The Effect of Animation on The Society During The COVID-19 Pandemic

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ABSTRACT

Animation has always occupied a special space in the hearts and minds of those that have consumed the media by making it possible to bring to life what would otherwise be impossible. It is because of the spectacle of seeing what otherwise wouldn't be possible that makes animation so magical, and the almost magical effects that can be achieved through animation has captivated the minds of many throughout history and its many different forms.

Animation's development went hand in hand with the development of the movie or motion picture which captured real-life, and this interdependence is displayed through the development of shared technology that both mediums utilize.

The industry's contributions towards the art of telling complex stories and narratives through gestures and different perspectives from its early days until now, This research project delves into the importance of animation and its cross-medium contributions to many of the things that are now taken for granted.

 This research project delves into the importance of animation This paper attempts to understand the links between culture and animation, how animation has taken place during (covid-19), how animation have been studied , Animation and how it affected society during (covid-19) and Animations industry growth during (covid-19).

Keywords: Animation, 2D Animation, 3D Animation, Animations industry, society during COVID-19.

1 Introduction:

The impact and influence of the animation industry as well as its principles and techniques pertaining to character portrayal and story conveyance today permeates every facet of our daily lives, at times in ways that many people least suspect. Sharing its artistic incentive with the world of comic books as well as film, the world of animation has always been an important staple in a consumerist culture that supports itself with visual advertising and media.(Jeff Lenburg, 2011)

Animation, since its inception has been a work regarded with a sense of awe and spectacle. There has always been something magical about bringing the things which one imagines to life on a screen. Animation in the modern age has taken on a wide variety of forms and styles, with the genre exploding in the late 1990's with the advent of digital animation and computer programs (Cavalier and Chomet 2011).

Animation surprisingly enough began as a simple concept; a bunch of slightly different images can be arranged in a sequence to produce the illusion of motion. However, the animation which people are so familiar with today took centuries of technological development to finally come into its more recognizable form. The contributions towards the genre over the past 100 years or so have propelled animation from being a mere sideshow, to an internationally significant cultural medium (Wells 2006).

The earliest known animated film was made in France in 1906, titled Humorous Phases of Funny Faces, and was made from chalk pictures. Since then, other small animations were made, but the first animated cartoon with synchronized was made by Walt Disney in 1928, called Steamboat Willie. Many cartoons like this followed, and they were used to entertain viewers with gags and charades of drawn characters. Nine years later, Disney released the first full-length future film, Snow White. And in 1993, software for 3D animation was created (Sito 2013).

Animation has had various uses over the past, as it reached various nations with many different cultural practices and societies. All of these influences are typically portrayed through animation, and the medium has found use for promoting propaganda, rallying support for political causes, advertising, and also largely as entertainment features for public consumers (Street 1998).

Animation has its applications in many different fields and has been utilized in order to "spice up" dull web sites and videos which people would ordinarily not pay attention to and bring to life/portray concepts which cannot be witnessed through realistic means (Parent 2000).

The medium of animation through its humble beginnings had set new standards for the possibilities of what one could do with art and expression. The later innovations within the field of animation and the different techniques that would develop within the course of the 20th century would step animation up from being merely a form of side entertainment to a high profile form of entertainment and storytelling art with the introduction of various cartoons and cartoon characters which would come to be known the world over (Blazer 2019).

2 ANIMATION:

Animation; the word "ANIMATE" comes from the Latin verb "ANIMARE" means to make alive or to fill with breathe.

Animation is the rapid display of a sequence of images to create an illusion of movement. The most common method of presenting animation is as a motion picture or video program. In simpler word; animation means giving life to our imagination (Blair 2020).

Animation is a method of photographing successive drawings, models, or even puppets, to create an illusion of movement in a sequence. Because our eyes can only retain an image for approx. 1/10 of a second, when multiple images appear in fast succession, the brain blends them into a single moving image. In traditional animation, pictures are drawn or painted on transparent celluloid sheets to be photographed. Early cartoons are examples of this, but today, most animated movies are made with computer-generated imagery or computer-generated imagery (CGI) (Finch 2013).

