The Art of Animation: How Animation is Creating a Better Film Industry

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A Senior Thesis submitted in partial fulfillment

of the requirements for graduation
in the Honors Program
Liberty University
Fall 2023

Acceptance of Senior Honors Thesis

This Senior Honors Thesis is accepted in partial
fulfillment of the requirements for graduation from the
Honors Program of Liberty University.

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Abstract

With the progression of streaming services in recent years, the art form of animation has gained traction, continuing to develop into exceedingly creative forms through the work of talented artists. Animation has developed alongside the film industry, achieving great success in the process. This thesis will define animation and its place within visual effects, critically analyze categories of character design, theme, and story while demonstrating their relationship with animation, and contrast animation with live action films to understand its strengths and differentiations. The research concludes that animation has great benefits to offer the film industry and should be continued to be explored as a respected and viable form of artistic expression.

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Introduction

The screen fades up from black, the camera tilts up, and the audience witnesses an orange feline, clothed in a black cape, boots, sombrero (with a large yellow feather), and a sword mounted at his side. The curtains open and he enters the spotlight to a cheering crowd of humans while he proclaims "Welcome to my fiesta! Make yourselves at home!" (Crawford, 2022). After this incredible entrance, a magical adventure begins after this cat, Puss in Boots, loses the eighth of his nine lives. He begins a search for the last wishing star, which would grant him the ability to have his lives back. To reach the star he fights off Jack Horner and the Baker's Dozen, Goldilocks and the Three Bears, and the Wolf of Death. Eventually he makes the decision to sacrifice the gift of the star for the sake of his friends. Living happily ever after with those he loves at the end, he takes advantage of the one life he has left. This charming story is told in the film *Puss in Boots: The Last Wish* a product by DreamWorks (Crawford, 2022). The form of this story: animation.

Though animation in concept is nothing new, its establishment within the world of film began as a recent innovation. In the most basic sense, animation is a grouping of images combined in a manner through which to provide the illusion of movement. In Beckman's (2016) book, Esther Leslie specifies in her definition that "animation is understood to be the inputting of life, or the inputting of the illusion of life, into that which is flat or inert or a model or an image" (p. 28). Around the turn of the 20th century, animation began to develop into the form understood today.

Originating with J. Stuart Blackton, the work of *Humorous Phases of Funny Faces* is typically acknowledged to be the beginning of modern animation within film. After this the animated category grew rapidly, with many artists creating shorts and cartoons of their own. It

was not until 1937, however, that animation emerged into the public sphere. Created by Disney

Brothers Cartoon Studio, *Snow White and the Seven Dwarves* brought animation into popularity.

Dave Kehr (2023) explains that "although not the first animated feature, it was the first to use up-

to-the-minute techniques and the first to receive a wide, Hollywood-style release" (para. 9).

Animation quickly grew into a popular category of the film industry (primarily through

Disney) in its use of cartoon animation appealing to younger audiences. In the past century,

animation has continued to develop through increased technological advancement. Artists today

now have more opportunity than ever to engage with this field using capable software, robust

hardware, and general appeal.

This thesis will discuss animation and its place within the current visual effects spectrum.

It will also explore the strengths that animation has to offer the film industry, primarily in

categories of character design, theme, and story, explaining how these have been used to connect

to viewers and the principles behind its application. These categories will be contrasted with

live-action film, exploring how animation offers its own set of advantages. With all these

benefits in mind, the thesis will conclude with an overview of how animation has and will

continue to transform the film industry for the better.

What Is Animation?

Although previously defined, understanding animation with all its technicalities can be

rather complicated. The emergence of a wide spectrum of visual effects technologies has created

space for animation to overlap with many other varieties of effects. It is important to understand

how animation is defined in contrast or relation to terms such as visual effects and computer-

generated imagery. One can understand visual effects to be the all-encompassing term for

"imagery created, manipulated, or enhanced for any film, or other moving media that doesn't

take place during live-action shooting" (Maio, 2021, para. 4). Both animation and computer-generated imagery fall under this umbrella. Computer-generated imagery, however, contrasts with animation in that it includes any software generated graphics brought into a film, whether static or dynamic.

Animation is more specific in that it deals with the dynamics or movement of images in isolation. The majority of animation today is created through use of CGI (computer-generated imagery); however, many studios still utilize hand drawn, 2D techniques. Historically, hand drawn animation was both the standard and only available option. It was not until the release of Disney Studio's *Toy Story* that the film industry saw its first computer-generated animated film.

