

## **Videogames as Medium and Art**

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### **Abstract**

*It has been reported people spend around 10.000 hours on video games until the age of 21 in the United States of America (Prensky, 2003). With the improvements of technology, videogames provide imagined worlds with their own set of rules. These artificial realities introduce a high-level immersion via interaction whose possibilities are only limited by creativity and technology. They are fed by the possibilities of impossible things, our collective memory and our individual memory and they produce an alternate reality, which can be seen as nostalgic, escapist, illusion or even real. This paper discusses the notion of videogames as a medium for art. First, an introduction about videogames including definition and history is given. The second part of the discussion is based on investigating certain commercial games, chosen from different genres, as products of sound art, visual art and audiovisual art. The third part focuses on art works that use video-game technology as a medium. New media works and art installations, which are designed as video games, such as Toshio Iwai's Music Insects are investigated for this cause. Eventually, the article ends with a conclusion that video games are not only for having fun or for education but they also have the potential to be on the same level with a canvas as it gives great opportunities for artists to create, implement and share their ideas.*

## **1. Introduction**

The videogame world is still very young, but it has also improved greatly since games like Spacewar from 1961 and Pong from 1972 (Kent, 2001). The first videogames were requiring specific hardware and was requiring engineering skills essentially. There were strict limitations on what could be done due to hardware such as display screens, memory size and computational power. Now, videogames are everywhere in handheld devices, phones and web browsers designed by engineers, artists and writers and used for fun, entertainment, training and education. Finally, the question is can they be art?

There is no doubt that videogames include artwork such as and the traditional approach to video games only includes concept drawings, graphics, soundtracks and the sounds as pieces of art but the resulting game as a whole is not regarded as art as movie critic Roger Ebert points out videogames can never be art (Ebert, 2010). Or can they be? Or are they already?

This paper, which also exists as a videogame, discusses the place of videogames and their medium in the world of art, while avoiding the discussion of what art is. In addition, the reasons for the avoidance will also not be given in order to avoid implying anything about the borders or the definition of art. The benefits of investigating video games from the perspective of art will be offered through readings of commercial and art videogames.

### **1.1. What is a videogame?**

Before starting the discussion about the relation between videogames and art, the term, videogames, needs to be clarified. Grant Tavinor gives detailed study on the definitions of videogames and introduces his definition as (Tavinor, 2009, p. 26) "X is a videogame if it is an artifact in a visual digital medium, is intended as an object of entertainment, and is intended to provide such entertainment through the employment of one or both of the following modes of engagement: rule and objective gameplay or interactive fiction." Another detailed discussion exists in "Videogames and Art" (Clarke &

Mitchell, 2007). Yet, my description would be more general, loose and it will be based on the medium and it will be independent of the content and the aim.

Thus, I will define the medium initially. The videogame platform is a medium that can be interactive via visuals, audial and physical movements, and it can include visuals as drawings, still images, graphics, animations and motion picture; it can include audio as music, speech, musical instrument sounds and sound effects; and text as codes, menus and in-game text, in order to tell something or the make people feel in a certain way.

This description, even though it can not cover all the exception, prevents us from excluding some major types of videogames such as, videogames that are not digital, videogames that are mainly soundgames, videogames that are not for fun, videogames that do not have a win condition and videogames that do not have an end.

## **1.2. Why are videogames important?**

A not so recent study shows that in U.S.A. on average 10.000 hours of a 21-year-old person is invested in videogames (Prensky, 2003) and any basic internet search will show the size of the industry, which is still growing. For example, during 2009, 1099 games have been released for only PS3, XBOX 360, Wii platforms. In addition, this number does not include computer games, online games and games for handheld devices (Leigh, 2009) or the game market is predicted to increase to around \$50 billion (Scanlon, 2007) or Grand Theft Auto IV had a first week sale of \$500 million (Tavinor 2009). For the discussion of art, this might or might not mean a lot depending on the nature of the art work, but it certainly shows that videogames are a part of today's culture. Many people are showing interest and using the medium either as a creator or as a consumer.

Now videogames have already become a part of education and social studies (Wardrip-Fruin, N. 2004), (Wardrip-Fruin, N. 2007), (Harrigan, P. (2009)). Serious games are being developed with the sole functionality of teaching, while regular videogames are used as a material and method for teaching (Squire, 2004). For the last 5-6 years, the discussion has also spread to the world of art as

the number of books and papers that discuss the relation of videogames and art have increased significantly.

On the other hand, the videogame medium has a lot to offer as a new media. It is an inherently audiovisual medium and it enables intuitive ways of interaction through programming via visuals, audio and physical movement. The high level of interaction through virtual reality increases the level of immersion and can isolate the player from the real world as the player gets lost in the flow of the game. The game worlds, which is not necessarily realistic, becomes real as the players stop comparing it with reality and start thinking between the rules of the game. Eventually, this enables the players to experiment living in an alternate world in an alternative way through role-plays or their alter egos.

