

A REVIEW STUDY ON THE DIFFERENT TYPES OF ANIMATION

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Abstract: Activity is a dynamic medium in which pictures or questions are controlled to show up as moving pictures. In customary animation, pictures are drawn or painted by hand on straight forward celluloid sheets to be captured and displayed on film. Today most activities are made with computer produced symbolism (CGI). Computer movement can be extremely detailed 3D activity, while 2D Computer animation can be utilized for elaborate reasons, low transfer speed or quicker continuous renderings. Other regular activity strategies apply a stop movement procedure to two and three-dimensional items like paper patterns, manikins or mud figures. The stop movement strategy where live on-screen characters are utilized as an edge by-outline subject is known as pixilation. In this research paper various uses of animation and different types of animation are discussed.

Keywords: Animation, GIF, UNICEF, communication, Stop motion

1.0 INTRODUCTION

Animation is nothing more than an optical illusion – a way of tricking our eyes into thinking that lots of static pictures are one moving image. Animation has been used as a communication tool in development programs since the 1960s and is still used by social change organizations today. Animation is the way toward making the deception of movement and change by methods for the quick show of a grouping of static pictures that insignificantly vary from each other. The dream—as in films when all is said in done—is thought to depend on the phi wonder. Artists will be craftsmen who spend significant time in the creation of Animation. Liveliness can be recorded with either simple media, a flip book, movie film, video tape, digital media, counting designs with enlivened GIF, Flash activity and advanced video. To show liveliness, a computerized camera, COMPUTER, or projector are utilized alongside new advancements that are delivered. Liveliness creation techniques incorporate the customary activity creation strategy and those including stop movement activity of two and three-dimensional items, paper patterns, manikins and earth figures. Pictures are shown in a quick progression, for the most part 24, 25 and 30 outlines for each second.

The use of animation in social change work largely falls within the field of development communication (also referred to as communication for development). The United Nation's Children Fund (UNICEF) defines development communication as a "process for sharing ideas and knowledge using a range of communication tools and approaches the empower individuals and communities to take actions to improve their lives" (UNICEF). It includes a diverse range of communication approaches, such as information dissemination, education and awareness raising, training entertainment (edutainment), behaviour-change communication strategies, advocacy, social marketing, communication for social change, and participatory communication.

1.1 DIFFERENT TYPES OF ANIMATION

The essential procedures and strategies are the same for all animation, and as a result of the extensive variety of uses, animation graduates are popular. Following are the various types of animation:

1. Simple animations
2. Traditional animation
3. Computer Animation
4. Stop motion

1. Simple Animation

Simple animation is a way of making a movie by using a series of drawings or before film was invented, there were early forms of animated pictures and that when viewed quickly one after another create the appearance of movement

2. Traditional animation

Traditional animation is basically classical animation or hand-drawn animation. Traditional animation, now and again alluded to as cel activity, is one of the more established types of animation; in it the animator attracts each edge to make the animation grouping. Much the same as they used to do in the days of Disney. In the event that you've at any point had one of those flip-books when you were a child, you'll recognize what I mean. Successive illustrations screened rapidly in a steady progression make the figment of development.