Animation in Development

When considering the development of technological capabilities in the animated field, it is important to maintain an open mind. Many individuals have restricted views about the way animation should look, arguing, for example, that hand-drawn animations are more authentic and creative. This, however, is a limited perspective. Every form of animation has something to offer the creative field, just like the artistic expression of painting manifests itself in a variety of different forms and genres. There is no one 'right way' to do animation. Mukherjee and Sobhakar (2020) clarify that

> "It's not only about using high end technology, 3D or 2D or extraordinary visuals that has the ability to capture visual realism. It's about how creatively we use the animated mediums to make those stories, worlds and characters feel real in a deeper, relatable, inspiring and humane way" (p. 84).

In essence, the kind of technology used for animated creation is not nearly as important as the creativity itself. The only true limitation to animated creativity are the artists, not the technological capabilities.

Disney's *Toy Story,* created through Pixar Studios, brought a new form of animated creativity to the cinematic world, revolutionizing it for the better. Within Zorthian's (2015) article, Andrew Stanton, a screenwriter for the film, explains their outlook on creativity: "We said anything that we break ground with, computer graphics-wise, will be subservient to getting the story right," he adds, "because that's what history has shown wins" (para. 19). The goal of Pixar heading into this film was to take the best that technology had to offer at the time (the film being released in 1995) and harness it into telling a powerful story.

Pixar's own *RenderMan* software was used for the film's animation, which is still used for all of the company's animated films today. Created in 1988, its initial form had numerous limitations. In Tovar's (2019) article, Bill Reeves explains that "there was no visual feedback on what we were doing – we were putting in commands and there was only waiting and praying;" furthermore, "lighting, shadowing, and rendering all had to be manually written in with a text-based program" (para. 20). Despite these difficulties, the film achieved enormous success.

Animation's Accessibility

Ever since the emergence of *Toy Story*, the technological landscape for animation rapidly progressed into increasingly capable systems and softwares. As with many other inventions, these advancements have transformed from being a rare commodity to common and accessible. Rather than having to land a job with a prestigious company, individuals have many of the tools needed to make quality animated shorts (or even films) right at hand.

A quick search across the internet demonstrates the vast creativity that these 'home' editors are capable of producing. The availability of technology within this field provides creators no excuse for lacking creativity or quality in their product. With this rise of capability and accessibility, animation continues to grow closer and closer to a place where anything that can be conceived can be achieved.

Animation Guidelines

Now that the definition and technology of animation have been discussed, it is important to understand how animation manifests in application. Quality animation requires detailed precision in numerous categories. The general principles of what makes a *good* animation were defined in the 1930's by Disney. Known as the Principles of Animation, these include 12 categories: "Squash and Stretch, Anticipation, Staging, Straight Ahead action and Pose to Pose, Follow Through and Overlapping Action, Slow In and Slow Out, Arcs, Secondary Action, Timing, Exaggeration, Solid Drawing, and Appeal" (Bishko, 2007). When these principles are combined into a harmonious collaboration, the viewer will generally find the animation more pleasing.

Although these principles are generally followed across the majority of animations, the means by which these are achieved in software varies greatly. Some methods used in creating animation include "Stop Motion, Performance, Keyframing (frame by frame), Inverse Kinematics, Dynamics, Task-level, Behavioral Animation, Rotoscoping, and Motion Graphics" (Saputra et al., 2021, p. 7). In addition, once the environment outside of the animation itself is considered, components such as texture, lighting, color, camera angles, special effects, sound design, score, character design, and more should be implemented. Animation itself is just a small piece of the puzzle in the long process towards a completed animated short or film. The 12

Principles of Animation must work in harmony with the aforementioned vital components in order to create a quality product.

Animation Software

Learning how to apply all these techniques properly is no simple task. The idea of being an animator can seem quite appealing, since a vast amount of artistic expression is involved. However, a talented animator must be technically precise and have knowledge and skills in many kinds of software as well. Softwares and simulators used by Disney, for example, include Autodesk Maya, Pixologic ZBrush, Houdini, Pixar's Presto, Disney Hyperion, Meander Animation Tools, Quicksilver, Beast, Swoop, Tonic, iGroom, XGen, Matterhorn, and Splash (Niklaus, n.d.). Although some of these are Disney-exclusive material, many other softwares are available for little or no cost to the average individual.

