

History of Animation Essay

(By Blanki Fernandez-Miranda)

Animation as an artform has had a long and expansive history dating back to the earliest traces of human civilization. Animation in simple traditional forms could be found even in ancient Greek vases that would use different phases of action to give the illusion of movement. This idea would provide the foundation for animation for years to come. Some of the earliest forms of animation can be found in the 1800's-1900's in the form of optical toys such as the phenakistoscope, the praxinoscope, and zoetrope. All of these forms of animated movement utilize optical illusions via quick moving hand-drawn pictures to give the illusion of movement. This same idea was used in photography which can be seen through the first motion picture "The Galloping Horse".

As time progressed, so did the methods in which animation was made. Throughout the 1900's cel animation became more popular, which utilized a similar process but on a wider scale. Walt Disney Studios is one of the most popular animation studios to this day and was one of the first to pioneer animation into the direction it is now, utilizing hand drawn cel animation to create fully fledged animated feature films by hand. "Steamboat Willie" for example was one of the first animations to utilize synchronized sound. This merging of mediums would open the door to animation's full potential, which would be soon seen by Walt Disney's later first animated feature production "Snow White and the Seven Dwarfs". This production is also notable for its usage of rotoscope animation, which is a process in which animation is drawn over film footage.

As animation as a medium became more wide-spread, traditional animation began to flourish. Hanna-Barbera and Warner Bros were also two huge animation studios that utilized cel animation during this time period. However, art is known to capture the changes of the times, so when technology began to advance, new forms of animation began to emerge. Stop motion animation for example utilizes the same practice of using multiple images to create the illusion of movement via real props, sculpts, and puppets in a real environment that would be photographed and edited together. The characters, objects, and other elements featured in Stop Motion are usually made and positioned by hand, however as future tech develops methods such as 3D printing help streamline the process.

Additionally, the biggest switch in animation's current history would be the rise of CGI/3D animation. Pixar is known for being one of the first studios to pioneer and produce 3D animations via their feature film Toy Story, which was also the first CGI feature film. CGI and 3D animation was a huge shift as it utilized current technology to make animation in a three dimensional space using three dimensional models and rigs. This made animation much more affordable in comparison to traditional 2D animation. This didn't completely stop 2D animation from being pursued though, as 2D computer animation slowly rose as an alternative. Programs such as ToonBoom Harmony and Adobe Flash help simplify the animation process while maintaining the charm 2D animation brings.

Something that's stayed consistent however throughout the entire history of animation is its twelve principles. The 12 principles of animation are Squash and Stretch, Anticipation, Staging, Straight Ahead Action and Pose to Pose, Follow Through and Overlapping Action, Ease in and Ease out, Arcs, Secondary Action, Timing, Exaggeration, Solid Drawing, and

Appeal. No matter what method or technique is applied to animation, usage of all of these principles helps guarantee it stays a convincing experience for the viewer.

12 Principles of Animation Analysis

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A sequence that utilizes the 12 principles of animation is the [opening sequence for Revolutionary Girl Utena](#).

Shot 1 (Time 0:13):



This first shot of the characters Utena and Anthy showcases the animation principle of ease in and ease out. The two turn into view very quickly, but once they come into the center view they slowly move closer to the corners of the screen. This creates a very delicate and appealing sense of movement.

Shot 2 (Time 0:48):



This shot showcases the principle of staging. Anthy's hand moves first, placing the rose in Utena's and after that action is complete Utena tightens her grip on the rose. The deliberate spacing in how the movements are done helps the viewer process each action individually and stages the scene better. The hands are also positioned on the far right of the screen, making them the focus point besides just the text and leaves on the ground.

Shot 3 (Time 0:56)



This shot showcases the principles of Follow Through and Overlapping Action along with Secondary Action. As Utena lunges toward the camera, her hair flips in the opposite direction of her movement, giving the feeling that it's swishing with her as she moves. She also opens her hand as she gets closer, adding a sense of constant movement and preparation for her next

move in the sequence. These details, while seemingly small, make the animation not only more appealing to look at but helps characterize the movement better.

Shot 4 (Time 0:57)



This shot showcases the principles of anticipation, secondary animation and staging. We get a close up of the character Saionji's eyes with his sword in front of him before he proceeds to turn and swing. This not only let's us see his secondary animation of his crying/tears, but it also gives the animation a moment to anticipate and prepare for the next pose/movement. It helps make the transition feel more organic and smooth while conveying additional detail at the same time.

Shot 5 (Time 1:04)



This shot showcases the principles of Timing, Follow Through and Overlapping Action along, and Ease in and Out. The timing on this sequence is incredibly precise, giving each key movement in this complicated shot a moment to be read and processed by the viewer. Follow through and overlapping action can be found in the movement of the hair and eyes after the final pose settles, as they still either close or wave even after the sword's position has well been determined. The ease in and out can be found complimenting the timing of the animation. The easing in and out of each part of the movement helps frame the brief resting points and allows the viewer to take in each moment of the action and feel the impact of it. Without easing in and out, the timing in part would go too fast and mess up the whole sequence.

Shot 6 (Time 1:04)



This show showcases the principles of staging, secondary action, and arcs. The staging and secondary action in this shot go hand in hand, as the initial focus of the frame (Anthy) pans out, the secondary action of the rubble falling casts over her and fades her out of view. Additionally, you can see the usage of arcs via the movement of Anthy's arms, hair, earrings, arm accessories, and especially the ruffles of her dress. Zoning in on her dress, each ruffle moves in an upwards and downward motion, creating an arc as it swirls around her. This makes her not only look more lively, but frames her in an ethereal sense. The soft movements of her dress and other accessories also heavily contrast the harsh falling rubble, creating an interesting contrast in the scene.