# What is video game

PanCangchao

ZhejiangNormaluniversity

Advanced Game Engineering

#### 1. A game, as audio-visual media

Computer technology will be in the real world game transplantation into virtual digital space: a computer program can handle the game rules and decision system, according to the operation of the players to feedback results; Keyboard, mouse, joystick, peripherals can achieve human-computer interaction; And in the meantime, help realize that every possible interface, is the medium of audio. So, we can put the game named interactive audio-visual media, it is based on the information transmission, but with movies, TV, animation, and other forms of media, relying on the audio-visual media (Vaudio) platform. It can be said that the video game is the nature of interaction (play), but the premise, can see and hear. It was here that the game's visual sexual problems.

Western scholars have medium of video games and film art association has done the following description of "the most active cultural surface film interface can be converted to computer culture is computer games. In the 1990 s, game designers from 2 d to 3 d interface, and began to increasingly systematic use of film language. The game with gorgeous film as the opening, and then to set up the mode, establishing background, metasomatism story... no matter what type of games - action adventure, fighting, flight simulation, first-person action, athletic or simulation class - relies on from the film photography, this includes the camera Angle and depth of field, full of expressive force computer generated 3 d light and shadow to create atmosphere and mood." 1) today, the size of the video game industry has long been beyond the film industry. More and more movie is adapted into the game, and more and more games had been changed to movies. The current foreign some big issue, besides into theaters, video rental market, network broadcast platform, will also make relevant video games to sell at the same time. Widespread game work, by using its characters and virtual space to produce all kinds of engine. These phenomena show that in the current era of visual culture, to Vaudi. On the basis of the flow of the medium in the form of fusion between the text and.

After all, the next question is, the game is not a movie, the visual mechanism in the medium of video games, and in the film and television media have different nature. The purpose of this article, is under the film medium as the reference, the analysis of video games in video production, organization and dissemination characteristics.

## 2. games, video production

Movie pictures were taken by the camera of the objective world people activities, stored on the film, and then through the projector. Film makers must advance the arrangement of the scene, performance in each camera, lighting, composition and a series of visual elements, real-time video again; Then through montage and post-production, images from the film fixed order; This process need cast cooperation, director, photography, editing, sound and other departments to cooperate.

Traditional film images from photographic record of the real thing, but the picture of the game, is completely rely on the computer image technology and animation design. Most

video games without organization to the real world of characters and events, (2) the graphics in visual content such as characters, actions, objects, environment is designed by the company make, and then into the game; Program for the contents of the images (scenario, props and role, etc.), and then in the process of the game, based on player feedback instruction, through the calculation of the game engine, real-time rendering of every frame image (some hints of plot cinematic sequences are hard-wired.

Dye CG animation, and real-time rendering of the animation is a big difference). In this process, the game of "like" because lost all reality refers to the related content, essentially has the image, can only be called a video.

## **3.** games, video of the organization

Traditional film depend on montage (through the combination of the lens to produce meaning) and the depth of field lens (meaning expressed in a single lens) mutual cooperate, to complete the narrative. The each shot in the movie can be produced in different space and time, but through the screen shots will be different according to certain logic clips, can build the integrity of the illusion, so as to complete the visual symbol encoding, express specific meanings.

Video game, requires careful analysis. 2 d era in the majority with horizontal version of the game, the game content is mainly on the plane. Role in extending continuously plane space action; When there is a dialogue or replacement plot, adopted the text box in the form of animation. Today's 3 d game scenes, players can manipulate the protagonist in the virtual 3 d space. Because the picture is controlled by the player, said from the lens grammar, both 2 d and 3 d games, until into the next checkpoint, or triggered another plot before the video player is basically stretches without pause, "long" is a complete. Such a

"long" main effect, coherence is to realize the game control, so as to ensure the smooth of the interactive game with the integrity of the process.

In addition, the current game role in metasomatic dialogue and drama, tend to play in advance to make good CG animation. The CG animation tend to be independent and picture editing, fully carried out in accordance with the rules of the film. But it is important to note that the animation in these interactive game passages, significantly reduced. Players can hardly intervention picture movement (but you can choose whether to let animation continue), must stop such as animation, players can continue to gain control of characters and images (3).

So, the organization methods of video game, especially in today's 3 d video games, is the graphics and game players control cinematic sequences generated by the two types of images. This paper referred to as "view" aura ": independent CG animation can only watch, players can't interference; The graphics of the movement and change, depends on the game. Both supplement each other, not only ensure the game interactive coherence, also has realized the full of narrative.

### 4. the transmission of video game

The spread of film image is after the video production. Filmmaking is completed, after developing, clips, such as processing, make copies, sent to theaters playing (or shown on the TV, Internet and other media). The audience sitting in the cinema or television, computer, appreciate the screen light in the dark, accept the audio-visual monitor information encoded and passed to him. So, the film is a unidirectional "accept" of output transmission process, and the propagation are separate from the production process.

But the game is not so: the game between the player and is a kind of "accept of output feedback one output" transmission of two-way cycle, the game process is the process of players in real time and interactive game system. So, the player is a hands-on operation who are in the process of the game, is the creator of the video game, and game video receiver. This means that the production and spread to film image can be separated, the game video communication process, is a closely integrated and production process of real-time.

In addition to generate real-time video it can also be recorded in other time after playing. Such mode of transmission developed on the basis of the video game engine. (4) engine film is a traditional film and television art, and interactive media technology (video game) after the integration of a new media form, is also a video game video and a way of communication. Because did not participate in the interactive process, from the strict sense, the engine film cannot serve as recipients of game players, they could not affect the rendering, but only linear game animation audience.