Seeds of Doubt

Amber Hilson

University of Central Florida

Part of the Film Production Commons, and the Illustration Commons

Find similar works at: https://stars.library.ucf.edu/etd2020

University of Central Florida Libraries http://library.ucf.edu

This Masters Thesis (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Electronic Theses and Dissertations, 2020- by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

STARS Citation

https://stars.library.ucf.edu/etd2020/58
SEEDS OF DOUBT

by

AMBER HILSON
B.A., Florida Atlantic University, 2016

A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Fine Arts
in the School of Visual Arts and Design
in the College of Arts and Humanities
at the University of Central Florida
Orlando, Florida

Spring Term
2020
ABSTRACT

Seeds of Doubt is a two-dimensional (2D) animated film that explores how anxiety can stifle personal growth. The film demonstrates how accepting and coping with this anxiety can help you return to a place of calm and allow you to blossom. Roma, a young witch, struggles to use her magic to successfully make her crops grow. Her lack of confidence leaves her stuck inside the greenhouse until she is ready to move on to the tomato fields outside. She must first re-center herself and overcome her self-doubt before it consumes her completely. This idea is sourced largely from my own personal experience with anxiety as a teenager and how this affected my relationship with myself, my family, and my art.

“And the day came when the risk to remain tight in a bud was more painful than the risk it took to blossom.”
— Anais Nin
ACKNOWLEDGMENTS

I would like to thank my thesis committee chair Jo Anne Adams, and committee members Cheryl Briggs, and Darlene Hadrika, for your mentorship and guidance throughout this process. I would not have been able to do any of this without you.

Thank you to my friends, family, and loving boyfriend, for your constant love and support through these crazy times. You all mean the world to me.

Thank you to my fellow green bananas. Your friendship and laughter have made the hard times worth it.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF FIGURES</td>
<td>v</td>
</tr>
<tr>
<td>WHY ANIMATION</td>
<td>1</td>
</tr>
<tr>
<td>The Problem of Story</td>
<td>4</td>
</tr>
<tr>
<td>Finding the Process</td>
<td>6</td>
</tr>
<tr>
<td>PREPRODUCTION</td>
<td>8</td>
</tr>
<tr>
<td>Identity and Character Design</td>
<td>10</td>
</tr>
<tr>
<td>Set Design Influences</td>
<td>11</td>
</tr>
<tr>
<td>Depth</td>
<td>13</td>
</tr>
<tr>
<td>Plot Devices</td>
<td>14</td>
</tr>
<tr>
<td>PRODUCTION</td>
<td>17</td>
</tr>
<tr>
<td>Animation</td>
<td>17</td>
</tr>
<tr>
<td>Painting Backgrounds</td>
<td>19</td>
</tr>
<tr>
<td>Music and Sound</td>
<td>21</td>
</tr>
<tr>
<td>Visual Effects</td>
<td>21</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>25</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>26</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1: By Author, Early Visual Development of Roma ......................................................... 10
Figure 2: By Author, Shot 9 Background Painting of Greenhouse ............................................. 13
Figure 3: By Author, Early Visual Development of Magic Tome .................................................. 15
Figure 4: By Author, Shot 18 Still ............................................................................................ 18
Figure 5: By Author, Shot 20 Background .............................................................................. 20
Figure 6: By Author, Early Magic Explorations ....................................................................... 22
Figure 7: By Author, Still from Shot 22 .................................................................................... 23
WHY ANIMATION

One of the most important questions that gets asked before ideas are even considered for production is deceptively simple: why is this animated? Without an acceptable answer to this question, it can be hard to justify all the time, labor, and particular care that is necessary for completing an animated production, whether it be two-dimensional (2D), three-dimensional (3D), or stop motion. When initially conceptualizing my thesis in fall of 2017, the gravity of this question caused a lot of anguish. In my contemplation, I realized that the answer to the question lies in why animation is special in the first place: because it is more than just the combination of writing, film, and visual arts. Blending these things is what elevates the work to something more. This can be done through characters and settings, by involving elements that simply do not exist in real life, or by exaggerating certain beautiful subtleties that might be overlooked if shot in live action. It can be done through explorations of more abstract concepts that can’t simply be captured in a painting, because they require visual nuance through motion that a single image can’t provide. As great animator and filmmaker Norman McLaren states, “Animation is not the art of drawings that move, but rather the art of movements that are drawn. What happens between each frame is more important than what happens on each frame,” (qtd. in Wells, 10).