The availability and power of today's technology provides enormous opportunity to the animation artist. Many processes that had to be completed manually can now be done through automation. As machine and software capabilities continue to grow, animators still have the difficult task of knowing how to use these tools and balancing production efficiency with creativity.

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Telling A Story Through Animation

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Although the technology of animation is quite impressive, the true heart of it lies in its capacity to tell a story. As in any other form of art, the technology is necessary, but not what achieves the end result. The animation space is unique in that it can deliver an experience unlike anything else. Whereas pure live-action film (without use of CGI) is limited to the tangible real world, animation is limited only by the imagination. Thus, characters can be designed to appear in any way that an artist can create them, stories can garner emotion that can be stimulated

through these characters in powerful ways, and themes can resonate with audiences through stories that would only work in an imaginary world.

In seeking to understand animation's residence within film, it is important to know just how animation differentiates itself. Just as a piano would not be special if it sounded the same as the guitar, animation has tools unique to itself that make its storytelling methodology able to stand out. Its very goal is to reach the imagination using illusion (Jin, 2018). Animation does not deal with tangible realism so much as convincing the audience of the authenticity of created worlds and characters. A quality animated work will feel grounded within its setting while simultaneously exploring abstract ideas in ways with which the audience can connect. This is the beauty of animation, that which distinguishes it from the rest of the cinematic field. The stories told can venture past the known to the unknown, making tangible that which is intangible.

The Nature of Art

Before articulating how animation can achieve the previous goals, a point must be clarified regarding the nature of art and subjectivity. Any piece made within a creative category will naturally lends itself to subjective audience response. A math equation will always have the same result; however, a music piece is analyzed in terms of quality, methodology, emotion, etc., none of which are concrete and all of which are subjective in essence.

Nicolene Burger (2023) identifies the nature of art with personal taste, which "is formed by inner beliefs, desires, proclivities, perceptions, and external societal and cultural influences" (para. 12). Art differentiates itself from the majority of other vocations through its subjective nature. Therein lies its attractiveness, though, allowing any individual to approach a creative work and be impacted in a personal, intimate manner. When an individual creates a work of art, they strive to bring into the world something beautiful. Although people may disagree one

whether something qualifies as beautiful, but the *definition of beauty itself is objective*. Ralph

Winn (1942) explains that "when (and as long as) an object is regarded as beautiful, it

necessarily pleases" (p. 6).

The challenge with art, then, is that it seeks to create beauty while people disagree on

what would meet that standard. Abstract art, for example, polarizes those witnessing it with some

finding it childish and others inspiring. Fortunately, there are degrees of subjectivity in the

subject of beauty. Certain things tend to be agreed upon, for there are numerous concepts

determining whether an object is aesthetically pleasing. For example, "ideas about proportion,

harmony, symmetry, order, complexity and balance have all been studied by psychologists in

great depth" (Castro, 2021, para. 3). Although there is no definitive consensus on what

constitutes beauty, there are many factors typically contained within a 'beautiful object' in the

human psyche.

With this in mind, these factors can implemented when creating art in search of beauty.

Most people will find a sunrise awe-inspiring, while finding a rainy-day dismal. In relation to an

animated film: shape, color, sound, pacing, movement, and many more categories can be utilized

to lead a viewer towards certain feelings and reactions. These principles will not achieve the

intended effect with every viewer; this is why movies are so often debated. This methodology,

however, work more often than not when executed well.

Industry Examples

There are numerous animated creations that demonstrated just how effective the art form

can be in affecting an audience. Films of this nature demonstrate the strengths that animation has

to offer, in contrast with pure live action. It is not that live action is ineffective at affecting an

audience, it simply has different strengths and seeks to accomplish different purposes. Due to

separation from reality, animation can affect certain parts of human psychology and emotion in ways that live-action simply can not.

These films create timeless and memorable characters, have tangible and intimate themes, and produce deep emotional reactions. In Matlin's (2017) article, Michael Fukushima, an executive producer, notes that "great animation films happen when all the component pieces – art, movement, timing, acting, music, audio – all come together and work as an ensemble. No single element needs to be outstanding, but the amalgam needs to work in beautiful harmony" (para. 11). Creating an animated film has numerous challenges, but if it results in a quality piece, it has the potential to resonate with its audience for years to come. The following examples will provide evidence of noteworthy animated films and what allowed them to achieve such impact on their viewers.

