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Sugar Freed

By Sarah Gaygen

A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Fine Arts in Film and Animation

School of Film and Animation

College of Art and Design

Rochester Institute of Technology

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Abstract

Sugar Freed is a 2D digitally animated short film about a little girl named Molly, who gets fed up with her mother, a dentist, and ends up in a candy world ruled by evil gummy bears. *Sugar Freed's* message evolved over time from a simple warning against sugar, to a child gaining an understanding of why her mother's lessons are necessary, stemming from parts of my own childhood. The purpose of this film was to see if I could find the right balance between time management and quality control to produce an animated short that was well over four-minutes long, had a full narrative that showcased all the animation techniques I had learned, retained the high quality standards that I had applied in past films, yet would be fully finished by the end of the academic year. It was also important that this film would be met with mostly positive criticisms at screenings.

Molly storms out of her mother's office after being denied ice cream and finds her lollipop is sugar free. Outside, she catches sight of a giant, walking gummy bear, beckoning her to follow. She finds a packet of magic rock candy, and after eating it, finds herself in a vast world made of candy and sweets. At the encouragement of the land's gummy bears, she winds her way through the land eating everything in sight. Eventually, after winding her way through the distant chocolate mountains, Molly discovers the true nature of this land, finding a factory of captured children, the bears harvesting their rotten teeth for candy coated fuel, and then must find a way to escape with the help of the dental tools her mother gave to her.

Introduction

In the making of *Sugar Freed*, my ultimate goal was to see how far I could push the limits of what I was capable of in terms of my skills as an animator. Being the final film of my college career, I knew it was “go big or go home” time. As many of the RIT faculty can testify, I certainly didn’t shy away from going big. My film ended up being just shy of six-minutes, and being a 2D hand drawn feature, required a tremendous amount of work because of the need to create over 6000 different drawings, on top of nearly 100 backgrounds. While I knew I would deal with struggles in terms of managing my time while making sure each scene retained a high level of quality, I took on that challenge because I wanted my film to be a culmination of the techniques I learned, and through those techniques combined with unwavering dedication, I believe I achieved my goal of not only completing a large-scale film, but a critically successful one.

To achieve that success, I needed to craft a story and setting that I could really sink my teeth into. As it turned out, that statement ended up becoming more literal than first intended. I had always been inspired by different media surrounding colorful sweets and candies from early childhood, from short films to board games. Then I thought about an early childhood experience with my first cavity and how my mom and dental hygienist struggled to keep me calm while they took care of it. The majority of candy themed cartoons back then didn’t come with any warnings about the dangers of sugar. There were many childhood PSAs that warned against too many sweets but most of them were diet related. However, there were those that talked about how it

could damage your teeth. I thought, what if I could combine those prospects in a cohesive adventure story?

I decided on a young girl, Molly, being fed up with her dentist mother, ending up in a world of sweets like she's always dreamed, but it turns out to be far from a friendly place, and defeating the bad guys with dental hygiene. The only missing ingredient was the heart. I thought about my own mother, and how often the things you've been taught at a young age don't always register until you become older. In resolving the story's emotional conflict, I realized that it isn't just that a parent gives the tools or lessons that a child needs through life, but also that the child should recognize *why* those tools are used and necessary. This realization came through while workshopping the original treatment of the film's plot because it ended with Molly simply defeating the dragon, which proved to be unsatisfying. It needed an extra bit of tension, so instead of the dental tools defeating the beast, it was changed to Molly's smile in her realization of why she appreciates her mother.

With the execution of that message in mind, this film came to be a testament to the work ethic my parents tried to raise me with. I poured myself into the research and processes for the year and a half of total production time, on top of balancing work life and new work opportunities that came along the way. It took many hours on end, and little time for breaks in between, but not only was the film finished, I was able to make adjustments based on nearly all critiques received during the course of production, no matter how small. In the process of gathering the building blocks of this thesis film and assembling them together, *Sugar Freed* took me on quite a journey on the road to completion.

Research

Story Inspirations

The stories I've grown up with that have stuck with me through adulthood are the ones where a child character gets swept away to another world, such as *Alice in Wonderland*, *Peter Pan*, and *The Wizard of Oz*. These were often a form of escapism for someone like me who grew up being homeschooled in a small town that had a limited worldview. However, all the protagonists eventually end up back where they started, either because that's their end goal or they wake up from the dream. Sometimes the two will overlap, but either way they'll often come back changed in some form or another, with some new appreciation for the environment they originated from. I decided to take a similar approach in my story but make the escapism in itself part of the conflict, fulfilling the protagonist's hedonism before the world comes back to bite them. In that sense I aimed to create a realm that seemed enticing on the outside but had an evil underside that didn't shy away from a few dark elements.

I've always had a fascination with the darker side of fairytales. These stories often didn't shy away from some gruesome imagery, like the evil queen in Snow White getting her feet burned off with red hot shoes, or the stepmother and stepsisters getting their eyes pecked out by birds. One that's always stuck with me is Carl Collodi's *Pinocchio*. I had grown up with the 1940 Disney film, and did not discover the original serialized stories until I was much older. The Disney version is quite sanitized in comparison to the original text, which included imagery like

Pinocchio being hanged from a tree and black rabbits carrying a coffin made intended for his dead body. Yet Disney's Pinocchio is still regarded as one of the darker movies in the company's catalog. The Pleasure Island sequence, in particular, had a strikingly grim and intense tone with the donkey transformation of Lampwick and the main protagonists barely escaping with their lives. I took much of my inspiration for *Sugar Freed's* candy world from here, alluring children with tempting candy only to use them for nefarious purposes. I wanted a similar kind of punch with my storyline's external conflict, a feeling of true danger. This was what inspired the kidnapped kids and the bears' transformation into a dragon. Most of all, I wanted to show the fear that Molly felt, but also how she had the courage to overcome that danger.