The magic of animation comes from the medium’s unique ability to depict the motion of an idea, a feeling, or an event, which can create new depths of meaning that other mediums don’t have the ability to express.

What this led me to with my own thesis was the realization that I needed to highlight and exaggerate the main narrative themes of my film; namely, intense feelings of anxiety, the beauty of nature, and finding peace in the meditative process of creation. Through animation, I can
convey my main character’s anxiety visually in a way that couldn’t be done as effectively in either a singular painting nor live action film. I can depict the beauty and power of nature by highlighting it with literal magic. As British animators John Halas and Joy Batchelor state, “If it is the live-action film’s job to present physical reality, animated film is concerned with metaphysical reality – not how things look, but what they mean,” (qtd. in Wells, 11). Building on this idea, I bring these thematic ideas together in animated film to create visual poetry.

I based the design of main character Roma on myself in order to explore the personal struggles I faced at a similar time in my life. As a teenager, I dealt with crippling anxiety and a fear of failure so severe that it limited me from creating art for nearly three years. It was only by learning to accept failure as an important part of the creative process that I was able to begin to overcome the paralyzing fear of making mistakes and stop restricting my art making process. It was also important for me to bring attention to the significance of the relationship between Roma and her Papa, as daughter and father as well as mentee and mentor. Papa provides Roma with support, comfort, and a guiding hand, but never directly leads her to any concrete answer.

Referencing my own direct experience of growing a garden and tomato plants with my father, I use growing plants in my film as a metaphor for creating art. My own personal relationships have been so integral to not only my journey to cope with anxiety, but also my growth as an artist; it is only because of the guidance and support of my family, friends, and several teachers throughout my life that I am now able to harness my own creative magic as well.

Anxiety, self-doubt, and fear of failure are plagues that are prevalent throughout the creative community. I have spoken to many artists who closely tie the success of their careers to their own self-worth or attribute the perceived value of their work to their perceived value as a
person. Many artists can relate to the experience of approaching a fresh, blank canvas and feeling nervous, anxious, unsure where to begin. Grace Emmet, an illustrator and volunteer writer for womenofillustration.com, describes her experience as an artist with anxiety and self-doubt as follows:

Following the months after my graduation from art school, I experienced some of the most severe doubts in my artistic ability I had ever faced. I didn’t draw because I told myself I was lazy, burnt out from school, and that I wasn’t ready. But in reality, I was afraid to transition from art student to a professional artist.

Very slowly, and with many missteps, I learned how to cut myself slack for not being perfect. It was only when I relieved myself of the pressure of having to face the world as a “real” artist that I was able to do what I love most again. (Emmet)

Because Roma’s core struggle in the film echoes my own personal struggles as an artist, I was able to utilize the reflective quality of the act of animating to find further clarity for myself. Animation artists do not have the luxury of time that live action filmmakers do, therefore every movement and gesture must be carefully considered before they are even animated. The process of thinking through each movement so deliberately becomes almost meditative, as animators tend to mimic the movements they are trying to recreate in front of a mirror or a camera to get a better understanding of how to execute it. This allows the animator to mirror what the character is moving a certain way based on how they are feeling and what they are experiencing. This idea of using the reflectivity of artmaking to gain a better understanding of emotions is the basis of art therapy, especially for anxiety sufferers.
The power of art therapy for persons diagnosed with anxiety lies within the idea that the creative process allows clients to engage in both self-expression and personal exploration (Liebmann, 1990). Art making enables clients to step back, look inside, and identify their strengths and weaknesses by creating visible depictions of their mental states. Examining tangible images and forms representative of the self allows a person to gain a clearer understanding of factors contributing to his or her personal development and what life changes need to be made. In my experience, the self-actualization and disclosure inherent to art making seem to be very helpful to persons with anxiety disorders. (Chambala 187)

Animation created an avenue for me to overcome my own fear of failure due to lack of skill. Throughout the creation of this film, I was constantly reminded that the only way to gain skill is through trying and failing. Roma learns over the course of the film that striving to make all your creations perfect will only cause you anxiety and heartache. She and I both learned that the end result is not as important as the actual process of creating. By refocusing your efforts from a perceived lack of skill to finding joy in the process, your creations will be filled with joy too.