Example 1: Ratatouille

Released in 2007 by Pixar Animation Studios, *Ratatouille* is an incredibly popular animated film with its unique story about a man, a rat, and cooking. Now, those three elements combined seem practically impossible to make appealing, but director Brad Bird achieved this goal. In 2007, it received the Oscar Award for Best Animated Feature Film of the Year. How could Remy, a rat (generally considered to be one of the most vulgar creatures in the animal kingdom), become such a likeable protagonist in a film?

The protagonist of a story must be compelling, or the story quickly falls apart. Perhaps the most important element of a protagonist is whatever makes them unique: their emotions, desires, strengths, weaknesses, etc. When the audience can understand a character well, they will connect in a far more intimate manner than they would otherwise.

Character design plays a significant role in this as well. In Paik's (2015) book, character designer Jason Deamer articulates that "although the movie is about rats, we're giving them human emotions" (p. 16). In order to achieve likability, the designers reached for concepts found in humanity and impressed them upon the character of Remy. He is the central character in the film; yet, if he didn't appear pleasing to the eye, no depth of personality or passion could compensate. The majority of humans today would find a realistic looking Remy quite disgusting.

In Paik's (2022) book, character designer Greg Dykstra explains that when designing they "tried to stay away from the most common gross-out points of rats . . . but we also wanted to emphatically say that they are rats" (p. 22). The film *Ratatouille* does not offer a natural realism to its viewing audience, but fantasy. This fantasy, however, manages to accomplish a realism within the context that it it creates.

As in any good story, quality animation will convince the viewer to suspend their disbelief for the duration of the film. Merriam Webster (n.d.) defines suspension of disbelief as "[allowing] oneself to believe that something is true even though it seems impossible" (para. 1). Due to the nature of the main character in *Ratatouille,* the film must not only achieve suspension of disbelief, but excel in it. To most viewers, this is exactly what it does. Remy ceases to be a rat in the typical sense and transforms into an appealing, vivacious, and rather cutely designed protagonist, that also happens to be a rat.

Instead of small black beady eyes Remy has huge human-like eyes with brown irises. In contrast to a narrow mouth and a small nose, Remy has a wide mouth and a large nose. The space above Remy's eyes is formed to appear like eyebrows, instead of rounding straight back to the neck. All these elements work together to allow Remy to effectively display emotion and thus be far more relatable to an audience. His face can contort to show full range of expression,

allowing him to communicate anthropomorphically with his fellow rats and to a limited extent

with Linguini (the man who befriends him and whom he puppeteers while cooking). Creating the

character of Remy in the context of the film was no easy task. His design and nature had to

differentiate themselves enough from that of real-world rat, while simultaneously maintaining his

true nature, which is crucial to his development and purpose in the film.

The movie details Remy's journey after he is evacuated from his home with his family

and friends. He finds himself separated from them, ending up in the city of Paris within the

restaurant Gusteau's. Befriending the young and shy Linguini, they craft a method whereby

Remy puppeteers Linguini under his hat. This allows Remy to fulfill his dream of cooking and

Linguini's of working in the restaurant. The film centers itself around the message: 'anyone can

cook,' but this message indicates far more than its literal meaning. Director Brad Bird (2007)

speaks through character Anton Ego, the great food critic in the film, expounds upon this

message in his concluding review of the ratatouille dish, "Not everyone can become a great

artist, but a great artist can come from anywhere."

Although a simple point, the depth behind the message of the film is beautifully complex.

Eric Herhuth (2017) shares that the idea that anyone can cook or experience beauty levels the

playing field between the cook and the critic (p. 164). When Anton Ego discovers that a rat was

the cook of the dish he adored, his ideas completely change. No longer must a cook be from the

highest reaches of society, a civilized man or woman with many accolades. Instead, the greatest

artists and creatives can come the uneducated, unimpressive, and unappealing: 'anyone can

cook.' How much better can this truth be demonstrated than through a rat, truly the lowest of the

low.

This was the challenge in creating such a film, to design a character in the form of a rat, yet not reminding the audience of anything that a real rat would cause them to dislike. Through the incredible character design, story, and themes, this combination together managed to craft a masterful film. A film of this nature would only have been possible to achieve in a fantastical animated space. Picture a live-action film attempting the same story. Not only would the audience be quite averse to an actual rat, but emotion could not be demonstrated, the theme would not resonate, and the story would flop.

Ratatouille demonstrates just how effective an animated film can be at dealing with serious ideas that manifest in the real world. Although the story takes place in a fictionalized setting, the message that any person could break out of their societal mold and become something more resonates deeply with the human spirit. Though more elements such as the beautiful artistic design of the film, depiction of emotion, character development, style of animation, etc., could all be expounded upon in more detail, even that which was covered demonstrates how the film managed to create an Oscar-worthy product.

