Book of Worlds:

An Artistic Representation of Mental Illness

A Major Qualifying Project
Submitted to the Faculty of
WORCESTER POLYTECHNIC INSTITUTE
In partial fulfillment of the requirements for the
Degree of Bachelors of Arts in
Interactive Media and Game Development

WPI

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Abstract:

Book of Worlds is an artistic representation of mental illness. Each chapter contains art which conveys an imagined world inspired from symptoms of specific mental illnesses. Sketches, paint studies, and final compositions illustrate key world locations and inhabitants. The goal of this Major Qualifying Project (MQP) was to create captivating and imaginative works of art befitting a professional concept artist's portfolio and ready for publishing as a stand alone art book.

This MQP was completed at Worcester Polytechnic Institute (WPI) by one Interactive Media and Game Development IMGD (BA) major. In this report, I discuss research which inspired *Book of Worlds'* artwork and describe the imagined mental illness worlds along with my artistic process. This report includes concept art inspired by symptoms from eating disorders, bipolar spectrum disorders, and trauma-related disorders.

Acknowledgements:

Table of Contents

1.   Introduction

Book of Worlds is a compilation of artwork conveying imaginary worlds inspired by symptoms of mental illnesses. Each chapter contains drawings and paintings portraying a separate mental illness world. Each mental illness world was inspired by symptoms from eating disorders, bipolar spectrum disorder, or trauma-related disorders. Additionally, one Book of Worlds chapter describes the artistic processes used to conceptualize worlds and create final paintings.

I like to imagine characters and locations, to create entire worlds with unique inhabitants who may interact in freeform story arcs. I am also interested in mental illness and topics related to mental health such as psychiatric medication, in part due to my own personal experience with such topics. Through Book of Worlds, I combined my interests in mental illness and world building to create professional concept art expressing these fictional landscapes inspired by modern research.

The goal of this MQP was to create imaginative, compelling works of art which evoke intense feelings and reactions from the audience leaving an impression. Symptoms of mental illnesses inspired the final paintings, but ultimately the work is my perspective on the subjects. I researched mental illness and then expressed my feelings surrounding mental health through the Book of Worlds' concept art. While the main goal of Book of Worlds was to create captivating artwork and worlds, I also hope to encourage more conversations surrounding mental health. In many locations, stigma surrounding mental illness persists (WHO, 2020). People with mental health issues may feel less alone in their struggles if the public were to discuss mental illness symptoms more frequently.

This MQP was completed by one Worcester Polytechnic Institute (WPI) student majoring in Interactive Media and Game Development (IMGD). This IMGD student, Natalie Milgram, conceptualized all worlds, created all drawings/paintings, wrote all prose, and compiled all works into a printed book titled Book of Worlds: An Artistic Representation of Mental Illness.

2. Background

2.0 Mental Illness

2.0.0 Mental Illness and Stigma

Mental illness affects an individual's emotional state, cognitive processes, and/or behavior (Mayo, 2020). Perception of mental illness has evolved throughout history and attitudes towards mental health continue to change (Jutras, 2017). Originally, mental illness was thought to have supernatural causes (Jutras, 2017). More recent scientific developments have led to public documentation of mental illnesses and classification systems like the Diagnostic and Statistical Manual of Mental Disorders (DSM) (Jutras, 2017; American, 2020). Healthcare professionals in the United States diagnose individuals with specific mental illnesses according to diagnostic criteria listed in the DSM-V (American, 2020).

According to the National Institute of Mental Health (2021), approximately one in five adults suffer from a mental illness in the United States and nearly 50% of Americans live with a mental illness during adolescence (between the ages of 13 and 18) (National, 2021). John Hopkins Medicine (2021) claims about 26% of american adults suffer from a mental health condition (John, 2021). Mental health stigma persists around the globe, resulting in discrimination and false perceptions of mental illness (WHO, 2020). Mental health stigmatization can negatively affect mental illness sufferers' employment, housing and healthcare access (Covarrubias & Meekyung Han., 2011). Individuals may feel less confident, experience isolation, and/or refuse mental healthcare due to stigma associated with their mental illness (Covarrubias & Meekyung Han., 2011). UCLA and Pennsylvania researchers (2018) demonstrated a clear association between mental illness stigma, reports of suicidal ideation, and reports of self-injury after analyzing 68 higher education institutions (Gaddis et al., 2018).

2.0.1 Eating Disorders

Eating disorders involve excessive focus on food consumption, body weight, or exercise which interferes with an individual's quality of life and health (Eating Disorders Victoria, 2019). Individuals with eating disorders may develop food related rituals or crave control over food intake (Eating Disorders Victoria, 2019). Anorexia Nervosa causes extreme behaviors around eating and exercise (U.S. Department of Health, 2018). Individuals with this mental illness may starve themselves or exercise excessively due to a false perception of their own body weight (U.S. Department of Health, 2018). Bulimia Nervosa involves episodes of binge eating and other behaviors which prevent a human from gaining weight (NEDA, 2018). Individuals suffering from Bulimia Nervosa may eat large quantities of food until uncomfortably full, even when not truly hungry (NEDA, 2018). They may also feel as though they cannot control food intake and often counteract weight gain through behaviors such as fasting, excessive exercise, intentional vomiting, or purging, and/or use of laxatives (NEDA, 2018).

While the Diagnostic and Statistical Manual of Mental Disorders (DSM) defines Anorexia Nervosa and Bulimia Nervosa as specific eating disorders, many adults experience a variety of eating disorder symptoms which manifest in different ways not only defined by these two labels (Fairburn & Cooper, 2011). The DSM-V includes changes in the eating disorder diagnostic criteria in response to the many people diagnosed with "eating disorder NOS" as defined by the DSM-IV. The changes include more diverse symptoms corresponding to more diagnoses (Call et al., 2013). Approximately 30 million American adults live with an eating disorder at some point in their life (Caceres, 2020). The mortality rate of eating disorders is higher than almost all other mental illnesses (ANAD, 2021).

2.0.2 Bipolar Disorder

Bipolar disorder causes abnormally intense moods and energy levels which fluctuate, or cycle, across periods of time (National, n.d.). The DSM-V defines three main types of bipolar disorder, each diagnosis involving either depressive or elevated mood and energy states (National, n.d.). Depressive and manic episodes affect an individual's mood and energy levels (National, n.d.). Manic episodes are elevated mood states associated with feelings of elation, racing thoughts, less appetite, and magnified confidence which can cause a human to believe they are more important or talented (National, n.d.). Mania or hypomania can also involve irritability or pressured speech resulting in what some healthcare professionals term "a flight of ideas" (Swann et al., 2005). Pressured speech may also manifest through disorganized communication as thoughts race (Medical, 2017). Depressive episodes may involve feelings of sadness and loss of interest in previously enjoyable life activities (National, n.d.). During depressive episodes, individuals may feel worthless, think about death, have concentration difficulties, talk and move more slowly, or experience an increase in appetite (National, n.d.).

Mood states affect sleep as well, with depressive episodes often resulting in a need for more sleep and hypomanic or manic episodes decreasing the need for sleep (National, n.d.). Humans can experience symptoms of both depression and mania at the same time in what the DSM-V terms a mixed mood episode (National, n.d.). Some people also experience psychotic symptoms such as hallucinations or delusions during mood episodes (National, n.d.). Mood states shift, or cycle, over varying periods of time (National, n.d.). Females with bipolar disorder often experience more rapid cycling and mixed mood states than males (Depression, 2020). Humans with more frequent mood cycles experience higher suicide rates and often have more depressive symptoms (Schneck, 2006).

The DSM-V defines several types of bipolar disorder, formerly called manic depression, which involve manic, hypomanic, and depressive episodes (National, n.d.). Bipolar I is characterized by at least one manic episode, while bipolar II involves less intense manic symptoms known as hypomanic episodes and more frequent depressive episodes (National, n.d.). Cyclothymia involves fluctuations between depression and elevated mood states which are not intense enough to meet the DSM-V's definitions for depressive and manic mood episodes (National, n.d.). While several diagnoses for bipolar disorder exist, healthcare professionals in the US recognize that this illness exists on a spectrum (National, 2007). In a study of almost ten thousand people over the age of 18 (2007), researchers found approximately 4.5% of

participants suffered from bipolar I, bipolar II, or subthreshold bipolar disorder symptoms at some point in their life (Merikangas et al., 2007).

Some healthcare professionals prescribe psychiatric medications to treat bipolar disorder symptoms (Maya, 2020). Prescribed medications include antidepressants, antipsychotics, and mood stabilizers (Mayo, 2020). Doctors may prescribe electroconvulsive therapy (ECT) to treat severe bipolar disorder symptoms (Web, 2020). Due to the diverse manifestations of bipolar disorder and high comorbidity rates with anxiety and substance abuse related disorders, individual's often receive inaccurate diagnoses and consequently inappropriate treatments from healthcare professionals (National, 2007). National Institute of Mental Health researcher Kathleen Marikangas, Ph.D. and colleagues (2007) conducted a study analyzing mental healthcare treatment of over nine thousand american adults and found that only 40% of participants received appropriate medication for their bipolar disorder diagnosis (National, 2007).

2.0.3 Trauma-Related Disorders

An individual can develop post traumatic stress disorder (PTSD) after experiencing one or more traumatic events (American, 2021). These traumatic experiences may involve exposure to violence, death, sexual abuse, or verbal threats (American, 2021). A person may receive a PTSD diagnosis without having experienced traumatic events firsthand (American, 2021). Secondhand trauma exposure through word of mouth or media coverage could also trigger PTSD (American, 2021). Approximately 8% of American adults live with PTSD during their lifetime (APA, 2021).

The American Psychological Association (APA) (2021) organizes PTSD symptoms into four distinct categories: intrusion, avoidance, alterations in cognition and mood, and alterations in arousal and reactivity (American, 2021). Intrusive thoughts can occur through negative dreams and flashbacks of the PTSD sufferer's traumatic experience(s) (American, 2021). People diagnosed with PTSD may purposefully avoid situations to suppress feelings related to their traumatic experience(s) (American, 2021). They may limit interactions with people, places, or objects which trigger memories of their past trauma (American, 2021). Individuals with PTSD may also experience intense negative feelings and thoughts which can further result in distorted beliefs about themselves and/or others (American, 2021). These distortions can cause individuals to feel angry, shameful, or disconnected from people (American, 2021). APA's (2021) arousal and reactivity category includes behavioral PTSD symptoms such as sleep difficulties, poor concentration, impulsive decision making, and self-destructive actions (American, 2021).

Dissociation is a common symptom of PTSD (Lanius & Hopper, 2008). Episodes of dissociation are often triggered by reminders of traumatic experiences (Lanius & Hopper, 2008). Dissociation affects an individual's memory and perception of reality (Lanius & Hopper, 2008). Individuals may feel disconnected from the world around them or have difficulties perceiving their identity (Lanius & Hopper, 2008). Dissociation can manifest through loss of memories or reality distortions (Mental, 2020). Individuals with trauma-related dissociation may experience many symptoms including emotional numbness, amnesia, and depersonalization (Lanius, 2015).

If severe symptoms interfere with an individual's quality of life for more than one month, they meet the criteria for a PTSD diagnosis (American, 2021). Approximately 3.5% of american adults live with PTSD, with women being diagnosed twice as often as men (American, 2021).

Trauma may cause an individual to experience PTSD symptoms which do not meet the diagnostic criteria for a PTSD diagnosis (American, 2021). If symptoms are present for no less than 3 days and no more than one month, an individual may receive a diagnosis of acute stress disorder (American, 2021). If an individual experiences prolonged trauma, they may have additional symptoms and receive a diagnosis of complex PTSD or C-PTSD (Mental, 2020). C-PTSD may be triggered by chronic abuse, sex trafficking, torture, or prologed forced labor (Mental, 2020). Individuals with PTSD may experience extreme dissociation, chronic pain, and immense emotional dysregulation (Mental, 2020).

Depending on the quantity, intensity, and duration of symptoms, an individual may receive a diagnosis of acute stress disorder, PTSD, or C-PTSD (American, 2021; Mental, 2020). Other trauma-related disorders include adjustment disorder and reactive attachment disorder (American, 2021).

Borderline personality disorder (BPD) involves impulsive behaviors and intense mood fluctuations (National, N.D.). Healthcare professionals debate whether this disorder is distinct from C-PTSD (Cloitre, 2014). Some researchers suggest BPD is highly stigmatized and controversial, a diagnosis associated with untreatable violent behaviors (Lilienfeld & Arkowitz, 2012). Doctors may label patients as borderline if they are difficult to treat, consequently resulting in possible false negative perceptions of said individuals (Lilienfeld & Arkowitz, 2012). The diagnosis of BPD may mask a different mental health condition (Lilienfeld & Arkowitz, 2012). Researchers in the United Kingdom (2020) conducted a meta-analysis focussing on the relationship between childhood trauma and borderline personality disorder diagnoses (Varese, 2020). Over 70% of BPD study participants had experienced some degree of childhood trauma (Varese, 2020). This meta-analysis of 97 individual studies suggests a strong connection between trauma and BPD (Varese, 2020).

2.1 World Building and Concept Art

World-building involves the creation of a fictional diegis that is unique (Merriam, 2020). An intricate world rich with details may make for a more compelling and believable environment (Hillebrant, 2019).

Various definitions of concept art exist in a plethora of source formats. Dictionary.com (2020) defines concept art as an "artistic rendering" of fictional elements created to further develop concepts in entertainment products such as video games or films (Dictionary.com, 2020). Concept Artist, a concept art magazine, suggests concept art is narrative driven, stating it has "a great story underneath the strokes" and is developed from "a fundamentally compelling concept" (Concept, 2019). In professional concept artist Mark Molnar's (2015) book *Behind the Pixels: From Sketches to Polished Concept Design*, he writes concept art is similar to illustration and is

used to "visualize an idea" for films or other entertainment industries (Molnar, 2015, p.4). Molnar characterizes concept art as "experimental" works involving "unique ideas" which may inspire a creative team or influence a project's overall visual aesthetic (Molnar, 2015, p.4).

One art and design website CreativeBloq (2012) suggests concept art is not "super polished" (CreativeBloq, 2012). Instead, CreativeBloq defines concept work as art used to convey vision and mood of entertainment products before final production (2012). Artists at Pixar Animation Studios create concept work to plan films' color/lighting schemes and emotional flow in what they call "color scripts" (Amidi & Lasseter, 2011).

Toy Story Concept Art by Dice Tsutsumi

2.2 Concept Art and Mediums

Concept artists may work with digital or traditional mediums. Digital art involves the use of technology, hardware and software such as Adobe Photoshop to draw or paint. Applications such as Procreate, Clip Studio Paint Pro, Rebelle 3, and Corel Painter 2021 can also serve as digital concept art "mediums" (Coron, 2020). Digital artists may use computers, touch-sensitive tablets, and/or pressure-sensitive pens to create artwork (Wacom, 2020).

Touch-Sensitive Display Image from Wacom Website
Pen Computers | Wacom

Traditional mediums include analog materials such as paint, charcoal, ink, clay, and paper. All paints contain pigment particles mixed with a medium (Mellow, 2011). Pigments in watercolor are suspended in gum arabic, a combination of polysaccharides and glycoproteins which can be dissolved in water (Mellow, 2011; Mahendran et al., 2008). Gouache is opaque watercolor (Merriam, 2020). Gouache may be used opaquely or transparently depending on the ratio of water to medium (Kessel, 2020). Acrylic paint contains an acrylic polymer emulsion which surrounds pigment particles (Liquitex 2020). Acrylic paint dries quickly and does not reactivate with water (Liquitex, 2020). Oil paint is a mixture of dry pigments and oil (Mellow, 2011; Britannica, 2021). Linseed oil, walnut oil, poppy oil, and/or safflower oil can be combined with pigment particles to form oil paint (Mellow, 2011).

Oil pastels also contain pigments, however these particles are instead mixed with a binder composed of wax and mineral oils (Sloan, 2008). Oil pastels have a soft, somewhat greasy texture and can be easily blended or smudged once applied (Sloan, 2008). Colored pencils contain pigments bound by oil, wax, and/or water soluble gum (Colored, 2020). Colored pencils are dryer than oil pastels and don't blend as easily due to their lower binder to pigment ratio (Colored, 2020).