The Problem of Story

One difficult aspect of working on this film was clarifying the core meaning of my story. I began the process with an approximate idea about the unfolding of the plot, but difficulty arose when developing specific elements that signified the nuances of my meaning particular to my perspective. I developed multiple iterations of the story that all resulted in limited success.

Part of the problem was that I was becoming overloaded with ideas, concepts, and potential nuances of my theme. With every new iteration of the story, my actual intentions became buried under a plethora of symbols and plot devices from older versions causing my
message to become more confused. As Karen Sullivan so aptly states, “When a story isn’t working, instead of identifying what is wrong with the story, new shorts producers tend to add more: another character, another event, more props, more dialogue. It usually doesn’t fix the story. It is just more, not better.” (Sullivan, 107) This is exactly what I ended up doing in my fruitless search for the perfect symbolism to express my numerous thoughts and feelings. I put such immense pressure on myself to make sure everything was executed perfectly that I became overwhelmed very quickly. It became too easy for me to lose myself in the idea that my storytelling skills weren’t up to par and that I was doomed to fail.

Something that is so often said in the world of animation is a quote from Henry David Thoreau, to “simplify, simplify, simplify.” When Thoreau initially said this, it was in the context of happiness. He claimed that when we take on too much and spread ourselves too thin in life, we can become overwhelmed and find it difficult to enjoy our lives for what they are. The same can be said of animation; echoing the words of Sullivan, too much detail can make a story difficult to follow. Heeding this advice, I decided to strip down all the excess elements and devices that I had been trying to make work to find the actual soul of the story. This manifested in two key ideas: the first, the way unchecked anxiety can creep up and consume you entirely, narrowing your worldview and seemingly paralyzing you. The second is that remembering the joy in the process of creating is what allows you to grow and develop.

Finding exactly what I wanted to say with *Seeds of Doubt* was key to finding my voice as a filmmaker. I was then able to refocus every other aspect of my production to make sure that any decision I made pointed back to one of these two ideas in some way. This concept is key in any animation production, as it creates a guiding principle for all decisions to point back to during the production. Any acting choice I made for my characters, any background I painted, or
any visual effect on screen all had to reflect at least one of those two points. Through this I realized that I needed to reshape the setting in order to reinforce both Roma’s youth and narrow focus, so my wide fields of the family farm shrunk down to a simple greenhouse with a view of the fields from the windows. I consolidated several different props into one simple magic tome that served as a symbol of Papa’s wisdom and craft that he imparts on Roma and the legacy of their heritage. I made sure that Roma’s focus never strayed from her magic, the plants, or the tome. In doing so, my story became much clearer, and in simplifying many aspects of my film, it allowed me to successfully create a story that could be told in the two- to three-minute short film format. This finally allowed me to move on to the next step of learning the full animation pipeline.

**Finding the Process**

At the time of starting the production of my thesis film in fall of 2017, I had not experienced the full filmmaking process in animation. I had done small looping pieces for my own portfolio, but I had not been introduced to all the specifics that went into planning and organizing the complete production of an animated film. As previously stated, animation is a very time-consuming medium, and as such, extensive planning and project management are extremely important in assuring that one can complete work in a timely manner. Initially, it was very difficult to estimate how long different aspects of production would take because I lacked production experience. The only way to gain this experience was by diving straight into animating key shots from my film from start to finish. This facilitated the creation of a clear proof of concept for the final look of my film, and additionally allowed me to gain a better sense of how the entire animation pipeline would work for this project. Through this process I very
quickly learned the importance of keeping track of how long different steps of the production process would take by utilizing work logs and taking extensive notes. I was then able to use this information to create schedules that could estimate roughly how long different parts of the process would take.