Example 2: Inside-Out

Another accoladed film by Disney Pixar is *Inside Out*. In 2015, this film provided yet another Best Animated Feature Film Oscar Award for the prestigious company, of which they currently have eleven. This film demonstrates how effectively animated films can display the concept of emotion, through use of character design, story, and theme. *Inside Out* deals with emotion head on, as the primary characters from the film are realistic manifestations of human feelings: joy, fear, sadness, disgust, and anger.

The character design truly lays the foundation for the impact of this film, with each of the *feelings* taking a form characterized by their nature. Marika Nieminen (2017) points out that

humans make quick first impressions based on shape, which can be taken into account when designing characters (p. 11). A proper first impression is absolutely vital to an audience's interaction with the animated character. In general, a director would hope an audience would find a good character good and a bad character bad. The exceptions would be when the story subverts the expectations of the audience intentionally, allowing for a different plot point to develop later. In these cases a bad character may be designed to appear charming and kind through use of proper design techniques, but later be revealed to be the villain.

For the most part, *Inside Out* is quite straightforward. Proper character design elements are strategically used to produce specific reactions from its viewers. Nieminen (2017) expounds on how this is achieved. For this movie primarily intended for young audiences, the characters would appear in bright colors with a simple shape. Their facial expressions also take up a large portion of their face, making their mood readily clear (p. 8). In this film, the 5 primary 'feeling' characters immediately communicate their emotion through those methods.

For example, the character Joy appears like a young girl in design, albeit lacking precise detail. Her skin, however, glows yellow and her bob-cut hair depicts a bright-saturated blue while she wears a simple greenish-yellow dress. Her face is constituted by massive eyes with the same-colored pupils as her hair, pencil-thin eyebrows, a wide and constant smile, and a tiny button nose. Overall, her design is simple, but it is supposed to be. Her design is intended to portray nothing except the element of joy, and it accomplishes just that.

In contrast, the character Anger seems to be everything that Joy is not. Instead of a human-like body, Anger is very short and wide. His head consumes half of his body, his hands are almost the size of his arms, and he wears a tiny suit with an excessively large tie. Anger is bright red (a color generally associated with that emotion), complimented by large-wide eyes

with red pupils. His mouth is large, wide, and set in a constant frown showing almost all his

teeth. Instead of eyebrows, the top of his head forms into an eyebrow-like structure, set in an

ongoing glare. When his temper explodes, fire shoots from the top of his head. Like Joy, he is

simple in design, portraying nothing except the emotion of anger.

These characters must be simple in order to communicate their message effectively. They

are shaped in proportion to their given emotion, "Anger is shaped like a brick, Joy a Star,

Sadness a teardrop and Fear is tall and thin like a nerve" (May, 2015, para. 23). Disgust is also

rather jaggedly shaped in accordance with her prickly nature. The beauty of these characters is

that while they are simple in essence, the story develops them into much more complex and

seasoned individuals. The surprising discovery that the character Joy makes in her story's

journey is that each emotion is equally valid and vital to Riley's growth. Riley is the human host

in which the emotion characters reside. When she and her family move to a new state, the

'emotion 'Joy takes it upon herself to make Riley as happy as possible even though the location

is quite dismal. Through this journey Joy discovers that happiness is not everything, that Riley

needs every emotion to play a role in her human development.

Since the characters do become more complex, they end up showing more emotions than

what their nature has prescribed. Joy, for example, breaks down crying in a scene over the loss of

Riley's memories. Although her character design exhibits complete happiness, the director

transforms the audience's expectations of what that looks like when her personal emotions

expand. These characters were just one of the challenges of the film; creating a world within the

mind was an equally great challenge. Director and screenwriter Pete Doctor shares about

discussions with experts in the psychological field in order to properly demonstrate the science

of emotion (NPR, 2015, para. 4).

Inside Out literally had to make the abstract and intangible ideas or objects in the human mind real to the audience. The movie deals with concepts of long- and short-term memory, trauma, train of thought, change, loss, attention, etc. To portray these concepts within the fictional world, long- and short-term memory, for example, were presented as stored memory banks filled with memories. These memories took the form of an orb reflecting the color of the primary emotion associated with that memory. Through an intricate tube system, these orbs are then transported away into their proper location in memory storage.