Fig. 1 *Pinocchio*, Walt Disney Studios. 1940

One short film I took direct inspiration from was a Little Audrey cartoon from 1948 called *Butterscotch and Soda* by Famous Studios. Both it and *Sugar Freed* have similar story beats: A girl who loves sweets, to the chagrin of their caretaker, ends up in a world of candy, and after coming in conflict with the candy denizens, seemingly wakes up from the dream. It was a good source of inspiration for both the story and the visuals, but also highlighted differences I made sure to implement in comparison. For one, I wanted to up the pacing so that there was more focus on my candy world. *Butterscotch and Soda* didn't get to its candy land until the last third of its runtime. In his article, Remembering Al, Mark Meyerson notes a selection of the film's gags were also

spoofing off of the 1945 Oscar Winner for Best Picture, *The Lost Weekend*, (Seymore Kneitel, 1948) including finding an empty candy bag under a light fixture and a withdrawal motivated hallucination of a bat causing Audrey to scream before she faints (Mayerson). Its thesis therefore was mainly a child friendly allegory for the dangers of addiction, as the candy people only show up to admonish Audrey as she deals with the consequences of eating too much candy. Before she wakes, they torture her by pouring candy down her throat as she sits totally defenseless. This was a definite story area I wanted to change for my film, I wanted to give my protagonist the ability to fight back using tools that could thematically win against the sugar filled attackers. I then tied that element to my film's thesis of understanding the reasons parents teach the lessons they do, and that took care of the bulk of my treatment.



Fig 2. Kneitel, Seymore, *Butterscotch & Soda*. Famous Studios, 1948.

One more surprising bit of story inspiration I found along the way was from Tim Burton's 2005 rendition of *Charlie and the Chocolate Factory*. I was rewatching the film for the first time in years when a plot point came up that I had all but forgotten. Tim Burton added a new backstory for Willy Wonka that involved him having a rocky relationship with his dentist father. At that point I had already decided on my protagonist and that her mother was a dentist, so I studied how Tim Burton handled the relationship for the film. Wonka, played by Johnny Depp, and his father, played by Christopher Lee, ran at odds with each other, the rules against eating

candy being extremely harsh. Going against his father's wishes, Wonka eats chocolate for the first time and finds his passion in candy making, and his father completely abandons him while still a child, literally taking the house with him. In the end Wonka and the father reconcile at Charlie's encouragement. I decided to use this as a contrast to my film's parent-child relationship, making sure the mother remained likable to the audience and flexible to her daughter. Molly on her part through her journey comes to appreciate her mother's rules again coming in contrast to Wonka.

Visual Inspirations

When it comes to sweets and treats, there's no shortage of visual inspirations to draw from. For real life examples I studied plenty of gingerbread houses to populate the town of Gummy Gables, how and where the icing was placed to glue the walls together, and what kind of toppings could be used to trim the roofs and decorate the outside. The gingerbread houses were kept somewhat uniform to save time, all having the same general boxy shape, though the couple scenes with houses back in the real world were treated a bit differently. For those I went around Lockport, NY, which is very close to my hometown, and used some of the suburban houses there as reference. Specifically, I drew from a selection of a neighborhood block that was very close to my old childhood dentist's office, replicating many of the front porches and hedges surrounding the buildings. The dentist's office in the short was loosely based around my current dentist as an adult with its light cream-colored walls, hardwood floor, and wood paneled desks and cupboards, providing a warm and welcoming atmosphere.

When I started looking for visual references from the art and film world, I first looked at a variety of short films from the early to mid-20th century. Taking a cue from the Cuphead Artbook led me to shorts such as Disney's *Cookie Carnival*, and Columbia's *Bon Bon Parade*, both released in 1935 (Cymet & Moldenhauer, 89). They all had lots of architectural elements to study from and gave me ideas of how to design the landscape. However, many of the final design elements in the end came from a selection of shorts from Famous Studio's catalog from the late 1940s through the 1950s. The aforementioned *Butterscotch and Soda* entered its candy land with a large, sugared mountain with a big cherry on top, which was the basis for my chocolate lava cake inspired mountain dusted with powdered sugar. Another Little Audrey short, *Tarts and Flowers* (Bill Tytla, 1950) had its own centerpiece that I drew reference from: a large layered wedding cake in the center of its pastry themed town, which inspired the cake castle the gummy bears run out from.

Character designs on Molly and her mother early on were slightly more detailed and anatomical but were switched to a more stylized UPA mid-century look. With that, I decided to go against trying for the pastel watercolor look of the older short films and instead aim for a bolder, brighter color palette, but still keep it more painterly. To that end, I looked for more modern resources and wound-up finding inspiration from Disney's 2011 film, *Wreck it Ralph*. Much of this film took place in a racing game themed around candy, and had the bright, saturated colors I was looking for. I studied concept art from Jenifer Lee's *The Art of Wreck it Ralph* and took visual notes from Ryan Lang's uses of color, where and how the values were used, as well as some more landscape inspiration from Lorelay Bove's concept work of the town (Lee, 97).

Combining these modern design concepts with the visual inspirations of the past, I was able to achieve the bold, illustrative look of my film.



Fig 3.1 Lang, Ryan. Concept art for *Wreck-it Ralph*. 2012. Digital.

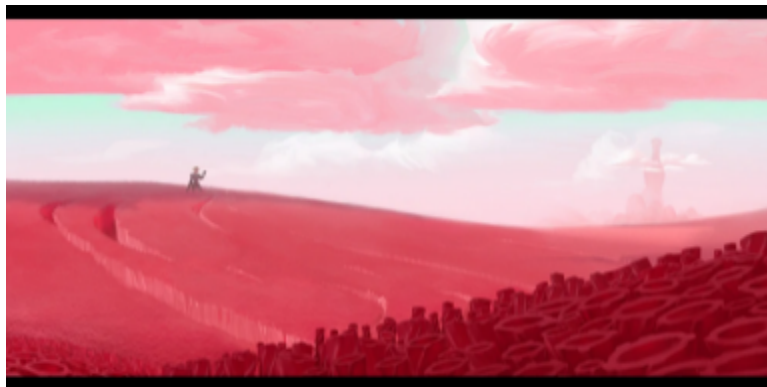


Fig 3.2 Lang, Ryan. Concept art for *Wreck-it Ralph*. 2012. Digital.