Oil Pastel and Colored Pencil Images from Blick Website
Art Supplies | BLICK Art Materials (dickblick.com)

2.3 Elements and Principles of Visual Art

Visual artworks embody combinations of components known as elements of art (Jordan, 2021). These elements include color, form, line, shape, and texture (Jordan, 2021). Each color has an associated hue, value, intensity, and purity (Jordan, 2021). A color's value is its lightness or darkness whereas intensity characterizes the potency of its hue (Jordan, 2021). Color purity is also known as saturation (Hello, 2015). Less saturated colors appear dull or faded (Hello, 2015).
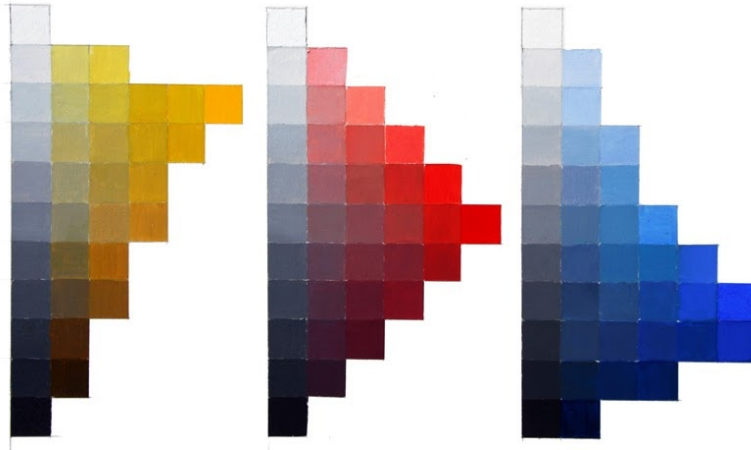
Value, Saturation, and Peak Chroma Diagram by James Gurney

Form refers to three-dimensional representations of two-dimensional forms such as painted cubes or spheres (Jordan, 2021). Lines as elements of art can be described as shapes which start at a point and flow out to form a thin mark (Jordan, 2021). Enclosed shapes, lines, and forms create positive spaces in an artwork and form implied negative spaces where positive space is absent (Jordan, 2021). Textures describe physical properties associated with an artwork's components, communicating the sensation of touch to viewers (Jordan, 2021).
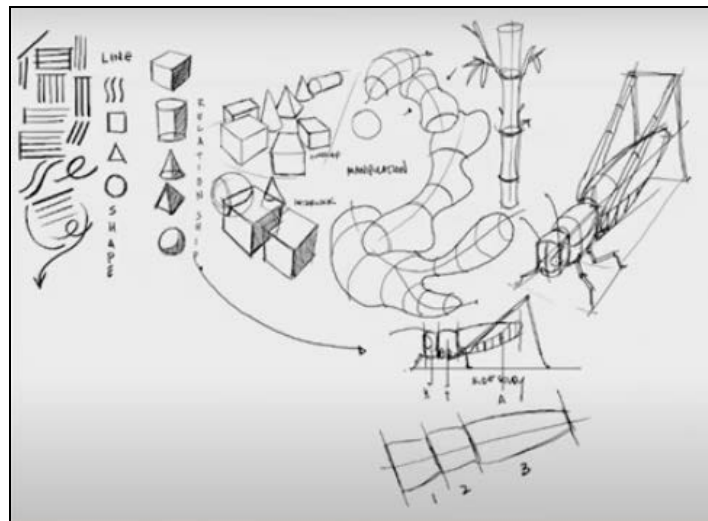
Line, Shape, and Form Diagram by Peter Han
Peter Han | Shape Language - Bing video

Visual art can be analyzed and evaluated with specific principles including rhythm, harmony, movement, balance, contrast and variety (Jordan, 2021). These properties describe interactions between elements of art and effects from such interactions (Jordan, 2021). Differences between elements result in variety and contrast whereas similarities generate harmony (Jordan, 2021). Repetition of art elements may create patterns or rhythms in a work (Jorgan, 2021). Through

principles such as contrast and repetition, art may possess balance or stability which can present as symmetry or asymmetry (Jordan, 2021). Movement causes a viewer to shift their focus between various locations in an artwork (Jordan, 2021). Repetition and/or variation of art elements can induce eye movements of varying speed and intensity (Jordan, 2021). These design principles can be used to analyze possible origins of individuals' emotional responses when viewing art.

3. Artistic Inspirations

My primary goal with the artwork in *Book of Worlds* was to leave an impression with the viewer. I wanted to create imaginative, captivating, and intense works of art which evoke strong feelings from viewers. Throughout this MQP I regularly viewed many different forms of art (drawings, paintings, sculptures) from different time periods to identify my preferences. I viewed art to gain inspiration, however I did not directly copy color pallets, compositions, or concepts from any artists. I viewed paintings/drawings of various artists for reference to better understand the qualities that produced emotions I wanted to evoke in viewers of my own artwork.

I focussed on artists whose work evoked potent feelings in me. Specifically, Hyman Bloom, Giacometti, Shaun Tan, Maurice Noble, Jackson Pollock, and Kathe Kollwitz's artworks evoke especially extreme emotional responses from me.
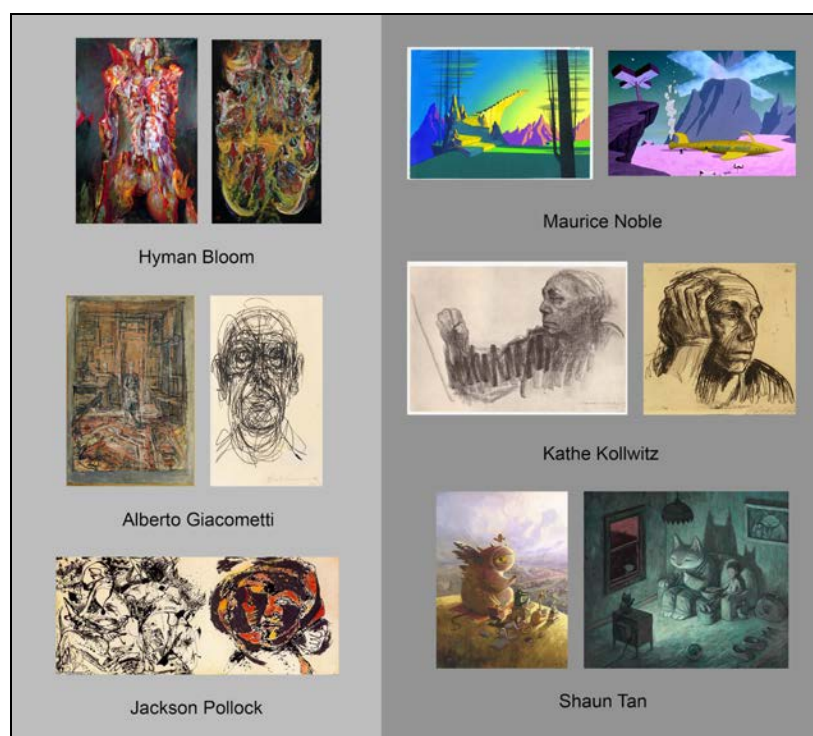
Book of Worlds Select Artistic Inspirations

Many other artists influenced *Book of Worlds* including Salvador Dali, Honore Daumier, Ralph Eggleston, Matei Apostolescu, Ed Gutierrez, and Frank Auerbach. Different artists inspire me in different ways, whether the mark making, color pallet, composition, medium, "feeling" and/or subject matter. I am drawn to artwork which possesses qualities of abstract art and have a preference for looser, expressive mark making.

It is difficult to quantify "feeling," however, there exists certain aspects of artwork which cause me to experience intense feelings. Here I offer two case studies in an attempt to describe the evocation of emotion in relation to elements of art and design principles.


Rules of Summer Illustration by Shaun Tan

In the above image, Shaun Tan arranges rectangles of varying values around a rounded fish. Each rectangle implies a three dimensional form existing in Tan's imagined environment. The repeated and varied rectangular and circular shapes generate strong movement and contribute to my intense emotional reaction when viewing the painting.

At first glance, my eyes shift fairly quickly to the fish's eye. I consider the blue fish eye circle to be this painting's primary focal point. Tan's repetition of similarly rounded skull and fire hydrant forms guides my eyeline from the bottom left to the bottom right of this painting. My eye then arcs from the bottom right humanoid to the fish eye due to Tan's placement of shapes and values. The fish shadow creates a two-dimensional oval section on the tan building. The arc of this warm shadow leads my eye to the contrasting cool fish which has a similar ovular shape. The light blue fish eye is surrounded by an oval much darker in value. This high contrast between light, cool, tiny fish pupil, and darker, warmer, desaturated eye oval allows my eye to

rest on this focal point for a longer period of time before viewing other areas. Additionally, the light, cool value of the fish's upper body creates more contrast with the dark eye oval, resulting in an even stronger focal point. The alternating rings of dark and light values surrounding the fish aid in movement as well. The fluid arched movement of my eyes from the lower left corner to the fish's eye contributes to the potency of emotion I feel when viewing this piece of artwork.
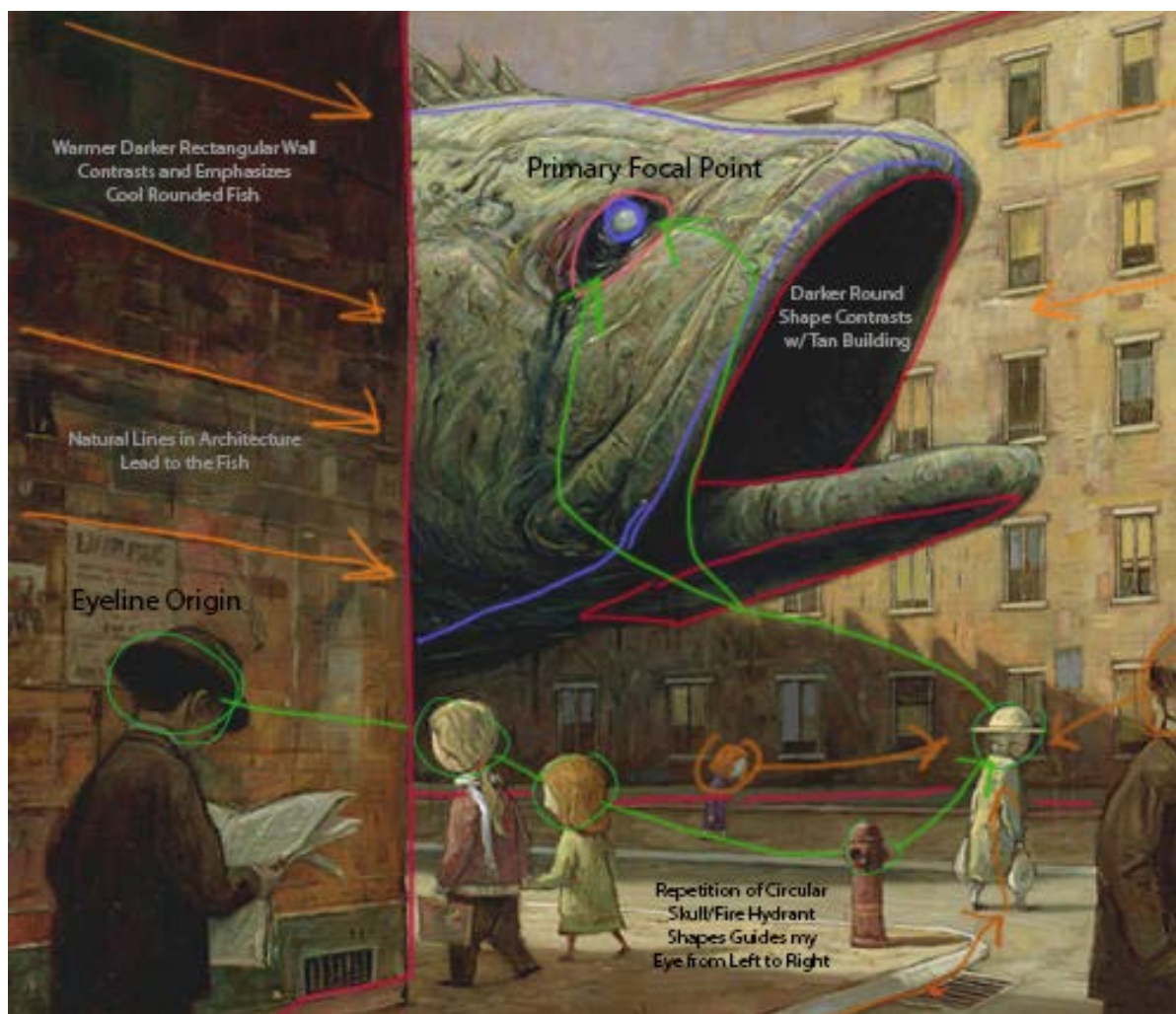
Analysis of Shaun Tan's Painting

The contrast of values between buildings in the foreground and background add a sense of depth. I find this contrast captivating as it pulls me into this imaginary world. Contrast between the fish's large body and the several humanoids standing on the ground creates balance, with the strong vertical wall suggesting more stability. The similarity between fish and wall textures creates harmony while the cool and warm color contrast creates balance. The especially dark fish mouth sparks intense emotion in me, in part due to its contrast with the rectangular light tan wall. In this Shaun Tan painting, color pallet, shapes, values, and textures come together in a composition which evokes powerful feelings from me.

The Artist's Mother by Alberto Giacometti   *Analysis of The Artist's Mother*
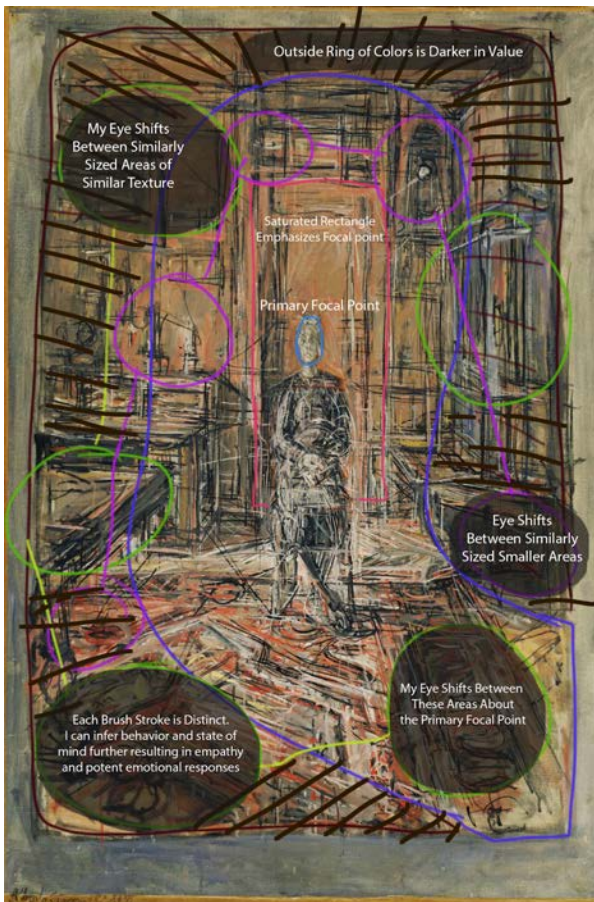
In this painting by Alberto Giacometti, the potency of my emotional reaction comes largely from the brush strokes' texture. I can sense each colored line's placement and infer hand motions which occurred when Giacometti painted this. My subconscious hand motion inferences evoke personal connection and empathy. The lines vary in thickness and overlap to form rectangles and triangles. Variable line thickness causes a desirable rhythm and sense of unity in this piece. I find Giacometti's balance of shapes especially pleasing. Like Shaun Tan's painting, this piece contains smaller shapes and darker value rings arranged around a focal point with contrasting color and shape. I suggest the humanoid's face is the primary focal point emphasized by a lighter ring of values (which vary in hue) and further stressed from an outer darker ring of values (which varies identically in hue). The small polygonal shapes formed from line balance radially, though asymmetrically, about the focal point. As my eye rests on the focal point and shifts between secondary points of interest, I am captivated and feel a powerful emotional reaction.

While work from other artists did inspire the development of *Book of Worlds*, I also drew inspiration from photographs online and observations from day to day life. Each mental illness world involved vastly different concepts hence the separate sources of inspiration, though the level of intensity in the emotion I hoped to evoke remained static.