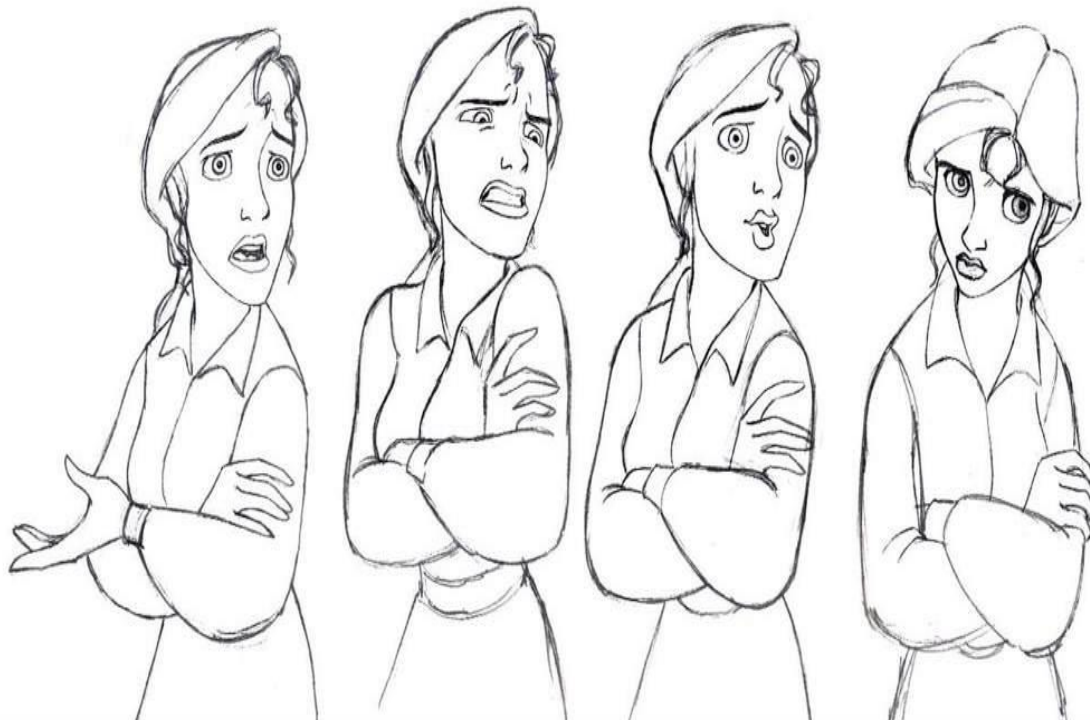


Figure 1.1: Traditional Animation

3. Computer Animation

Computer animation is the art of creating moving images via the use of computers. It is a subfield of computer graphics and animation. Increasingly it is created by means of 3D computer graphics, though 2D computer graphics are still widely used for low bandwidth and faster real-time rendering needs. Sometimes the target of the animation is the computer itself, but it sometimes the target is another medium, such as film. It is also referred to as CGI (Computer-generated imagery or computer-generated imaging), especially when used in films. To create the illusion of movement, an image is displayed on the computer screen then quickly replaced by a new image that is similar to the previous image, but shifted slightly. This technique is identical to how the illusion of movement is achieved with television and motion pictures. Computer animation is essentially a digital successor to the art of stop motion animation of 3D models and frame-by-frame animation of 2D illustrations. For 3D animations, objects (models) are built on the computer monitor (modeled) and 3D figures are rigged with a virtual skeleton. For 2D figure animations, separate objects (illustrations) and separate transparent layers are used, with or without a virtual skeleton.