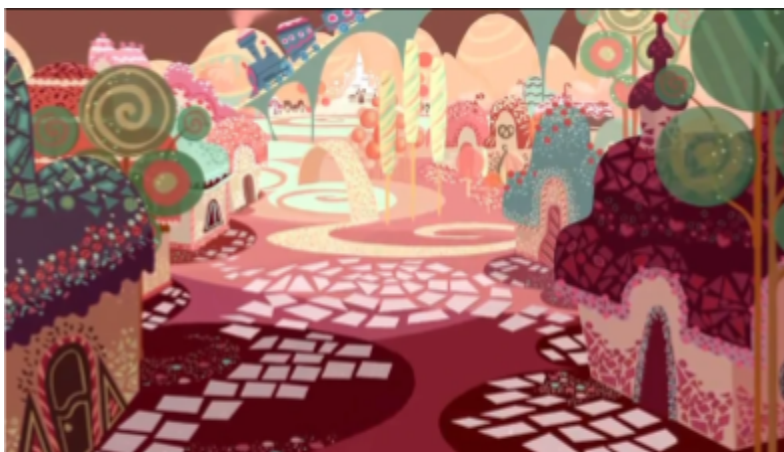


Fig 3.3 Bove, Lorelay. Concept art for *Wreck-it Ralph*. 2012. Digital.

Process

Storyboards

I work with story making in similar ways to carving a sculpture: starting out big and chiseling it down. The finished treatment from Thesis Prep certainly had more than enough to work with. The biggest problem was trying to condense all that information to a reasonable length. There were two versions to start with, one long and one shorter cut. They were both obscenely large with too many shots. The original longer cut had 220 panels and well over 100 shots. The main issue was that I was putting out way too much information that wasn't necessary. That included a large selection of traveling shots with characters simply moving from one location to another.

There was also the case of opening scenes being very drawn out. The first iteration had a lot of cuts establishing the characters and locations. That section alone had 43 shots in the very beginning. The second version, which was the main basis for the final cut, only had half that amount, but also included a drawn-out opening shot with a continuous camera. In the end that long opening was rearranged into a few separate cuts, and everything was contained to one room to simplify the layout. All the important opening beats managed to fit into a minute and a half, such as establishing the relationship between the characters, and getting Molly to the candy world.. One important scene I needed to fit was putting in a Chekhov's Gun, which according to Stephen Eldridge's article on *Encyclopedia Britannica*, is a film principle in which an object

introduced must have importance later in the film (Eldridge), with the business card the mother placed in the bag, later leading to Molly's realization and the emotional denouement.

The majority of the middle remained the same as Molly went through the gingerbread village, meeting the bears and finding the trapped kids. The biggest story change came from clarifying why the kids were trapped there. Originally, they were forced to mine candy in the mountains while their teeth rotted over time. The mined candy would be what would send Molly home, the kids giving her a piece after liberating them. This was changed to the bears harvesting the children's rotten teeth for making energizing candy that powers their world, putting a bigger emphasis on why the candy is important. However, this also drastically changed the context of Molly eating the candy to send her home. In the end, the last shots to get cut were the resolution with the kids, in which they cheered for her victory and gave her said candy that would send her home, and instead became Molly being sent home after the glow of her teeth destroyed the dragon and seemingly waking up from a dream. These were kept in until in-progress screenings in the Spring Semester, when most of the rough animation outside of these scenes were already completed.

Other cut scenes included a selection of shots after Molly ran away from the bears. There was a pack of floss that would have grown large, just like the tooth brush in the previous scene and the toothpaste in the following scenes. Following that would've been a more complex reveal of the dragon. As the gummy bears fused together, the film would cut to a long shot outside of the forest. The dragon would rise above the trees, the camera trailing it up to the sky, and as it flew would rotate to a bird's eye view of it chasing Molly into the village. Despite its epic nature,

it was decided to save time on animation by having the gummy bears transform, and then use that as a wipe to transition into the village.

Ultimately, many of my shot choices were motivated by ambition just as much as story and character. One of my goals was to really challenge myself on what kinds of shots I could animate. Other than rotating pans and trucking shots, I also included an instance of a Dutch Roll in the factory reveal, and a Vertigo Shot (Dolly Zoom) as the dragon towers over the helpless Molly. Though many shots ended up on the cutting room floor, the ones that made it served the story and my need to push myself quite well. No matter the shot, however, I aimed to have the character motivations read as clear as possible. That's one of the reasons I prefer making stories without dialogue: there's so much you can say just through actions and expressions.

Character Design

At the very start, the character designs didn't deviate a whole lot from the storyboards. A part of that for the mother's design was because she was based on my childhood dental hygienist, Kim. She was the one that worked on me through my volatile Pre-K phase, back when cavities weren't that uncommon. One of her most notable features was her long, straight blond hair,

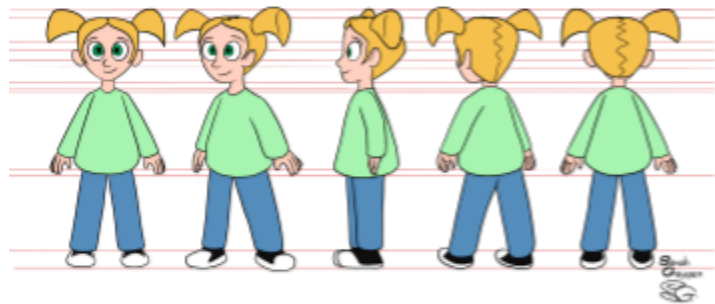


Fig. 4.1 Molly Turnaround Model Sheet

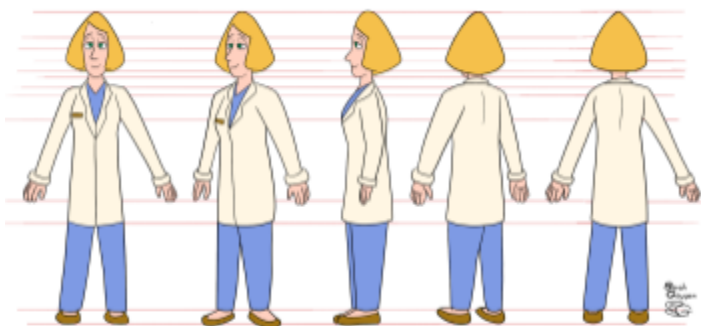


Fig. 4.2 Mother Turnaround Model Sheet

which she kept in a high ponytail. Unfortunately that first design made for a clunky silhouette, so it needed to be redone.