4. Concept

Book of Worlds contains artwork which conveys imagined worlds inspired from mental illness symptoms. Artwork includes rough doodles, concept sketches, traditional and digital thumbnails, paint studies, layout drawings, progress photographs/scans, and final painting compositions of imagined worlds.
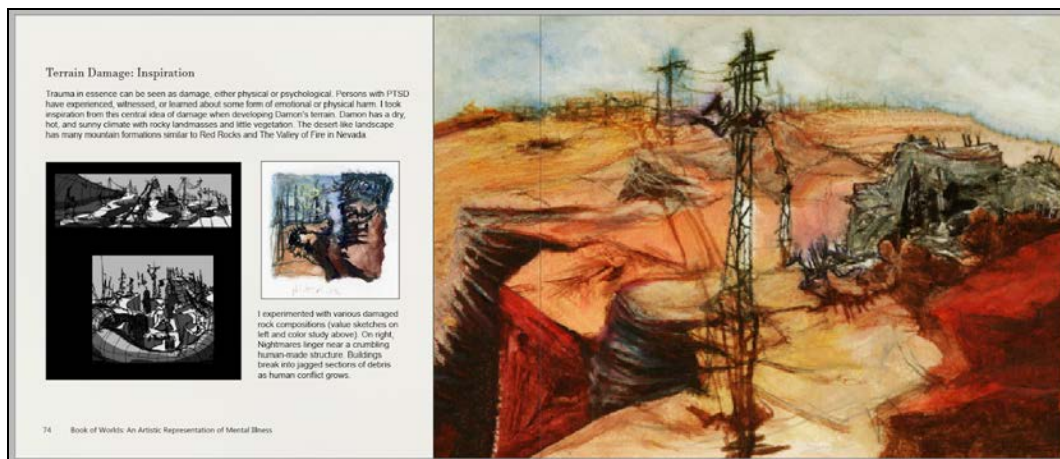
*Damon Terrain Damage Book of Worlds Spread*

Originally, I had envisioned seven separate mental illness worlds and one intergalactic pet store with creatures inspired by psychiatric medications. During A term, I decided to pursue an extremely thorough exploration of my first world, Lugelle. I developed stronger concepts through iterations of ideas and time consuming drawing/painting studies. My in depth artistic exploration of Lugelle took more time than anticipated, but resulted in compelling works of art which illustrated nuanced character interactions within Lugelle's landscape. I felt the additional time spent on Lugelle was worth the richer visual art yield and consequently adjusted *Book of Worlds* to contain only three worlds with more in depth studies of world inhabitants/locations.

Early on, *Book of Worlds'* main goal was to raise mental health awareness through concept work of the imagined worlds. I did not want to feel restricted when developing imagery and locations for Lugelle. To allow my imagination more freedom, I shifted priorities from raising mental health awareness to creating imaginative paintings which captivate viewers. *Book of Worlds'* artwork remained largely inspired by mental illness symptoms, but I did not want any works to serve as mental health education, that is, I did not want to rein in my imagination in order to clearly communicate any specific topics related to mental illness.

While I do not aim to educate individuals, a secondary goal of *Book of Worlds* is to encourage conversations surrounding mental illness. Paintings and drawings containing imagery inspired from mental illness symptoms with subtle connections to mental health topics could spark conversations among viewers. As mental health stigma persists worldwide, I hope discussions

among *Book of Worlds'* audience(s) can passively reduce fear related to speaking out about mental illness.

Though the quantity of worlds decreased from seven to three and my focus shifted away from mental health education, the printed *Book of Worlds* concept art book remained the final project deliverable. The first three chapters of *Book of Worlds* contain art displaying imaginary worlds inspired by mental illnesses: Chapter one: Lugelle inspired by eating disorders; Chapter two: Polarenti inspired by bipolar spectrum disorders; Chapter three: Damon inspired by trauma-related disorders. Sketches, paint studies, and final compositions illustrate world locations and inhabitants. Supporting prose includes background research on mental illnesses and explanations of worlds including the mental health inspiration behind concepts. The final *Book of Worlds* chapter describes my artistic process: methods and mediums used to develop *Book of Worlds'* artwork. This final segment includes descriptions of my concept art workflow tasks including research, preliminary studies, layout, traditional painting, documentation, digital edits, and printing on canvas.
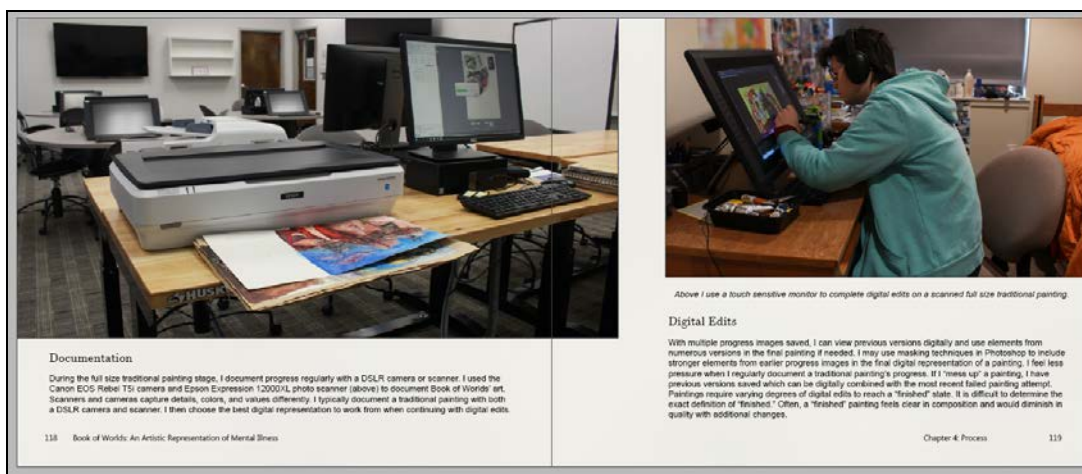
Process Chapter Spread from Book of Worlds

4.1 Lugelle: Eating Disorders

Eating disorder symptoms inspired the world of Lugelle, a whimsical land filled with fruit architecture, food landscapes, measuring tape creatures, and human inhabitants.

4.1.0 Lugelle Backstory

Lugelle is made mostly of food and eating disorder related items. Inhabitants initially had problems growing their crops and their races were rapidly dying from starvation. As the last few crops dwindled, aliens visited Lugelle and gifted inhabitants with an enlargement device which could grow food to massive sizes. Locals began to worship food once it increased in size. They became obsessed with food after they had initially pondered their possible deaths from

starvation. Lugellian's obsession with food is inspired by eating disorder sufferers' obsessive thoughts regarding food and body image (Eating Disorders Victoria, 2019).

As locals became obsessed with food, genes from the enlarged alien fruits started mingling with Gelmith's nature and caused the formation of new species made of eating disorder related objects. Animals made of measuring tapes and other objects lurk in the wilderness. One official, Fro, ordered the construction of Lu, a giant toilet in the town center, and established laws forcing citizens of Gelmith to drop portions of their food ration inside each week. Eating disorders can cause individuals to lose control over their food intake, often resulting in discomfort and adverse health issues (Eating Disorders Victoria, 2019). This central idea inspired Fro's food dictatorship.

4.1.1 Lugelle Inhabitants

Eating disorders affect humans of all shapes and sizes. I created humanoid Lugelle characters in a variety of sizes, shapes, and colors to reflect this reality.

Lugelle Inhabitants Gouache Paint Sketches

Mutated creatures are made mostly of tape measures, scales, and utensils. Species include Slibs, Centisnakes, Kilokar, and Chebby. Slibs are very calm, while other critters like Kilokar and Chebby are more aggressive, attacking humans for food. Eating disorder symptoms can result in significant bodily harm and in some cases death; I created more violent Lugelle creatures to reflect the high death risk this illness presents. Lugelle contains two breeds of Lusky: terrestrial and aquatic. The Lusky is made mostly of liquid and causes surrounding terrain to turn to liquid. Other aquatic creatures include Jelly Jumpers and Plungees which are inspired from plungers. I

took inspiration from eating disorder sufferers' behaviors, including laxative use, when developing aquatic creatures (NEDA, 2018).

4.1.2 Lugelle Locations

4.1.2.0 Fro's Berry Drones

Grape clouds float in Lugelle's sky just above Mesuramba. Fro turned some grape clouds into drones. Drones spy on Lugellians, keeping careful watch to ensure humans dump excess nutrients into the Lu. Fro's constant observation hints at the agonizing food obsessions experienced by individuals with eating disorders (Eating Disorders Victoria, 2019).

Berry Drones Final Painting

Berry Drones Select Reference Images

4.1.2.1 Mesuramba and Ramen Swamp

Mesuramba is a jungle made of cinnamon stalks, broccoli, and juice from Melonmill River. Lucon members stash vegetables in cinnamon stalks and may find themselves cornered by Kilokar when wandering.

Kilokar Attack Final Painting

Kilokar Attack Select Reference Images

Lugellians associate measuring tape weapons of Lugelle with negativity and death. The presence of deadly measuring tapes was inspired by eating disorder sufferers' fear and discomfort regarding body size and/or weight (NEDA, 2018). Mesuramba's large quantities of produce were inspired by binge eating behaviors. I included many "healthy" foods. Some people may be unaware unhealthy binge behaviors often involve excessive consumption of "healthy" foods like carrots or grapes (NEDA, 2018).

Mesuramba Value Study

Mesuramba Color Study

Rare fruits grow in Ramen Swamp, so it is off limits to Lugellians. Fro uses Simis and egg creatures to capture humans crossing through. Simis live in mirrors, but leave their enclosure to prey on humans. In the scene below, an egg creature and Simi team up to strangle an intruder. The ramen noodles have a mind of their own. They wrap around the fear-stricken human. This Lugellian's feelings may be similar to eating disorder sufferers' fears related to food intake or body image (Eating Disorders Victoria, 2019).

Ramen Swamp and Select Reference Images

Simi and Centisnake Paint Study

4.1.2.2 Chebby Pens and Punishment

When Fro catches Lugellians hoarding food, wandering in forbidden areas, or missing their Lu drop off time, he subjects them to punishment within a Chebby Pen. Eating disorder sufferers may feel imprisoned by their obsessive thoughts; these feelings of captivity inspired prison cells made of warped silverware that contain Centisnakes and Chebby (Eating Disorders Victoria, 2019).

Chebby Pen Paint Study

Fro first places humans in a Chebby Pen and then fills jars nearby with fruit. Humans mustn't eat from the jars, or they will die a long, painful death from Centisnake venom. Anorexia Nervosa's mortality rate is higher than most if not all other mental illnesses (ANAD, 2021). Lugellian death by measuring tape and whisk-based creatures is meant to parallel death as a consequence of eating disorder symptoms. In the scene below, Ramen stands nearby to document any co-conspirator names the prisoners divulge. Tiny Chebby buzz within the cage and graze on human flesh when they are in the mood.

Fro and Ramen Watch Chebby Pen Punishment

4.1.2.3 Request Station and Produce Pen

Fro uses the Produce Pen to lock up all food dropped in the Lu. This warehouse is made of shopping cart components. If a citizen dares ask for extra food from Fro, they may stop by the Request Station located on one corner of the Produce Pen. Humans may ask for extra fruit or Centisnake milk through a speaker, though Fro almost always says no or grunts angrily in response. Starvation and restrictive dieting associated with eating disorders inspired Fro's food dictatorship at the Produce Pen warehouse (Eating Disorders Victoria, 2019).

Request Station

Citizens may only eat from their assigned ration or purchase select smoothies from Fro's fruit juice franchise "Jamba Juice." Lugelle's roundabout eating system and prison of nutrients is one way to represent disordered eating and food obsession.

Jamba Juice Interior

Jamba Juice Interior and Exterior Gouache Studies

Fro controls Lugelle's food supply and uses the Megamasher to build food idols for his palace.
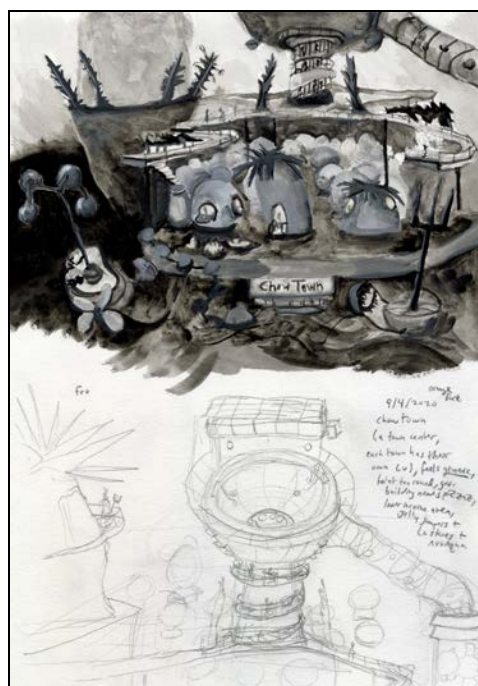

Fro's Mega Masher

Fro's Mega Masher and Palace Color Thumbnails

4.1.2.4 The Lu

Purging and laxative use associated with eating disorders inspired Fro's massive Lu food drop off center. The Lu is located in the center of Chow Town, a less wealthy residential area.

Chow Town Value Study

Inhabitants must drop a portion of their food ration into this giant toilet each week. Delivery workers pick up divided nutrients with the help of single berry drones. Terrestrial Luskies snack on any nutrient particles dropped during food transfer. In the painting below, a Lugellian expresses his dissatisfaction with Lu pick up duty. If he refuses to transport food to the Produce Pen, Fro may opt for Chebby Pen torture. This forced labor reminds me of extreme exercise

routines carried out by individuals with eating disorders (Eating Disorders Victoria, 2019). The compulsive physical activity can prevent people from relaxing and may contribute to obsessive thinking surrounding body image (Eating Disorders Victoria, 2019).


Lu Pick Up Final Painting

Lu Concept Sketches

4.2 Polarenti: Bipolar Spectrum Disorders

Bipolar disorder symptoms inspired Polarenti, a chaotic, intense world with extreme climates and strange mutant object creatures.

4.2.0 Polarenti Backstory

Originally, humans of Polarenti lived alongside plants, trees, clouds, and objects. Once civilization developed, an asteroid struck Polarenti which released a substance toxic to humans. Polarenti inhabitants named this substance Magora. As Magora eased into the atmosphere, plants, clouds, and objects became sentient. Mutated objects bread to form strange creatures.
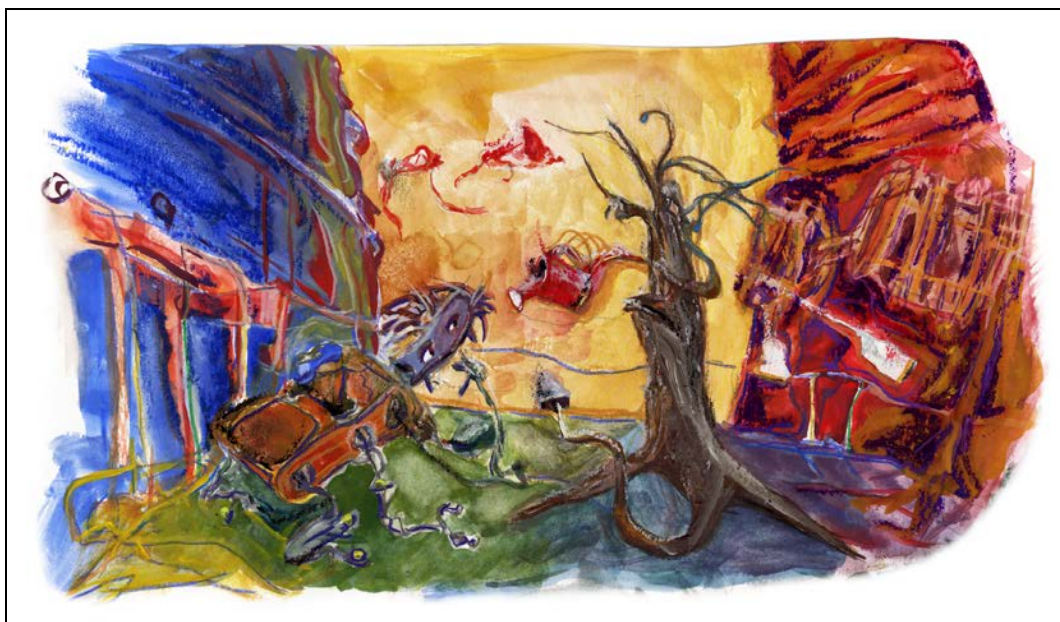
Chainsaw and Sentient Tree Creatures made Sentient from Magora

Mutant objects began to build an empire within Magora-infested Polarenti and named the land Magora. Humans soon realized Magora's dangers. The substance made humans feel full of energy, eliminating any need for food, but also slowly killing humanoids through a deformation process. Eventually, Magora became a part of life and intoxicated humans began mating to create the Magoran race. Magorans now live alongside objects in the colorful city of Magora where Polarenti has turned into a whimsical, illogical mess of beams and structures.

