

PIGGY PRECIOUS

A CREATIVE PROJECT

SUBMITTED TO THE GRADUATE SCHOOL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE

MASTER OF FINE ARTS

BY

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## **I. Statement of the Problem**

The rationale for the creative project is to allow myself to become further adept in animation and film making in regards to the stop motion skill set. As an animator, this film allowed me to step further into the indie animation filmmaking sect by using a combination of creativity and professionalism. Introduction into the stop motion techniques was acquired in my undergraduate studies, however, graduate school has allowed me to excel further in implementation of various techniques and processes while furthering my knowledge into the arts of fabrication and filmmaking.

Working on a stop motion animated film, required me to be the producer, director and an artist. This involves wearing many different hats. The producer needs to find various ways to budget adequately for my film, ensuring the cost does not exceed the expenditure. The director has to plan appropriately to ensure the film meets the completion date. The artist has to ensure completion of certain tasks, such as puppet making, animation and model making.

As the Producer, I budgeted appropriately for the cost of materials and assembling a stop motion studio, within the allotted space provided. The requirement of careful, fiscal planning consisted of finding several cost-effective means of purchasing materials through thrift stores, and inquiring within corporations about the use of student discounts, and lastly the constant search of sales throughout the retail arena. I also had to contract individuals to help with the film to ensure it adheres to the completion date. Contracting individuals in film making, involves hiring individuals to work in certain areas of a film for a certain amount of time until their task is completed. For example, I hired individuals to help with the audio, creating the stop-motion pig puppet and completing some animation. I discussed compensation, which would not make me go

over my budget, but allow them fair payment for hours worked. Overall, I had to maintain fiscal responsibility or the film was at risk of not being completed.

As the Director of my film, this required numerous tasks, such as scheduling, logistics and quality control. I had to set an exact schedule for me to be able to meet the completion date. If certain areas fall behind such as animating, making the puppets and creating the sets, the chances of a completed film by the set deadline can become difficult to achieve. I had to reiterate and ensure the artists are aware of the scheduled deadlines for their tasks, going over work needing to be completed, and contact them immediately if changes are needed. Additionally, if they fail to meet the schedule's timetable I had to contact them promptly to prevent any severe changes in scheduling, which will lead to areas falling behind in the film making process. Overall, when working with a team, professional interpersonal skills are necessary throughout the entire film making process, understanding the lack of communication can create many barriers and hinder film progress.

To work on the artistic side in stop motion, an individual needs to be well versed in many areas such as; sculpting, mold making, casting, armature creating, model making, prop creation, lighting, photography, compositing (color correction, editing, etc) and sewing to create a stop motion film on top of the other skills needed to create a short film such as animating and editing. I needed to ensure I was able to do certain artistic tasks within a certain time frame to avoid falling behind schedule.

## **II. Review of Influences/Literature**

An influential American artist and stop motion animator, Christiane Cegavske (2006) directed one of my favorite stop motion films, "Blood Tea and Red String". She inspired me to create a film that appears childlike, but is layered with dark innuendos of intrigue as the story

progresses. Christiane's story progresses as a struggle begins between the aristocratic white mice and the creatures that dwell under the oak. The white mice commission the creatures to make a doll for them, however, the creatures fall in love with the doll and cannot bear to give the doll to the mice. This results in selfishness and thievery by the white mice and much debauchery (Cegavske, 2006).

A second influence is Yuriy Borisovich Norshteyn (Yuri Norstein), (1975) and his classic Russian animated short film, "Hedgehog in the Fog". The story is about two friends, a hedgehog and a bear. The two have tea together and converse while counting the stars. One day the hedgehog decides to bring jam to the bear, and during his adventure he comes upon a horse in the fog. The hedgehog becomes curious of the fog, and decides to explore the fog in the woods, which leads to many frightening creatures and helpful ones as well. It is a story of both beauty and intrigue (Norstein, 1975).

A third influence of mine is a film directed by Karel Zeman (1978) called, "Krabat". The film is about a beggar boy, Krabat, in the early 18<sup>th</sup> century Lusatia, who is soon enticed to become an apprentice to an evil sorcerer. The boy is forced into slavery along with other boys while being instructed on how to use black magic. Once a year the boys have to duel the evil sorcerer, and since the sorcerer has the advantage of using the evil Grimoire (book of black magic) the challenger usually perishes. Krabat soon grows weary of the slaughter of his friends every year, and secretly studies the forbidden book. While doing this, Krabat discovers the saying, "Love is stronger than any spell". This is ultimately used to defeat the sorcerer for the sake of love, (Zeman 1978).