Experimentation was essential in finding out what visual styles and methods would work best to communicate my story. This trial and error process is integral, especially in the earliest stages, to figure out exactly how things will look and the most economical way to do so. Leaning on my drawing and painting skills, I ultimately decided to use a digital two-dimensional (2D) animation program called TVPaint rather than a three-dimensional software like Autodesk Maya. TVPaint boasts painting tools not unlike Adobe Photoshop, along with simulated multiplane cameras, visual effects, and overall optimization for the animation pipeline.
PREPRODUCTION

I knew the story of my film would be best told in a world like those created by Tolkien in *The Hobbit* or in Studio Ghibli films such as *Princess Mononoke* (1999) or *Kiki’s Delivery Service* (1989), where high fantasy and magic are tied to exploring human nature, and respect and reverence for the natural world are key components to the message. To emphasize this magical feel of the world at large, I took inspiration from the visual language of aforementioned Studio Ghibli films as well as Disney films of classic fairy tales and storybook-style films, such as *Snow White* (1938) and *Winnie the Pooh* (2011). These films all juxtapose simplistic characters with complex and detailed background paintings in order to illustrate the depth of the natural world. Combining these ideas with the setting of a tomato farm like the one my own father grew up on, I created a world in which magic was used by people to serve nature, resulting in a harmonious relationship between the natural world and the farmer who lives off of its bounties.

Agriculture’s history has been driven by innovation, both in tools and practices, in order to increase productivity and output. In the medieval fantasy-inspired world of my film, magic has taken the place of technology as an aid for farmers and their production of crops. My characters’ magic is tied to nature and the creation of life and growth, rather than allowing them to do things like bend physics or manipulate the world around them. In doing so I wanted to emphasize the importance of respect and care in the relationship between farmer and nature.

With these inspirations in mind, I began to develop my own visual language for the film. Taking from the lessons of the influential film consultant Bruce Block, the next step was to create story structure and visual structure graphs for different elements of my film. These charts
depict things like depth, visual rhythm, or the intensity of action on one axis and the length of time of the film on the other. By making these graphs and comparing them to one another, the connection between how visual elements contribute to storytelling becomes very clear. By the same token, it becomes easy to see if certain elements of visual storytelling do not line up with the structure of the main story. Therefore, they can be easily corrected or adjusted before too many resources are spent on production. As Block so aptly states,

“Just as there’s story exposition, there’s also visual exposition. The story exposition defines the characters, the story situation, the location, and the time period. Story exposition sets up the basic story elements. The visual exposition defines how the basic visual components will be used to support the story,” (233).

When making these graphs for my own film, I made a note to track certain elements such as depth of field, the length of time of my shots, and the movement of my camera in order to compare these ideas to the emotional intensity of my story. I was able to emphasize the correlation between long, stable shots with little camera movement with moments of calm, and short, high action shots with anxiety and fear. As a result of this exercise, I was able to ensure throughout the entire production that these and all other design decisions reinforced the content of the story.
Because my film focuses on my own personal experiences with anxiety and personal growth, it was important that my main character reflected not only the ideas that she symbolizes, but also elements of myself. At the beginning of the film, Roma is a young teen who still hasn’t quite come to understand herself or her magic abilities. She is of a slight build, somewhat unsteady, and hesitant. She is made up of lanky, somewhat angular shapes to indicate her youth and awkwardness. Her relatively simplistic clothing reflects both her setting, a medieval-like fantasy world, as well as her hardworking nature as a farmer. The simplicity of her wardrobe also helps make her less time consuming to animate. The rich reds and browns of her hair and clothing highlight Roma’s passion and tie her to the earth and soil, while the blues of her
wardrobe tie her to water. While water is essential for the growth and survival of all living things, water can also be dangerous and powerful, such as in rushing rivers or severe storms. In this sense, the potentially volatile dichotomy of water symbolizes Roma’s tumultuous coming of age story. Ultimately, Roma’s visual design is comprised of a mixture of visual decisions that both appeal to my own sensibilities and reflect how I looked when I was her age.

