Analysis of the main types of animation

Experience, Personal Experience

My report will be based on 7 different Topics about animation.

The 7 topics are persistence of vision, Hand-Drawn Cel Animation, Stop-Motion Animation, CGI Animation, Modern uses of website animation, the issues associated with files formats and compression, different web animation software's available to animators. I will be researching for each topic how it first started and when it first started, the ways they're used and were used in the past. There will be quotes, facts and opinions. The research method I will be using is primary research. I will be watching videos, reading articles, books from animators and animation news sites and watching videos and looking at photos.

Persistence of vision

The persistence of vision in animation is an illusion of thinking multiple images blending into a single image and made they seem like its moving and talking. ' Persistence of vision works because the human eye and brain can only process 10 to 12 separate images per second, retaining an image for up to a fifteenth of a second. If a subsequent image replaces it in this period of time it will create the illusion of continuity'. There are many example and people are not certain when it first began but historians have found them on cave walls dating way before 3000bc. There are other types of persistence of vision, E. g. thaumatrope.

Cave wall animation

Here is an example of Cave wall animation. As you can see it has more than 4 legs and they're positioned in different places to indicate that the animal is

running. You know this by just looking at how they have been positioned. These types of drawings were drawn all over cave walls.

Thaumatrope

A thaumatrope is a disc created in the 19th century with each side having drawings on them. When spun you can see both sides of the disc coming together to combine 1 image but this is an illusion. The speed of the disc is so fast that you are able to see both drawings. As you can see by this image the bird is now in the cage but when you stop it the bird will no longer be in the cage.

Zoetrope

A zoetrope is a sequence of photos that are printed on a spinning disk or drum which gives the illusion effect that whatever you've drawn is moving, say that you've drawn a person walking on the drum or disk, it will look like that person is walking or running. ' The slot acts as a shutter momentarily freezing the image. A traditional cinema projector works on the same illusion by actually stopping the film frames. Zoetropes were invented in 1834 by William George Horner.

Hand-Drawn Cel Animation

Cel animation is a 2D animation hand drawn on transparent plastic called " Cels" – parts upon a static background, drastically reducing the numbers of drawings required.

The first full length animation that used cel animation was 2937 Walt Disney's snow white and the seven dwarfs. ' Following a planning process, animators transfer draft drawings onto transparent sheets of plastic called cels. Each cel features one drawing with an outline on one side of the plastic and the color is filled in on the other. These ' cels' are then placed over a background and photographed in sequence. When played back at a speed of 12 or 24 frames they create the illusion of movement. It's rare for traditional cel animation to be used in modern productions since everything is digital now'.

Stop-Motion Animation

Stop motion animation also known as stop frame animation. Stop motion animation is taken one frame at a time with objects that are moved between each shot. This will give the illusion that the object has the power to move on its own when you play it back rapidly. Stop motion over the years have changed rapidly with the technology that is being produced. There are many cameras and accessories that make stop motion easier than when it first started out. Stop motion started out in the 1898 with J, Stuart Blackton and Albert E Smith for Vitagraphs The Humpty Dumpty Circus

As you can see in this image the objects are hand sculpted instead of drawn. This is called stopmotion, every individual moved in captured in one image and then the next little movement is captured in the second image, this process will go on and on with thousands and thousands of images taken until the objects seem to be moving when you play it back rapidly.

' You see stop motion animation all the time — in commercials, music videos, television shows and feature films — even if you don't realize it. While it is common for people to think of stop motion as just one specific style, such as clay animation, the reality is that stop motion techniques can be used to create a wide range of film styles'.

Stop motion takes a lot of time and is very unique. You need the patients and the skill to focus for a long period of time.

CGI Animation

What is CGICGI animation known as Computer Generated Imagery. CGI is used in nearly every film that comes out nowadays, it's a big part in film and it helps achieve things that are impossible to do in real life.

It creates the impossible and looks incredible when done correctly. The first time CGI was first used was in the movies 1973 west worlds, this movie used 2D CGI and the first time 3D CGI was used was in its sequel future world in 1976. Mostly all super hero films use CGI because most of the things that they do is practically impossible to do in real life. ' CGI is used for visual effects because the quality is often higher and effects are more controllable than other more physically based processes, such as constructing miniatures for effects shots or hiring extras for crowd scenes, and because it allows the creation of images that would not be feasible using any other technology'.

As you can tell by looking at this image is that CGI works on greens screens.

Modern uses of website animation

Navigation bar

The modern uses of animation on websites are the navigation bars, when you hover over them they appear to be highlighted. The modern uses of animation on websites are the navigation bars, when you hover over them they appear to be highlighted or give you more options on what page to go to. Pros: Make browsing the website easier. Cons: Some navigation bars might be too good and over the top with flashy colors and unnecessary.

Loading animation

Another uses of website animation is if your internet is slow or the website is just generally slow, you might experience the loading animation. It's just one simple objected animated in a loop to indicate that something is loading.

Navigation bar