There are many reasons I find these films influential to my own film. For one, many of the films begin lighthearted and become even more increasingly grim as the story progresses.

Second, there's an underlining theme which leads to the darker elements in each story; Blood Tea and Red String focus on selfishness, Hedgehog in the Fog focuses on curiosity while Krabat focuses on love. The theme which leads my film to a dark ending is jealousy with the man giving a lot of attention to his pet pig, however, the man's girlfriend is not happy about the predicament and feels underappreciated and unnoticed. Therefore, as the film continues to progress, the theme of jealousy becomes adamant, and leads to fatal consequences for the girlfriend.

### **III. Description of the Artworks**

While creating my stop motion film, "Piggy Precious", I had to go through the production pipeline (preproduction, production and postproduction). Preproduction involves creating the story and refining it through storyboards and figuring out the designs for my characters and sets. The production phase involves creating the actual puppets, sets and props to be used for the film, and then, staging and animating. Postproduction involves the compositing, editing, sound design and final output.

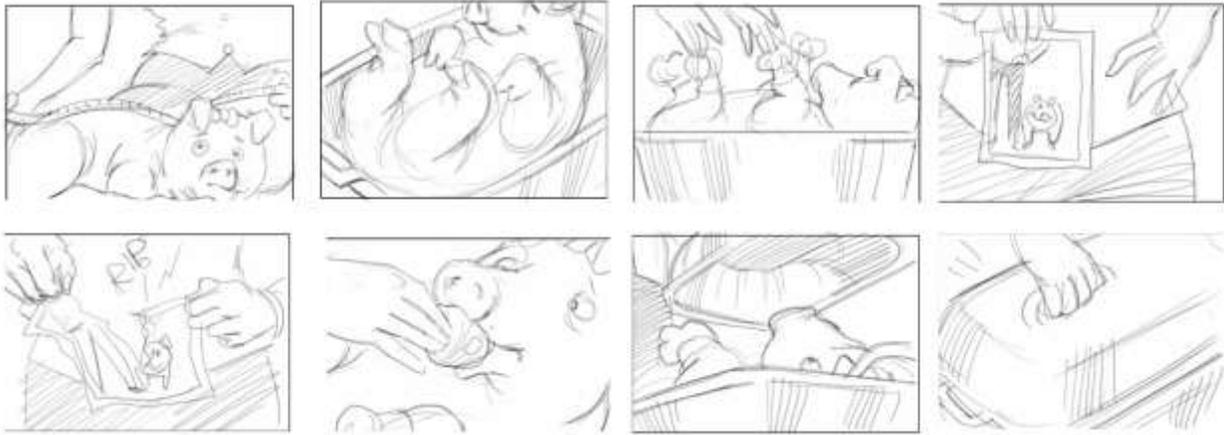
#### **Preproduction**

##### *Storyboarding*

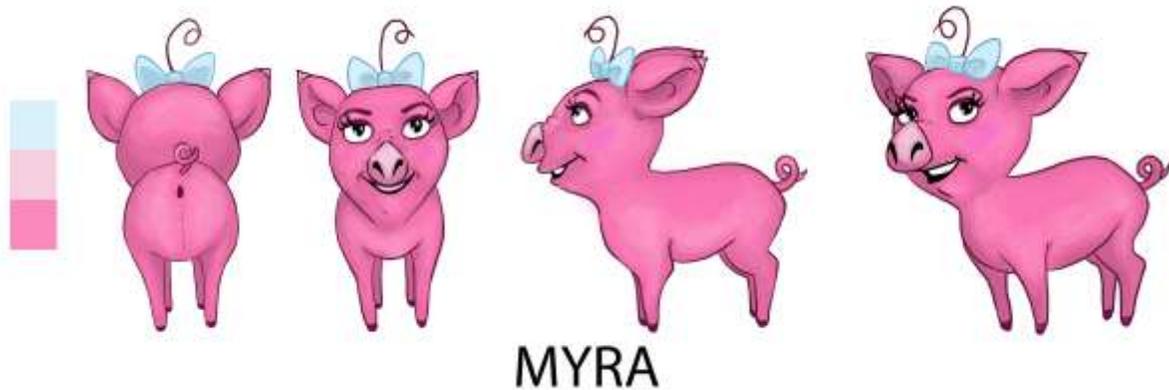
Preproduction of any animated film has to first start with an idea. Usually this is created through a script or something referred to as "beat boards", which usually just consist of five illustrated panels to give the basis of the story which is to be created. Once the foundation of the story is defined, actual storyboarding can begin, which is a series of pictures that work in a similar fashion as a comic book or sequential art. When the storyboards are refined they are then taken into an video editing program for timing, spacing and scratch audio so it becomes a series of moving pictures referred to as an animatic. This animatic is the film in a very basic form that I use as a map during the next two stages of production.