By the same token, Papa’s character design needed to reflect physical and emotional symbolism of my own father. He is a kind and supportive mentor, physically strong and sure of himself. Like my own father, his age and tanned skin reflect his years of gaining wisdom and experience working out in the field. He is made up of largely rounded rectangular shapes, both of which help indicate his kind and reliable nature. Like Roma, his clothing fits the idea of a farmer in a world more reliant on magic than technology. If Roma can be tied to water, Papa can be tied to a sturdy old tree. He is what Roma aspires to be. His relaxed attitude combines with his experience to allow him to demonstrate mastery of his craft; he can easily grow a ripened tomato from just an illustration in a book. He wears rich greens and browns, tying him to the nature, foliage, and the earth.

**Set Design Influences**

While my narrative would have worked with potentially any crop, it was important to me to honor my own family history by specifically making my setting a tomato farm. The main setting is the greenhouse that overlooks the tomato fields, allowing Roma to see what awaits her just outside. I felt that a greenhouse was the perfect setting for this story, as it is not only a place of nurturing for developing plants, but also serves as a safe, comforting place of learning and
growth for Roma while she practices her magic. At this point, Roma needs to move on to the wider world outside of the greenhouse, but remains trapped inside by her own self-doubt.

I was very inspired by the vast, rich environments featured in many films from Studio Ghibli such as *Princess Mononoke*, *Howl’s Moving Castle*, and *Castle in the Sky*. These films tend to feature complex, deep environments wherein the natural world has a power and majesty of its own that I want to channel in my own film as well. I wanted the world outside of Roma’s greenhouse to be a beautiful wide expanse where nature is free to grow as abundantly as it wants, even if it is assisted by magic. This is intended to reinforce that Roma’s perfectionism does not help her, and in fact only hinders her from continuing forward. It is only when Roma learns that she must be a conduit for nature’s growth, rather than trying to control the outcome, that she can leave the greenhouse to become a part of nature herself.
In this film I very intentionally use depth of field as a visual metaphor for Roma’s understanding of the world around her and how she views her place in it. I wanted to show how her perspective of the world and of reality is very narrow due to her youth and inexperience, and how this widens as she reaches maturity. It was also important to me to depict how her anxiety prevents her from seeing beyond her fear, in strong contrast with what wide and open fields await her just outside. The majority of the film takes place in the greenhouse; a typically safe, comforting space to learn and grow, until Roma’s anxiety causes her to feel trapped by her environment. Because it is a very confined space, it allowed me to depict how Roma’s perspective is currently quite limited. In order to highlight the complexity of nature in
comparison to Roma’s limited world view, I referenced the way Studio Ghibli films achieve a similar effect.

“Depth in Miyazaki’s animations comes from stacking or layering the planes of the image, and he enhances this sense of depth with the painterly detail of his landscapes. The use of fairly simply drawn characters upon detailed and highly artful backgrounds assures that the world (of nature) appears deep and complex.” (Lamarre 104)

Glass windows allow Roma to see a glimpse of what it’s like outside, but she will never truly know how big the world is until she gains the confidence to explore it. Her worldview gets progressively narrower as her anxiety takes over, eventually becoming the only thing she can perceive.

**Plot Devices**

Roma’s magic, which is what causes the plants to grow, serves as a visual metaphor for her creative energy. When she is anxious and unsure of herself, she is unable to put positive creative force into her magic, which causes her plants to die. By filling her creations with negativity and self-doubt, the vines come to represent Roma’s anxiety; they restrict her, consume her, and work to overshadow any encouragement or positivity from people who support her, in this case, the tomato that her father gives her as a symbol of his faith in her ability.
When Roma’s crop initially fails and she gets frustrated, her Papa brings out a large spell tome that helps illustrate the point that anxiety will produce bad crops, while happiness and inner peace will help produce growth. The purpose of this is to not only show Roma, but also the audience, an early glimpse at the message of the film. It also serves as a reminder to Roma later in the story as she comes to her own understanding of her Papa’s advice: that she will succeed when she is able to calmly appreciate the joyful experience of creating rather than trying to strictly control the outcome.