To create the appearance of smooth motion from these drawn, painted, or computer-generated images, frame rate, or the number of consecutive images that are displayed each second, is considered. Moving characters are usually shot "on twos" which just means one image is shown for two frames, totaling in at 12 drawings per second. 12 frames per second allows for motion but may look choppy. In the film, a frame rate of 24 frames per second is often used for smooth motion. (Maureen Furniss.2017)

■ Animation industry and Virtual Production during (covid-19):

If there is one field that was not stalled and has instead grown amidst the effects of the pandemic it is animation and the visual effects. Everyone from movie makers to the game developers have focused on visual effects and animation to bring out cutting-edge technological experiences to consumers during the troubled times. The disruption to the entertainment industry caused by Covid-19 has been well documented. The pandemic put a wholesale stop on global film and television production, and theater closures have limited the ways in which audiences can view films.

This led to appearance of virtual production Resulting is the technology integrate with the motion-capture techniques used in every major action film. As actors walk across a stage in a suit covered with dots, the actor's motion is recorded and translated into a format usable by a visual effects artist. This same technology is applied to the motion of animated characters. Instead of an animator working away at his or her computer to animate Super heroes running across the room, a stunt performer wearing a motion capture suit could actually run across the room (Krasner 2004).

Once this motion is recorded, it can be applied to an animated character, and that character can be inserted into the animated world. Using this technology, an animator can animate more than 20 seconds of film per week, instead of 2 seconds of film per week. As a result, the cost of the highest quality animated content will fall precipitously in the next few years (Brarda 2016).

150

If there is one field that was not stalled and has instead grown amidst the effects of the pandemic it is animation and the visual effects. Everyone from movie makers to the game developers have focused on visual effects and animation to bring out cutting-edge technological experiences to public during the troubled times. Animation has long production times, long preparation times. Thus, it is one of the few fields that is not so prone to crisis, whether economic or pandemic.

In addition, in many cases it is possible to work on animation from home. Since many creative people work in animation, moving to an online space was not a problem for them but a challenge. And is one of the only industries flexible enough to thrive in an unforeseen situation of social distancing. That is because one doesn't need to come close to their colleagues to send or receive suggestions about a particular animation project.

Types of Animation:

Traditional Animation 2D Animation (Vector-based), 3D Animation Motion Graphics , Stop Motion.

The traditional animation is one of the oldest forms of animation in film . As mentioned above, in traditional animation, objects are drawn on celluloid transparent paper. In order to create the animated sequence, the animator must draw every frame. It's the same mechanism as a flipbook, just on a grander scale. (Nicholas Russell.2018)

Traditional is most often (2D) animation. Aladdin, The Lion King, In the earlier years, the animator would draw on a table that had a light inside of it, so the creator could see his or her previous animation. While the traditional style is not nearly as prevalent today, drawings are generally done on tablets (Parent 2000).

2D animation can fall under traditional animation like most early Disney movies — Pinocchio, Beauty and the Beast, etc. But there is something called Vector-based animation that can be 2D without being traditional. With Vector-based, the motion here can be controlled by vectors rather than pixels. Vector-based animation uses mathematical values to resize images, so motion is smooth. They can re-use these creations so the animator doesn't need to keep drawing the same characters over and over again (Mickey 1982).

Today, we have a 3D Animation or computer animation is the most common type. But just because computers have stepped in instead of actual drawings, it's not necessarily easier. The computer is just another tool, and 3D animation is still a long, intense process.

In 3D animated movies, the animator uses a program to move the character's body parts around. They set their digital frames when all of the parts of the character are in the right position. They do this for each frame, and the computer calculates the motion from each frame (Gortler 2012).