I was encouraged to go simpler overall with my designs. The gummy bears were already simple with their round shapes, looking deceptively friendly but with slightly unnerving hollow eyes, so there wasn't much need to redo them. I did change the dragon slightly by adding light pink Stegosaurus-like spines along its back, but kept the Wyvern



Fig 4.3 Gummy Bear & Dragon Concept Designs

body with its winged arms. They were all colored the same cherry red to save time on animation as opposed to a variety of colors like many gummy packs. For Molly and her mother, I ended up linking them together as related not just by similar palettes, but also using inverted wedge shapes in their heads. Molly's is pointing down leading to her chin, and the mother pointing up using the shape of her hair. In the first clean cut of Molly, her hair was tied up in buns and the rest was parted in the middle, but this had to be swapped to triangular pigtails due to the buns and parted hair looking too similar to Mickey Mouse ears. Though early iterations of Molly had more detailed clothes, I decided to go for a simple sweatshirt, triangular yet rounded, like a gumdrop.



Fig. 5.1 Early Molly Concept Art



Fig. 5.2 Early Mother Concept Art

Backgrounds

I used loose, illustrative backgrounds for this film using a combination of bright and earthy colors. In the real world, I wanted them to be warm and welcoming, the dentist office using somewhat muted creams and woods, and emphasis on the sunny green grass outside. Once traversing in the candy world, the palette becomes heavily skewed towards the red-yellow color spectrum, with very little green aside from candy accents. This helped to emphasize the minty green of Molly's sweater. The world starts out bathed with a sunshiny yellow, seeming friendly like the gummy bears, but as the story progresses and the danger grows, it sets into dark oranges and a sinister red. The biggest darkening contrast comes with the reveal of the factory, which is a stark, sinister purple.

Using Procreate, I was able to make these images on the go, wherever I had my iPad. This proved to be a major time saver, as it was with the eventual animation. I used a set of digital gouache brushes specifically created for Procreate by digital artist Max Ulichney. His brushes were instrumental in creating the painterly feel for my backgrounds. Additional textures were used from many of Timmy Mattaliano's brushes, who is a digital artist and creative coach based out of northern California. A set of Mattaliano's *VisualTimmy* brushes were used for things like the grass, the rocky faces of the chocolate cliff, the metallic interior of the factory, and noise speckles to make the cake castle look more spongy. The fluffy cotton candy clouds, and a selection of trees were from a nature set created by Aaron Blaise, who is a former Disney animator, co-director of *Brother Bear* from 2003, and whose career has turned to digital art and teaching online classes. There were a couple instances of animation being done right from Procreate for certain elements to fit with the background. These were the fountain of cherry soda flowing in the courtyard, and the candy corn "flame" in the lantern.



Fig. 6.1 Background of Gummy Gables



Fig. 6.2 Background of Cliffside

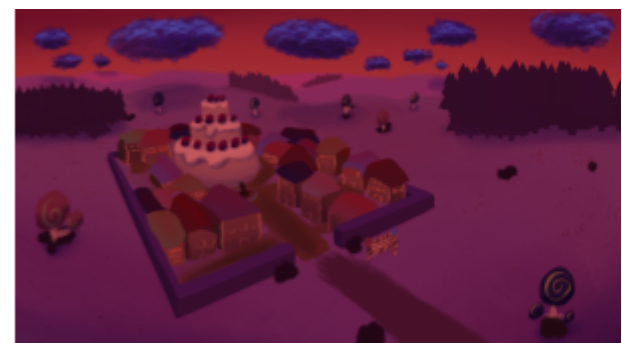


Fig. 6.3 Overhead Background of Gummy Gables

Animation

In a story with no dialogue, a lot of the emphasis had to be placed on the acting. The most important place to take care of this was in establishing the relationship between the mother and daughter, as this element led into the crux of the climax. All done while conveying it without too many cuts like in the first version of the storyboard. This culminated in the second opening shot, showing the mother's enthusiasm, and Molly's boredom of the dentist routine, yet reciprocating her mother's fist-bump. The begging for ice cream and photo of the two together served to firmly establish to the audience that they were related, and not merely dentist and patient. My goal for the mother was to not be harsh when enforcing the rules of sugar consumption, both to make sure she remained likable in her short screen time, and so that her offering ice cream at the end wouldn't be too much of a heel turn. When encouraging Molly to smile, I used an ASL sign for "smile," partially inspired from being with my classmate Youmee Lee, and thought it would add a nod to the deaf community here at RIT.



Fig. 7.1 Mother using ASL to Sign "Smile"



Fig. 7.2 Molly Reuniting With Her Mother

The acting emphasis extended to the rest of the film with Molly and the gummy bears. To establish the bears being of another world, more emphasis was placed on squashing and stretching to make them appear bouncier, as well as appear more benevolent in their early scenes.

Molly for her part needed to be curious and bewildered at first, but not afraid, before eventually relishing in sugar coated hedonism. One tricky scene was the gummy bear trying to encourage Molly to eat him, all through pure pantomime. The mimed biting action from the bear needed to be staged clearly, and Molly for her part had to be shown going through the motions of being weirded out, considering it, then resigning herself to, “why not?” before taking an exaggerated chomp of the bear’s arm before it regenerated.