## **2. Videogames as Artworks**

In this part, two commercial videogames will be investigated from the point of the usage of the medium as artworks. These games are chosen in order to show a small example what is being created with the videogame medium, as well to discuss them from an art's point of view.

### **2.1. Silent Hill 2**

Initially released in 2001 by Konami for PlayStation, Silent Hill 2 (Konami, Team Silent, Creature Labs, 2002) is psychological horror-survival game, with the aim of disturbing a person. It is the second installment of the Silent Hill franchise, which includes eight videogames, two movies, comics and books. Instead of fighting, like most of the games from the same genre, Silent Hill 2 focuses on story and puzzle solving. The player experiences Silent Hill 2 through the main character James, who goes to the town, Silent Hill, in hopes of find his dead wife, from whom he had recently received a letter.

The game starts in a peaceful town but as the game continues and dives into the mind of James, the environment evolves into mazes. A more detailed analysis of the architecture of the environment can be found in Space Time Play (Degler, 2007). The game opens with the video of James talking to

Maria, who has a disturbingly resemblance with James' late wife, behind bars as seen in Figure 1. The game blurs the notion of definite truths like good and bad. After playing James as the good and sane person, in the very depths it is shown that James is the murderer of his wife Mary.



Figure 1: Silent Hill 2

The game has multiple endings and they are decided by very subtle events rather than obvious choices. While looking for Mary, if James does not apply first aid to his wounds and wanders most of the time hurt the game ends with a darker ending. Another dynamic is the attention paid to Mary or Maria, by staring at Maria or the picture of Mary, James can change the end.

Another point of success in Silent Hill 2 is the audio. The soundtrack composed by Akira Yamaoka includes diegetic sounds in the non-diegetic soundtrack thus the songs not only reinforce the mood, the emotion and the immersion but also they are a part of the environment. James is equipped with a radio that receives static noise when monsters, which are designed by the usage of uncanny valley and created from James' mind, are around.

## 2.2. Fallout 3

Fallout 3 (Bethesda Game Studios, 2008) is the fifth installment in the Fallout released in 2008 by Bethesda Software. The game offers the players a free world in the form of Washington D.C. after a

nuclear war as seen in Figure 2. The player gets to experience the life of a vault dweller, who due to circumstances becomes a nomad in the wastelands, scavenging the ruins for old relics such as cola and trying to stay alive while following his own path.



**Figure 2: Fallout 3**

Along the ruins of the future and the science fiction, the game offers a nostalgic world. The objects, art style and even the hairstyles are retro. The game fills the grayness and the dark atmosphere of the poverty-stricken future with black humor and jokes successfully. This might seem absurd in real world but it feels very normal in the world of Fallout as the whole world is constructed in that manner.

In the game, the character is equipped with a radio, which plays the soundtrack of the game. The radio stations and the signal quality depend on the location in the game. The radio programs are dynamic and reflect the changes that happen in the game, on the other hand, the music played from the radio includes but not limited to The Inkspots and Billie Holiday.

In contrast to Silent Hill 2's disturbing and menacing visual style, Fallout 3 presents a world that is inviting for investigation while triggering the player's curiosity. Real world spectacles like Washington Monument and United States Capital gives the player a feeling of admiration and power in Fallout 3. While in Silent Hill 2, the low visibility of the environment due to fog, gives a false sense of peace that is shattered with radio noises or unexpected spaces in a small town.

The above games show a very tiny fragment of what videogames can offer. Some other videogames for further interested are Planescape: Torment (Black Isle Studios, 1999), Limbo (Playdead Studios, 2010) and Sanitarium (DreamForge Intertainment, 1998). The main critics of videogames are the shallowness in meaning and story such that some of the “deep” games employ a story, which would be defined as basic in other mediums (Wardrip-Fruin, N. 2004). Major reasons behind this are the profile of the target audience, the aim of the videogame and the problems that come with having a dynamic and interactive story, as the amount of content may increase exponentially with respect to a static story.

### **3. Artworks as Videogames**

Videogame art is not limited artworks that are specifically developed videogames but they also include stills, videos and sounds (Clarke & Mitchell, 2007). However, in this part, playable videogames that have been developed and regarded as artworks are given. These games are not developed by large companies employing groups of people; instead these games are designed either by a single or a small group of artists.

#### **3.1. Music Insects**

Designed by Toshio Iwai, Music Insects is simply a pixel-based drawing program that can compose and play music in real-time and animate the insects. Music Insects was initially designed as a museum installation, later it has also been converted into an arcade style videogaming machine. The player creates the image and the bugs that create different sound with respect to the instruments that they are affiliated with perform the image as a composition. Different types of bugs and different types of food with real-time production capabilities introduce a wide range of musical ideas (Daniels & Naumann, 2010). The idea is later improved in SimTunes (Maxis, 1996).