Animators adjust and tweak the curvatures and movements their characters make throughout. From Toy Story in 1995 to today's Coco, 3D animation has become the dominant style in animated films (Watkins 2000).

151

3D animation is also unique in that, unlike 2D or other traditional methods, the character's entire body is always visible. If a character turns to the side, the animator only needs to draw the side profile in 2D animation, but in 3D, the entire body still needs to be visible. So again, even though computers are being used, with new technology comes with way more considerations (Roberts 2012).

With the passage of time now we have the motion Graphics its a pieces of digital graphics that create the illusion of motion usually for ads, title sequences in films, but ultimately exist to communicate something to the viewer. They're often combined with sound for multimedia projects (Ratner 2000).

Stop Motion:

There is also another type of animation called Stop motion encompasses Claymation, pixilation, object-motion, cutout animation, and more. But the basic mechanics are similar to the traditional style like a flipbook. However, instead of drawings, stop motion adjusts physical objects in each frame (Ternan 2013).

If moved in small increments, captured one frame at a time, the illusion of motion is produced. Whether puppets, clay, or even real people, these manual adjustments can make it a long, arduous process. Wallace and Gromit, Chicken Run, and The Nightmare Before Christmas are all great examples of stop motion films (Purves 2014).

Stop motion is definitely an older form of animated storytelling, especially compared to 3D computer animation. But the process of animating pictures dates back way before Disney or Pixar (Batkin 2017).

3 The effect of animated videos in modern society during covid -19.

People love visual content. It is engaging, educative, entertaining, and can never get boring. It is for those reasons that animated videos are becoming popular day after day, particularly among millennials. The videos are everywhere these days and are carrying messages on literally everything you can think of (Uhrig 2018).

The truth is that animation weaves through our daily lives in more positive ways than many of us realize. Whether it's knowingly on our televisions or behind the scenes of our social and scientific advancements, animation affects more than just those of us who work with it. (Maureen Furniss.2019)

animation is a great simplifier. Not to confuse simple with simplistic – making something simplistic is to underestimate the intelligence of the audience, but making something simple, something easy to understand, is an art. animation pure and simple, animation is a totally unique form of entertainment. From movies, to television, to web video and games, animation provides an inspiration that live-action film cannot by presenting the impossible, the otherworldly. (Andy Seed.2008)

animation is a trustworthy medium for education from classic television to phones streaming curated You tube playlists: if you grow up in a house with a screen you're very likely to be faced with animation (Barrier 2003).

The VFX (visual effects) on Education:

Teaching is more effective when done in 3-D videos than in writing/reading bookish content. Tutors use educational animations to explain hard concepts to school kids and the results are amazingly good. These videos create a better learning environment because they aren't boring they break the monotony of the teacher explaining stuff all the time. Some animations are interactive and engage the learner even more than a teacher would. That's without mentioning how they improve a learner's overall creativity and improves their attitude towards school (Ng 2016).

School lessons aside, educational animation videos are also being used to facilitate civic education in different sectors. The medical industry, for example, has over the recent past been using animations to communicate messages of healthy living. There are animations that explain how people should plan their diets, others tutoring adults on the various family planning methods, while others instruct people on how to protect themselves from different diseases (Barron and Orwig 1997).

The Animation effect on children learning:

One of the core areas of improvement for children has been related to emotional development and morality. Animated content has played a significant role in ensuring that both the emotional and moral standards of children have been in-tact. Thought not the best replacement for real world interactions, animated cartoons have been successful in inculcating the best practices.

Improving screen experience the fact that children are spending more time watching cartoons has also created a wonderful opportunity for companies to focus on improving screen experience. With rise in demand, companies are now focusing on usage of better technological tools to produce better content taking the cartoon watching experience to new heights and exploring various platforms to reach out to children.