4.2.1 Polarenti Locations and Inhabitants

### 4.2.1.0 Magora Landscape and Sentient Buildings

Magora causes Polarenti's environment to appear colorful but disorganized. The style of Magora was heavily inspired from symptoms of mania including racing thoughts, increased energy, disorganized thinking, and impulsivity (National, n.d.). Inspired by rapid thought

patterns, many buildings have limbs which connect to building related objects such as windows, door bells, and diving boards. Friendly Magorans sometimes hang out, ringing sentient building doorbells of neighbors to make their presence known. The noise of doorbells may alert cloud creatures lingering in nearby skies. The loud sounds can cause irritability in sentient water forms, an emotional shift inspired loosely by mania induced restlessness and agitation (National, n.d.).


Magoran Rings Doorbell Paint Study
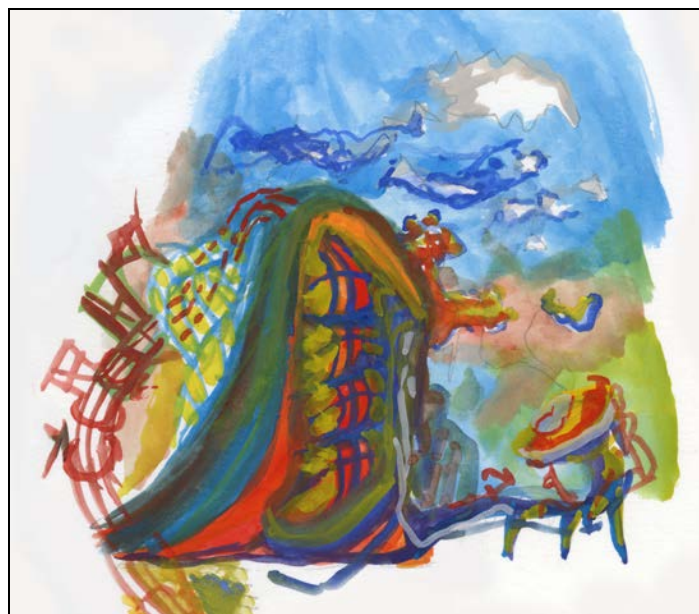
Sentient Building Study

4.2.1.1 Magoran Anatomy

Magoran anatomy evolved as I painted studies of various Polarenti locations. I wanted Magoran limbs to feel disconnected, inspired from humans but illogically disorganized. Magoran fingers and toes can extend well beyond their hands and feet.

Magoran and Colrab Acrylic Studies
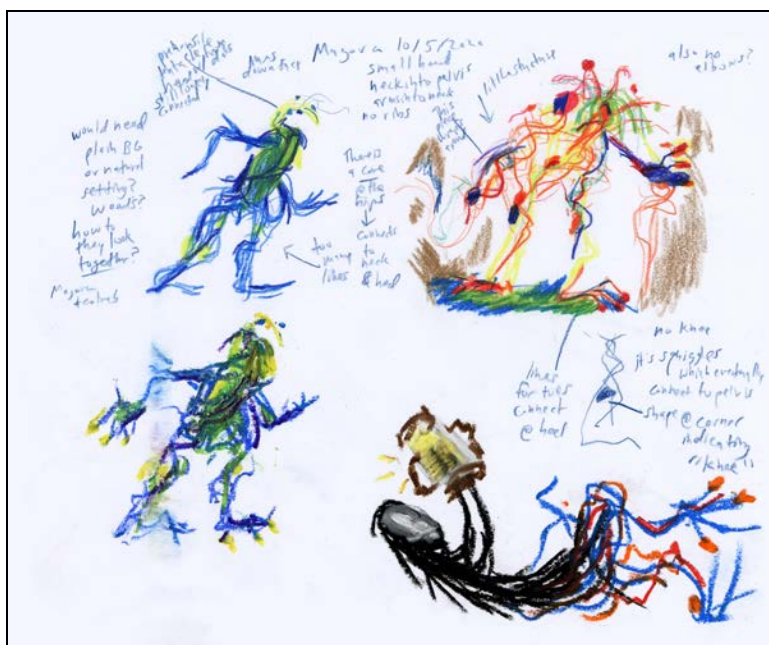
Colored Pencil and Oil Pastel Magoran Studies

Magoran Anatomy Study in Gouache

Some Magoran anatomy designs also include spiralling beams and rounded color shapes; elements often present in United States' hospital ball machines. The speedy balls plunging through metal coils remind me of restless manic energy (National, n.d.).

*Boston Children's Hospital Ball Machine. Image by Scott Lad.*

4.2.1.2 Magora Color and Style

Delusions of grandeur inspired a saturated palette. Delusions may cause individuals to feel extremely strong or famous to the point of danger due to a less accurate perception of reality (National, n.d.). I attempted to reflect delusions through hues much "stronger" than colors which typically exist in earth's natural environment. Symptoms of mania also inspired Magora's chaotic mark making. I aimed for impulsive marks full of energy and spontaneity. I wanted parts of Magora to feel as though they were built with urgency to reflect racing thoughts (National, n.d.). A color study of one Magoran city block is pictured below.

Magoran City Block
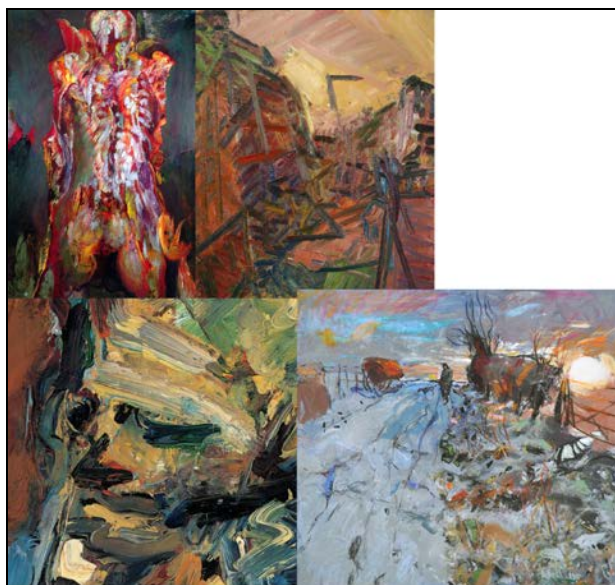
*I took inspiration from works by Hyman Bloom, Frank Auerbach, and
Duncan Shanks when developing Polarenti's style.*

4.2.1.3 Magora Development

Magora causes some symptoms of mania in humanoids. It makes humans feel full of energy, and is also a power source for the city of Magora. As I developed Polarenti, I experimented with various mediums to nail down Magora's style. As I painted more locations, the style continuously evolved. Over time, I tried out combinations of colored pencil, oil pastel, ink, acrylic, and gouache. I felt Magoran sketches completed with only gouache did not possess enough intensity or energy.


Magoran Front Yard Paint Study

Gouache Magorans

4.2.1.4 Mutant Objects

Several objects appear whimsical in nature due to their sentience or Magora influenced anatomy. Some sentient object species are made of objects related to themselves. This was inspired from disorganized thinking and racing thoughts (National, n.d.). I experimented with different ideas for mutant objects including watering cans, soda cans, and chairs.
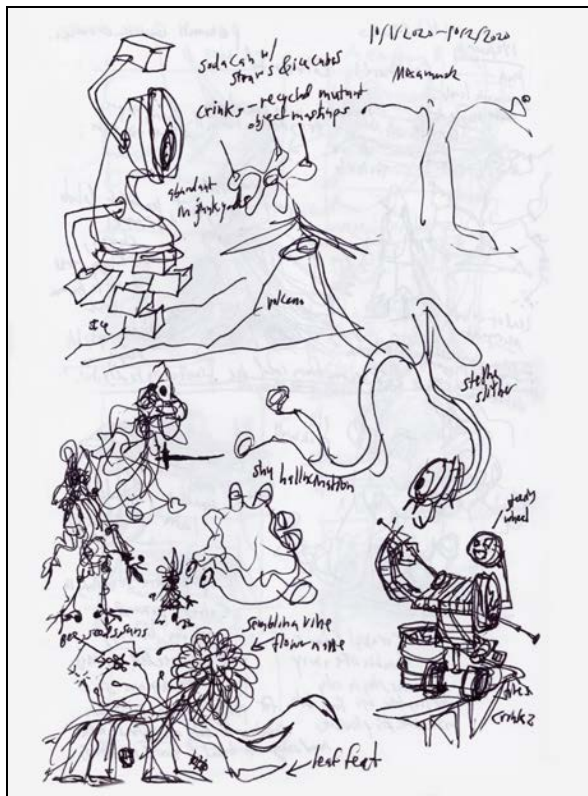
Crink Ink, Gouache, and Mixed Media Sketches

I named these mutant objects Crinks. Sometimes Crinks gather in support groups to vent about prior poor treatment from humanoids.

Crink Support Group Final Painting

Crink Support Group Select Reference

4.2.1.5 Crink Detox

Before Magorans evolved to tolerate Magora's toxicity, sentient objects would step in to detox using specialized equipment formed from Magora itself. In the remains of hospitals, sentient windows use eyes to see and sentient medical devices stand nearby to assist in detox procedures. In the painting below, I imagined one Colrab and Magoran couple. The Magoran did not wish to be detoxed though they were close to death. The Colrab spouse, worried for their partner's death, brought the Magoran to a window Crink doctor. The doctor attempts surgery as sentient restraints hold down the Magoran, and substance particles cause increasing sentience among wall planes. The presence of restraints in some psychiatric hospitals inspired the sentient restraints in Crink Detox.

Crink Detox Final Painting

The Colrab spouse remains largely black and white to express their inspiration origins of depression. I represented hopelessness and decreased energy with desaturated colors sagging downwards across Colrab bodies (National, n.d.). The ragged Colrab stripe pattern is less chaotic than Magorans' style, though intensity remains present through extremes of the value scale: black and white. Rapid cycling bipolar disorder can manifest as mixed mood states all the time. I wanted Polarenti to reflect the spectrum of bipolar disorder and made an effort to include Colrab and Magora elements in several compositions including Crink Detox.
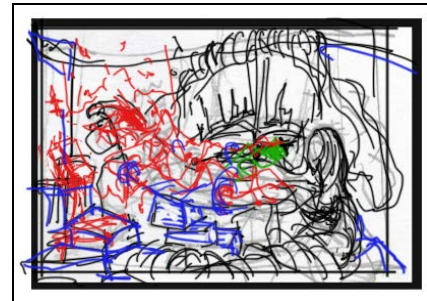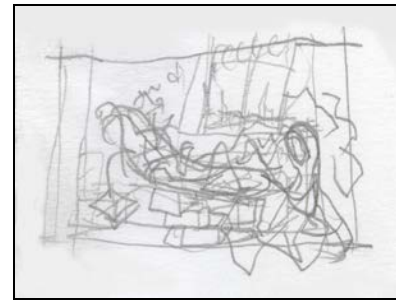

Magoran Colrab Relationship Sketch

The Crink Detox color study shows Magora's impulsive mark making and saturated color palette.
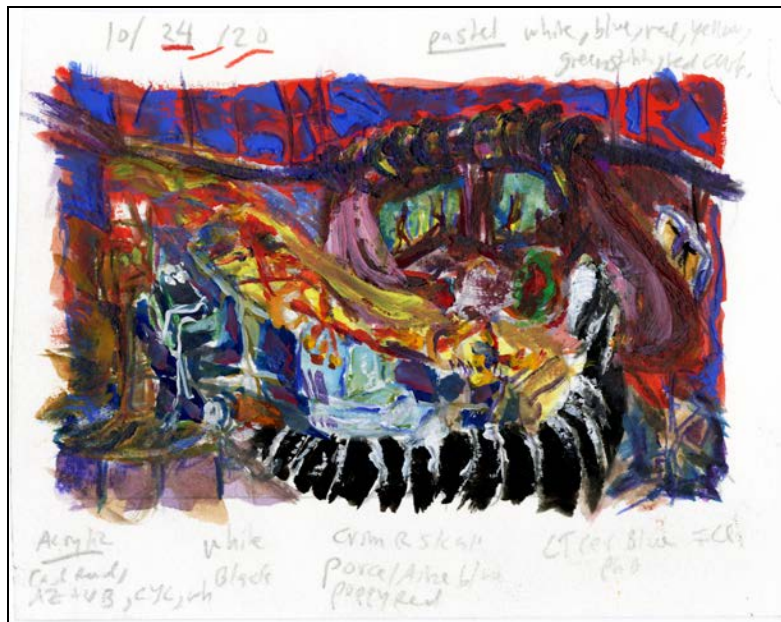
Crink Detox Color Thumbnail

Detox Thumbnails

4.2.1.6 Sentient Bridge

Sentient bridges clamp onto the Colrab border and allow inhabitants to cross. When developing Polarenti, sentient street lamps came to mind.


Sentient Street Lamp Study

Baby street lamps may wander away from family members, ending up lost within Polarenti's bizarre and confusing landscape. Colrab may return these innocent lamps if found wandering.

Sentient Bridge Final Painting

4.2.1.7 Cloud Creatures

I considered the idea of cloud creatures which take the form of evil cloud doctor spirits. Sentient clouds took many forms as I completed drawing and painting studies, but most seemed irritable, grumpy, or evil (below). I was inspired by some humans' views of psychiatrists. Some people with mental illness become paranoid of healthcare professionals and do not seek help.
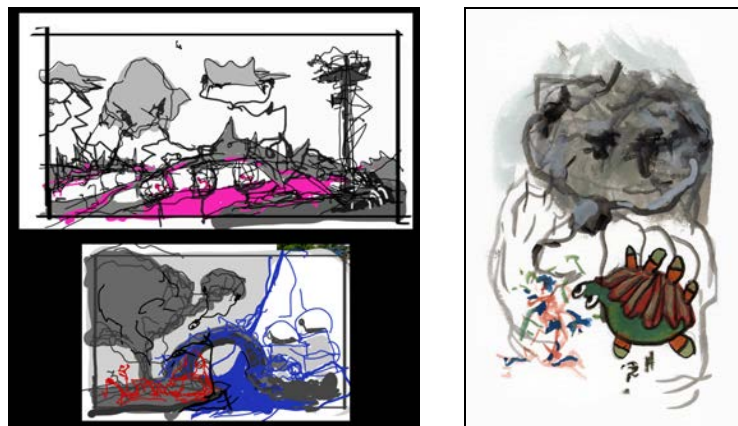
Cloud Creature Studies

Cloud Creature Additional Studies

4.2.1.8 Residential Areas

Magora contains several residential areas home to mainly Magorans and mutant objects, or Crinks. Magorans live in sentient buildings which connect to Magora's ball machine generator for energy. I imagined sentient buildings of various colors, shapes, and sizes, taking inspiration from Frank Gehry along with colorful cafes and city streets in New York. I also took inspiration from the artsy ball machines located in some United States hospitals.

Sentient Building Studies

Lawn mower and chain saw Crinks may eat sentient plants to survive, however their vegetarian diet causes tension between plant and Crink species. The irritability sometimes present during manic mood episodes inspired this interspecies conflict (National, n.d.).
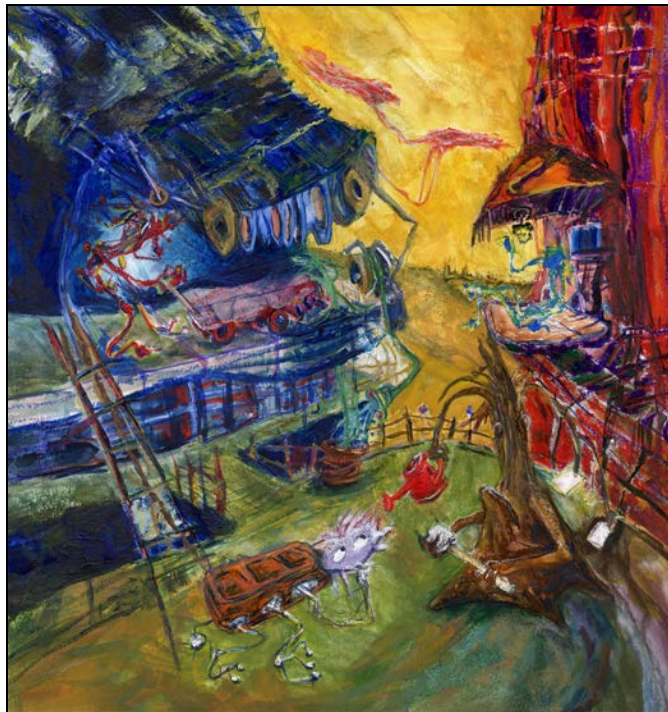
Residential Area of Magora

In residential areas, Magorans interact with a variety of Crinks including sentient garden hoses and lawn mowers.