Another scene that needed special attention was Molly’s reaction to finding the photo of her and her mother on the business card. This was the big emotional revelation for Molly; the reaction had to be small, but powerful. The original storyboard panel had a smile that was too big, it looked unnatural. After a hold, I used a small laugh, Molly only realizing how much her mother means to her as she’s at the claws of a dragon. Her smile is little, but shows her teeth, enough to start glowing and weaken the dragon. This scene tied with the resolution at the end is the result of Molly gaining understanding why her mother enacts the rules she does.

Technical Process

When it came to making the digital rough animation, I went to what was a relatively new software program. It was an iPad app released in 2020 named Callipeg, created for bitmap animation on the go. I had first started using it during Peter Murphey’s Advanced 2D class in 2021, and immediately saw its value as I was able to finish half an assignment while waiting in urgent care. Its user interface was reminiscent of other bitmap focused programs like TVPaint, but simplified and touch based for use on the tablet. It proved to reduce production time

exponentially because of the portability, and I was able to give my roughs a fluid hand drawn look in much less time.

However, Callipeg, still being a new and growing program as of the 2021-2022 production period, had many key features missing. For one it lacked a moveable camera, perspective guides, and blending layers. Many complex shots, such as the turnaround reveal of the candy world and the destruction of the dragon, were animated in Toon Boom Harmony. Thankfully, shortly before production started, the developers added the option to export into Toon Boom with all layers intact. This kept the rough to clean up animation pipeline running smoothly for the most part. Minor exceptions were had with scenes with canvases larger than the standard 1920x1080 pixels due to camera moves, in which the Toon Boom scene settings would be locked to whatever odd canvas size it was imported as.

With the roughs done, I chose to do the clean-up animation in Toon Boom with vector ink and paint. Not only would this smooth out the look of the animation, but Toon Boom has multi-frame coloring capabilities. Inking and coloring were mostly done concurrently with each scene. On average, I took one hour per second of animation during this phase, depending on complexity and amount of movement involved. Moreover, Toon Boom wasn't only a great choice for cleanup, but post-production compositing as well. As I was using the Premium version, I had access to the node view and all the bells and whistles it had to offer. I was able to make color corrections right within my scenes without having to export to an extra program like After Effects, which cut down exporting time. During dramatic scenes like the factory reveal and dragon scenes, I experimented with Toon Boom's lighting system. I researched how to set up the

lighting and tone shaders, adding a map, and setting the light source. Using this method I was able to create a backlighting effect in certain scenes. Luckily, Harmony 21 had come out during production, and added a new effect node for shine and light rays. This was perfect for emphasizing the glow of the teeth in the final scenes.

Many were worried about my time constraint because I'm traditionally a smooth animator. I mainly animate on 2s, with occasional 1s sprinkled on for the quick actions. There had to be a conscientious effort to save time where I could so the important scenes could shine.

Much of this was achieved by using holds and loops where I could fit them in. One particular shot where I saved a significant amount of time was when the gummy bears were running out of the castle. I made a single run cycle, then was able to disguise the recycled animation by offsetting the timing



Fig. 8 Reused Animation of Bear Run Cycle

for each bear. There were also a couple select places of animating with peg movements instead of hand drawn, which involves using a digital parent-child system so that the computer software can animate an object automatically between two or more set points. This was used for the cotton candy clouds floating by, the giant toothbrush slicing a backlit gummy bear in half, and the dragon wings as they raise during the vertigo shot. These were used sparingly as to not clash too much with everything else.

Music

While I was animating over the Spring Semester, my composer and sound designer, Emily Pace was working hard on her end. I had picked her out during the Fall Artist Call Meeting, where the animation students would pitch their films, and both students and local composers would demonstrate their sound portfolio. Pace was a well-known name amongst the RIT animation department for studying both sound and animation. She had worked with numerous students beforehand, but the one student short I knew her for, and why I recruited her for my film, was her work on Sara Calhoun's 2021 senior capstone, *How Did it Go, Again?* It was an honors-winning short about a boy meeting a giant snow woman, which had a soft, atmospheric tone, and an atmospheric score and soundscape to go with it. My film in comparison would be much more fast paced, but I wanted elements of that sentimental tone to hit during the emotional climax and resolution.

I tried to give Pace enough direction with the sound design, while keeping it open for creative input. For the score, I described it as being soft and down to Earth, using acoustic guitar and piano for the body. When transitioning to the candy world, I wanted it to turn more upbeat and pop-like, and a heavier use of synths to create an artificial undertone. I cited Aivi Tran & Steven "Surasshu" Velema's work on the show *Steven Universe*, created by Rebecca Sugar (Cartoon Network, 2013), as a source of inspiration. The show often used bright synth music that worked with its outer-space themes as inspiration to draw from. For sound effects, I gathered a list of everything required for each scene. There were a lot of biting and chewing sounds needed, being a film about candy, but I think we hit a good balance of quick crunches and tears hopefully without upsetting too many people with misophonia, a condition which causes irritation to

certain sounds. My favorite creative decision on her end was the sounds she chose at certain points where the gummy bears jump around, such as a quick horn-like synth as one rises up from the ground, and the springy “boinging” sounds heard as they hop out of the castle.

Work/Life Balance

I would be remiss in neglecting to mention the lingering effects of COVID-19 and of working multiple jobs during production. Even though many restrictions had been lifted at the point of production, I still chose to remain a remote student. For one, prior to the pandemic, I had always commuted from home, which was a little over an hour away from the main campus. Having the option of using my home setup was a major benefit, saving both time and gas money. Being raised as a homeschooled student K-12, I was very much accustomed to independent home learning, so I had an advantage in mental fortitude in that sense. Having all the tools I needed on hand, I could work easily to whatever schedule fit, and as an added bonus, I had landed a remote job at RIT based in my field of animation.

Over the Summer before production began, I became the flagship member of RIT’s MAGIC Spell Studios animation team. Hired by Brian Larson and David Long, we worked with BOCES of Chautauqua County, NY to produce animated shorts for the various school districts. These ranged from custom school announcements using caricatures of the faculty, to a series of shorts called *The Character Kids*. We also had another client, Causewave Community Partners, for whom we created animated portions for a set of traffic safety PSAs.

