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Visual Development for *Wellspring*

By

Jane F. Anderson

An Undergraduate Thesis Submitted in Partial Fulfillment

of the Requirements for the

Fine and Performing Arts Program

and the

Honors College

East Tennessee State University



4/28/23

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Date



4/30/23

Saritdikhun Somasa, Thesis Mentor

Date



5/2/23

John Hilton, Reader

Date

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Abstract

The primary focus of this thesis is the study of visual development for worldbuilding, starting with creative writing and documentation and translating the written content into visual concepts in both 2D and 3D. This project includes an original narrative, setting, and characters and explores aspects of the visual development pipeline. The content below contains work in visual research, 2D character design, 3D character sculpting, 3D printing and assembly, hard-surface modeling, matte-painting, illustration, compositing, and heavy creative writing.

Introduction

Fantasy worldbuilding is a tedious, intricate, and yet rewarding task. Many influential examples include J.R.R. Tolkien's *The Lord of the Rings*, George R.R. Martin's *A Song of Ice and Fire*, and Patrick Rothfuss' *Kingkiller Chronicles*. Such stories are often expansive, boasting large ensemble casts that traverse sprawling, original worlds. Many also employ new languages, governments, histories, and complex magic systems that add depth and mystery. As an admirer of fantasy writing, I wanted to try my hand at a worldbuilding project; something creative and fun to develop that utilized skills in writing, illustration, and 3D design. I wanted to explore what it might have been like if great fantasy authors had access to the many creative programs and software widely available today- a chance to demonstrate getting the look and feel of worldbuilding elements directly from their source. The purpose of this project was not only to develop one of my own narratives but to explore 2D and 3D design pipelines and make concept pieces to couple with the writing as visualization. The goal of the work was to set a solid foundation for further development of this story and allow for a more tangible and finished product to be developed in the future.

Chapter 1: Preliminary Writing & Establishing the Narrative

The first and most important step of any creative development is to gather materials and take notes. To begin this process, I created an online resource document that contained sections for each category of the design process. I also included a bank of any visual references I gathered and cataloged links to helpful articles and information. By keeping an online document, all the notes were kept organized, easily editable, and accessible from many locations.

To kickstart the writing process, I began by describing the setting and its history. When planning this project, I wanted to be able to focus on a smaller area and densely pack it, thus the

titular city setting of Wellspring. The city is located on a rocky bluff in the middle of a moor dotted with snowdrifts and little streams. The land is tundra-like and sports little vegetation outside of grasses, shrubs, and spindly trees. Radiating out from the town, the air gets colder, and the earth gradually becomes blanketed with thick snow and dense fog. Forming a perimeter and unnatural barrier around the town is a dark and twisted forest. The trees have white, petrified bark cloaked in blood-red foliage. They are withered and contort in unsettling ways. The forest emanates strange fog and is home to many terrifying creatures that are just as twisted as the trees. The unknowns of the forest keep the residents of the township locked in the center of the moor, never to venture too far lest something horrible happen to them. The city is a haven in the middle of the woods with mysterious origins that are uncovered as the story progresses.

With any large population of people comes the need for a governing body. This is where I had to start doing more research and clearly lay out logistics and plans. With any work of fiction, be it sci-fi or fantasy, forms of government become heavy points of interest and can be a strong inspiration for protagonists and antagonists. There are many forms of government to choose from, like democracies, monarchies, theocracies, etc. and each form drastically changes how the narrative society functions. For this section, I began heavily referring to a blog run by author Michael J. Tedin that compiles an ongoing repository of all things worldbuilding. In his section dedicated to constructing fictional governments, Tedin emphasizes the importance of using real-world examples as a basis for any imagined ruling bodies, which holds true for most aspects of writing fiction. When creating a fictional governments, classes, and factions are important for supplying believability and structure and can double as powerful character motivators.

Wellspring's politics are heavily inspired by Plato's *The Republic*. Rather than use a conventional king, queen, or council, I wanted to explore a more philosophical approach to hypothetical government that could prove both challenging and thought-provoking. In *The Republic*, Plato, speaking as Socrates, describes a city that is only as large as it needs to be to fit the needs of its people and keep them all content, regardless of class. The city cannot dip into extremes of luxury or poverty lest it become "feverish", and each citizen must serve their most efficient function for the betterment of all. Justice and fairness are the aim of the rule of law, which is interpreted by only the most thoughtful and learned individuals. Wellspring follows these goals and ideals closely.

The city is run by a small group of aged men everyone calls simply, The Philosophers, which is meant to be on-the-nose, referring to the rulers of Plato's ideal society. They are seen more as wise teachers than a ruling body and remain mostly unquestioned by the people they scrupulously govern. According to their annals, the city was founded by a small group of varied people that had been thrown together in desperation when the forests began to darken. The group found abandoned ruins on the bluff on which Wellspring now sits and were pleased to discover the area was warded from the evils in the forest. The group had a hard time getting along at first, but due to the dire straits and limited resources, they had to do something to stay unified. Each member of the group, as is told by the Philosophers, had a specific title and purpose: Physician, Smith, Scribe, Sentinel, etc. to name a few. All the members of the founding group got together and decided the first Philosopher among them would be the one to lead and vowed to follow his will in all things, trusting him to be the wisest and most just. From then on, the Philosopher would create and maintain rules that served every resident of the city. Most importantly, the consequent families that emerged from the original founding group would continue their work

and live purposefully through labor. If a towns person was born to a family of Smiths, then a Smith they would be, and so on and so forth. Over time, the population multiplied and grew unwieldy, so the Philosophers instituted a rule that would apply a population cap to Wellspring, making the process of finding a marital partner and creating offspring tedious and, in some cases, dangerous. While this decision garnered much resentment from the people, they complied, trusting the Philosophers knew best.

In Wellspring, there are not necessarily castes or classes, rather many different types of laborers, and of course, the Philosophers. There are those who work with textiles, those that specialize in medicine, those who are martially adept, and many more. Each family name is simply the title of the work they do, like Smith, Scribe, Tender, Mender, etc. mirroring medieval English trade surnames. I had to use many synonyms for jobs to better fit as family names- more on that later. In terms of other norms and community rules, families do intermingle with one another, but children are still only able to continue their parents' work. Anything remotely artistic is banned outright and most text is factual, often being limited to manuals and records of events. Citizens are heavily censored and must watch what they say, lest it be seen as disruptive or counterproductive. While crime and punishment can be intense, most discipline is delivered in the form of public shame and stigma (a common theme in this story). Time is as much of a resource as food or water, and citizens must work on their tasks from dawn until dusk. Elderly citizens or the impaired, being seen as unfit to work, are generally cast out from the city. This inhumane version of "efficiency", on a case-by-case basis, causes quiet unrest among the citizens of Wellspring. Due to the status quo however, they largely remain silent. This harsh rule, among others that are instated, acts as a slow-burning indicator that something is fundamentally wrong with Wellspring.