## *Designs*

While the story is being created a series of designs for the film come into play, such as character designs to figure out what designs will be best suited for the film. When first designing, a series of exploration sketches are done before final character designs and sets can be completed. The character designs for a stop-motion film are very important, for although the characters may look appealing in the drawings, issues may arise in the fabrication process. For example, the pig in my film required bigger legs to allow tie-downs and other animation issues. Tie-downs are extremely important in stop motion animation because they allow the character to be firmly screwed into place on the stage to prevent unnecessary movement on stage while animating. The pig's legs were too small in the original design for many tie-down rods, so changes had to be implemented during the fabrication phase.



Storyboards by Bot Roda, (2013).



Character Design by Chimdalu Obi. (2013).

## **Production**

### *Puppets*

Puppets can be made using numerous materials in stop-motion (foam, latex, silicone, etc...), there is really no one way to puppet making. The materials used all vary on what you will need your puppet to do when animating.. Puppets are first started out with a clay sculpt, which is the character made out of clay. A mold is then made out of the clay sculpt. A mold can be best thought of as a shaped cavity of the sculpt to allow fluids (resins) to be poured into the mold (referred to as a cast) and to be made out of other materials (e.g. plastic).

Molds can be made in many ways; stop motion usually adheres to the two-part mold process for puppets. Parts for molds define how many physical pieces the mold is made out of. If a puppet is made with two pieces, the mold is a two-part. If it is made with three pieces, it is referred to as a three- part mold, etc. The two-part mold for most puppets is made using one side of the body (e.g. the backside) and then flipped over to make the second part of the mold (e.g. two-part mold). The reasoning for this is to allow the armature to be properly seated in the middle of the puppet.

Molds are usually made using a variety of materials, however, a majority of molds today days for stop-motion are either plaster (e.g. hydrocal or Ultracal 30) or silicone. Plaster molds are usually used for hot foam due to it absorbing moisture when heated and allowing the puppet to come out of the heating process with predictable results (not shrinking due to moisture not being absorbed). Using out of molds is popular due to its shelf life and durability. Also, with silicone, the need for a mold release (something that prevents the molds from sticking together or to the puppet) is not needed, unless casting with silicone, silicone only sticks to itself. Silicone is not recommended for hot foam, since silicone traps in moisture when heated and puppets will not come out suitable for use.

Armatures for stop motion make the rig and allow the puppet to be posed. Think of it as a skeleton in our bodies, without this skeleton intact, we would be able to stand up and move. In stop motion, there are two types of armatures ball and socket and wire. Ball and socket armatures are made with cut metal plates, threaded rods and brass balls. Wire armatures, are made with twisted aluminum wire and brass tubing is usually integrated. The choice of armature in the puppet plays a very important role, although expensive and tedious to build, ball and socket armatures provide the best durability, since the chances of the armature breaking in the puppet is

rare if put together competently. However, wire armatures tend to break easily, due to the less durable aluminum wire breaking inside the puppet over time. Heat from moving a wire armature puppet, causes the wire to slowly deteriorate over time. Aluminum wire is sensitive to heat, and repairs have to be made, which can be time consuming. This is why stop motion animators have to be extremely delicate when animating wire armature puppets.