The animation effect on children awareness:

It was an event most people were unprepared for and the institutions across different sectors were no different. It seemed like a joke at first and so many of us thought we would get rid of the virus in no time, because we are used to bouncing back from difficulties . However, the governments started putting measures in place as the cases started increasing. It was then we realized the coronavirus is no joke.

The media swung into action almost immediately, creating awareness about safety protocols to combat the coronavirus. But we did not see content suitable for children to learn about the changes happening in their world.

Recently, the governments decided to ease restrictions to reopen the economy. The implication of this move is that many children will now see their parents going back to work and think that life is back to normal. They might also simply get bored of staying indoors. So, the animation was created to provide information to children on how to stay safe and protect their loved ones.

By leveraging technology, animation helped in awareness through the power of storytelling and digital media.

153

The animation effect on Graphic design education:

Animation is also used in creative arts to show and produce the skills needed to achieve a grade for example an graphic design course is creative arts, which is a specified skill in creativity. They would use animation in their work and much of it for presenting to the class they would use various diagrams and animations to get a topic across the class in presentations.

Game Development Companies:

Unreal Engine and Unity Technologies are two of the many companies that have allowed ambitious filmmakers to continue with their dream projects during covid -19. The advanced technology used by these game development companies have ensured that there is no green screen required for movie production. The readymade environments created by the two companies has been able to take the movie watching experience to all new levels. The backgrounds produced by these leading gaming companies have already been used in top films such as the Lion King and the Black Panther.

The best part of using readymade backgrounds is that, in traditional films, first the scene is shot and then the background is created and lighting adjustment has to be made when creating the background. With the backgrounds readily provided by gaming companies, the production team simply has to work towards the lighting part during the shooting in order to match the background. Experts say that this also reduces the cost of production since there are not as many shots required.

It is also noted that there is crunch for talent requirement in the industry of gaming which can affect the production. The companies are also working towards developing a qualified talent pool in order to support the production. With the knowledge of virtual tools, to take on the challenges of the game development or digital filmmaking world (Wells 2013).

4 Explanation of Animation evolve today's:

When animation was in its early stages, it was all about experimentation with motion, machines and optical illusions to generate a sense of movement. As animations were developing alongside the beginning of motion pictures, it was associated with a sense of wonder, with a new visual experience. As it progressed, viewers became used to storytelling tailor-made for children.

Yet from drawing and coloring, to stop motion to 8-bit animations, we've come a long way. 3D graphics, CGI (Computer Generated Imagery) and even Gif animations are taking the visual world by storm. that something else has also changed: the way we use animation is not nearly just for kids, as some believed it to be. It's now considered as a tool for grabbing attention and crosses over to all types of spheres – including marketing.

We are drawn to animations because of their clarity and simplification. And this can work across the board: whether it be explaining a new product or app, teaching students, or creating a public service announcement (Sarris and Strintzis 2005).

154

When people can visualize a process, even more abstract concepts that are represented through images can make things far clearer and engaging to them. Breaking down a message into pieces of vital information is something that viewers not only appreciate, but something that today's society is also getting used to. With the lightening speed of communication that we can almost instantly access, in this day and age, our brains are thriving on simple messaging (Sito 2013).

and a well-produced video can cover a lot of information in just two minutes, with much more to offer than a news pamphlet or a heavy block of text. Animations have an Element of Surprise Combining stimulating images, inspiring audio and creative techniques in an animation make for an engaging experience. As long as approach and message fit with the topic and target audience, there are vast possibilities to create a successful video (Gasek 2013).

many children growing up would watch cartoons or read comic books, enticed by the adventures of endearing characters. Those famous catch phrases or the lessons learned from these cartoons were genuine and influential; something like learning material. Today, as adults, we still can enjoy animations and feel connected. Animations trigger the emotional side in us because they appeal to our minds. We all have seen Toy Story, Up, or even the tear-jerking classic Bambi. Crossover to television and there's a variety of TV shows with cartoons made for adults. The Simpsons, Family Guy, Daria. We easily allow ourselves to become inserted in a world that is not ours, and go along with the story (Barrier 2003).