One of the themes I am trying to communicate is a sort of unrest beneath a seemingly functional exterior. While society functions efficiently and all peoples' needs are met, not all is right within Wellspring's walls. The citizens are essentially captives, both physically and socially, not being able to leave the town and lacking the collective will to elicit any meaningful change. The laws are dry and unfeeling, and the citizenry acts in accordance with that. There is no art, little expression, and ultimately no real purpose to the so-called purposeful lives of the people that live here. That is where my protagonist comes in.

My protagonist and the character I wished to highlight for this project is a girl named Ayvel. At the beginning of the story, she is about fourteen years old and belongs to the smallest family in town, the Boffins. Boffin is English slang for "genius" or "tinker" and is sort of an ode to Tolkien, as it is a very Hobbit-sounding surname. The name also contrasts those of her neighbors by sounding more lighthearted and a little out of place.

Ayvel was a fun character to write. She is kind of a ray of sunshine in an otherwise dreary town, though she is not necessarily happy about it. While I used many sources to help me better write my characters, a piece of advice from late screenwriter Peter Russell influenced Ayvel's personality the most. In a video by Film Courage, Russell states, "We all have secret lives, and they're all about compensating for our wounds. That's the action that will make a great story". I took that to heart when writing Ayvel.

She is a curious person, belonging to a dwindling family of tinkers and inventors. The job of inventing, however, in the greater Wellspring society, is kept under the greatest scrutiny of the Philosophers and seen as frivolous to the other, more "essential" families. Innovation is mostly frowned upon and runs counter to Plato's idea that he "[I] would allow the state to increase so far as is as consistent with unity... [that, I think, is the proper limit]," (Jowett, 1998, p. 279). While the

invention is borne of necessity, necessity is determined by the Philosophers, therefore the Boffins are not allowed much freedom to experiment, especially when dealing with the magic system I will be discussing later. Ayvel's curiosity frequently gets her into trouble with the Philosophers, and it doesn't help that she is accident-prone. As part of her "core wound", her clumsiness makes her question her role in society, endangering her already fringe social station. Additionally, she has a key accident where she tampers with a volatile experiment that bursts, causing a flying shard of glass to cut her crosswise, leaving a huge scar that disfigures her face. This is something she is incredibly self-conscious about and will often do borderline ridiculous things to conceal. The scar serves almost as a scarlet letter or stigmata, marking her as talentless and unfit.

Ultimately, Ayvel is the culmination of the unrest in her city. Her missteps, overly curious personality, as well as some personal vices against the Philosophers make her question her station, and she will run away from Wellspring, stealing one of the most important projects along the way. This particular project is known as The Battery and happens to be the one that blew up in Ayvel's face as an earlier iteration.

The Battery is part of the magic system at work in Wellspring. The town is protected from the blighted forests due to it being situated on top of a vein of a mineral known as "Iliaster", the term coming from Paracelsus' alchemy and meaning the "light of the universe". "Like a true alchemist, he [Paracelsus] thought of the [Aqua and] Iliaster as extending both upwards and downwards: they assume a spiritual or heavenly form as well as a quasi-material or earthly one. This is in keeping with the axiom from "*Tabula Smaragdina*:" "What is below is like what is above, that the miracle of the one thing may be accomplished." (ARAS, *Paracelsus*). This Iliaster is a pure, yet volatile mineral that warms the immediate area and wards off the

twisted forest and its creatures, yet it doubles as a metaphor (which will be discussed momentarily). While untouched for hundreds of years, the Boffins were finally allowed to experiment with small samples of this miracle mineral as a would-be source of energy. The Battery project was the first attempt to house the mineral in a safe container for use in things like lighting or heat. The iteration Ayvel runs away with is the first to avoid melting or exploding, so it shows great promise. With it in tow, it negates some of the negative effects of the forest and gives her hope for her people to be free in the future.

The forest is not completely safe however and when faced with one of the stalking Grey Creatures, Ayvel quickly realizes this venture was a mistake. The forest and its inhabitants are twisted forms of life. The ground underneath the snow is blackened and laced with streaks of bright crimson Anima, a mysterious substance not unlike the pure Iliaster found in Wellspring. Anima is a corrupted version of the Iliaster and is the culprit for the encroaching blight. Over prolonged exposure, it has caused the trees to die and morph, much like petrified wood. The animals have grown chitinous and disturbed, neither living nor dead. To serve as primary antagonists based in the forest, a small faction exists that is responsible for the corruption and the Anima. They too, are morphed by the environment. This faction is the Sorceress, Ani, and her group of Animates. Each Animate is named after a blackbird (i.e., Lark, Harrier, Starling, Thrush, Oriole, Raven, and Sparrow) and is powered by the red Anima that Ani uses in the form of crimson tattoos.

The Iliaster and Anima are representative of ideas. Iliaster represents pure thought with the potential to do great things that help society, being greatly inspired by Paracelsus' natural philosophies; idealistic and noble aspirations developed by creative minds. Anima is the perversion of those ideas, the use of energy and power for selfish and evil means, embodies by

the evils of Ani, the Sorceress. As a tinker, Ayvel experiments with the Iliaster, using it to achieve her ideals for a freer and happier society.

Chapter 2: 2D Protagonist Development

With the preliminary writing out of the way, it is easier to explain Wellspring's visual development. For the first and main leg of the project, I wanted to explore my protagonist, Ayvel thoroughly. She is the type of character I have drawn for a long time, a quirky, yet intelligent little nobody with a mind like a steel trap. She is a social outcast that sees the world very differently than those around her.

When writing any character, it is good to use archetypes as a starting point for building their personalities. In Ayvel's case, I gravitated towards the use of the Enneagram personality archetypes to help determine a starting point for how she interacts with her world. Enneagram is useful since it covers a spectrum of behaviors for each type, ranging from highs and boons to lows and banes. I used type 1, The Reformer, as Ayvel's base. She is an idealist with noble intentions and is highly dissatisfied with the status quo. She can be manipulative and condemnatory and even a bit of a narcissist when others' ideals do not align with hers.

On the surface level, Ayvel is a tinker. She is curious and desires to fix things, even if they aren't necessarily broken. While she does not jive with her station as a young girl, she makes her own way and finds her footing as a brilliant innovator later. The main obstacles to her success are the dogmatic Philosophers and her fragile self-confidence.

Using Ayvel's personality, activities, hopes, and fears as blueprints, I then had to create a design that could reflect that information accurately. I compiled a mood board and reference sheet for her using a program called PureRef. It is a useful tool for constructing and annotating idea boards and quickly formatting groups of photos that I used many times during this project. I

gathered images that could help me visualize Ayvel's appearance, attire, equipment, and demeanor and organized them as shown in Figure 1.