#### **3.2. Electroplankton**

Designed by Toshio Iwai for Nintendo DS, *Electroplankton* (Indies Zero, 2005) is a descendent of Iwai's games that introduce music creating entities in the game. *Electroplankton* is a game that includes composing, performing via audiovisual interactivity. The game uses biological concepts as metaphors for directing the visuals and the audio. The aim of the game is allowing the players to create their own interactive audiovisual performance as a visual music instrument (Daniels & Naumann, 2010).

### **3.3. Fijuu**

*Fijuu* is a videogame developed by Julian Oliver and Pix for PC between 2004 and 2008. It is an interactive instrument based game. The game works with the idea of taking visual input and giving audiovisual feedback via physical interaction. The player manipulates the complex 3D environment that results in changing the sound. The visual environment resembles a record player as it consists of layered disks that are related with sounds. By playing with those disks, the user creates music as well as changing parts of the visual environment (Daniels & Naumann, 2010).

### **3.4. REZ**

Designed by Tetsuya Mizuguchi for PlayStation and Sega, *REZ* (United Game Artists, 2001) is a rhythm based music game like the popular game *Guitar Hero*. Yet in the game, the player does not try to hit a button at a certain time, instead the player flies around and fight with the enemies in the science fiction environment. The actions done are reflected via the soundtrack, the timings of the output sound are adjusted to match with the rhythm. *REZ* takes the basic approach of "Mickey Mousing" as in the early computer games, yet uses it to create a more complex diegetic – non diegetic music. The musical style of the game arises from research done on African tribal music and techno music. On the gaming side, *REZ* has a mode in which the character is invincible so that the player can focus on creating music. The initial success of the game resulted in a rerelease of the game with improved graphics for newer gaming consoles (Daniels & Naumann, 2010).

These are again a small portion of the work done in this area. Some other examples for art videogames for further interested are *Q3apd* by Julian Oliver (Daniels & Naumann, 2010) and Steven



Pickles, Small Fish by Masaki Fujihata (Daniels & Naumann, 2010) and Every Day the Same Dream ( Molleindustria, 2009) from Molleindustria.

#### **4. Conclusions**

Videogames are one of the applications that is driving the necessity for more computational power and they can employ most of the abilities of computer, which is regarded as the ultimate medium by Lev Manovich and Friedrich Kittler (Hayles, 2005). Computer might or might not be the ultimate tool depending on the medium but videogames can bring the most out of them via utilizing interaction via sensors such as buttons, camera, microphone, location sensors, computation, vision, sound, connection to others through internet.

The videogame industry is still mainly driven by money and entertainment as the December 2010 release World of Warcraft shows by selling 3.3 millions of copies in the first 24 hours (Molina, 2010). Creativity and originality is not the main concern. However, as game engine tools, software development kits, modding and hacking tools, which are very distinct cultures under videogames and beyond the scope of this paper, become available people with different intentions such as artists will use them. Today, source codes for a number of games are available and some professional game design tools have free versions that anybody can download and use. New generations will be more exposed to the medium.

The interaction between videogames and art have been existent since early nineties (Clarke & Mitchell, 2007) and a look around the web gives you many artists, events and papers involved in the topic. Space Time Play discusses the architecture within the context of videogame design and videogame design within the context of architecture (Borries, Walz, & Böttger, 2007). Chad Chatterton employs the relation between videogames and landscapes in his works (Clarke & Mitchell, 2007). The Art History of Games was a symposium organized by Georgia Tech and Savannah Institute of Art and Design in February 2010. Suzanne Treister, Mauro Ceolin, Miltos Manetas, Jon Haddock and Cory Arcangel employ the style of videogames in their artworks (Clarke & Mitchell, 2007). Joseph DeLappe uses videogames to display the results of his investigations related to politics and war (MoMA | An

Evening with Joseph DeLappe, 2010). The Legible City by Jeffrey Shaw replaces a real city's buildings with writings in his virtual reality environment, where the user drives around via a training bike in real life, as he blurs reality with virtual reality (Manovich, 2001) (Mealing, 2002). Paul Henry Smith and Andrew Bucksbarg are among the examples for artist that use hacked game consoles and controllers for performances (Lozaw, 2009) (Galaga Remix 2, 2010). In Expositur: Virtual Knowledge Space, Sylvia Eckarmann and Mathias Fuchs uses videogames to create a virtual gallery do their exhibitions (Clarke & Mitchell, 2007).

As an audiovisual artist videogames as works prove to be a rich source of examples, while the medium serves as a canvas that can be shaped to artist' will. My ending conclusion is that this is a very new media with both tremendous potential and kinetic and approaching with narrow and dismissive does not solve anything (Brandon, 2007). Yet, I direct the question to the reader after the paper: Can videogames be art or is art only limited to great poets, filmmakers, novelists, painters, composers and poets (Ebert, 2010)?

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