Sentient Garden Hose Crink

4.2.1.9 Clock Tower Concept and Development

Inhabitants carry out routines according to the Polarenti clock tower. Sentient numbers, gears, springs, and Magora particles comprise the tower's base. Several mist forms nearby also gained sentience over time. With the clock tower composition, I wanted to suggest multiple faces through abstract colors and shapes. The idea for suggestive faces within faces was inspired by paranoia and cognitive symptoms experienced by some people on the bipolar spectrum (National, n.d.).

Clock Tower Full Size Digitally Edited Traditional Painting

Magorans are attracted to the clock tower's swirling lights and play on bouncy springs to burn off energy. Their energetic bouncing was inspired by high energy levels associated with manic and hypomanic mood episodes (National, n.d.).
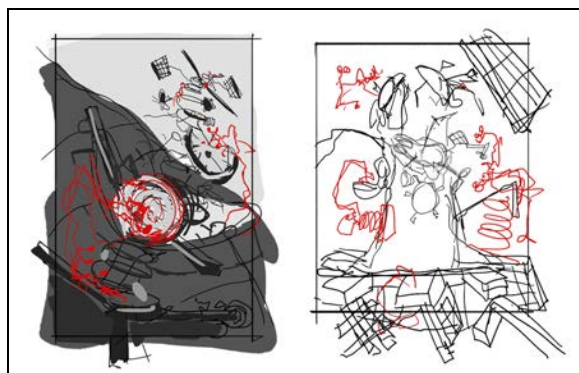

Clock Tower Select Thumbnails

Clock Tower Select Reference

4.2.1.10 Mixamucks and Magora Ball Machine

Magora turned trees into Mixamuck creatures who began to rebel against humans in response to their prior poor treatment. Mixamuck tree branches hold objects related to trees such as watering cans, pieces of paper, seeds, and axes. Like Crinks, Mixamuck tree creatures were inspired by the flight of ideas associated with mania (National, n.d.).
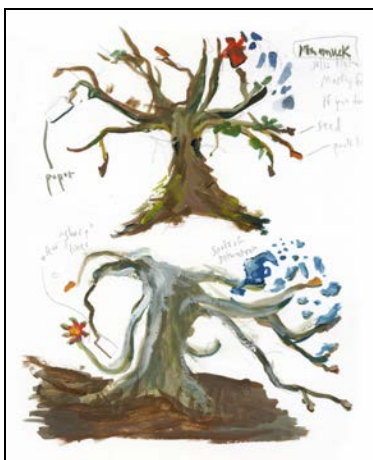

Mixamuck Paint and Graphite Sketches

Loops of beams splay out from Magora's ball machine generator, journeying in loop-de-loops across Polarenti's terrain to deliver energy from Magora balls. Occasionally, Magora balls can erupt if they become overloaded with energy. In some instances, a loop-de-loop may rip apart as Magora balls explode and spread substance throughout nearby Polarenti terrain. As ball machine loops break apart, they become sentient from excess Magora.

Mixamuck Encounter Final Painting

Mixamucks sometimes take advantage of excess Magora particles to prey on Magorans. They may cling to the substance to gain energy and strength. Excess Magora can influence especially aggressive behavior in Mixamuck's sentient watering cans. Aggression and humanoid harm in this scene was loosely inspired by irritability, injuries, and fatality which can occur as a result of mood episodes (National, n.d.).
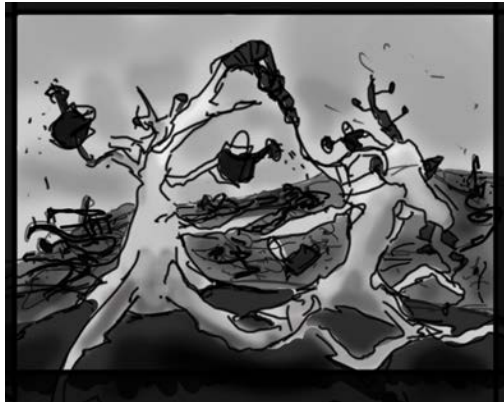

Early Mixamuck Concept Sketch

4.2.1.11 Colrab

Symptoms of depression inspired Colrab, a land of cold darkness with minimal energy sources. Depression can involve decreased energy, feelings of emptiness, or an overwhelming sadness or numbness (National, n.d.). I used cool colors to hint at sadness or "blue" feelings and distanced land masses to suggest a vast, empty environment. Numbness inspired a cold atmosphere; icicles hang from caves and icebergs drift in rivers.
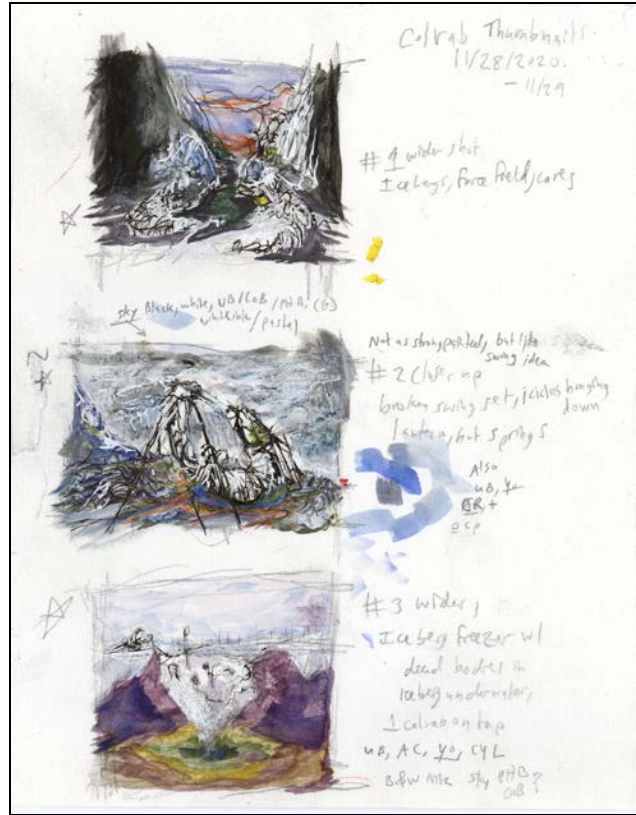
Colrab Final Composition
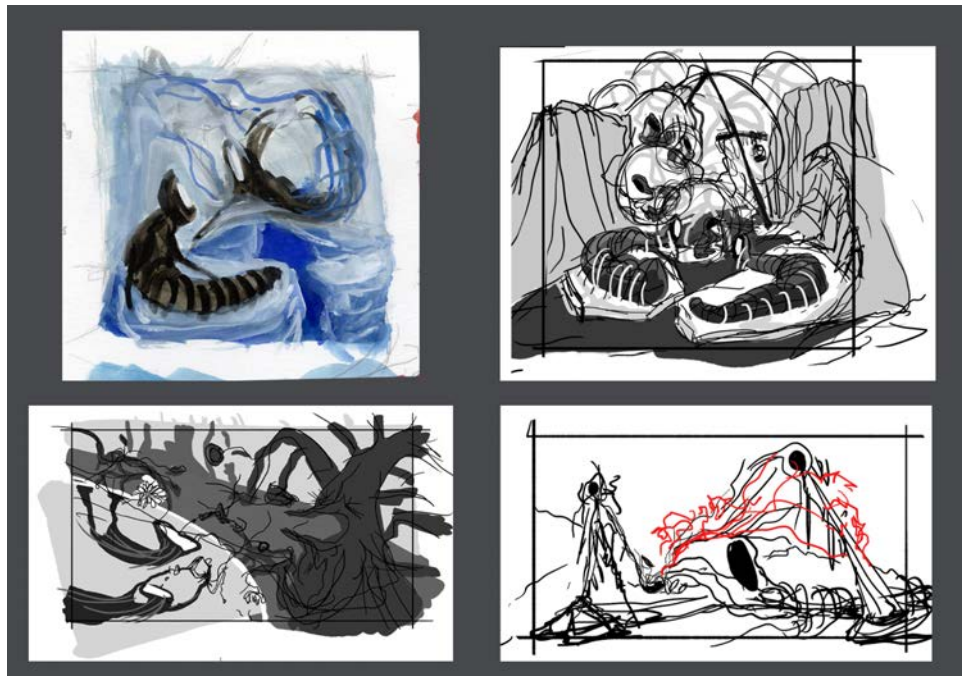
Select Colrab Digital Thumbnails

Colrab Color Thumbnails

Colrab Select Reference

The Colrab race began as humans who flocked from Magora-infested Polarenti. As Colrab evolved into limbless slug creatures, they began wearing white or black masks to reduce risk of deformation from Magora. Their desaturated palette opposes Magorans, just as depression contrasts mania (National, n.d.). Initial Colrab designs were mainly bipedal and more humanoid. Early on, I painted Colrab entirely in gouache and felt their style was not spontaneous enough. Though Colrab is inspired by depressive symptoms, I wanted more expressive mark making for cohesion between Magora and Colrab landscapes.

Early Colrab Biped Studies
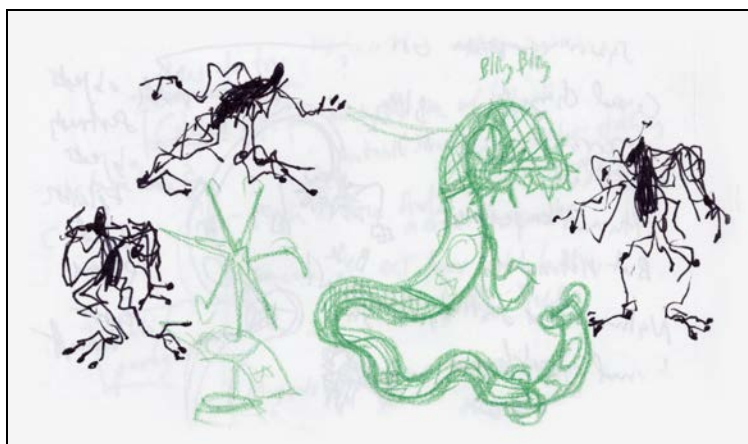
Hybrid Colrab Species Designs

Colrab access Magora's energy through an electric tower. This tower (inspired from electroconvulsive therapy) powers force fields (Web, 2020). Colrab recharge in force fields to maintain homeostasis. Their sluggish nature was inspired from the lethargy often experienced by depression sufferers (National, n.d.).

Colrab Force Field Study

Additionally, antidepressant medication inspired bright firefly creatures which Colrab gather into glass lanterns for portable light sources (Mayo, 2020).

Colrab Antidepressant Lantern Studies

4.2.1.12 Colrab Morgue Freezer

In Colrab, freezing cold and darkness caused starvation among humanoids. Many Colrab died from starvation or lack of energy. Colrab store dead bodies in large frozen chunks of ice. With bipolar disorder comes risk of suicide and early death (National, n.d.; Schneck, 2006). I wanted the presence of death in Polarenti art to reflect the serious risks involved with this mental illness.

Colrab Freezer Studies
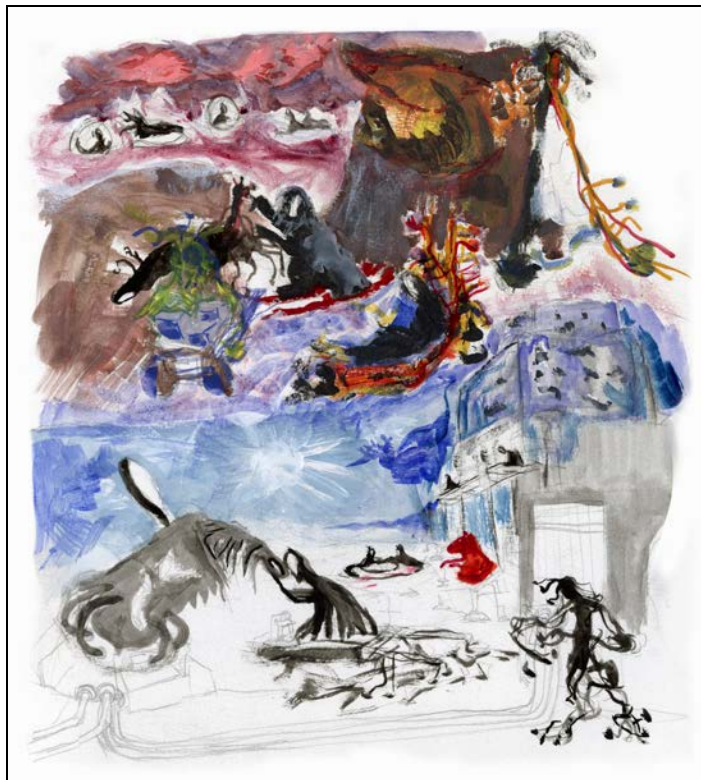
Colrab Freezer and Forcefield Additional Study

4.2.2 Other Polarenti Concepts

Early on when developing Polarenti, I thought of several ideas which did not make it past preliminary sketches or paint studies. I thought of mood swing transportation which inhabitants could use to travel around Polarenti.

Mood Swing Transportation Study

I was also thinking amusement zones within Magora could reflect feelings of mania with roller coasters racing around. Mutant objects could have built mutant building clusters with roller coasters going in and out and abstract faces being formed by buildings.

Sentient Building Coaster Concept Sketch

Early on, I also thought of a sloth-like quadruped creature called Sarona which was inspired by antipsychotic medication.

Unused Sarona Concept Sketch and Intergalactic Pet Store Thumbnails

I kept some elements of my initial ideas, like abstract faces within compositions. However, I left out other ideas like roller coasters and pill rock climbing walls from final Polarenti paintings due to project scope.

Select Unused Polarenti Thumbnails Including Pill Rock Climbing Walls
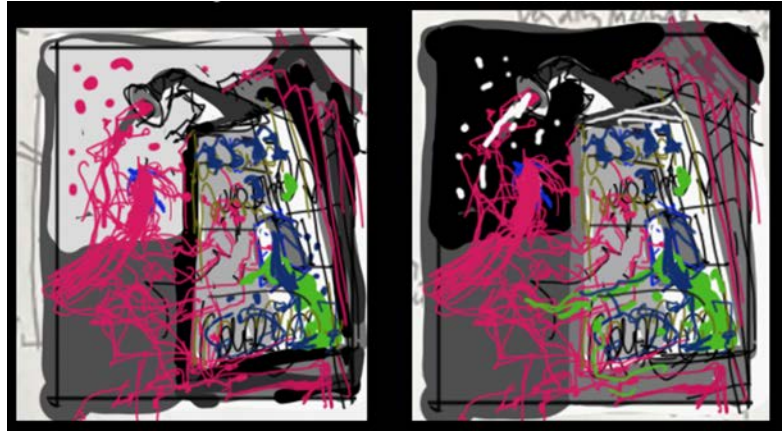
Unused Polarenti Pill Wall Sketch and Crink Vending Machine Concept

Select Polarenti Color Thumbnails

4.3 Damon: Trauma-Related Disorders

Trauma-related disorders inspired Damon, a desert-like war-ridden world filled with dilapidated science labs, broken down technological devices, conflicting humans, and nightmare creatures.

4.3.0 Damon Backstory

Originally, Damon contained only humans and reptilian-like creatures. As humans developed their society, they invented new technologies. Less intelligent humans (Hedons) were selfish and used technology purely for entertainment despite negative environmental impacts. Scientists pushed back on Hedons' luxurious preferences. Conflicting temperaments escalated into elaborate physical attacks which eventually led to a world war.