The film is a beautiful depiction of how the use of color, shape, texture, sound, and lighting can work in masterful harmony to demonstrate incredibly complex objects and ideas. The film is marketed for/to children, and yet the concepts resonate with even the oldest of audiences. Truths about human nature, human relationships, and human experience are all conveyed throughout this film. They are articulated, however, not through words, but the art of animation. Live-action films quite often deal with the forementioned heavy topics, but they would not be capable of portraying these nonphysical objects and ideas in any impactful and serious manner. Live-action (without use of CGI) can only portray that which is real. It would be quite impossible for a live-action film to succeed in portraying the ideas present in *Inside-Out*.

Example 3: Into The Spider-Verse

Into the Spider-Verse, though not created by Pixar, is another Oscar winning Animated Film which revolutionized the animated field. Sony Pictures Animation released this masterful product, finding incredible success in doing so. The company was certainly not unknown at the time, but few companies truly rivaled the notoriety that Pixar had achieved. Although this film received an Oscar, it was not from box-office revenue. It received $326 million across the globe,

quite impressive in its own right, but not significant compared to Pixar's *Incredibles 2* which made $1.2 billion (Robinson, 2019).

Perhaps the primary reason the film received its acclaim was due to its artistic elements, differing greatly from anything that the animated industry had previously seen. *Spider-Verse* draws its inspiration and style from the Marvel comic books throughout the movie, not only greatly pleasing fans, but creating something immensely creative in the process. Although the film is primarily computer generated, the utilization of hand-drawn techniques provides elements of real-world tangibility to the animation.

The animation and style of the film demonstrates the vast extent of creative talent required to create a masterful product. Projects like this are vital to the development of the artistic field as a whole. Without new inventive creations, components such as technique, style, and animation within the entire film category grow quickly stagnant. It may be easy for production studios to continue to renew the same kind of content, losing creativity in the process of seeking to make money. Due to this, it can be difficult for a company to choose to try something new or out of the ordinary, but with *Into the Spider-Verse* it certainly paid off. *Into the Spider-Verse* excels in so many categories as an artistic work. In addition to the three elements of character design, theme, and story being discussed, the score, overall style, and animation itself work in beautiful collaboration.

Into the Spider-Verse begins with a coming-of-age story about Miles Morales, an inner-city teenager growing up in New York City. In the Marvel comics, Miles Morales is a Afro-Latino Spider-Man variant as an alternative to the traditional white Peter Parker. This movie takes the same approach, with Miles' ethnicity being a core part of his identity and culture in his character development.

The story begins with Miles struggling with life as any typical teenager would. He is moving to a higher-ed school away from his friends at home. He also struggles with his Police Officer father who seeks to find a balance between being both strict and loving. He is interested in music, girls, and creating graffiti with his uncle Aaron. During one of his graffiti excursions, he gets bitten by a spider and slowly starts developing spider-like abilities, as any spider-man variant does. As the story progresses, he makes friends with the Peter Parker Spider-Man of his world who then tragically dies fighting a villain. Through the help of friends from other Spider-Man universes, Miles Morales learns how to be a hero in his own right, becoming the Spider-Man his world needs.

Into the Spider-Verse combines the elements of Miles' passions, music and art, into the very nature of the film. The creators of the film sought to ensure that Miles' identity was articulated not only through his character development and design, but through every other category of the film itself. The audio carries Miles' journey of becoming Spider-Man, combining sound design from the fictional world, scored sections using key motifs for different characters and emotional elements, and Hip-Hop music reflecting Miles' current mood and situation. The impact of these three elements creates a feel that differentiates the film from any other superhero movie or any other movie in general.

Sound Editors Rubay and Schulkey shared what the creation process looked like, with the goal of matching the tone of the film's visuals with the sound itself. To do this they had to find a proper balance between the fantastical sounds of the animated world with the grit and realism of Brooklyn. In addition, once the film's plot develops and other worlds begin breaking into the Miles' earth, the sound designers created specific treatments for the new characters, depicting audibly their worlds, designs, and identities (Soundworks Collection, 2018).

Creating a world of sound for an entirely new animated world is no easy task, but the methodology used to implement certain sounds was masterfully creative. Rubay explains that to create the sounds of the interdimensional collider they

> "repurposed recordings of mechanical things, winding things, electrical charges and computer monitors. We made new recordings using microphones that pick up electromagnetic fields and translate them into sound. We used a hand-drill to create the sound of force waves winding up" (Soundworks Collection, 2018, para. 7).