After a brief stint as director making the pilot of *The Character Kids*, my main job on the team became focused on animating and rigging. We mainly used 2D puppet animation, often using basic three-quarter view rigs, sometimes multi-view. This made for speedy productions, especially when it came to the animation aspect, which was good for a limited budget. It also allowed me to pump animations out while on my semester limit of twenty hours per week. Another benefit came from the fact that this was a remote job, allowing me to work from home, using a school provided desktop unit without making the hour commute to Rochester. Though there were a number of weeks where I had a light load while pre-production was done, once animation got started I was cranking out a good many hours per week, many times hitting the cap.

This wasn't as much of an issue early on, but once the Spring semester came and I went full into the animation on *Sugar Freed*, I had to dial it back. On top of working for MAGIC, I also had a local part-time job during the weekend that typically took about 12-13 hours. By having these jobs, I was able to continue my last semesters at RIT without taking out any additional loans. However, animating a six-minute film requires a lot of labor. I took myself down to eight hours a week working for MAGIC, so I could have a true part time, twenty-hour work week.

Even then, I was spending an inordinate amount of time in front of a screen from January through the end of April. The rough animation was completed by February 21st, which was about a week later than I intended, but nothing that couldn't be made up for. Clean-up took up most of the rest of the semester. Based on my average of one second of cleaned and colored

animation per hour, and having it take about 8 weeks, it's fair to suggest I spent an estimate of 30-33 hours per week in order to complete it. That still left me several days that I could use to do compositing work.

Those long hours in front of the computer left me rather burnt out by the end of it. This would be true for most people after pumping out more than a five-minute film on their own in the matter of weeks. There were many days when I was animating for eight or nine hours straight with few breaks aside from eating dinner. I did have one animation assistant, my best friend Samantha O'Sullivan, helping out with some smaller scenes on the side. She's an amateur animator, so there were things I still needed to clean up, but every little bit helped me out in tremendous ways, and most importantly she had the time to animate. Still, that left me with very little time or energy to draw anything else for myself. Still, it's hard to deny the satisfaction of completing a herculean task when so many others had doubts.

Evaluation

Throughout the making of this project, there were many notes and adjustments received, even at the beginning during our Thesis Preparation seminars. Since I was working with such a large story, that didn't come as a shock. The initial problem facing the story, as my chair Peter Murphey brought up, was it needed more heart in its resolution. Originally, Molly defeated the Dragon with the blast of toothpaste, and that was that, nothing beyond that really made the character struggle. As I myself was struggling to come up with an answer to that problem, our Thesis Prep professor, Tom Gasek, gave me the hint for inspiration I needed: the power of a smile. That set the reworking of the final act in motion, setting up the business card that linked mother and daughter, and Molly's emotional resolution being the true power that saved the day, and was approved in the final treatment.

I always strived to make sure every tweak or refinement was accounted for when receiving my notes from my chair and committee members. Sometimes there were story adjustments, Jonathan Seligson being the one that suggested the switch from the kids mining candy to the bears harvesting their teeth. Other times there were a few animation fixes, such as some instances of running towards the background not being in proper perspective. Often after I finished animating one scene, I would go and make the necessary adjustments to a previous scene before moving on to a new one, and so forth. This rhythm helped keep me accountable, and proved to be effective. By the time the final committee meeting was held, the only final adjustments I needed to make was masking Molly's feet in a few outdoor scenes so that it more

accurately looked like she was walking through grass. Judging from the feedback received that meeting, I was in a good place for the final screenings.

When the day of screenings finally came, it felt a bit surreal. Having come to RIT in the Fall of 2019, I was in the unfortunate group of students whose catalog of previous films until now had been streamed to YouTube because of the COVID 19 pandemic. Seeing my film at last on the big screen at Wegmans Theater, I felt both a combination of exhilaration and intimidation. One could really feel all eyes focusing on your hard work as opposed to watching on a computer screen in your living room. There was no doubt of my nervousness going up on stage and giving my artist statement, but there was also consolation in the fact I wasn't alone and many of my fellow graduates felt much the same way.

The feedback I received from the faculty was very positive all around, thus achieving my end goal. It seemed many were mainly impressed with the fact I was not only able to finish an animated film of nearly six-minutes, but with enough time left to add a certain amount of polish. It was an uphill battle, but despite many doubts, I managed to pull it off. The story was very clear and the opening scenes managed to establish the mother/daughter relationship effectively. The character animation was cited as being well executed, as well as being both expressive and smooth. Professor Vanessa Sweet stated that the dragon's defeat was well animated particularly its pacing and the effect I created for its disintegration. The backgrounds were also noted as being well done with an engaging illustrative style.

One note of criticism I did receive, though more of an observation rather than a detriment to the film itself, was comparing my roughs vs. my cleaned up and colored animation. Mari Jaye Blanchard, one of the professors who saw my film during in-progress screenings, said that my rough “pencil-test” animation had more life to it. The digitally inked animation seemed to have lost some of that charm in the process. Ultimately, it makes some sense; I’ve always had more fun making sketchy, loose animation over the tedious process of lining everything. However I knew digitally lining it in Toon Boom would also save a tremendous amount of time when it came to coloring and compositing. The option of leaving the animation rough hadn’t really crossed my mind, however that leaves open the possibility of using a faux-Xerox style of animation for future projects.

Conclusion

The journey for creating *Sugar Freed* was a road both harrowing and rewarding. There were a lot of hills and valleys to navigate, as well as a few of my own dragons to defeat in the name of time management. For all the fun there was in researching and coming up with the concept, executing that vision was far from easy. Past experiences were a big help; this wasn't my first go at a large final project, as I had also made a five-minute piece for my undergrad capstone. Another more unexpected assist was my lifestyle of being homeschooled preparing me for an independent remote work environment due to the COV-19 pandemic. With the help of Peter Murphey's guidance and belief in my skills, I managed to come out on the other side, seemingly victorious.