Humans were originally unaware of critical information: Damon inhabitant temperaments directly affect the stability of Damon's terrain. The surge in human conflict triggered terrestrial and structural destruction. Mountains collapsed, boulders cracked, and structures began to fall apart.
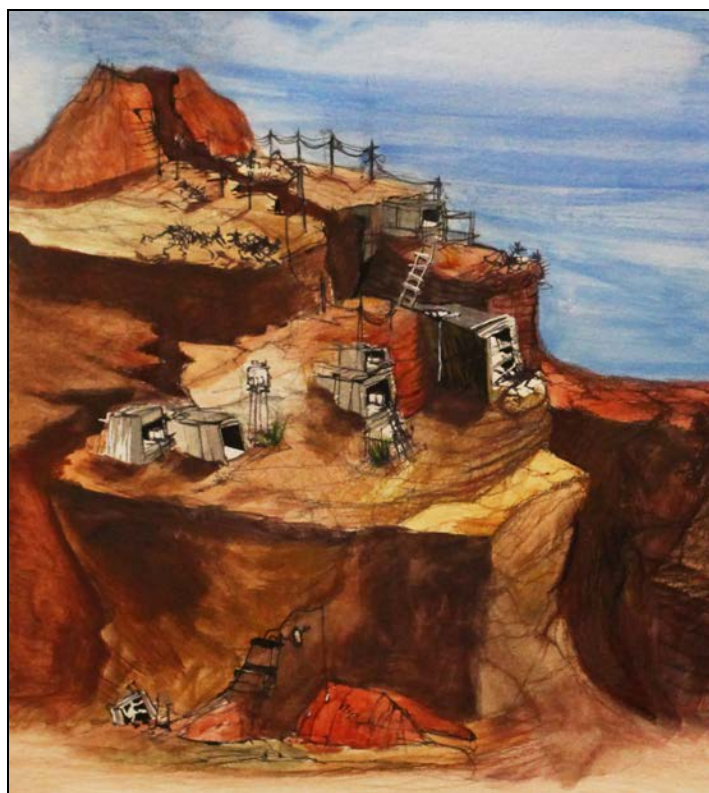
Damon Paint Study Shows Terrain Damage

Damon Sketch Shows Terrain Damage

After Hedons' executed their first physical attack on scientists, Damon's environment birthed a Legacy Nightmare (Ezra) in the Pit of the Past to protect its environment; to prevent more terrain damage caused by human conflict.

Ezra Paint Study

Ezra began birthing other Nightmares. The growing Nightmare race scavenged for technology to remove sources of conflict. Over time, Damon learned to manipulate anticipated damage. Ezra and Damon developed a gross communication system using basic symbols easily formed from cracks in terrain. Damon's communication manifests as symbols and designs on craters, mountains, and cave walls.

Baby Ezra Communicates with Damon through Rock Cracks
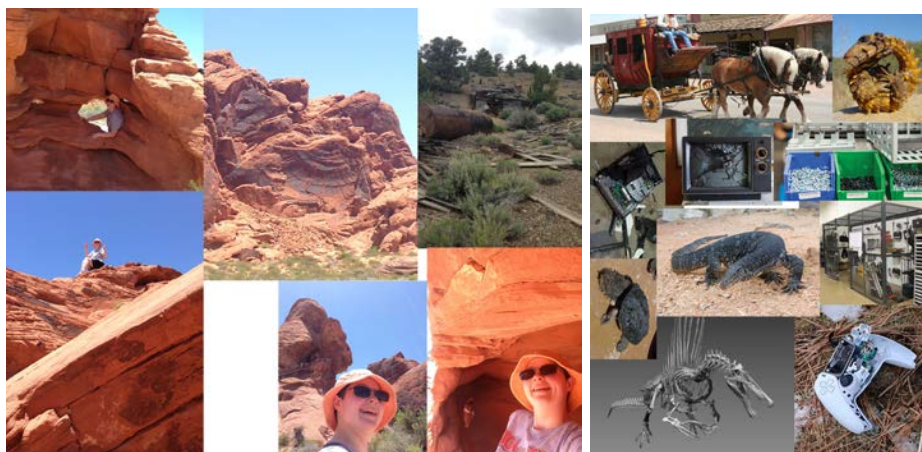
Damon Select Reference Images

4.3.1 Terrain Damage Inspiration

Trauma in essence can be seen as damage, either physical or psychological. Individuals with PTSD have experienced, witnessed, or learned about some form of emotional or physical harm (American, 2021). I took inspiration from this central idea of damage when developing Damon's terrain. Damon has a dry, hot, and sunny climate with rocky landmasses and little vegetation. The desert-like landscape has many mountain formations similar to Red Rocks and The Valley of Fire in Nevada. Nightmares linger near crumbling human-made structures. Buildings break into jagged sections of debris as human conflict grows. I experimented with various damaged rock compositions.

Damon Terrain Study
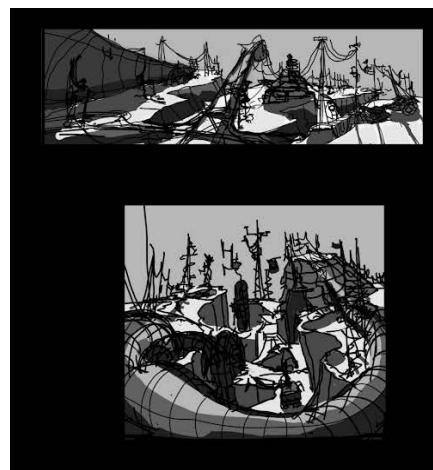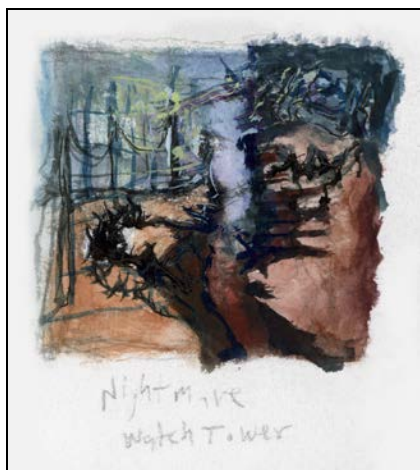
Alternate Damaged Rock Compositions
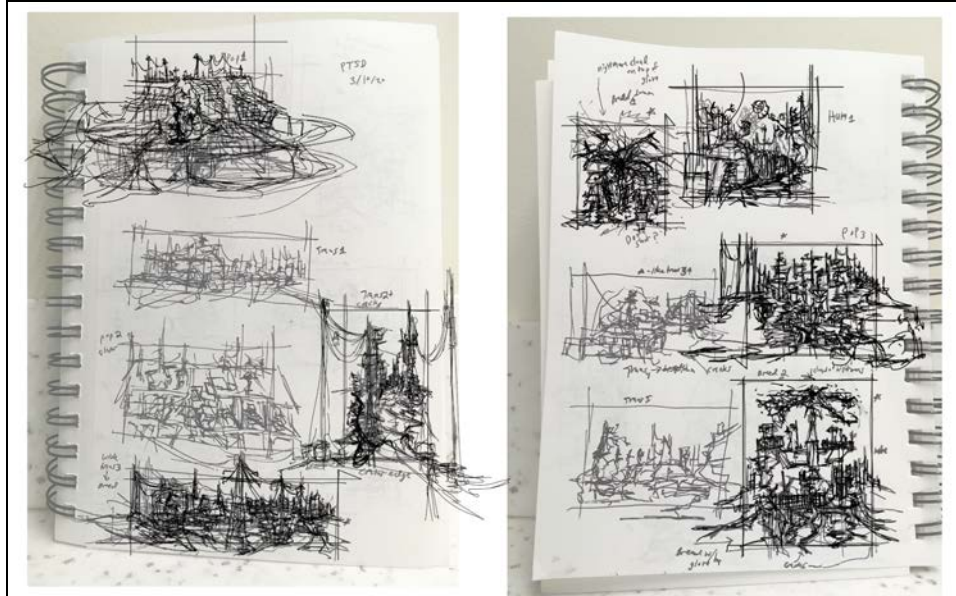
Alternate Damaged Rock Thumbnail Overlays

4.3.2 Conceptualizing the Nightmare Race

Flashbacks and nightmares associated with PTSD sparked the idea for nightmare creatures lurking around Damon's terrain (American, 2021). These inhabitants are bony with pointy extrusions. I wanted the pointy spines to evoke weaponry, tools which may cause damage. Nightmares are mostly black in color, but some species contain brown, yellow, blue, or purple hues. Their primary black color is inspired from the darkness and intensity of traumatic experiences. Black contrasts white, it is one extreme of the value scale indicating a lack of light.
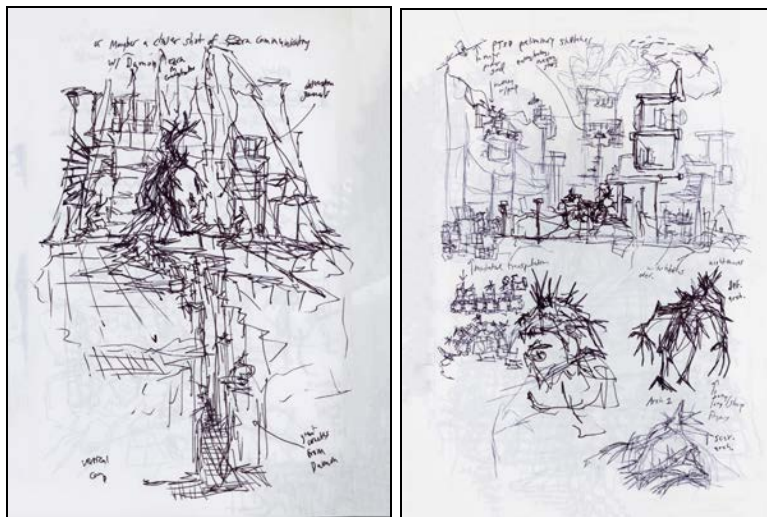
Early Nightmare Concept Sketches

I took inspiration from reptile, amphibian, and dinosaur anatomy when developing Nightmare designs. Traumatic memories remind me of terrifying ghosts and spirits of the past. When I think of ghosts, floating creatures come to mind. I explored flying Nightmares to see if their presence felt more ghastly than biped or quadruped designs.

Select Nightmare Reference Images
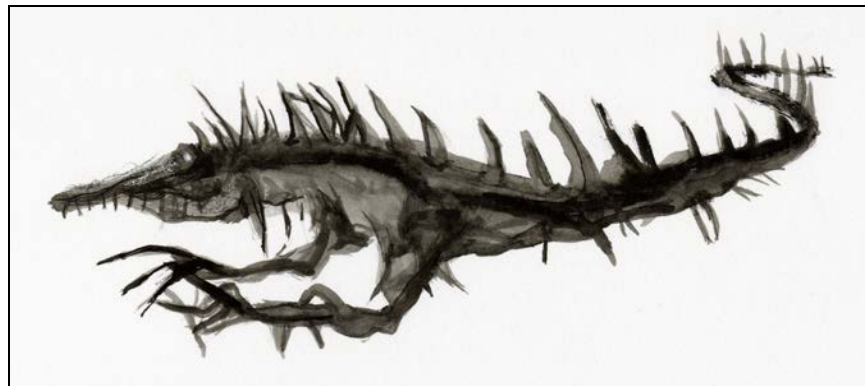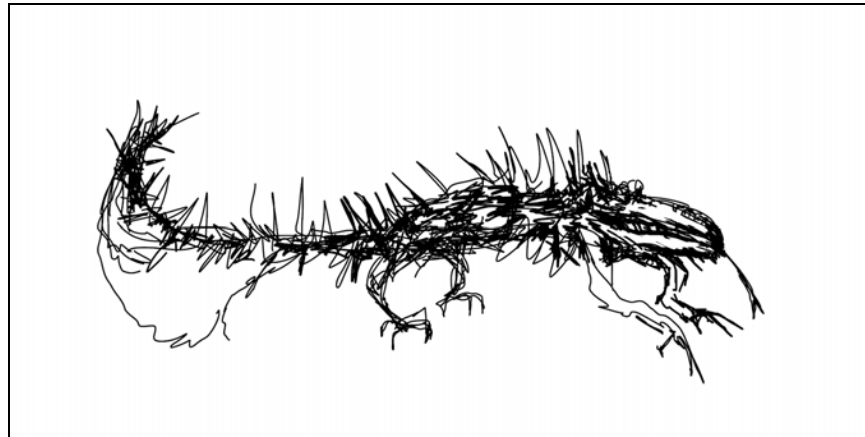
Select Nightmare Studies (Digital & Traditional)

I wanted Nightmares to seem jagged and unstable with their pointed claws and spiky skin. A Nightmare's genes or "essence" congregates in their spines. PTSD can involve emotional dysregulation; nightmare designs reflect Damon's main concepts of damage, instability, and harm (American, 2021).

Digital Nightmare Study

I also considered a looser style with more erratic linework. This was inspired by the jarring traumatic experiences and often unpredictable damage associated with PTSD (American, 2021).
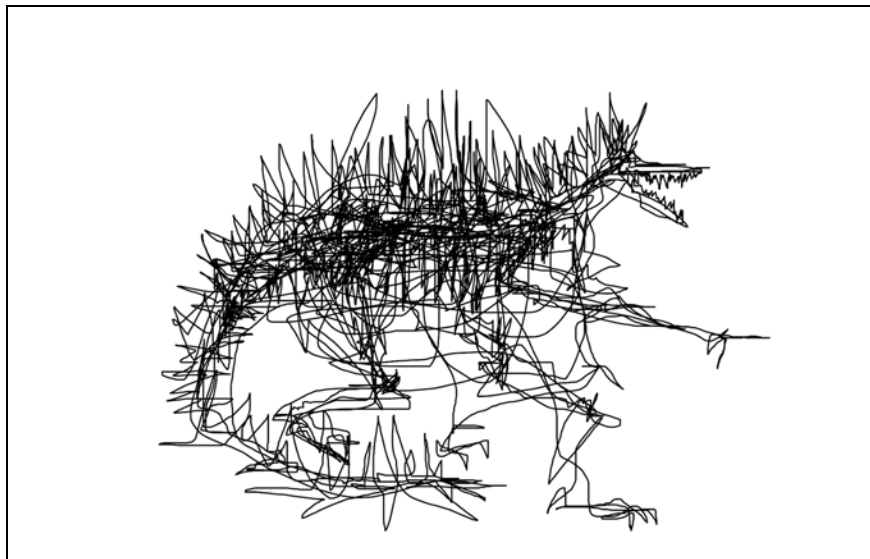
Digital Nightmare Study (Looser Style)

4.3.3 Springs and Power Lines

Power lines hang on poles scattered across mountains and craters. Nightmares place sensors on wiring to detect human conflict. Large quantities of water rest deep under Damon's terrain. Humans and Nightmares collect water through piping systems in large boulders.

Damon Spring Study (Digitally Edited)

In the scene above, Nightmares collect water at a rock spring near a laboratory. Human-made structures are visible, but many pieces of technology are lying around without power, evoking a post-apocalyptic feel. With this painting, I explored a mixed media approach using crumpled paper, torn tin foil, and wire. I wondered if the damaged mediums would add to Damon's destructive nature, if the "injured" materials would hint at trauma or PTSD.
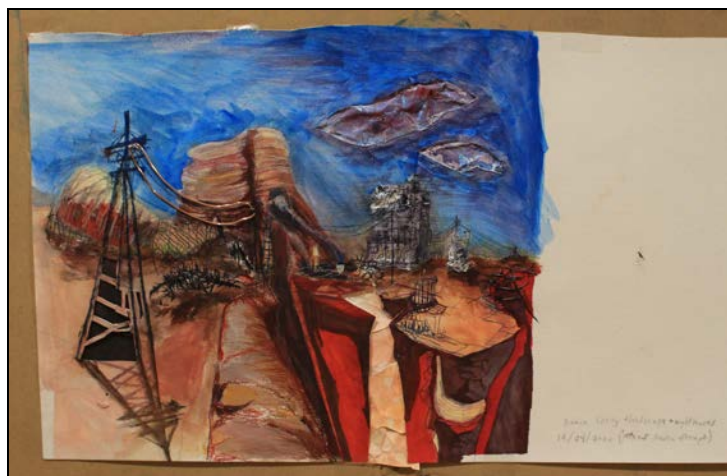
Damon Spring Study (Original Mediums)
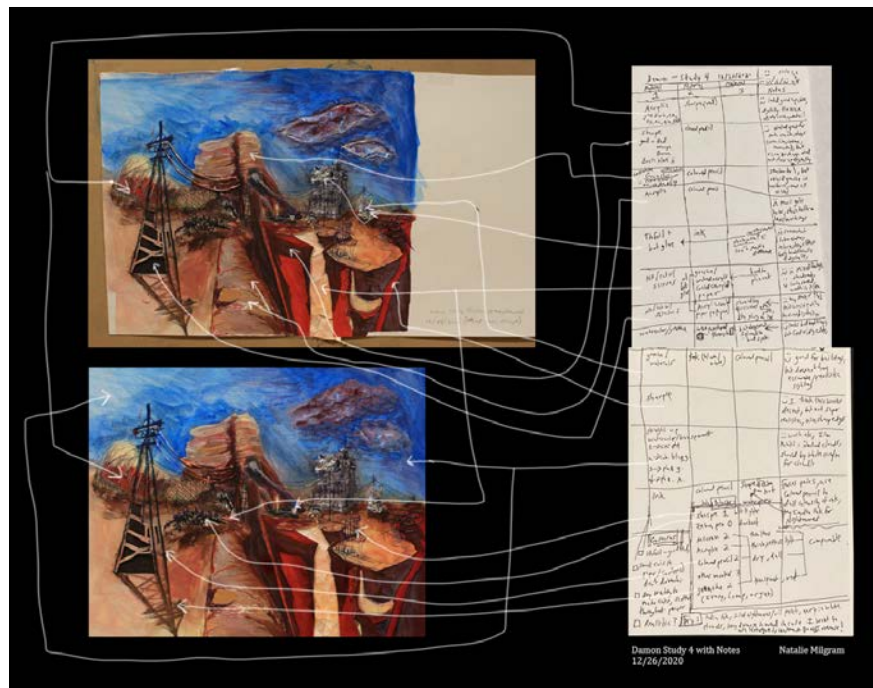
Analysis of "Damaged" Mixed Media Approach

4.3.4 Pit of the Past

The Pit of the Past was the first extreme opening in Damon's terrain. The cavity forms caves deep underground. With the help of other Nightmares, Ezra built up the Pit of the Past to store technology, tools and entertainment devices. The Pit of the Past contains several rock podiums which serve as lookout posts for Nightmares to guard their territory and resources.