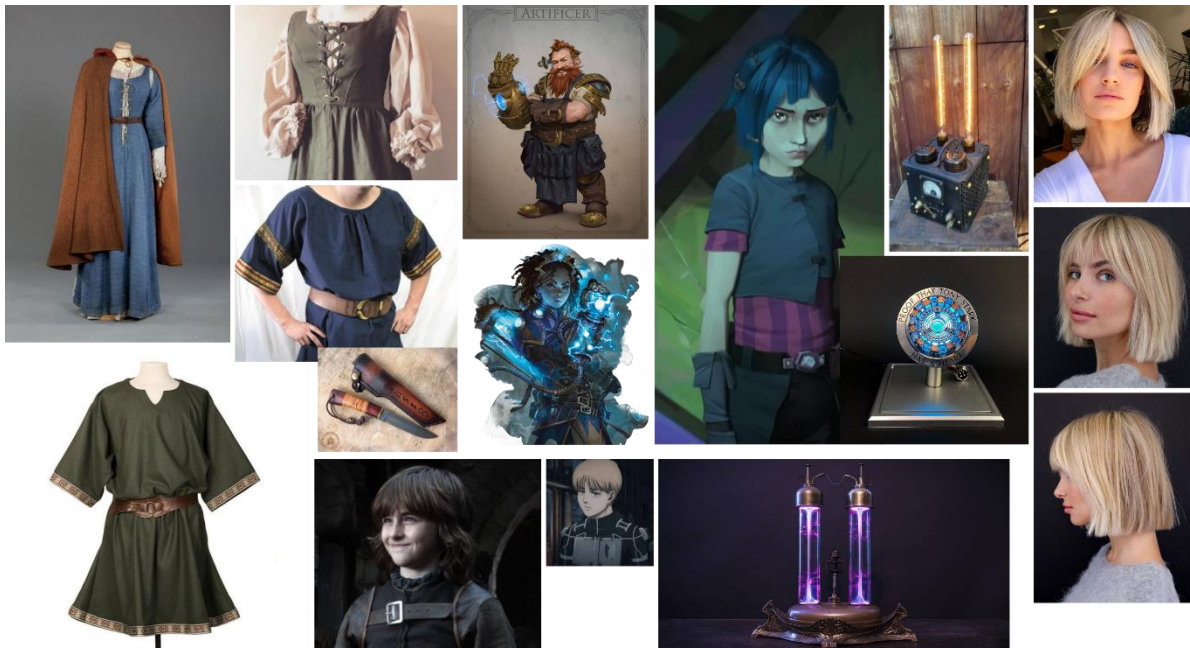


Figure 1- Ayvel Reference Board

The culture of Wellspring is visually inspired by that of the Anglo-Saxons and the Danes. When sketching Ayvel's attire, I wanted to communicate not only geographic location but also societal status. She appears peasant-like and dresses plainly, being relegated to the same old work attire each day. As for her appearance, I combined aspects of several characters (as seen in Figure 1) and added my own touches, keeping in line with her intended mien. I liked the idea of messy blonde hair and expressive brown eyes to start.

Below in Figure 2 is the first rough sketch of Ayvel. At this stage, most of the defining elements were present such as the facial scar and the giant battery. I determined she would have the Saxon elements but combined them in such a way that seemed a little more steampunk to reflect her station as a tinker and inventor. She also looks more incredulous here, which changed as I developed her character. From here, I could refine the look into something more finished. The final product was two-fold. I created a design for Ayvel at about fourteen years and

another at twenty years old to compensate for a time skip in the story.

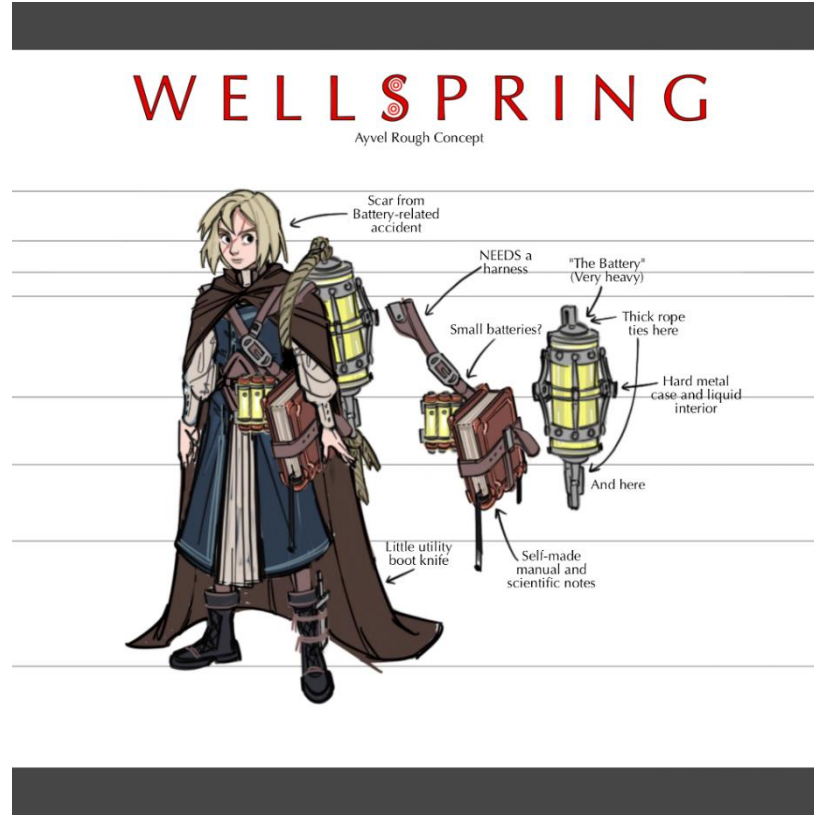


Figure 2- Ayvel Rough Draft

As a fourteen-year-old, Ayvel is small, meek, and feels out of place. She wears old work clothes and dresses in layers to compensate for the fluctuating temperatures in the city. She also wears limited colors, as textiles in Wellspring are not meant to be decorative, but practical. She layers a heavy, blue dress over one of her father's old work shirts, wears heavy laced boots, and gloves that are a little too big for her tiny hands. Emulating peasant women in old world Norse and Saxon communities, she keeps her dress gathered up in the back to create pockets for carrying trinkets. She has messy blonde hair that her father keeps choppy and short, and of course, her facial scar stretches from her left brow down to the right side of her jaw. In Figure 3, she carries the first stable rendition of the Battery. However, she carries it using a shoddy rope over the shoulder, which is not well suited for travel and is exhausting to manage.