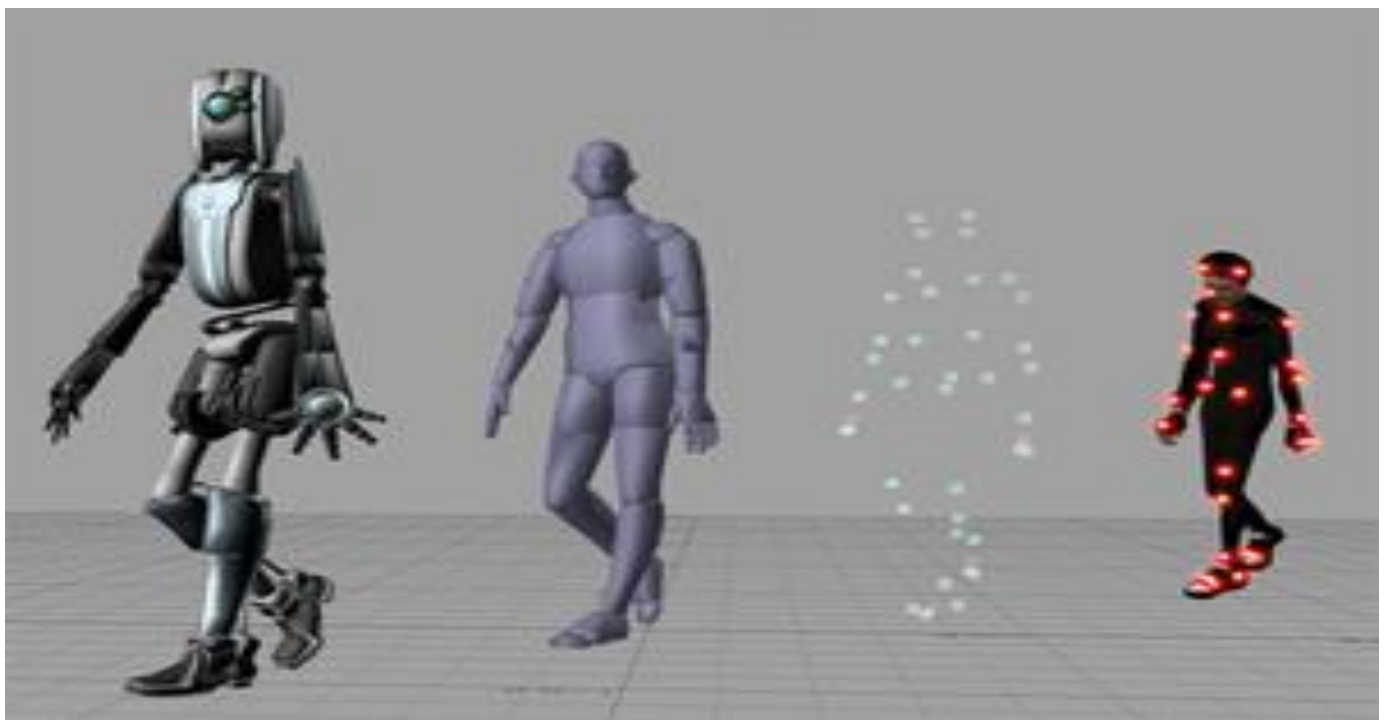


Figure 1.2: Computer Animation

4. Stop Motion

Stop motion is an animation technique that physically manipulates an object so that it appears to move on its own. Stop-motion is a simple, but time-consuming, form of animation where objects are physically manipulated and filmed frame-by-frame. Stop motion comes in many forms: Object animation and pixilation can use the stop-motion technique without specialist equipment, but special stop-motion models have often been used for special effects in live-action films. The 1933 King Kong film was famous for the stop-motion ape, and the original Star Wars films and The Terminator used stop-motion models for many of the aliens and machines. Following are the various types of stop motion.

- Puppet Animation.
- Clay Animation
- Cutout Animation.
- Pixilation.



Figure 1.3: Stop Motion

1.1 THE USES OF ANIMATION

Animation is used in the following multimedia technologies:

- **Cartoons**
The most common use of animation, and perhaps the origin of it, is cartoons. Cartoons appear all the time on television and the cinema and can be used for entertainment, advertising, presentations and many more applications that are only limited by the imagination of the designer. The most important factor about making cartoons on a computer is reusability and flexibility. The system that will actually do the animation needs to be such that all the actions that are going to be performed can be repeated easily, without much fuss from the side of the animator. Speed here is not of real importance, as once the sequence is complete, it can be recorded on film or video, frame by frame and played back at an acceptable speed.
- **Simulations**
Many times it is much cheaper to train people to use certain machines on a virtual environment (i.e., on a computer simulation), than to actually train them on the machines themselves. Simulations of all types that use animation are supposed to respond to real time stimuli, and hence the events that will take place are non-deterministic. The response to real-time stimuli requires a fast response and the non-determinism, requires a fast system to deal with it. This means that speed is the most important factor in simulation systems.
- **Scientific Visualisation**
Graphical visualisation is very common in all areas of science. The usual form that it takes is x-y plots and when things get more complicated three dimensional graphs are used. However there are many cases that something is more complex to be visualised in a three dimensional plot, even if that has been enhanced with some other effect (e.g., colour). Here is where animation comes in. Data is represented in multiple images (frames) which differ a little from each other, and

displayed one after the other to give the illusion of motion. This adds a fourth dimension and increases the information conveyed.

CONCLUSION

Following are the various conclusions drawn from this study:

1. With the help of stop motion animation, you are able to see a fluid presentation of an animated film, video or commercial.
2. Cell Animation is a less expensive Animation technique which is very useful Traditional animation technique as well as any artist or animator can create it without technology such as Computer and any other modern equipment. A Animator can create a cell animation within few minutes with drawing (Sketching) and Painting. In this animation we can see line's rhythm with appropriate details
3. Computer Animation is a modern Technique it is two types such as 2d digital and 3D animation both are marvelous. 2d digital animation is a advance technique of cell animation in this technique animator create animation on computer (2d Space such as X and y).in contrast 3d animation has three dimensional such as X, Y and Z is depth. 3d computer animation looks like reel. In this animation anybody with the help of 3d camera can see a depth. In addition, with the help of graph animator can refine and create good animation
4. Stop Motion animation is very classic technique and time-consuming technique which is less popular in the world therefore few artist and production house use this animation. Constriction is indispensable for this animation without Constriction nobody can do it.

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