For the praise I garnered from the screenings, I did end up with my own share of reservations. If I could have changed one thing earlier on, I would have adjusted certain scene lengths for pacing purposes. The more I looked over the film during the editing process, the more I realized certain shots and poses should have been held for just a little longer. A lot of things just seemed to fly by without a lot of time to take it in. The goal was always to trim everything down to a reasonable length, aiming for around five-minutes thirty-seconds of total animation. However, extending those holds in the grand scheme of things really wouldn't have added that much more in production time, and the feel of the film would have been more balanced. Other personal design critiques may have been solved if I had more time, such as working on more varied house designs for the candy village and coming up with more kinds of props and background elements. The clock isn't something you can mess around with, unfortunately.

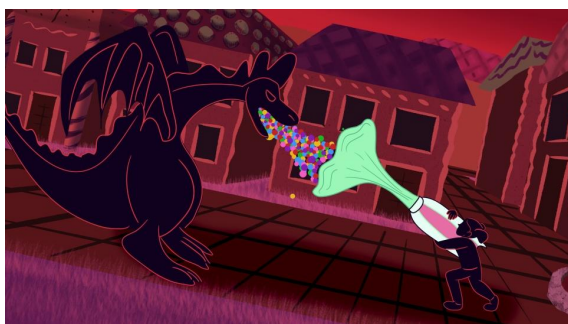
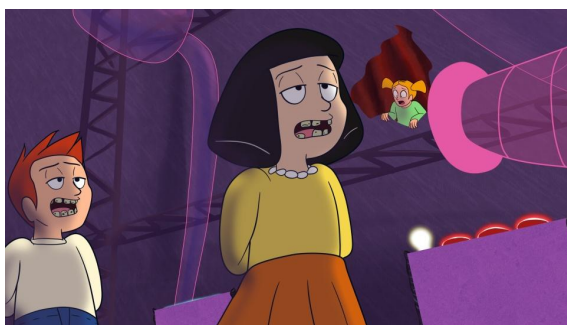
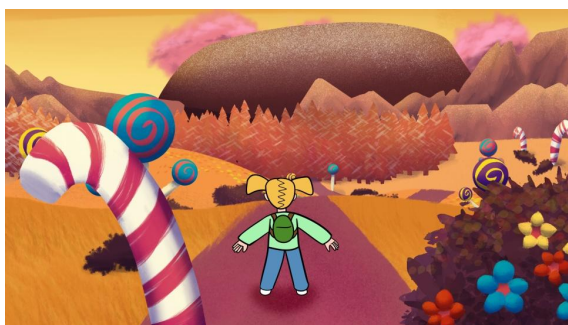
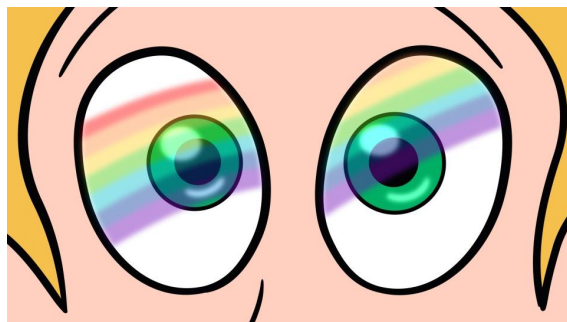
Nevertheless, a finished product was produced by the deadline, and that is one of the best skills to acquire when going into any career. Thanks to the tricks I've learned like recycling animation, digitally coloring multiple drawings at once, and knowing how to perform the compositing process within a single program, I was able to make my film within the deadline. At the same time, I was still afforded the right amount of time to dedicate to smooth, flowing animation combined with dynamic camera shots, retaining the level of quality I dedicate myself to. I created a project where I could showcase all I've learned through my character animation with a heavy focus on their acting, along with complex scene compositions I now had the experience to complete. Through these, the film was met with overall positive feedback from the faculty for its clear story, good character animation, and lush backgrounds, fully marking it as a success in my eyes.

With my strengths of working independently and willingness to work as long as it takes to see a project through to fruition, it doesn't matter how much planning and effort I'll need to go through to get to the other side of creating a film. If there are critical eyes to serve as a guiding light, and a drive to create no matter how much potential burnout looms, I know I can get there. Because of that desire to create a fun, adventurous film while keeping it emotionally engaging, the story ended up morphing into something even better than what it started as, from a simple morality tale into a heartwarming story of parental bonds. Even if imperfections seem big and blatant on the creator's end, what ultimately matters is the audience interaction and their ability to suspend their disbelief. As a child I found myself being transported to many fantastical places through animation, and now I have gained the tools to do the same for others. If they can find

themselves sucked into a world of my own creation, that is one of the highest compliments my works could ever receive.

Appendix

Screenshots



Thesis Proposal

Sugar Freed

By Sarah Gaygen

Graduate Thesis Production Proposal

School of Film and Animation

Rochester Institute of Technology

Approved for submission by

Peter Murphey, Thesis Chair

Title: Sugar Freed

Director: Sarah Gaygen

Technique: 2D Traditional Animation

Approx. Length: 4:00-5:00 minutes

Logline

A little girl, fed up with her dentist mother, travels to a land made of sweets, but when she discovers the children there writhing with stomach aches and cavities, she must use the bag of dental supplies her mother gave her to escape.

Thesis Statement

Good parents will set boundaries for you, but they will also provide you the tools to overcome obstacles you may face as well, and not always in ways you figure out right away.

Treatment

It's a bright Summer day, and a young girl spots an ice cream truck out from a window. She walks over to her mother, a dentist currently checking someone's teeth, and eagerly points toward the truck. The mom smiles kindly, but shakes her head no. The girl scowls, while the mom sends the client away with a cheerful disposition, and puts the girl on the dentist chair. The mom walks away, clipboard in hand while an assistant comes in to clean the girl's teeth.