Daniel Pemberton, the scorer for the project, adds that "the hi-hat noise in Miles' theme was made by scratching the actual spraycan noise from his graffiti session earlier in the film into a hi-hat rhythm" (2018, para. 1). Utilizing methods such as these provide a tangible feeling of realism to a film that could easily venture off into the exceedingly fantastical. Elements of this kind may be difficult for a viewer or hearer to notice consciously, but often the goal is that these sound pieces achieve their affect while keeping the viewer unaware and focused on the larger picture.

Miles' other primary passion, art, additionally plays a vital role in the film. His passion is evident in many scenes: the movie opening with him drawing in his room, his excursion with his uncle to create some graffiti, even his painting of his own spider-suit to be more to his liking. The colors and textures in the film emanate from Miles' own designs, but just as importantly the comic books as well. The director and team sought to make the movie feel like a comic book come-to-life, with the goal of any frame paused on looking straight out of a comic book panel (Sony Pictures, n.d.). The movie implements clever comic-book components, such as CMYK offsetting instead of actual motion blur, lighting rendered in halftones, pop-out words, thoughts, and graphics, motion lines, specific-camera angles, integrated textures, the list

goes on. There are specific frames integrated into scenes where all the colors will shift and a frame is held briefly, emphasizing a specific 2D comic panel appearance. To keep the film grounded, artists drew over top of the computer-generated animations. Sony (n.d.) explains that their "creative challenge was to find a balance between heavily stylized design and emotional appeal" (para. 5)

The animation techniques employed in the film are equally as impressive as the artwork, with careful attention to each character and their movements. For example, when Miles Morales is learning how to swing with his webs, he struggles significantly at first. Corridor Crew VFX artists explain that in order to emphasize his struggle, Miles is animated at 12 frames per second while the camera and Peter Parker next to him continue to move at 24 frames per second. When Miles is viewed in contrast to these other two elements, his movements feel rigid and clumsy. As he begins to better adapt to his abilities, he progresses to 24 fps, which depicts him smoothly swinging along as a capable Spider-Man (Corridor Crew, 2019). Techniques like these are used throughout, every character receiving their own special implementation of animation to differentiate them from the others. Combined with each of their specific character designs, the film delivers a stylized feel for each character, allowing the viewer to see each of them as fully their own.

Into The Spider-Verse brought new inventive methods into Sony's creation of a powerful story, resulting in an Oscar-Winning masterpiece. The themes of the story resonate with viewers, as Miles discovers he should not seek to be a Spider-Man like all the others, but rather to simply be himself. Until he discovers that he must take his natural talents and passions and bring them into the superhero world, he continues to fail. This is why all of the elements work

together from the basis of his passions to practically narrate his story for him. The film echoes deep messages about family, passion, and sacrifice in the midst of struggle.

Many Spider-Man movies have been created in the past years, with many also achieving great success. Spider-Man is one of the world's favorite superheroes, being an inner-city kid turned hero that practically anyone can relate to. What this specific movie achieves that live-action cannot is its incredible freedom and flexibility in creative design. The film's emulation of comic books, fluidity with framerate, experimental simulated camera angles, pop-outs, freeze frames, etc. could not be accomplished in true live-action. These elements were intricately pieced together to tell a story about Miles Morales which appeal to both children and adults. The film truly deserves its accolades, as its invention will help the animated industry continue to pursue new creative ideas.

Live-Action vs. Animated

It is important to understand that live-action film is in no way inferior to the animated genre. It likewise is a powerful artform, capable of creating and telling stories that resonate deeply with its audiences. In fact, perhaps most often when creating a film, one should choose the live-action form over animated. Live-action films are naturally more realistic, more grounded, and more quickly relatable. Whereas an animated film has to spend time developing a character's design and story to draw appeal (i.e. Remy in *Ratatouille*), live-action films involving humans are easily connected to.

This is not to say that narrative arcs, displayed emotions, and costume and context design, must not be used to create this connection, but due to characters' natural humanity in live-action films, their base nature is understood. There is something profoundly intimate about viewing another human struggle through a journey that an audience has journeyed or will

journey, living in a world in which the audience lives, and displaying emotion and expression that the audience witnesses daily. Viewing the world in its natural state on a film screen is simply not an experience that can be truly replicated. The live-action form could be examined as extensively as animation itself, with it often being understood to be the foundational form of cinema.