From the above we conclude that animation during (covid19) is important because it makes us be able to communicate in many deferent specialization The most important of which is education, whether for adults or children. we can tell stories and communicate emotions and ideas and lectures in a unique, easy-to-perceive way that both small children and adults can understand. Animation has helped connect people throughout the world in a way that sometimes writing and live-action films cannot. Today, anyone can pick up a drawing tablet and show their ideas to the world. Drawn figures can be funny, or make something sad or serious have a playful, less intimidating feel to it to make the viewer feel more comfortable.

Types of realism in animation

Types	Details
Visual Realism	It assess the extent to which the animated environment and characters are understood by the audience compared to the ones from the actual physical world. Software like Maya, a (3D) modeling software (Autodesk) provide advanced rendering techniques for filmmakers to create realistic objects and landscapes with vivid texture and lighting. This software is easy to use even for filmmakers who do not know how to draw

155

Aural Realism	It is almost similar to the visual realism. It is the enhancement of convincing sounds using computer-generated imagery (CG), for instance the sound of birds can be recorded.
Realism of Motion	It contrasts with characters moves and motion. It is a series of illusions from static images, and natural laws of physics are used in production in order to convince the audiences that the objects are real. It includes the computer generated characters (animation) and objects created accords and sensors with real human actors. This increases a sense of realism in motion.
Narrative and Character Realism	It attempts to make fictitious events seem real. It uses software that convince audiences that what they are watching is real. Filmmakers can now control what they feel they might need in their production without boundaries in their imaginations to visualize what's in their thought. Now filmmakers have the power to manipulate the skin of an actor or produce animated characters, realistic environment to achieve more realistic results.
Social Realism	It creates a diverse and complex world of animation which represents the world or makes audience believe that the event indeed took place in this real world which is fictitiously designed. This conviction is based on what objects or environment the society itself can relate too.
Psychological Realism	It shows the emotions of animated characters. This type of realism is significant as characters in film are a conviction to audiences that the animated characters are as emotional as human characters. The use of original or hand animated three-dimensional world techniques and other technique, such as rotoscoping, is largely employed in animated film Moana (2016).

5 CONCLUSION:

In most animation, culture is reflected through different means. Some are reflected by the physical appearance of characters, some are reflected with the objects within the animation and even the language they speak. Since the beginning of animation, people have used what they understand and comprehend around them to develop plots and storylines. A number of researchers have studied animation as an exclusive academic field. However, the study of animation content can do better with increased quantity. Animation is on the rise and may well continue to do so in the near future. It is a global trend in which if better understood, the more benefits we can reap out of animation. Animation can become a powerful business tool but importantly as well is the fact than the culture and identity of a nation can be shared through its .

Creating video animation jam-packed with valuable content like how to practice safe social distancing, how to clean your hands, vital information about the coronavirus, what to do if you or someone you know gets affected by it and so on.

Once these videos are made, they will spread like wildfire as the stakes are high, and everybody is looking to help. Even creating awareness about this topic could save somebody's life.

Due to the rapid changes in technology, animation has also changed a lot. Today, computer graphics (CG) is considered as the most important computerized communication tool, which animator directors can rely on to communicate their dream effectively. animation have now gained lots of popularity worldwide . The use of latest technology like 3D animation and graphics has been able to draw a huge number of audiences.

the world of animation seems to have found a conciliatory niche for itself that is stable as a rock. Animation has been a big part of the artist and creative community animation comes in different varieties and types that have all inspired us to create something unique, build dreams, and turn concepts to real life. animation would be changing forever, especially within the creative industries

I believe more companies, studios, and artists should be utilizing this tech and seize the opportunity.

it as animation made simple; let your mind do the animation, and your hands do the work for you. Just draw what your imagination visualizes, and anything is possible.

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157

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