Pouting the whole time, the girl goes through the process of getting her teeth cleaned, moving robotically as she knows this process in and out as shown by a series of quick jump cuts, ending with her mom comes back in for the final check, and gives her an enthusiastic thumbs up, while the girl rolls her eyes. The mom gives her a goodie bag of dental supplies: a toothbrush, toothpaste, dental floss, and mouthwash. The mother then picks out a business card, smiling, and slips it in the bag too. The girl sighs and walks out, and then spots a jar of lollipops on the front counter. Eagerly taking one, she pops it in her mouth, only to realize with disgust it's sugar free. She looks up at the mother dejectedly. The mother gives a sympathetic look, but the mother encourages her to keep smiling. The girl gives her a grimace instead, and goes to sulk in the corner of the waiting room while the mother looks on sadly before going back to work.

Then the girl spots something outside: a large gummy bear, waving her over. She goes outside, stuffing her goodie bag in her bag pack, and the bear leads her around the corner of the building, only to find that it has disappeared. Instead she finds a pack of enticing, rainbow pop rock candy lying on the ground. She opens it up, looks over her shoulder to make sure no one is watching, and gleefully eats a handful.

Suddenly she finds that she's been transported into a land made of sweets. There are gingerbread houses, candy roads, and chocolate mountains with powder sugar snow. She finds a village of gummy bears greeting her, one of them encouraging her to eat him. She hesitates, before taking a small bite, only to find he regenerates. Gleefully she takes bite after bite until satisfied, licking her lips. She then ventures out in the land to eat to her heart's content. The gummy bears watch her go, and a sinister smile forms on their faces.

The girl goes through the countryside, eating everything in sight as shown through a montage sequence. While climbing through the chocolate mountains, she gets a funny feeling in her mouth, and in her stomach. She slows down, starting to feel sick. The gummy bears from before appear and begin to surround her. Backing into the cliff face, her hand breaks through, and she looks in to find children in chains mining the candied walls, jumping through shots of their teeth rotten to the core. Frightened, she barrels through the gummy bears, chomping on those that try to grab her, until she feels a sharp pain in her mouth and trips. Her backpack pack flap flies open, and her dentist goodie bag spills out. The gummy bears catch up and recoil at the site of the dental items. Seeing this, the girl grabs the toothbrush and holds it out, and it suddenly grows to the size of a sword. She gets up and thrusts it at the bears, swiping and keeping them at bay, until she finds an opening to run. The bears regroup and go after her. After she puts some distance between her and the bears, she takes out her floss, also growing bigger, and ties it between two trees making a trip rope, which the bears fall for.

The gummy bears become angry, and vibrating like jello, they fuse together into a gummy dragon. It flies from the mountains as the girl runs across the fields trying to escape. The beast corners her back in the village, and shoots candy breath right into her mouth. Quivering, she reaches into the bag for the toothpaste. It grows, and she shoots it at the beast. It's a fierce battle, both forces neck to neck. But the

candy breath overpowers her, knocking her down. Her dental tools are scattered, turning back to their regular size. The dragon starts ramping up for another attack. The girl is terrified, but she notices something on the ground near the dental bag. It's a business card: her mom's business card, with a picture of the two of them together with big, toothy grins. She smiles sadly, teeth showing, and they start to shine.

The beast reacts in pain. Seeing this, she flashes a smile at him. It recoils, but it's not enough to defeat it. Dodging another candy breath, she grabs her dental supplies, and starts using them on herself as the beast chases her. After spitting, she stands her ground as she wipes her mouth, and flashes a blinding grin. The dragon roars in agony as the light takes it over. When the light clears, there's nothing left of the monster but melted candy, and a breath mint. The previously imprisoned children arrive on the scene and cheer. She gives them the dental bag, and one of the children gives her the breath mint.

The girl eats it, and finds herself back in the dentist office. Her mom comes to the front, looking for the girl, the girl jumps up to hug her. The mom, somewhat surprised, embraces her back. The ice cream truck pulls up to the front of the office, and the mother offers to buy her some. The girl refuses, happily sucking on her sugar free lollipop, flashing a smile to the camera before an iris out.

Rationale

I've always drawn to colorful fantasy lands covered with sugary pleasures. As a child I grew up with many early to mid-20th century short films from Disney and Famous Studios that took place in worlds of cake and cookies. Naturally I was also an avid Candyland player back in the day. There's so much for the imagination to chew on, and it was always a goal of mine to make a short involving the setting. There's a notion of escapism in a setting like a sweet world; a kind of childlike hedonism. With a rise in my childhood in PSAs in anti-sugar and childhood obesity prevention, it had my mind whirling about the dark underbelly of a candy land.

Oftentimes growing up, while I tried to be a good daughter and obey my parents, there were points where I'd question the things I was told. Why do I have to pick up my clothes off the floor? Why do I have to learn this kind of math? Do I

really have to brush, floss, *and* rinse twice a day? Boundaries and rules are set for us as children to help prepare us for independence. Sometimes you don't appreciate the things you've been taught until you're older, and not just practical survival and personal health lessons. Children pick up on attributes and attitudes of parents as a reference of navigating adulthood, for better or worse in some cases. Parents influence their children in many ways, even if their personalities clash, and I wanted to show some of that in my film.

Schedule

		FALL 2021															Winter Break	
Week		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Preproduction	Vis Dev	█																
	Storyboard		█															
	Animatic						█											
	Backgrounds									█								
Production	Keys+Breakdwn										█							
	Inbetweens														█			
	Inking																	
	Coloring																	
Postproduction	Composition																	
	Effects																	
	Render																	
Sound	Scratch Track							█										
	FX List									█								
	Mixing																	
		SPRING 2022																
Week		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Preproduction	Vis Dev																	
	Storyboard																	
	Animatic																	
	Backgrounds																	
Production	Keys+Breakdwn																	
	Inbetweens	█																
	Inking				█													
	Coloring							█										
Postproduction	Composition										█							
	Effects											█						
	Render													█				
Sound	Scratch Track																	
	FX List																	
	Mixing												█					

Budget

Software	
Toon Boom Harmony Premium Subscription	\$160
Storyboard Pro Subscription	\$80
Procreate	In-kind
Adobe Creative Cloud	In-kind
Sound	
Composer	\$200
Sound Engineer	\$200
Promotion	
Festival Fees	\$300
Poster	\$50
Postcards	\$30
Total	\$1,020

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