Once the mold is made, the casting process begins. Most puppets are made using either silicone or foam. Silicone is used a lot in stop-motion due to its tear strength and durability, meaning the puppets will not tear or break as easily while animating with them. However, silicone is heavy and may weigh down the puppet, so many times, certain parts of the puppet are made out of silicone (hands, face), or just coated with a silicone skin. Meaning, the puppet is first cast out of a lighter material (e.g. foam), and then, silicone is poured over the body or a certain part to give it a silicone skin. Foam is also used, due to it being very light and flexible, however, foam can become worn down in time, so the puppets may require more repair or need to be made again. There are two types of foams used when making puppets ‘cold foam’ and ‘hot foam’. Cold foam can be cast without the use of heat and can be used for puppets which do not have a lot of bulk (e.g. fatter puppets), since it has a higher density, it won’t be as flexible for the thicker parts of the body (e.g. stomach).

The puppets for my film involved an initial clay sculpt then plaster two-part molds are made of the female and male clay bodies and hot foam is cast with an interior ball and socket armature. The reasons I chose hot foam was due to the fact the puppets were heavy-set, therefore, to allow proper flexibility which allows a lower density compared to casting the puppet out of cold foam. A silicone skin was not required for the body, since the puppets were going to be covered up in clothes. However, the arms for the male and female puppet were

separate plaster two-part molds and were cast using silicone to give it a texture similar to skin and maintain durability when animating. Finally, costumes were then put on the human characters using fabric glue. Gluing allows the fabric to come apart easily to make repairs to the puppet as needed.

The pig puppet was made using a three-part silicone mold, and then, cast with a ball and socket armature interior using silicone with an upholstery foam belly. Since the pig has facial animation, the mouth shapes were made separately using multiple two part silicone molds, and then cast with silicone. The eyes are made using a one part silicone mold. The eyes are then cast using white plastic with a concave indent and the indent is painted using regular acrylic paints, and finally, filled in with epoxy.



Puppets on set (2013).



Pig fabrication by Brenda Baumgarten, (2013).

### *Sets*

As with puppet making, there is no one way to make a stop-motion set. Individuals can use, foam, wood, cardboard or a variety of other materials. It comes down to personal preference, and how the puppets will be interacting with the set. If the character will be interacting with a part of the set; foam or a light plastic may be best, to allow the elements to move easily if the character has to push, pull or do some other action. For props, foam or a light plastic is essential, so the props do not weigh down the puppets while animating, also it allows them to hold the props by using pins to keep them in their hand or tiny magnets. Overall, careful planning is necessary for the set design, and adhering to the storyboards for the set design is essential, to see

how many sets need to be created and what interaction will be done to the elements in a certain part of the story.

The sets in “Piggy Precious” were created using a variety of resources. Cardboard and plaster were used for the kitchen cabinetry, fridge, window, and living room dresser. These items were first blocked out in cardboard, and then plaster applied over the cardboard. Once dried, the plaster was sanded to achieve the desired smoothness and painted using acrylic paint. Acrylic sheets cut with a razor were used as the glass for the cabinetry and the bottom part of the oven. The miniature oven was metal and found at a thrift store. It too was sanded and painted to complement well with the set. The walls of both the living room sets were made using pieces of cut wood and painted with home interior paint. The floors of the living room were made using balsawood to allow the wood to be able to be drilled into for the tie-downs of the puppets and then stained. The kitchen floor was created using pieces of glossy paper cut into squares, and then laid out on poster board to give a checkerboard style floor. The living room pots and flowers were bought at a local hobby store in the miniatures section. The picture frame and door were both created using wood and painted using interior paint.



Kitchen Set, (2013)



Living Room Set, (2013).

## *Props*

The food, bowl, fork, knife, oil and pepper shaker were created using a very light plastic, so the characters are able to hold the props without weighing down the puppet. The props first have to be sculpted, then one part pop out molds are made and cast using a very light plastic. The plastic surface is sanded to allow for acrylic paint and many elements are hand painted using fine point paint brushes for precision. Finally, the parts are sprayed with acrylic sealant spray to prevent the paint from peeling off. Once dry, these props are ready to be used. The place mat and mitten were hand sewn elements, and the yarn balls were made using tiny Styrofoam balls, and wrapping yarn around it.