The plants themselves and Roma’s ability to grow them represent her attempt to control nature versus working with nature by learning how to be a conduit for her magic. In the beginning of the film, she is unsure of herself, and her plants whither shortly after sprouting; her uncertainty makes her unable to provide her plants with the help they need to grow. As she
becomes more anxious and upset with herself, her crops turn into invasive vines that grow around her and start to strangle her. When the positive magic from Papa’s tomato saves Roma from her anxiety, it causes the vines to lose their strangling grip and wither. In the end, when Roma comes to understand her Papa’s lesson and re-centers herself, she learns to find joy in the process of creating again; she can now grow explosively fertile crops and is able to leave the greenhouse.
PRODUCTION

In animation, especially hand drawn 2D animation, time is the most valuable resource you have. It is vital to be economical and intelligent with how you use your time, and where all the planning and scheduling done in preproduction comes into play. After the completion of two proof of concept shots, I was able to break down the process of my film’s production into three main steps: rough animation, line art (or clean up,) and color. In rough animation, I use rough gestural drawings to lay out the main actions and establish the timing of each shot. Line art involves cleaning up these rough drawings to make sure all forms are clear and that volumes of objects are consistent as they move through space. In my case, it was also particularly important to me to utilize a pencil-textured digital brush in order to preserve the hand drawn quality of my work. TVPaint’s color-texture-gradient (CTG) layer made the coloring process extremely easy. By referencing the cleaned up drawings from another layer, the CTG layer is able to easily calculate where to fill color automatically rather than the artist having to fill a shape manually. This greatly helped to speed up the production process and allowed me to direct focus on refining motion during the animation phase.

Animation

When animating, careful consideration is made for every movement, both from the characters as well as the camera. In this film, I intentionally used long shots that feature slow, contemplative actions to highlight moments of calm and thoughtfulness. Shots that are meant to depict Roma’s feelings of anxiety are quick, feature a wider variety of changing camera angles, and have higher action movements to reinforce the viewer’s sense of panic and disorientation.
Roma’s specific movements are also very intentionally planned out to reinforce her personality and her mental state. She is somewhat awkward and hesitant at the beginning of the film in order to highlight her uncertainty in her ability and herself. Her later panic is emphasized by her jerky, frantic movements as she runs through the greenhouse trying to escape the growing vines. Roma’s movements are controlled and have an even tempo as she allows the magic to flow through her and when she finally steps out of the greenhouse. The variety in Roma’s character acting helps to emphasize her emotional journey throughout the film. In contrast, Papa’s acting is steady throughout the entirety of the film. His movements are confident, loose, and smooth. This helps to reinforce not only his calm, experienced nature, but also his reliability and consistency as a character. As a loving mentor for Roma, the deliberate and self-assured quality of Papa’s movements give Roma and the audience a sense of comfort.

Figure 4: By Author, Shot 18 Still
Painting Backgrounds

In attempt to pay homage to Studio Ghibli’s visual style of painting their environments that convey similar ideas, I did a lot of research into their specific practice and methods that they use to create the background paintings for their films. I studied the work of Kazuo Oga in particular, one of the main background painters for both Studio Ghibli as well as Studio Madhouse. I learned of the existence of the specific standard paint used by many background painters in the Japanese anime industry called Nicker Poster Color, an extremely pigmented paint with consistency similar to a gouache. I ordered some for myself to experiment with to see how the paint behaved and how I might create a similar look digitally. To depict calm, bucolic scenes, artists typically use vibrant blue hues with a slight gradient to show the vastness of the sky. They fill in flora by working from dark to light, using a lot of contrast to suggest a bright, sunny day with strong shadows, and sporadic but delicate brush strokes to convey clusters of leaves on verdant foliage.
When adapting these techniques for my own background paintings in Photoshop, I utilized these techniques for painting the fields outside the greenhouse specifically. Because painting in a digital space does not inherently have the same material properties as physical paper and pencil and paint, I find that it can sometimes look flat or sterile if these elements are not intentionally added back in through digital means. I focused very heavily on textures when it came to painting the interior environment of the greenhouse to give things a lot more life. From the stippled texture of the wall, the roughness of the terra cotta pots, the smooth variation of wood grain seen on the table, all the way down to the compacted dirt floor, I quite literally left no stone unturned when it came to giving each object in Roma’s safe space its own distinct feel. It was an important step necessary in helping to create the atmosphere and breathing life into the

*Figure 5: By Author, Shot 20 Background*
space. I felt that the importance of texture helped to create a lively environment full of beautiful imperfections and “happy little accidents,” which I wanted to contrast directly with Roma’s stiffness and search for perfection.

