Game Art Curriculum in Fine Arts Major*

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ABSTRACT

Based on my teaching experience in the Art colleges, I found potential usages of a game engine as a tool for fine art. This paper will provide new way to use game engine; Making a Virtual Art Gallery with a real-time 3D rendering game engine and Making a Draft movie for a 3D Animation in postproduction using a real-time 3D rendering game engine. This paper will also provide the case study of various projects draft movie for a 3D animation with Real-time 3D Rendering Game Engine. This study will provide new possibility of game engine.

I. Introduction

This paper discusses a new teaching method that aids college students in Fine Arts to access game art easily. The game industry is in demands of competent artists, but 3D game engine that is specifically designed for game development is not a simple tool for students in Fine Arts major. The students are usually not interested on the complex structure of coding or commercial aspect of the game industry. To encourage them to study game art spontaneously, art colleges need to invent a new education scheme. This paper suggests the alternative approach for game art training by applying the 3D game engine as a new medium that is suitable for Virtual Reality and Interactive Cinema. The author has been experimented on the new system for three years to art students in Pratt Institute and Chung-Ang University.

There are many game engines such as Quake, Unreal, Jupiter, and so on. These commercial game engines cannot be thought without games. Although every game engine is specifically designed for games, when we taught this to the art students, we found their creative ideas was not limited to its original purpose. Based on my teaching experience in the Art colleges, CGIM in Pratt Institute and Art department in Chung Ang University, the author found potential usages of a game engine as a tool for fine art. In this paper, we want to prove the new possibility of a game engine that people ignored intentionally or unintentionally so far.

II. Statement of the problems

The percentage of employment of students in Fine Arts area has been decreased for years. It is almost a miracle to find an open position from the few healthy post production companies and win it against experienced artists for a student as a novice artist. Therefore many art colleges have made an effort to widen the area of employment. One of the efforts is to provide game art courses for artist positions of stable game companies in various sizes, because the games market differs from the movie market in that it is less

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centralized [1]. Although many students have a wrong idea that game industry is not as important as movie industry, the size of game industry surpassed movie industry's years ago [2]. Moreover the territory that computer artists involved is larger than the one in movie industry.

Top Ten Industry Facts (ESA - Entertainment Software Association) 2003

Fifty percent of all Americans age six and older play computer and video games.
The average age of a game player is 29 years old.
Thirty-nine percent of game players are women.
Computer and video game software sales grew eight percent in 2003 to $7 billion and are expected to show strong growth over the next few years.
In 2003, more than 239 million computer and video games were sold, or almost two games for every household in America.
All games are rated by the Entertainment Software Rating Board (ESRB), and sixty-three percent of games are rated "E" for Everyone. (For more information, please see www.esrb.org.) - continue
70% of the top 20 best selling games in 2003 were rated "E" for everyone or "T" for teen.
Ninety-two percent of all games are purchased by adults over the age of 18.
Ninety-six percent of parents surveyed who have children under the age of 18 said they are paying attention to the content of the computer and video games their children play, and sixty percent of parents say they play interactive games with their kids at least once a month.
The vast majority of people who play games do so with friends and family. (Almost sixty percent of frequent game players play with friends, thirty-three percent play with siblings, and about one-quarter play with their spouse and/or parents.)

A game company is not a small post production company, but it has its own unique development system. To be an art department member, a game artist has to acquire special techniques that do not exist in post production process. It has been only few years art colleges began to provide the game art courses [3].

The author had worked for a game company as an art director for 5 years, and currently he is a full time faculty member of Chung-Ang University. When the author taught a game art course to the students in Fine Arts - two years in Pratt Institute and one year in Chung-Ang University - he discovered problems of conventional training process. To acquire standard game art skills, commercial 3D game engine study is the most practical choice, but without understanding the engineering side of the 3D game engine, the art students are easily discouraged by the complex structure of it. Although the subject mainly focused on art, knowledge on the game engine technology cannot be overlooked to produce optimized game art. It is the ground game art technique to distinguish the most efficient approach based on the development environment.

There is another problem. Some students found difficulty in being familiar with a game due to the conspicuous commercial side of game industry. The game industry is partially responsible for this stereotype, but the students' misconception for the new medium is more serious problem.

III. Solutions to the problems

3.1 Apprehension of game as new art medium

Narrow definition of a game in the computer game market is limited to the PC based computer game and the video game, but the nature of a game is more profound. Hunting for survival vs. hunting for amusement, and horse riding for transportation vs. horse racing for