Animated film's very nature differs from live action; it is not real world. It is not supposed to look or feel the same. In order to achieve the connection that live action achieves with its audience, animation must utilize different techniques. For example, the aforementioned movie *Inside Out* achieves its grounding by creating a substantiated and well-developed world within its own context. Since the concepts within the film are naturally abstract and thus difficult to comprehend, animation uses the nature of the world it creates to achieve the concrete.

Issues often arise when one form of film seeks to accomplish the same success as another through an ineffective methodology. For example, Disney has been recreating many of its most beloved animated works as live-action remakes. Although some of these films have achieved success, many have not done as well as their predecessor (the animated work). These films have additionally received quite a fair amount of public backlash. One could fairly say that films of these sort seek to accomplish something the live action genre is not capable of truly delivering, resulting in a lacking story.

Although there is a substantial difference between animation and live action film, this thesis has explored how animated film can tell a story in an equally powerful manner. The methodology differs (and should), but the ultimate result is the same. Both live action and animation are capable of rich storytelling that deeply affects the audience watching.

Unfortunately, many have a notion that animated films are only for children; they are fun and cute and nothing more. This is evidenced by some of its treatment at the Oscars, with three live-action actresses of Disney princesses presenting the animated category in 2022. Lily James jokes, "so many kids watch these movies over and over," with Halle Bailey interjecting "and over and over and over and over and over." Finally, Naomi Scott adds, "I see some parents out there know exactly what we are talking about" (Oscars, 2022). Suffice it to say, these jokes received a fair amount of backlash due to their portrayal of the work created by these talented storytellers and animated teams as nothing more than childish.

In Roxborough's (2023) article, Guillermo del Toro, Oscar Award Winning Director of the animated stop-motion film *Pinocchio*, argues about his passion: "I believe you can make an adult fantasy drama with stop-motion and move people emotionally" (para. 4). In addition, he states in his Oscars' speech "Animation is cinema. Animation is not a genre and animation is ready to be taken to the next step. We are all ready for it. Please help us. Keep animation in the conversation" (Oscars, 2023).

Live action has many strengths and advantages that animation simply does not, but the comparison is difficult because so much of the controversy revolves around personal preference (as discussed regarding the nature of art). In addition, lines have been increasingly blurred in the live-action spectrum with the explosion of CGI usage in these films. There are no longer as many true live-action films (meaning without CGI). Films that do use it, however, often blend computer-generated and animated elements into the background of the story, sometimes accomplished so seamlessly the audience has no awareness. This, however, is a good thing. Technological development in any section of cinematography is a benefit to the entire category as it advances the creative process. Live-action and animation should not be viewed as

adversaries in the film industry, rather they must both be treated as respected and viable art forms.

Animation Today

When the full breadth of everything invested in the creation of an animated work is understood, along with its artistic impact, its place within the current film industry must be validated. Animation offers unique opportunities and methods for storytelling that differentiate it from many other kinds of creative art forms. There is so much intricacy involved in a quality animated process, with talented artists pouring over every stroke and frame.

The three film examples provided demonstrate the heights of accomplishment that animation can achieve. The film *Ratatouille* depicts a unique protagonist's character design, narrating the journey of a rat becoming a cook in an animated world. The film *Inside-Out* illustrates how animation can take intangible concepts and make them tangible, as it turns psychological emotions into characters. Finally, the film *Into The Spider-Verse* specifically demonstrates the masterful techniques and artistry that can be utilized in a film, with deeply creative design and cinematography. All three of these, though some may be intended for younger audiences, still maintain stories with resoundingly impactful themes that anyone could benefit from.

Much more could be said about the animated industry at large, with many other animation genres not being covered in this thesis. Anime, for example, is a hugely popular animated industry originating in Japan, but growing in popularity across the globe. Stop-motion animation also continues to gain traction, an relatively easy form for anyone to attempt themselves. There are countless other animated works and genres, created in America and other countries by studios or up-and-coming artists. Although this thesis primarily surveyed animated

films from a Western perspective, the works created around the globe are by no means less

significant or creative.

Animation as an art form and storytelling vessel continues to expand, and creations by

any studio or artist progress this expansion. To evidence this in 2021, the global animation

market grew by 5 percent, reaching over 372 billion dollars. It was estimated that this will reach

60% growth in the next nine years (Statista Research Department, 2023). Viewers clearly desire

increasingly more animated products, as the unique creations and compelling stories that it

delivers can impact any individual. With the strengths that animation has to offer the public in

mind, its place as a viable art form capable of thriving in modern cinema should continue to be

founded. Animation helps create a better film industry.

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