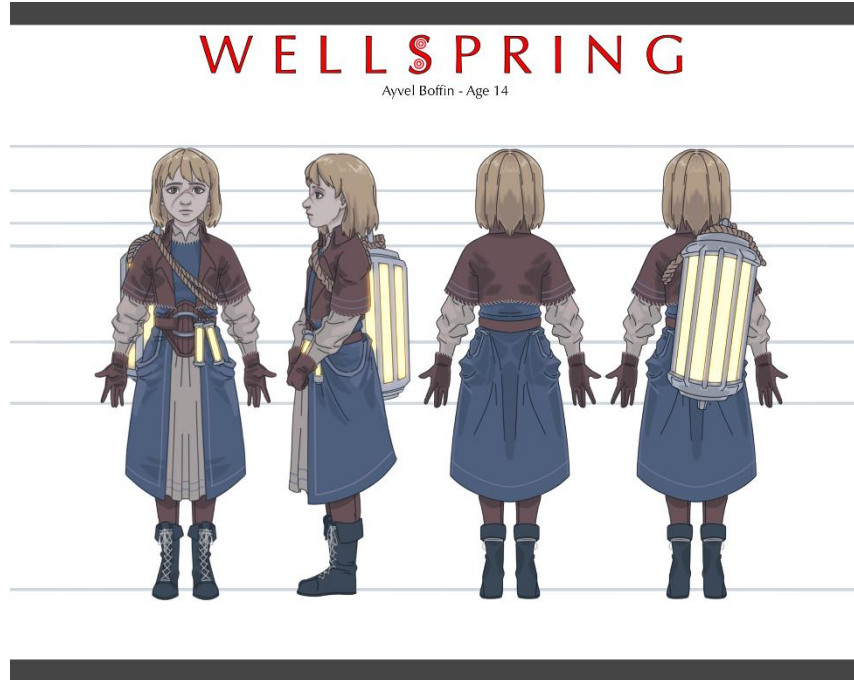


Figure 3- Ayvel at Fourteen Years Old

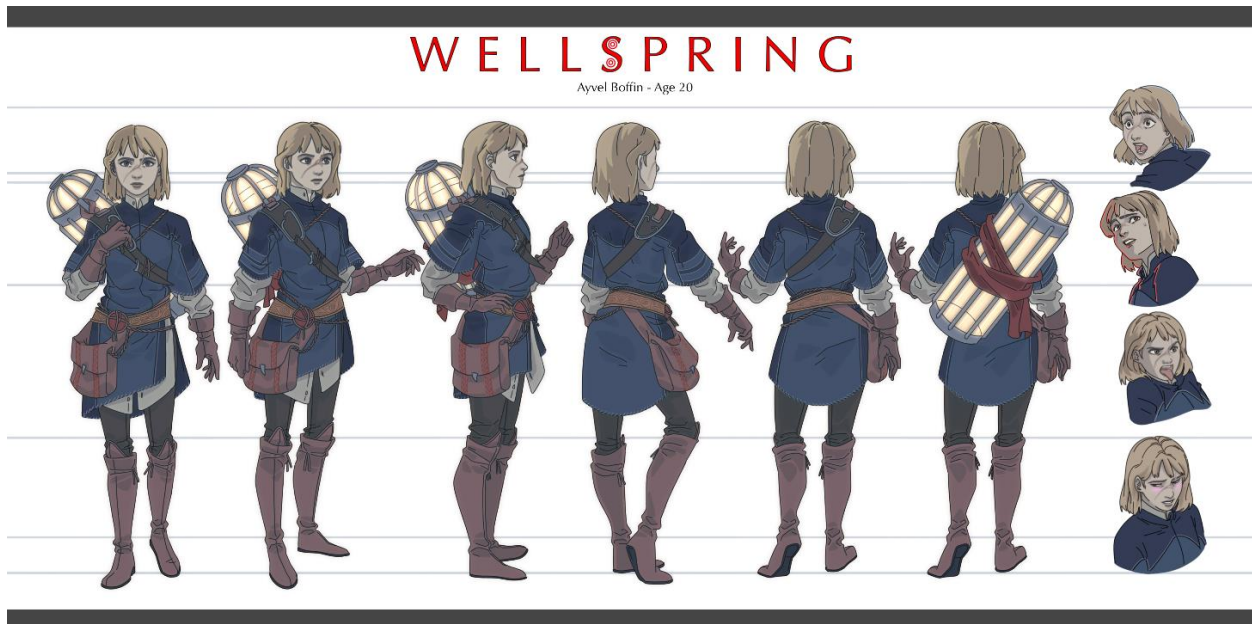


Figure 4- Ayvel at Twenty Years Old

In the middle of the story, there is a six-year time skip in which Ayvel, having learned some valuable lessons about herself and her home, attempts to spark change in the town and hone her craft in her own way. In Figure 4, her attire is more colorful and includes more decorative elements to reflect this change. She wears the same old work shirt underneath her

doublet that she did as a child, mainly as a memento of her father. She dresses more comfortably and carries more equipment reflective of her experiences. Spending more time away from the safety of town, she carries a large knife and has developed a convenient shoulder harness to help her carry the newest rendition of the Battery. At this stage of her life, she is more confident and self-reliant. The scar remains, but Ayvel has grown enough as a person to accept it.

Chapter 3: 3D Protagonist Development

Using the fourteen-year-old character sheet from Figure 3, I created a sculpture of Ayvel using Zbrush and Autodesk Maya. The concept sculpting process was straightforward but got more complicated concerning further application, i.e., post processing, optimization, and 3D printing. I first laid out the basic musculature using plain spheres that I contorted, creating a mannequin for use throughout the sculpting process. I grouped together similar pieces into subtools (or individual components) like the arms, hands, torso, etc., so that I could freely move and manipulate each limb. I also kept a mannequin master with all the pieces to work non-destructively and have backups in case I made any irreversible errors while sculpting. I also included a rough version of the head.

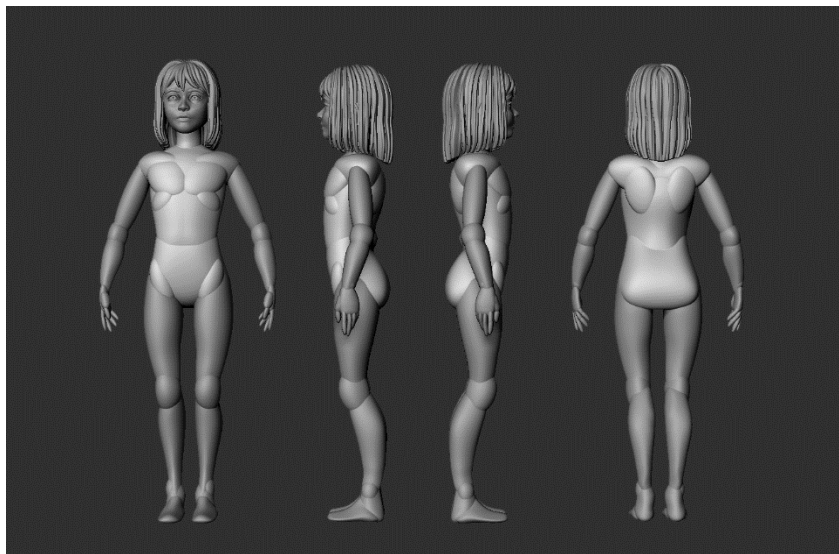


Figure 5- Musculature Blocking

With the mannequin block-out made, I then began adding in the rough shapes for Ayvel's attire, moving from head to toe. Since she wears layers, I had to consider how everything would lay on top of each other for continuity while still retaining the intended silhouette. After the major pieces were laid down, I added in the smaller details such as buckles, pockets, and large folds. From here, the sculpting process mimicked that of chiseling stone. I increased the resolution, allowing for more and more features, using finer brushes, and carving out more details until I got a product that very closely mirrored the 2D concept art.

