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History of Animation & The 12 Principles of Animation

One of the first instances of animation in history that also supported the 12 principles of animation was a study of movement; one of the first to initiate this study was Eadweard Muybridge- 1872. By taking sequences of photos he was able to capture the continued movement of humans and animals and was one of the first inquiries into how we moved.This inquiry gave insight into the creation of the 12 principles of animation. For example, these photographs show the following principles. Firstly, the 5th principle: Follow Through & Overlapping Action, it displays this through how the appendage on a body may lag behind the majority if it is pliable or isn't engaging its muscle. The 7th principle: Arc and how movement often includes arcs. And the 8th principle: secondary action which shows there is often a wind-up of movement before an action to give power to the action. And lastly

By 1936 Walt Disney was creating some of the first ever animations with sound. The background was done on different layers so that it could be changed without having to change the original illustration of the characters. These animations were made to be cartoon-like and unrealistic for entertainment but were solidified in history to be one of the first animations with synchronized sound. This animation process introduced a few new Principles to the world of animation. Most notably the 1st: Squash and Stretch, used to make exaggerated and over the top actions, 2nd: Anticipation, Walt disney utilized anticipation even in his cartoon-like animations because it gives power to the action and makes movements more realistic; this technique also makes it easier to show to the audience what a character is about to do. In addition to this the 3rd Principle was very important, one of its most significant uses is during steamboat willie, when mickey mouse is center frame, whistling, tapping his foot, and steering the boat. The illustration of Mickey Mouse in the center frame is one of the most popular scenes of animation in pop-culture history as well.

By 1957 celloloid animation became much more popular and used several cost effective methods to convey point and action. This animation used lots of cycles and was choppy as it was cheap and fast to make, some of these techniques included suggestion, smears,and looping cycles. This Period introduced the 9th principle: Timing, this technique is prevalent in this period because of the many uses of cost-effective animation, and so it was crucial to know the amount of drawing/frames necessary to convey an action. Like the use of drawing on twos rather than drawing on ones could make the creation of cartoons cheaper for studios and make it a big deal to pay attention to this principle at the time. Additionally the 10th principle: exaggeration, by taking the idea or essence of an action to the next level, it means to make an animation more convincing when conveying emotion, action, or thought to the audience. This was important as, at the time this kind of animation was marketed heavily towards kids and made to keep children entertained.

Studio Ghibli began creating animated movies by 1985, much like Disney they used cell animation and painted/water color backgrounds. Studio Ghibli has become a very significant pillar of animation as its use of storytelling and animation in movies was made for wider audiences than just kids like Disney. Studio Ghibli is currently one of the few studios that still use Celluloid to animate, unlike the majority of studios that have moved towards computer-generated animation. Studio Ghibli adds weight to a few animation principles. For

example, the 6th principle of animation: Slow in & Slow out, the use of frames to settle into a pose before the quick action and then settling back into another pose. As Studio Ghibli was very particular about their animation, the use of Slow in and Slow out is what made their animation so believable and subtle. Another principle that added to the realistic depictions in Studio Ghibli was the use of the 11th principle: Solid drawing, this is used to make sure 2D characters are drawn so that it makes it feel like they are in a 3 dimensional space. This is prevalent in their work as many movies produced by Ghibli are significant for their impressive and dynamic work in character movement and movement in general. Next, Studio Ghibli also uses quite a lot of the 12th and final principle: Appeal, to make the character-design of a subject just much more appealing and noticeable. The use of appeal is very important as it can be used when the audience must recognize a character by their shape or color very quickly, or when drawing the main character many times, it's important to have a design that is somewhat simple so that the animation process does not become so tedious.

By 1993 stop-motion animation had become popularized to Aardman's work of puppetry in works like Wallace and Gromit, Shawn the Sheep and more. Through using plasticine for characters and sets Aardman was capable of creating much smoother stop-motion animation. One notable principle of animation that played a big role in this kind of animation was the 4th principle: Straight Ahead/Pose to Pose. Because stop-motion animation required the use of a singular model the animator could only use straight ahead animation. Showing the distinct change in animation style as opposed to Pose to Pose. Straight ahead animation is often more difficult in a 2D plane as it can cause many problems which makes the use of physical 3D animation so much more impressive.

Lastly one of the most recent improvements in animation history is acknowledged in 2015,through the use of computer software;the most notable being ToonBoom, animated TV shows no longer required celluloid to animate and were now done digitally, though they may do key frames physically. Animators now draw directly onto tablets/screens that translate directly to computers which makes the process of animation much smoother and easier to finish. This technique is quicker and cheaper than celluloid animation however, it is still able to retain the charm of close attention to detail. And is able to retain all 12 principles of animation through the traditional aspects of animation.