**Music and Sound**

I found through experimentation in the music production program, GarageBand, that a combination of string instruments, particularly guitars and harps, suit the emotional arc of my story best. I chose to work with University of North Carolina at Chapel Hill graduate student Tyler Hawes as my composer, in particular because of his specialty in guitar and other string instruments. The harp and guitar have come to represent Roma and her Papa respectively. The harp’s soft, feminine tones and intentional plucking sounds were a good fit to represent Roma’s character as a young teen girl. Calling upon the harp’s cultural associations with both magical and heavenly bodies, I felt the harp also helped reinforce the idea of Roma as a young Mother Nature figure. For Papa, using the guitar’s pleasant melodies to represent him helps reinforce his positive, calming presence. By using two related string instruments, I want to emphasize the familial relationship of my two characters, while also highlighting their own individual personalities. Placing emphasis on these kinds of sounds also helps to reinforce my pastoral fantasy setting.

**Visual Effects**

When it came to my own production’s visual effects, my list of needs was short; my main focuses were Roma’s magic and the growing, twisted vines. Although relatively simple in concept, these two elements are essential to the symbology of my storytelling. Experimentation
was once again key in order to figure out which method would be best for producing these special effects.

![Image](image_url)

*Figure 6: By Author, Early Magic Explorations*

When initially designing how to depict the magic in my film, it was important to remember what it represented in order to guide my visual decision-making. Referencing childhood memories of watching seedlings grow into full, fertile plants with my own father, I wanted to depict what seemed like magic growing up as actual magic in my film. Roma’s and her Papa’s magic is what makes their plants grow, and is a physical extension of their creative souls. Like the sun, it creates warmth and life, enabling their crops to grow. Because the magic in part represents the light of the sun, I chose to create the magic in Adobe After Effects using spot lights. This allows the magic to affect the lighting and color of the characters and environment, and also allows me to keep the shape consistent as it floats around screen. I used two to three different layers of lights, depending on the shot, in order to create further depth of color and shape.
When approaching the design and execution of the visual effects for Roma’s vines, once again it was important to remember not only their function, but their meaning. In the film, Roma’s vines are an expression of her emotional state. When anxious, the vines are thin, wiry, and ghostly in appearance. They grow around Roma, restricting her and nearly choking her, to emulate the way an anxiety attack can feel entrapping or strangling. When Roma finds peace with herself, she is able to transform the ghostly anxiety vines into lush, fertile tomato plants. One of the most important aspects of Roma’s vines throughout the film is their physical interaction with her. For this reason, after a lot of experimentation and deliberation, I concluded that it would be best to draw them by hand in TVPaint. This allowed me to produce these visual
effects in a timely manner, and also ensured that Roma and the vines could interact with appropriate harmony, both in timing and in visual style.
CONCLUSION

After the production phase of the film was complete, it was time to move to the post-production phase. This process is a frequently overlooked and underappreciated part of the film pipeline. In 2D animation, though it varies depending on the specific studio or production, post-production often involves the final mixing of audio to visual, compositing, and editing all of these elements together to create the final product. I utilized Adobe After Effects once again in order to simulate camera moves and composite my visual effects with the animation. The final editing process for Seeds of Doubt was relatively simple; after stitching together all of the rendered animation, the final mix of the music, and adding appropriate titles and transitions, the film was complete.

Reflecting on the process and production, I have found that animating this story has been a healing process for me. Because of the heavily self-reflective nature of this film, and especially through the act of animating it, I have been able to reconcile with past feelings. I have come to understand the ways in which I have grown as an artist, animator, and anxiety sufferer. Ultimately, my hope is that I can bring a similar sense of healing to other people with similar afflictions as myself, and show them that finding joy in the process can help them cope with their own anxiety and self-doubt.
REFERENCES