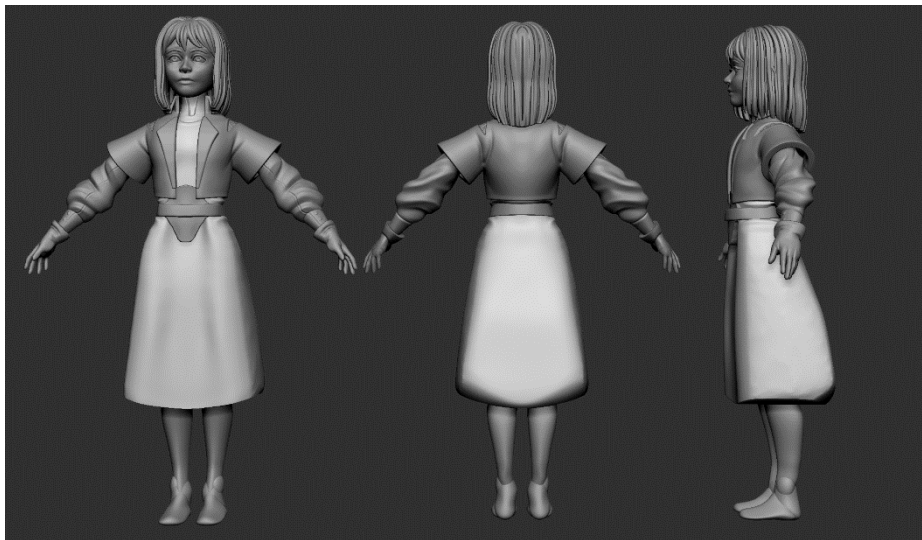


Figure 6- Attire Blocking

The face, I believe, took the longest to finish out of any part on the model. A big part of the process is avoiding falling into the uncanny valley. This project was intended to have a more stylized presentation, so it was easier for me to avoid that pitfall. Much like the rest of the body, the face began with a basic block out. I began by constructing a basic skull-like shape, then added muscle and flesh, much like sculpting with real-life clay using layers and blending. Once the face base was finished, I was able to then go through and bring out Ayvel's defining features, like her expressive eyes and prominent scar. This portion was about refining, keeping in line with the concept art, and ensuring the character's personality shone through in the model.

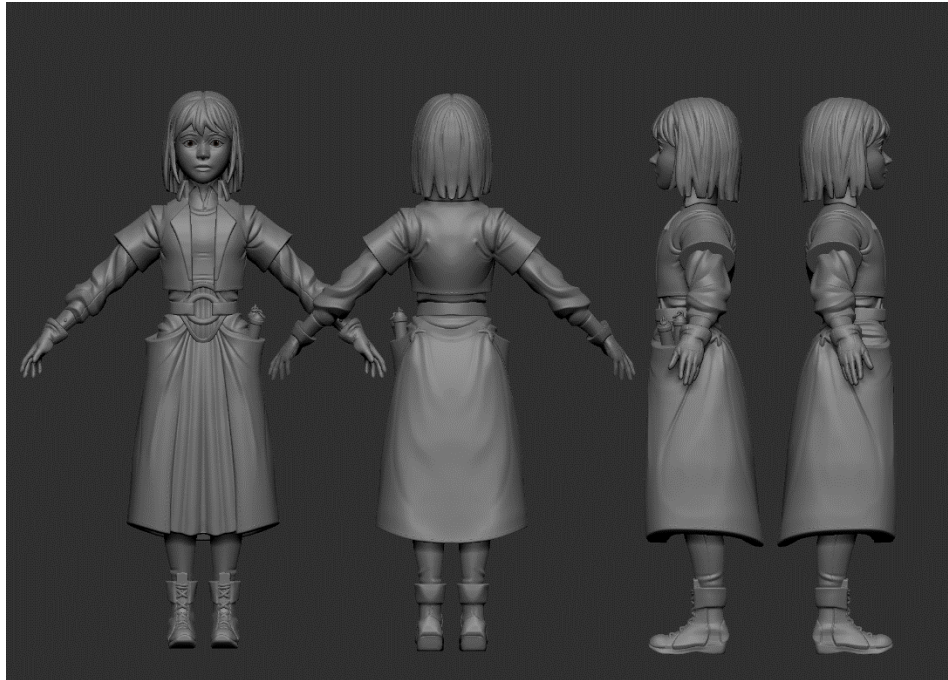


Figure 7- Refined A-Pose



Figure 8- Closeup of Facial Details

I sculpted Ayvel using a basic A-pose, as seen in Figure 7, so that I could utilize the symmetry tools and have a neutral stance that I could manipulate later. Once I felt the model was in an adequate place, I could start making those alterations. I had made sure during the sculpting

process to keep certain clothing and limb pieces as separate components so that I could freely bend and pivot them. I used the masking tool heavily here, masking off any parts of the body I did not want to move and positioning everything accordingly.



Figure 9- Posed Renders

Since I planned on printing this model, I had to choose a pose that would be balanced enough for a small statuette and still give some vitality to the immobile figure. Once the model was posed, I moved on to the post process. I made a copy of the project and combined all the subtools into one object. I then set up some directional lighting and got some BPR renders of my

model. Zbrush has a feature where after a render, different layers and masks can be exported as images for use in compositing. I gathered those images and put them into Photoshop. I started with the value layers from Zbrush and then added several color layers using overlays. Highlights and shadows were set up with the lights in Zbrush, which made the process go more quickly. I finished up the image with a few detail layers, added a relevant background, and painted in some lighting effects using add and screen layers. Something important to remember was the different materials that made up the scene. In the detail layers, I made sure to paint the matte cloth and the reflective metal, and even added a hint of subsurface scattering around the skin of the face. With that, I completed Ayvel's finished color pass.