Set Props, (2013)

## *Staging*

The staging or setting up shots for stop motion can be a very tedious and a time consuming process. First I have to reference the shot from the storyboard and start thinking how the shot needs to be framed, by choosing the appropriate lens and angle. Then, the camera is mounted to a tripod, and the camera is connected to the computer and the software turned on. Using the camera we build or set the set to the camera, which means finding the appropriate framing to match the storyboard shot which was referenced. The software program I use for this

process is called “DragonFrame”, and it provides the tools necessary to film animated short films by providing in computer setup and providing the proper aspect ratio. The focusing is on camera and I had to adjust the camera on the tripod to get the proper framing. Also, lighting is an important factor during this phase; I decided to use a three point light set-up implementing both bounce and diffused lighting to avoid any harsh shadows. Dragon frame allows me to adjust the aperture, ISO and shutter speed using its interface instead of adjusting the settings on camera. It also has a built in histogram to allow for an even exposure. Once the shot is set up, animating can finally progress.



Staging for animation, (2013)

### *Animation*

Animation in stop-motion involves moving the puppet or anything else that is moving in the scene frame by frame, camera shot by camera shot. The puppet is moved in small increments at 24 frames per second, which is a standard frame rate for films and gives the footage a smooth motion. The software allows the animator to review each still image to critique certain elements

of the shot. Also, Dragonframe automatically saves the image once a still shot is taken, so there's no need to save. The new digital technology available for stop-motion animators relieves some of the nuances of the past such as being unable to hold frames longer (holding one still image for a certain period of time), and having to shoot every individual frame, and therefore, allowing me and others to fully focus on animation. Some frustrations in stop-motion still occur today, such as ensuring the camera is not bumped, or you may have to match the shot, or worse case-scenario reshoot it. Also, tie-downs and props must be appropriately adhered, or animators may run into a chance of a puppet or prop falling out of place, which may require reshooting. Finally, puppets may start to tear or wear down, which can cause a delay in animation due to puppet repair. Animators have to be extremely gentle when animating puppets, and only move them when necessary.



Using Dragonframe to animate shot, (2013)

## Postproduction

### *Compositing*

After a scene is finished, the images in Dragonframe are exported into a compositing program. Adobe After Effects was used for this film. The first thing I do is rig paint any pins or seams which may be showing in the scene. Rig painting means hiding elements that should not be seen. For example, my pig has cuts in her mouth (seams), where the mouth pieces are replaced, and that should not be noticeable when the film is completely finished. Another example, is props have to be pinned to the character, and therefore, have to be taken out, so they are not noticeable on the finished film. Also, the process of motion tracking is used to prevent any shaky, unintentional motion that happened by accident while filming. Some shots were shot on a green screen and multiple elements have to be put together to complete a shot, which deals with keying out, masking. Once all shots are competently finished compositing, they can then be rendered out as high quality video to be put together in an editing program.



Compositing a shot in Adobe After Effects, (2013)

## *Editing*

Adobe Premiere was used to edit the film. Editing involves the process of putting all the shots of your film together on a timeline, and adding transitions such as dip to black or fade out, and final audio which includes the sound effects or any music. This is also the area where color correction is done. Color correction for Piggy Precious is color corrected using curve adjustments. Color correcting with curve adjustments is a topic all on its own. In a nutshell, the main focus of curves is adding contrast, which darkens or lightens certain areas in the footage to make elements stand out, and fixing the white balance if the image has a color cast, which means, looks too red, green or blue, to balance out the footage ( removing the colorcast). Once editing is finalized, Piggy Precious is able to be rendered out for final output. When a film is rendered out, numerous video formats may be exported, depending on if the video is going to be premiered online which will require a compressed video format such as H264 or a high quality format such as animation (.mov) if it is going to be premiered at a film festival.



Editing shots in Adobe Premiere, (2013).

#### **IV. Conclusion and Exhibition Statement**

“Piggy Precious” is a stop-motion independent film about the relationship between a man, his pet pig and the man’s girlfriend. The colorful sets and characters have a retro look and utilize both digital and traditional tools to create an interesting aesthetic to the film. The making of this animated film has allowed me to express myself both as an artist and artisan. Piggy Precious has also allowed me to admire and appreciate all the skill that goes into the fabrication arts and this is something I will continue to focus on throughout the remainder of my artistic career. Additionally, I hope to educate many other individuals about the appealing process of both puppet and model making.

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