 3D-videogame that explores and challenges the perception of space. Created with Unity3D, the game puts the player in a labyrinth with minimum visual information and requires the players to use their hearing for navigation. By encouraging the players to abandon their sight and to trust their hearing for navigation, the piece tries to show our dependency on vision and forces us to explore the capabilities of hearing. The game employs standard first-person point of view and controls to create an immersive experience. The simple visuals provide as minimum information as possible and leave the audio, which is realized in 3D by using binaural channels as the dominant source of information. The whole game is deployed as a webpage and can be accessed easily. In the showings, the game is defined as hard but revealing by the players and participants.

Categories and Subject Descriptors

J.5 **[Arts and Humanities]:** – *architecture, arts fine and performing, fine arts, language translation, linguistics, literature, music, performing arts (e.g., dance, music).*

K.8.0 **[Personal Computing]:** General – *games.*

H.5.2 **[Information Interfaces and Presentation]**: User Interfaces – *Auditory (non-speech) feedback, benchmarking, ergonomics, evaluation/methodology, graphical user interfaces (GUI), haptic I/O, input devices and strategies (e.g., mouse, touchscreen), interaction styles (e.g., commands, menus, forms, direct manipulation), natural language, prototyping, screen design (e.g., text, graphics, color), standardization, style guides, theory and methods, training help and documentation, user-centered design, user interface management systems (UIMS), voice I/O, windowing systems).*

H.5.5 **[Information Interfaces and Presentation]**: Sound and Music Computing – *methodologies and techniques, modeling, signal analysis, synthesis and processing, systems.*

General Terms

Design, Experimentation, Human Factors,

Keywords

Electronic and Time-Based Art, Art Game, Sound Game, Audial Perception, Navigation, Labyrinth.

1. INTRODUCTION

Today, videogames are an important part of the culture. According to studies, an American of age 21 spends on average 10000 hours on videogames [1]. Videogames have evolved since Spacewar [2], even though most of the videogames are created for entertainment, the gaming medium is also employed for education and arts.

Artists have been involved with the medium since early nineties in order to express their ideas [3]. Artists such as Joseph DeLappe with Dead in Iraq [4], Cory Arcangel with Pro Tools [5], Toshio Iwai with Electroplankton [6] and Jeffrey Shaw with Legible City [7] used gaming concepts and medium to create installations and performances.

Following along these lines, The Castle of Asterion is created as a protest to visual-heavy culture of the world. It is aimed to create an experience that utilizes and celebrates the hearing.

Figure 1. Main menu of The Castle of Asterion

2. THE CONCEPT

The Castle of Asterion is a new media work in the form of a short 3D-videogame that is experienced through a 1st-person point of view. Inspired by Borges' The House of Asterion and Kafka's The Castle, the game takes part in a labyrinth and it challenges how we perceive and navigate the space around us. In the game, the players try to find their way through the core of the labyrinth via the sound and the music they hear.

The experience exposes our tendency to depend on the visual information in our daily life rather than the audio information that exists around us. Finally, the game forces the players to abandon their visual understanding and realize their ability to visualize the space through hearing as they venture through the game.
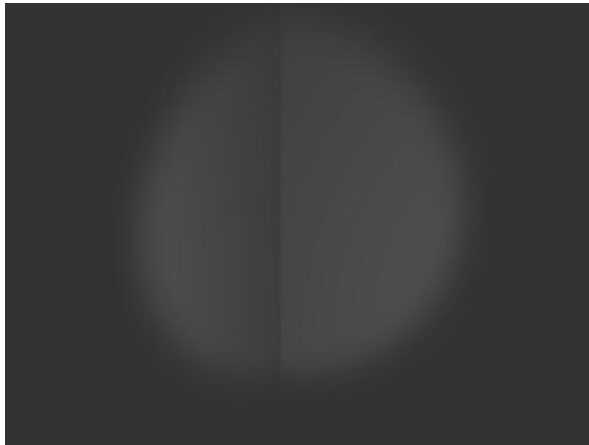

Figure 2. Scene from the first room

3. IMPLEMENTATION

The medium, videogame environment, is chosen because of its intrinsic ability to provide interaction, audio, video and ease of access. The audio is represented in a 3D-space via binaural channels. Music and sound of different types, such as pleasant or disturbing, is used to lead or mislead the player.

The visuals of the game are simplistic and they provide as little information as possible. The scene is lit by the flashlight that the player is equipped with. However, in fact the flashlight is not much useful and most of the time hurts the player as the player tries to use it. The game uses the architecture of labyrinth to create a challenging experience but it is the lack of visual information that makes the players lose their sense of location even in a simple space.

The whole level consists of four rooms with the first and the last common and the second and third depends on the path chosen in the first room. Of these rooms, the first one is a simple T-shaped corridor; the second one is an empty tower; the third one is a large square room and the last one is a real maze.
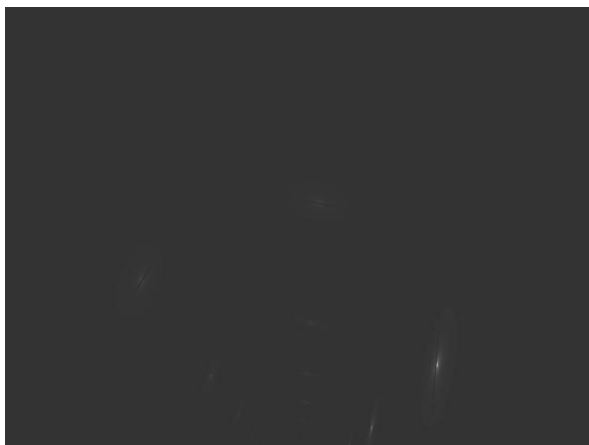

Figure 3. Scene from the second room

Figure 1 shows the main menu which also features the last part of the game. Figure 2 is an image from the first room and it is a scene that features the maximum amount of visual information. Lastly, Figure 3 shows the second room, where the player in fact just falls with the sound of a siren.

To reach to the center of the labyrinth, the player needs to find the sound sources since they might have teleporters that take the player to the next room. Depending on the songs the players track to find the teleporter, they will start the last room in a different location making the journey harder or easier.

4. REQUIREMENTS

The game can easily be accessed from a web browser with the Unity3D plugin. However, for higher resolutions an executable is necessary. The executable version can run both Windows and Mac operating systems. Even though, the minimum requirements for the game are not investigated scientifically, the game runs successfully on a computer with Intel Celeron 1.7 GHz processor, 1.75 GB of RAM. However for the experience to be meaningful the space must be isolated from noise and the sound needs to be reproduced in stereo. In addition, a relatively dark lighting condition is required as the graphics of the game are mostly dark.

The controls of the game require a regular keyboard and mouse. The list of controls keys can be accessed from the game in the main menu.

5. CONCLUSIONS

The reception of the piece was mixed. Unfortunately, the standard first-person-control scheme was too much of an obstacle for non-gamers. On the other hand, people with gaming experience showed two general tendencies: The first group tried to find ways of using their vision to 'beat' the game. Some succeeded in completing the game without experiencing the main idea, most got alienated with the game. The second group followed the instructions and used their ears. Again most of the people who used their listening skills could not finish the game but they defined the experience as revealing and enlightening as it encouraged them to use their hearing instead of vision for navigation. Most expressed their hesitancy in employing their ears for navigation initially and said the game was hard.

The full game can be accessed from:

http://web.ics.purdue.edu/~rmungan/TheCastleofAsterion

A short video documentation can be found at:

http://vimeo.com/18774638

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