Figure 10- Ayvel Color Pass

After rendering, I prepared the model for printing. First, I duplicated the project, keeping the process non-destructive, and then merged all subtools into one object. I then scaled this object using a reference cubic inch. The model was scaled to about eight inches tall. Since I planned to use a resin printer and the bed was about five cubic inches, I dismembered the model

to have smaller pieces. It was important to cut the model at seams or joints to better mask the divisions during assembly. At each division, I added in a peg and corresponding socket that would slot together when I connected the physical pieces. Once the pieces were cut, altered, and separated, I decimated the model. Decimation reduces the polygon count in a model without losing any of the sculpted detail and makes the file size more manageable. I then exported each piece as both an STL and OBJ file for print. Some printers take one or the other, but many accept both file formats. Once the prints were finished, I then used a Dremel tool to sand the imperfections out of each piece carefully. Printing with resin was favorable because it allows for sanding and alterations after printing, whereas plastic PLA filament melts or warps under high friction. Once the pieces were sanded, I washed them all to remove any excess resin shavings and let them air dry overnight. The next day, I took them outside and gave them all a couple of coats of grey primer.

Once the primer was dry, I assembled the pieces using heavy duty super glue. The glue held together surprisingly well for the body pieces. The base was a challenge since the holes I made in Zbrush did not align in the physical print. I had to take some liberties by filling in the old holes and drilling new ones into the base PLA. Attaching the base to the body was a twofold process. I started by using the same super glue and bound the pieces together, leaving them to adhere overnight. The next day, I reinforced the base with some hot glue and layered it so that it seemed like Ayvel was standing in a snowdrift, which is logical considering the story setting. Once all the pieces were assembled and glued, I did a final layer of white primer so that I had a bright canvas on which to paint. From here, I used both hand painting and an airbrush to give the model some color and detail. I finished off the print with some matte sealant, and the statuette was ready.



Figure 11- Painted 3D Print

Chapter 4: 2D Environment Development

With my protagonist fleshed out, I then wished to visually develop some of her surrounding environment. I chose to focus on one of the most defining features of her surroundings, the Tower of the Philosophers. This location is where the masters of Wellspring live, far above the rest of the town in seclusion on the highest bluff. This location is the best vantage point for looking out at the expansive forest, the never-ending sea of crimson trees. Architecture is trickier to conceptualize than characters, at least in my experience. It took a lot of brainstorming to get a design I liked for this landmark. Similarly, to my character development, I sought references and inspirations for the style and layout of the tower. The goal was to have it seem ancient and otherworldly without straying too far from real-world architecture.

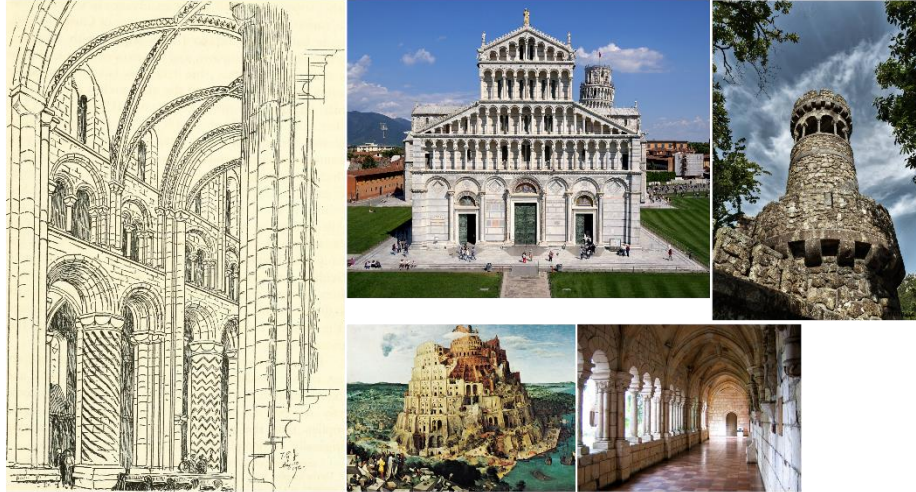


Figure 12- Tower References

I originally conceptualized very outlandish structures. They were triangular and were partially embedded into the bluffs, making them seem very cave-like. I created a preliminary draft of this idea but felt I didn't quite capture what I was going for. Since the current Wellspring (during Ayvel's lifetime) is merely built atop the remnants of a much older civilization, I leaned towards a different architectural style. Much like how in real-world history, medieval cultures sprouted from the remnants of the once great Roman Empire, current Wellspring sits atop the remains of a much more advanced and ancient society.



Figure 13- Initial Concept for the Tower Bluff

For the finalized concept, I referred more heavily to my reference board, taking inspiration from Romanesque architecture as a sort of midway point between the fall of Rome to feudal medieval societies like the Anglo-Saxons. My key real-world inspirations were the Pisa Cathedral and the Cathedral of Zamora. I included key features such as a more tier-based design as well as large columns and a recessed entranceway. A core characteristic I wanted to keep across both concepts was how there would be a shaft of light emanating from the center of the tower. This light and heat would be radiating from a high concentration of Iliaster located at the base of the building.

Architecture is tricky to draw correctly, especially when keeping in mind perspective, structure, and balance. To combat this, I utilized other programs and created a photo-bash matte painting. I first used Autodesk Maya to 3D model the structure of the tower. Modeling in hard surface made it easier to capture the angles and geometric forms correctly. I then set up a camera and placed some key lights both inside and outside the tower to get proper value scales. I then used the Arnold renderer to create a few high-quality images of the tower. Arnold, like Zbrush, has a feature where you can isolate certain channels, such as the alpha channel, and save that for use as a mask in programs like Photoshop. I did just that and imported those layers into Photoshop to paint and composite. I created a sketch layer to lay out the rest of the scene and establish the perspective I wanted to use. I then blocked in basic colors and lighting. I overlaid a stock stylized stone texture over the tower, using warp and liquify tools to contort the planes over the curvature of the tower. From here, I simply hand-painted over everything to give it that stylized look. The last step was to add a few blend layers to make the lighting more dramatic and make certain colors pop. Figures 14 through 17 demonstrate the process from sketch to final product.