Pit of the Past Color Study

4.3.5 Nightmare Clans

Over time, Ezra developed a clan system formed from specific Nightmare tribes, each with their own skills, symbols, and roles in Nightmare society. Ezra, with the assistance of Elder Nightmares, assigns each newly-bred Nightmare to one of 6 major sectors: Technology, Protection, Sensing, Scavenging, Teaching, and Leadership. Each sector serves a different role in the Nightmare community.
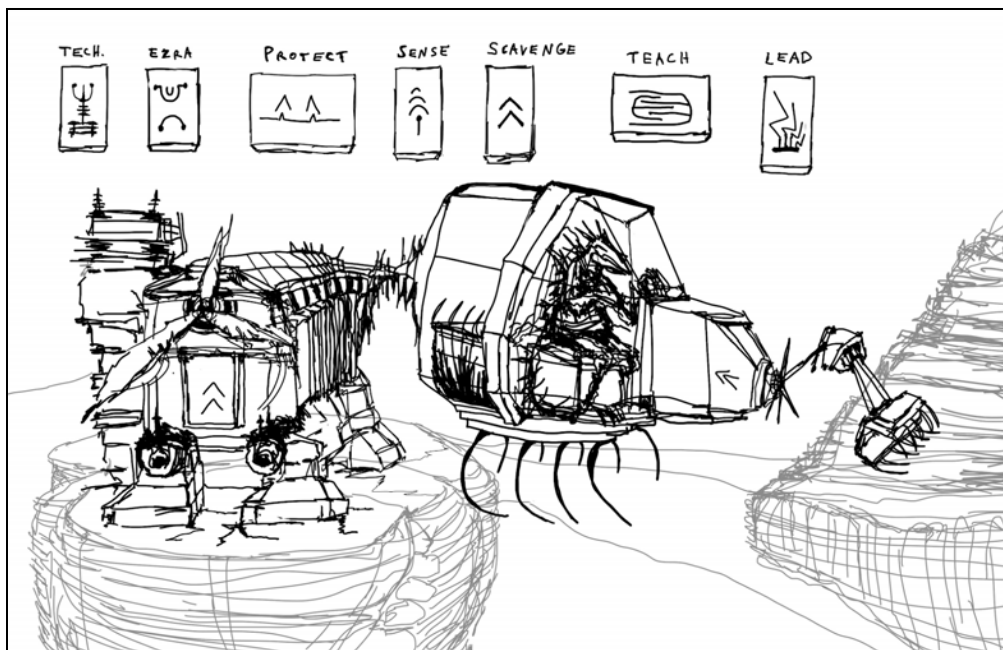
Nightmare Clans Concept Sketch

The above digital sketch illustrates a Scavenger waiting for their vehicle to refuel. I took inspiration from entoptic phenomena associated with altered states of consciousness when developing Nightmare clan symbols (Lewis-Williams, 2002). These altered states of consciousness remind me of trauma-related dissociation (Lanius, 2015; Lanius & Hopper, 2008). Additionally, the presence of entoptic phenomena imagery in Native American cave art further inspired Nightmare clans, sectors within the overarching Nightmare species, or tribe (Lewis-Williams, 2002).

4.3.6 Nightmare Breeding Ground

Damon created the Breeding Ground Crater especially for Ezra and marked it with rock crack patterns lining the perimeter. Ezra built the Nightmare Breeding Ground to birth additional Nightmares who could help protect Damon's terrain. Bits of wire, fencing, and piping form this jungle gym structure. At the top is a glove like mechanism, the technology which births Nightmares continuously.

Breeding Ground Concept Painting

Breeding Ground Thumbnails

4.3.7 Nightmare Clan: Sensors

Sensors trek across Damon, observing human behavior and noting connections between conflict, terrain damage, and Nightmare health. They report observations back to Ezra and Elder Nightmares.

Nightmare Sensors Detect Conflict

Above Nightmare Sensors detect the magnitude of conflict in a human quarrel. They ride in a double-decker vehicle fueled by Nightmare Essence. With this painting, I again attempted a mixed media approach. This time, I layered torn splotches of dried acrylic paint with gouache, watercolor, and ink. I wondered if digitally painted grainy textures would evoke fog or a hazy state similar to dissociation (Lanius, 2015).

4.3.8 Protectors and Guarding Technology

In the painting below, Protectors guard technology and Scavengers collect water in a bucket. Ladders and staircases formed from Nightmare spines afford Protectors access to technology cubicles lining the mountains. Protectors secure Nightmare bases, fight aggressive humans, and rescue captive Nightmares at risk of dissection.

Guarding Technology Concept Painting

4.3.9 Nightmare Clan: Technologists

Researchers, engineers, mathematicians, and inventors constitute the Nightmare Technology Sector. They invent and build weapons, machines, and structures.
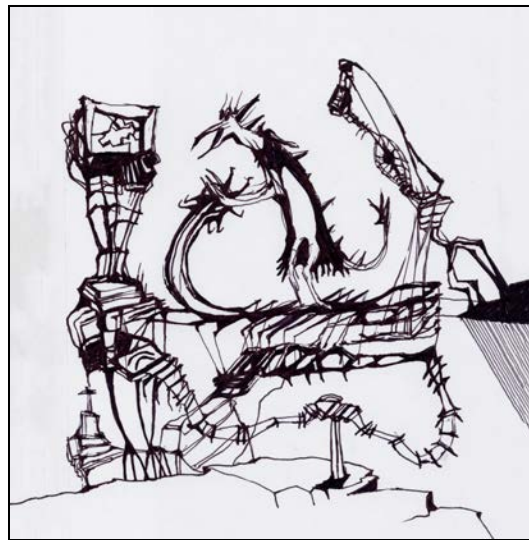
Nightmare Technologist Sketch

4.3.10 Nightmare Clan: Scavengers

Scavengers search for technology, food, and other resources across Damon's terrain. Nightmares scavenge for technology on foot, but also use vehicles infused with Nightmare genes which offer faster transportation. Scavengers store found resources in cubicles lining Nightmare controlled mountains (below).

Technology Cubicle Concept Painting

4.3.11 Nightmare Staffs and Accessories

Some Scavengers carry wands made of Nightmare spine. These staffs have appliance attachments which can sense conflict or transmit communication signals to other Nightmares. Some Nightmares wear cloth made of woven compressed Nightmare spine "thread" or beads made of chiseled Nightmare bones.

Nightmare Staff and Clothing Paint Sketch

4.3.12 Leadership and Elder Nightmares

The Leadership Clan consists of Elder Nightmares. An Elder Nightmare may intervene if a Protector cannot handle a human alone (below). Leaders also help facilitate clan trainings and schedule community events. While Ezra, the Legacy Nightmare, is considered an Elder Nightmare, they belong to two clans: Leadership and Legacy. Ezra takes counsel from Elder Nightmares of the Leadership Clan, but ultimately serves as the Nightmare race's sole leader.

Elder Nightmare Catches Human Stealing

4.3.13 Nightmare Teachers

Nightmare teachers educate newborn Nightmares on Damon's history including Ezra's birth, human conflict, and Nightmare traditions. In the painting below, a nightmare teacher warns baby Nightmares about the dangers of humans. Teachers offer Nightmare stress balls to particularly nervous students. Carmen (on left) squeezes a blue stress ball impaled with Nightmare spine shavings to relieve anxiety.

Beware Humans Concept Painting

4.3.14 Nightmare Spine Essence

Nightmares mutated Damon's inhabitants and nature with their own "Nightmare Essence." They created nightmare reptile breeds and advanced technologies with powerful genes originating from Damon's core. Nightmare spines contain a high concentration of Nightmare Essence. Engineers incorporate the spines into structures which serve as housing, community spaces, or laboratories. Nightmare Essence helps strengthen structures and protect against possible damage from human conflict, it serves as a power source.

Damon's core heat can enhance Nightmare Essence through a brewing process. Elder Nightmares and Technologists grind Nightmare spines into a fine powder to be dumped in craters. Planted spine structures surrounding enhancement craters grow and gain power at night.

Nightmare Essence Concept Painting

In the painting above, a Technologist shows a mistakenly trapped baby human to a Protector guarding Nightmare Essence. Nightmare cart spines protect surrounding terrain from damage caused by any inner conflict of trapped humans.

4.3.15 Damon Inhabitant Interactions

Each Nightmare's personality is different. A plethora of circumstances could believably occur within Damon's reality depending on environmental factors. I brainstormed possible Damon inhabitant interactions through sketches and thumbnails.

Select Digital Thumbnails for Damon

Human youth do not typically fear Nightmares until they hear frightening legends conveying the naturally peaceful creatures as monstrous villains. In the paint study below, a Nightmare of the Sensing Sector examines a captured baby human.

Nightmare Studies Captured Human

4.3.16 Nightmares as a Metaphor

At first, Nightmares existed only to serve Damon. Over time, Nightmares began to disconnect from Damon. They started collecting technology to service themselves. Nightmares now prioritized global domination over Damon's terrain health.

Nightmare Global Domination Shift Concept Sketch

The Nightmares serve as a metaphor for dissociation and memory in this case. Nightmares' desire for global domination further accelerated Damon's terrain damage. A person may dissociate to disconnect themselves from reality, to protect themselves from pain associated with trauma (Lanius & Hopper, 2008). However, once an individual is no longer in the midst of traumatic experiences, this self-protective measure interferes with daily life activities (American, 2021). PTSD sufferers can sometimes improve their quality of life by processing trauma and coexisting with memories of the past. With Damon, a peaceful human-Nightmare coexistence would greatly help terrain health. Cracks would still be visible, but no more damage, or trauma, would form. Of course, this is a simplification of PTSD, but it highlights one main inspiration behind the world of Damon.

5. Artistic Process

For me, the early stages of world development involve plenty of research, brainstorming, and daydreaming. I am trying to think of possible characters, locations, and scenarios which are interesting, entertaining and convey ideas. Like most concept artists, I brainstorm multiple ideas through doodles and sketches before dedicating large chunks of time to final painting compositions. As ideas form, I work through sketches, paint studies, and thumbnails to refine concepts.

While my early stages of research and concept development mimic work practices of a typical concept artist, I differ in the ratio and order of digital and traditional medium application. I often complete thumbnails and smaller traditional colors studies before executing full size traditional paintings. After traditionally painting, documenting and digitally editing work, I sometimes print pieces on canvas to further develop works traditionally. I shift between digital and traditional mediums multiple times during various stages of my workflow, collecting additional reference images as needed.

5.0 Developing Worlds

When developing a world, I tend to work in a nonlinear fashion to refine concepts as fast as possible. I first gather research, daydream, doodle, write, or paint out ideas. I then shift between these main tasks until my ideas develop. It is an iterative process which involves many versions of the same ideas improving/developing over time.

I developed core concepts for Lugelle, Polarenti, and Damon before MQP began. During winter and spring of 2020, I daydreamed, sketched, and wrote notes traditionally. These initial ideas rested in my brain for almost five months with little conscious thought directed towards *Book of Worlds*.

Select Initial Notes and Sketches for Damon

During MQP, I further developed these initial thoughts by digitally sketching in Photoshop. In a rapid, censorless, "free flow" of ideas, I brainstormed new locations and characters. Soon after digitally sketching "free flow," I shifted between sketching traditionally or gathering research while dreaming about the worlds in free time. If I felt stuck in one medium, I understood I needed to switch tasks. While writing prose can help to develop worlds, on several occasions I brainstormed concepts in writing I had not yet drawn. These written ideas interfered with my creative expression when drawing/painting designs because pre-existing concepts conflicted with newly generated art. Often the most important tasks were collecting reference images for inspiration and drawing/painting my ideas.

Lugelle "Free Flow"

5.1 Research, Studies, and Thumbnails

As I developed my worlds, I gathered reference images from the internet and daily life. This allowed me to incorporate real-world objects and information into my imagined worlds. By basing my ideas off of real-world information, I could create more believable worlds rich with details. I often went through multiple rounds of research. A few massive rounds of research at the start of each world to jumpstart my ideas, and then several rounds of more specific research for specific paintings I planned to bring to a full finish. Without research, my world concepts would be limited to my own memories and experiences; found photographs fueled my imagination and inspired ideas which made my worlds stronger.

Select References from Daily Life for Damon

Select References from Internet for Damon

As I gathered research, I began to sketch and paint different ideas for characters and locations. I created initial sketches with graphite, ink pen, gouache, water color, pastel, colored pencil, acrylic paint, oil paint, and/or Photoshop depending on the world. These sketches were often very loose and only meant to express my idea. I tried not to judge my work and was willing to remove any ideas which were not working well enough.

Colrab Paint and Graphite Sketches

Paint Study for Damon

While I sketched out world inhabitant/location ideas, I also sometimes drew or painted thumbnail ideas for final painting compositions. As I worked through my ideas, I went with my instincts to move between the development stages of research, sketches, and thumbnails.

Thumbnails illustrate a final painting composition at an extremely small scale, often only 2 by 2 inches in area maximum. The height-width ratio of the thumbnail is meant to indicate a rough aspect ratio for the final painting. My thumbnails were sometimes only drawings with no values, but often included values to indicate a light source. My thumbnail sketches ranged in detail from rough abstract shapes to defined character forms. Sometimes I did digital overlays or tweaked thumbnails digitally to improve the composition for final paintings, focussing on balance of shapes, focal points, and eye movement. I completed thumbnails both traditionally and digitally and sometimes gathered reference images at the same time.

Polarenti Digital Thumbnail Overlays with Select Reference

5.2 Layout

Once I developed world locations, inhabitants, and a general backstory, I developed the world style through sketches, research, and paint studies. After completing thumbnail sketches, I chose the strongest thumbnails to complete final paintings. During the layout phase, I drew out my chosen thumbnail at a much larger scale, up to 10 by 18 inches in area. I mainly used watercolor paper.

At first, this paper was not stretched and I found that it warped when I wet it with watercolor. To decrease warp in the paper, I wet blank watercolor paper with a sponge and taped it on a stiff board with gummed paper tape. Before, during, and after the layout stage, I continued to gather reference images related to the specific painting I was working on.

Early on, the layout stage offered many challenges because it was difficult to maintain the thumbnail's composition when redrawing the layout at a larger scale. To reduce changes in composition, I printed enlarged digital thumbnails and traced the layout onto watercolor paper using transfer paper. This method of working allowed me to achieve a final layout much closer in composition to the initial thumbnail sketch.