WELLSPRING

Tower Drafts

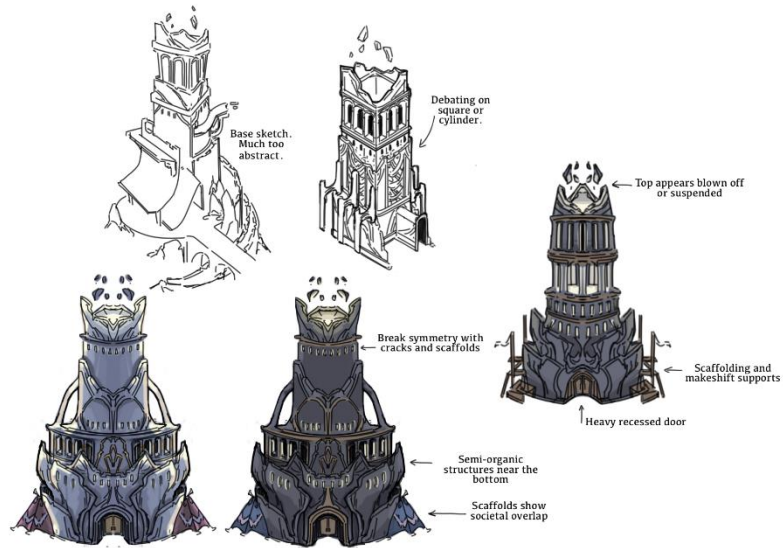


Figure 14- Secondary Tower Drafts

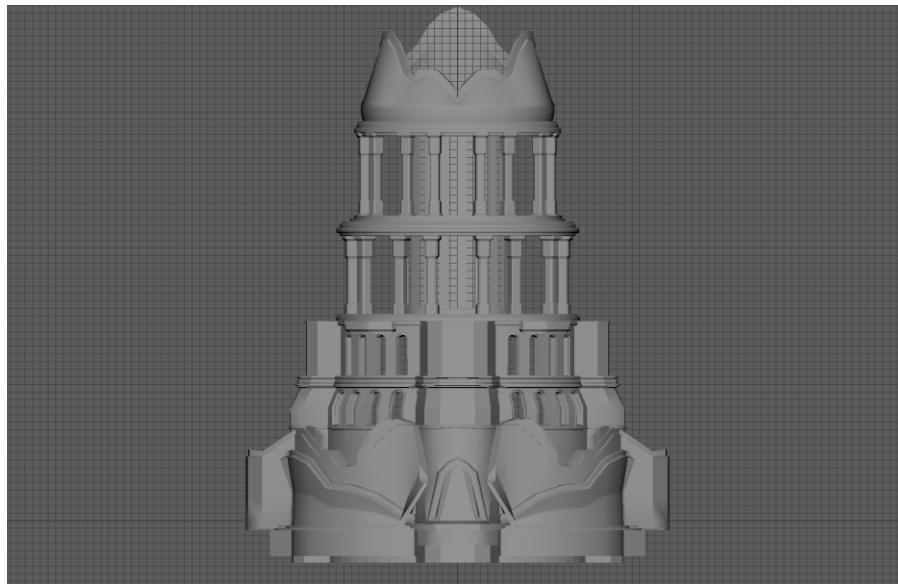


Figure 15- Hard-Surface Tower in Maya



Figure 16- Tower Stages 1 and 2

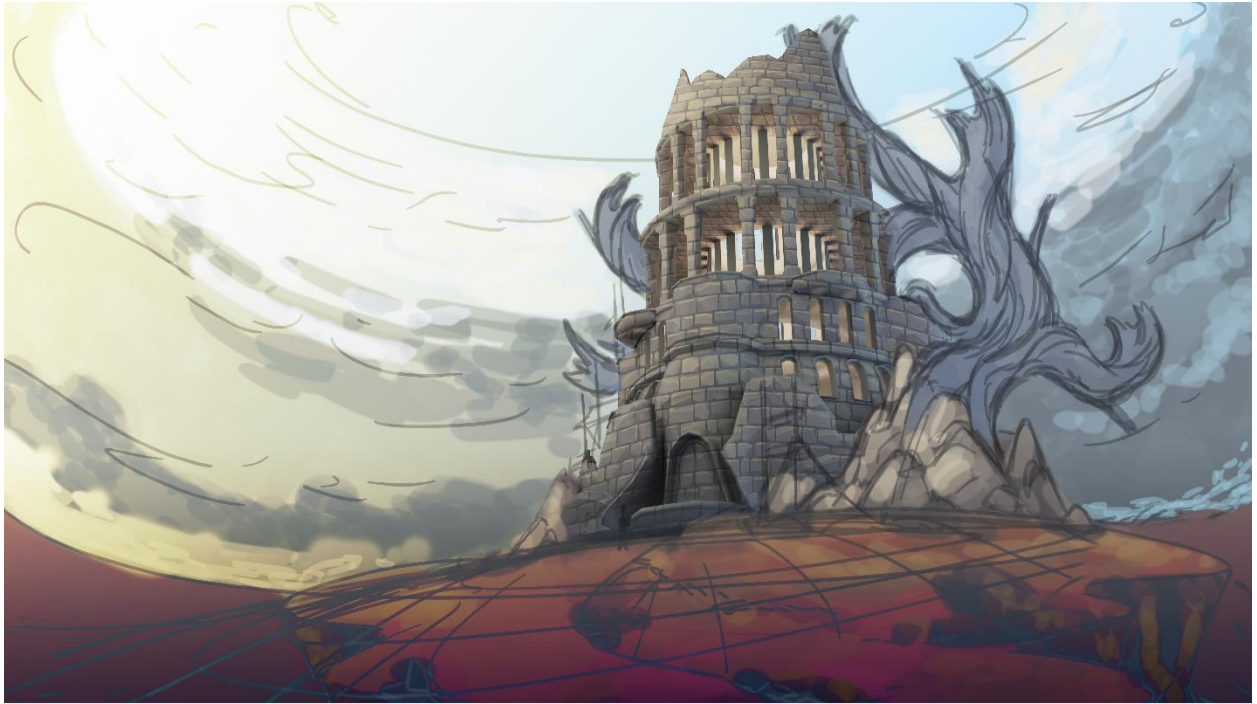


Figure 17- Tower Stages 3 and 4

Chapter 5: Miscellaneous Concepts & Supporting Characters

The last leg of this project consists of scattered concepts and miscellaneous information from my story. I consider Ayvel to be by far the most developed character from the roster, but she is by no means the only player in the narrative. She has a small family consisting of her father, Arrol, her Aunt Aydith, and Aydith's partner, Amadou. Amadou has a younger brother named Oumari that is Ayvel's best friend and fellow dissident. While Ayvel and her blood relatives are Saxon-inspired, Amadou and Oumari, as well as many other residents in the town are inspired by Malian culture. Many different types of people got caught up together during the founding of Wellspring, so the groups have just intermingled as time has gone on.

Ayvel's mother, Brida, is deceased by the events of *Wellspring*. When Ayvel was about five years old, her parents "accidentally" conceived a second child. The Philosophers eventually found out and shamed Brida into taking a concoction that would terminate the pregnancy since the population was at max capacity. Shortly thereafter, she became very ill and passed away, robbing the family of two members. Ayvel now lives alone with her father. Arrol is not a mean-spirited person but is rather hands-off with raising his daughter. Due to prior events, he fears authority and tries his hardest to avoid public scrutiny. Since Ayvel is both a nonconformist and very clumsy, the two Boffins are often at odds. Arrol's attitude sometimes makes Ayvel feel very unloved, which contributes to her desire to leave town.

Outside Wellspring, there is the faction of Animates in the dark woods. This group is led by the Sorceress, Ani, and consists of her seven creations: Lark, Oriole, Thrush, Raven, Starling, Sparrow, and Harrier. Each member of this group is named after a particular blackbird. The Animates, aside from Ani, are all essentially reanimated corpses. Referring back to the Anima/Iliaster magic system I described earlier, Ani, using knowledge of the mineral she

accrued over years of isolated experimentation, discovered this method of necromancy. The sorceress longed for a family of her own and wished to exert an unhealthy amount of control over them. Over time, she gathered the bodies of “worthy candidates” and, using the Anima she had created, tattooed them all, infusing them with the self-sustaining energy. While in this state, the Animates lacked much freewill but were not without distinct personalities. For a long time, they terrorized any civilized life within the darkening forests and the surrounding lands, spreading corruption deep into the earth itself. At the pinnacle of the violence, the original inhabitants of Wellspring took drastic action and enacted a ritual using the font of Iliaster in the central tower. The ritual, while mysterious in nature, only managed to put all the Animates and Ani into a deep slumber. During the events of *Wellspring*, the Philosophers also begin to tamper with the Iliaster in unsavory ways, which causes the Animates to wake. This phase of the conflict primarily takes place after the time-skip when Ayvel is about twenty years old.

Out of all the Animates, I wished to develop Ani the most since she is such a potent force out in the wilderness. As soon as I wrote her character, I knew exactly what she would look like. I wanted her to have a bony, emaciated physique that communicated her guile over all other traits. However, while frail in appearance, she still needed to be imposing. For this key aspect of her design, I was inspired by the character, Gollum, from J. R. R. Tolkien’s *The Hobbit*. While Gollum is not physically strong, he is dangerous because he is very old and very smart. This is what makes the book’s fifth chapter, “Riddles in the Dark”, so eerie. The main character, Bilbo, is trapped alone in the dark in the bowels of the earth with this creature far older and wiser than himself. To secure a way out of the caves and appease the creature, the two characters engage in a battle of riddles. During the exchange, it is Gollum’s ambiguity that generates the fear and puts

Bilbo on high alert. Ani operates similarly, although she has some of the magical Anima at her disposal as well.

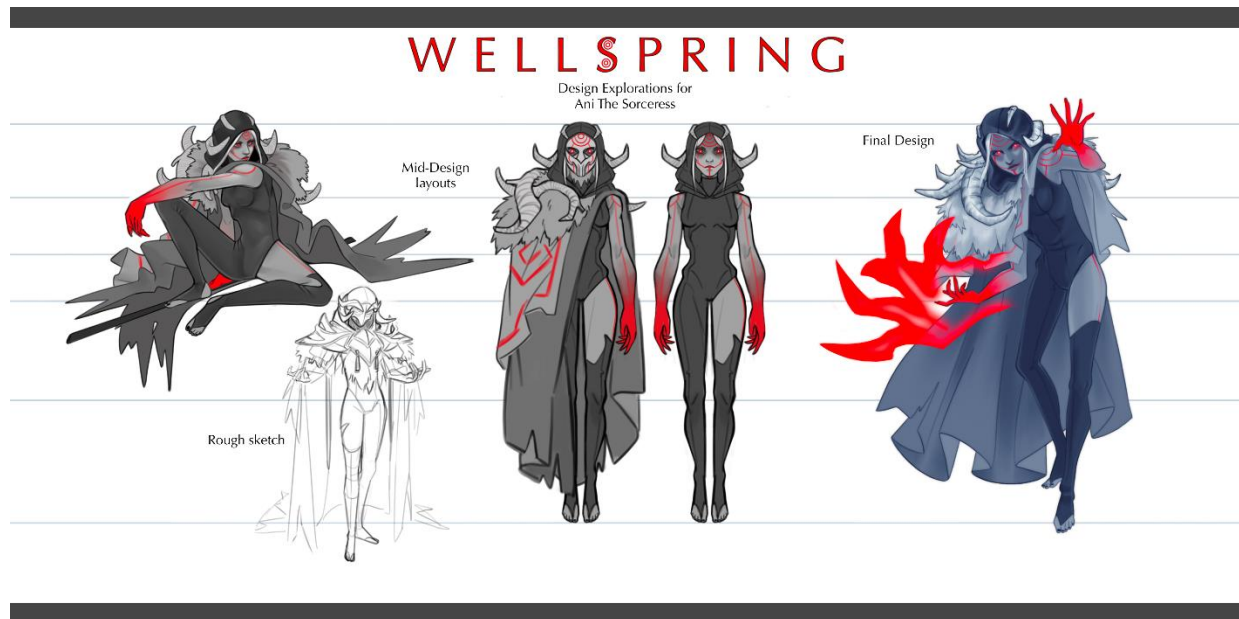


Figure 18- Designs for Ani

Her bony exterior aside, Ani is scantily clad in what is essentially long underwear, as are most of the Animates. I wanted to define the visual motifs of the Animates with top-heavy chitinous armor, heavy cloaks, and dingy furs. The armor is made from the remains of the twisted creatures of the forest and often includes gnarled horns, teeth, or claws. The heavy cloaks and furs accommodate the snowy, northern climate, though the Animates do not necessarily feel the cold. Ani's arms are bare, revealing large, clawed hands stained red with the Anima she uses. She sometimes dons a mask, though she wears it more for intimidation than anything else.

The tattoos that cover Ani's body mirror one's circulatory system. For each Animate, the tattoos must run down all extremities and moving parts to power them, much like veins and arteries. On a vital part of the body, such as the head, chest, or navel, there is a central locus from which the energy flows. This locus takes the form of concentric rings, such as the one seen on Ani's forehead. The locus needs to be destroyed to truly defeat an Animate.

Chapter 6: Conclusion

While I close this project and conclude this paper, the journey is far from over. While deciding what type of project to use for my thesis, I knew I wanted to do something creative that I would be passionate about. Once I started brainstorming, writing characters and lore, I found it hard to put the metaphorical pen down. This project was beneficial to me because I have long wanted to develop my own story and build my own world. With this project, I was not only able to do that, but exercise many of the skills I have gathered while in undergrad to visualize the written portion in both 2D and 3D. This project increased my understanding of character design, matte-painting, character sculpting, and 3D printing. I was also afforded the opportunity to channel my love for the fantasy genre and pay homage to many of the authors I admire through the written sections of this work. The content detailed above serves as a launch point for further development of Ayvel and her story. There are many more characters to expand upon and scenes to illustrate, and I believe this project shows promise for a game, visual novel, or other digital media in the future.

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