I Trace An Enlarged Digital Thumbnail on Transfer Paper for the Guarding Technology Layout

Oftentimes, I would feel stuck during the layout stage, unsure of the exact placement of objects. Many times I shifted from the layout stage to complete additional color thumbnails to get a sense of ideal object placements. I found that when I shrunk my painting down to thumbnail size and completed color studies, the simplest composition emerged which was often the strongest arrangement of shapes resulting in the most intense feelings evoked.

Guarding Technology Color Thumbnails

Each final painting involved an entirely separate process. Sometimes I had a color thumbnail before the layout, other times I began drawing the layout without the thumbnail and then backtracked to tweak composition, yet other times I began with a graphite thumbnail before completing a full size layout and then color studies. I grew to understand my nonlinear working methods and eventually learned to go with my instincts when developing a painting. I found that when I followed my gut feelings and set aside judgemental thoughts, I created the strongest pieces of art.

5.3 Final Traditional Painting

Once I developed the final layout and felt confident enough to move forward with the final painting, I made myself comfortable and began the final full size traditional painting. Depending on the world, I used different mediums including gouache, colored pencil, acrylic paint, and oil pastel.

I Complete the Full Size Traditional Painting for Sentient Bridge

I took breaks during the final painting stage, shifting between final paintings, sketches, thumbnails, and/or other tasks to let paintings rest. I became overly sensitized to paintings after working on them for several hours which caused me to question or overthink certain aspects of the art. If I became stressed or felt myself overthinking a painting, I took a break and shifted my focus to tasks unrelated to visual art. Breaks reduced my sensitization and enabled me to come back to final paintings with a fresh mindset. Breaks often resulted in stronger finished works.

5.4 Documentation and Digital Edits

During the final traditional painting stage, I documented progress regularly with a DSLR camera or scanner at the Worcester Polytechnic Institute Gordon Library. I used the Canon EOS Rebel T5i camera and Epson Expression 12000XL photo scanner to document *Book of Worlds*' artwork.

Gordon Library Epson Expression 12000XL Photo Scanner

With multiple progress images saved, I could view previous versions digitally and use elements from numerous versions in the final painting if needed. On several occasions, I used masking techniques in Photoshop to combine stronger elements from earlier progress images with elements from the final traditional paint progress image. I also felt less pressure when completing a final painting with regular documentation. I knew if I "messed up" a painting, I had previous versions saved which could be digitally combined with the most recent failed painting attempt. I could still create a fairly strong piece regardless of flaws in the final painting.

With the assistance of MQP advisers, I decided when a traditional painting was ready to be documented and finished digitally. I scanned or photographed paintings in their final traditional state depending on which documentation method best represented the traditional art in the digital format. Depending on the medium and colors I had used, scans and DSLR photographs captured details, colors, and values differently. I typically documented a final traditional painting with both the DSLR camera and Gordon Library scanner. I then chose the best digital representation to work from when continuing with digital edits.

Once I backed up the digital image (from DSLR or scanner) of a final painting onto my drive, external hard drive, and cloud backup storage, I began digital edits with Photoshop. First, I cropped the painting to an appealing aspect ratio and decided whether the composition would look better framed in black or left in a more vulnerable state with traditional paint borders visible. Next, I adjusted the image's exposure, contrast, saturation, vibrance and/or color balance.

Lastly came more involved edits which I sometimes delved into depending on the painting. Sometimes I used Photoshop to remove non uniform speckles in paint or adjust the values of a certain area to improve clarity in the composition. I often used digital edits to clarify my intentions with the mark making or enhance lighting effects in a scene. Occasionally, I also removed blemishes or stains which caused undesirable eye magnets in the composition.

I Digitally Edit Mixamuck Encounter with Photoshop

Certain paintings required more digital edits than others to reach a "finished" state. It was difficult to determine the exact definition of "finished" when it came to a final painting. Ultimately, with the assistance of MQP advisers and my own developing judgement, I grew to understand the qualities of a "finished" painting. Often, a "finished" painting felt clear in composition and would diminish in quality if any additional changes were made. It took approximately 10-25 hours to develop each final composition from its initial thumbnail to the digitally edited full size traditional painting. Smaller paint studies took approximately 1-3 hours. Once I brought paintings to a "finished" state in their digital format, I set files aside to compile into the *Book of Worlds* InDesign project.

5.5 Printing and Traditional Edits

With select final paintings which were especially strong, I printed the digital file on canvas to further develop the art. I used Alphagraphics, a Worcester printing shop, to print my digital files on canvas. I scaled up my digital image to print the final traditional painting with digital edits at a much larger scale, maintaining the same aspect ratio when possible. I experimented with canvas prints mounted on stretcher bars as well, but canvas mounts at Alphagraphics involve limitations on aspect ratio; canvas dimensions must be even multiples (measured in inches).

After retrieving my painting from Alphagraphics, I continued to work on the piece traditionally using acrylic paint, gouache, colored pencil, and/or oil pastel. I then documented this final traditional piece to save a digital file of any additional progress.

I Traditionally Edit a Canvas Print of Clock Tower

At this point, I had started with traditional or digital thumbnails/studies, moved onto a traditional layout/painting, continued with digital edits, and finally finished with traditional edits after printing the piece large on canvas. With traditional paintings printed, I had tangible pieces of art which could be displayed in galleries if I so chose to apply for gallery representation later in the year.

5.6 Compiling Works into *Book of Worlds*

Once I saved my digital files, I was ready to compile artwork and prose into the *Book of Worlds* In Design project. *Book of Worlds* contains final paintings as well as concept sketches and thumbnails. I usually made additional digital edits on rough sketches to remove excess marks around the main sketch described by *Book of Worlds'* text.

Request Station Book of Worlds Spread

In In Design, I experimented with different arrangements of artwork and text to craft visually appealing spreads. It is of note that I sometimes continued digital or traditional edits on pieces after placing art in the InDesign file. I also sometimes wrote additional prose to increase spreads' visual appeal. Due to my nonlinear creative workflow, I often shifted between drawing/painting, Photoshop edits, writing, and InDesign book formatting tasks.
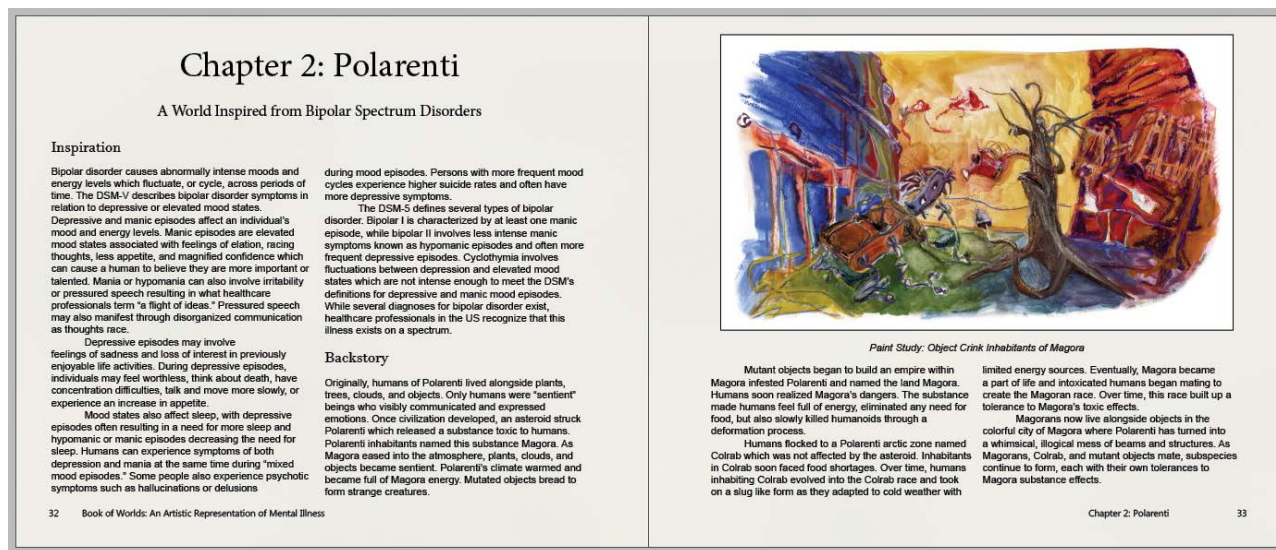
Polarenti Backstory Book of Worlds Spread

5.7 Publishing *Book of Worlds*

I chose Blurb to print my book because I was familiar with the company's website layout, pricing scheme, and material offerings from a prior course in children's book illustration. I used a Blurb software plug in with InDesign software to create a *Book of Worlds* PDF. Blurb then accepted the page and cover template PDFs to print an eight inch by ten inch softcover book. I had first ordered paper samples from Blurb to view and compare printed image quality on matte, semi-gloss, and luster paper. I chose semi-gloss paper for *Book of Worlds* because it is durable and prints images with a desirable shine.

5.8 Case Study: Ramen Swamp

To offer a tangible example of my artistic process, I will now describe Ramen Swamp's development from inspiration to the final digitally edited painting included in *Book of Worlds*.

5.8.0 Ramen Swamp Inspiration

Ramen Swamp was inspired by Ramen, a character from the world of Lugelle. I named this humanoid Ramen (possibly because roommates were eating a lot of ramen at the time) and gave him a pet ball of ramen named Club. At the same time, I also developed the leader of

Grazirre, Ramina, who did not make it into final paintings. She has long braids made of sentient ramen. Ramen, Club, and Ramina are pictured below in figure 5.1.

I wondered where Club and the sentient ramen came from. I started to think about the origins of Ramen's name. After some deliberation, I decided Ramen's parents named him after a Lugellian swamp made of ramen because they had adopted Club who escaped the swamp in a panic and was in need of a bowl to survive. This snippet of story sparked additional ideas like egg creatures and ultimately served as inspiration for the painting titled Ramen Swamp.
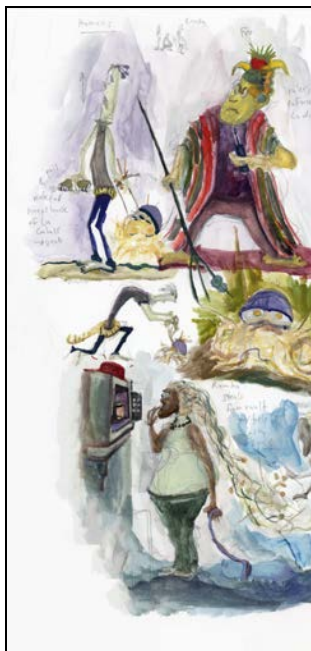
Ramen, Club and Ramina Initial Paint Doodles

5.8.1 Ramen Swamp Initial Reference and Digital Thumbnails

During digital thumbnail explorations of Lugelle, I thought back to my Ramen Swamp idea. I felt this concept was strong enough to explore. I collected several reference images containing ramen-related and swamp-related imagery and also researched swamps. I learned of the mangrove trees present in salt water swamps and thought their roots appeared similar to ramen noodles. This discovery based in real-life research further solidified the concept of Ramen Swamp. While looking at reference images, I created two digital thumbnail sketches of possible compositions for Ramen Swamp using Photoshop. In one thumbnail, I sketched a Lugellian on an avocado boat. In the other composition, I placed egg creatures and Simis around a Lugellian. While I did not use these thumbnails for the final painting, the concepts within the compositions sparked other ideas.

Initial Ramen Swamp Research with Digital Thumbnails
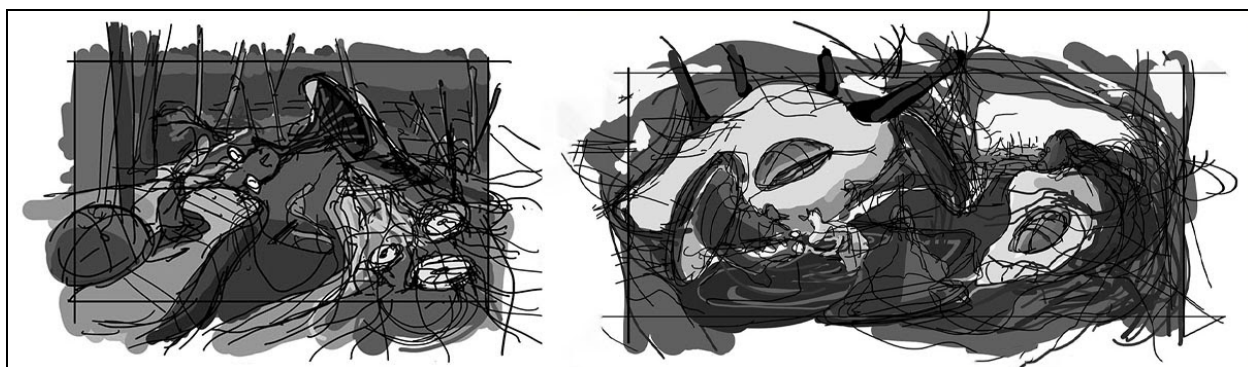
Two Initial Ramen Swamp Digital Thumbnails

5.8.2 Ramen Swamp Additional Digital Thumbnails

During Lugelle's development, I felt Ramen Swamp was strong enough to paint but was not satisfied with initial digital thumbnail compositions. I collected additional reference images and created more digital thumbnails exploring compositions. I wanted a variety of shape sizes to focus the viewer's eyes around a focal point. One composition contained an appealing balance of shapes with interesting figure eight natural lines guiding the viewer's eyes to a focal point. This thumbnail's value structure clearly communicated a foreground, middleground, and background, adding a desirable depth to the scene. I analyzed the composition and deemed this digital thumbnail strong enough to execute as a full size traditional painting.
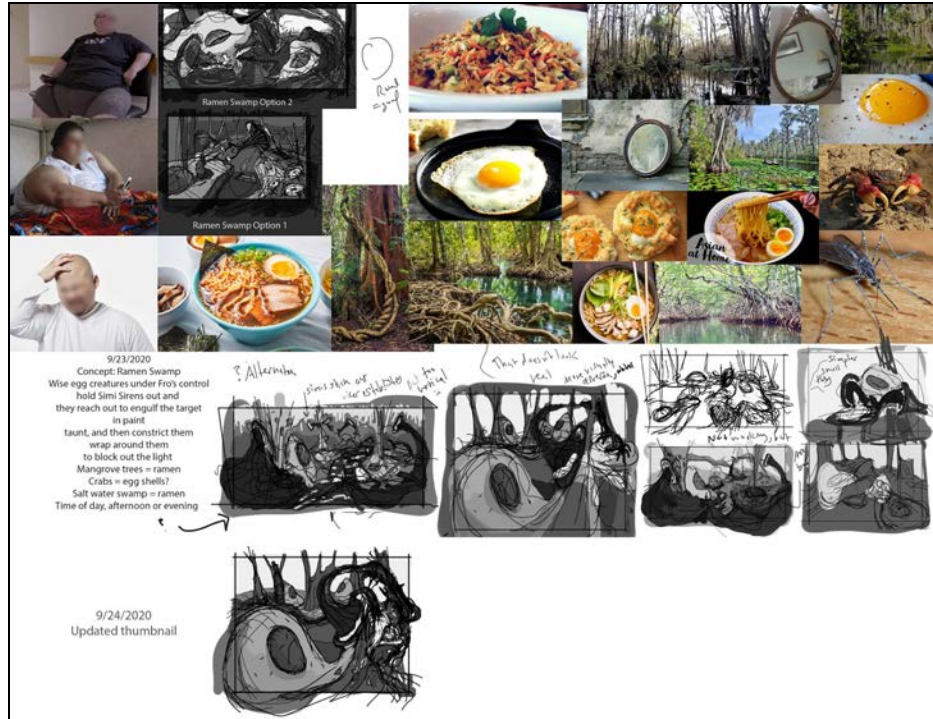
Additional Ramen Swamp Digital Thumbnails
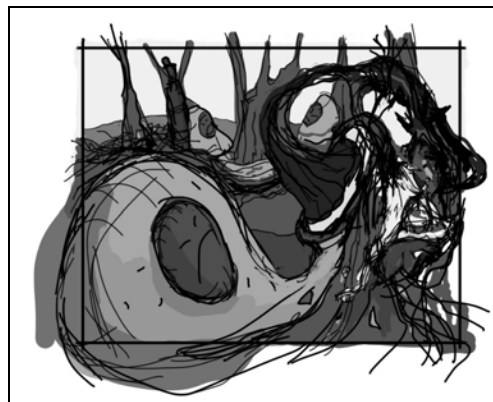
Chosen Digital Thumbnail for Ramen Swamp

5.8.3 Ramen Swamp Layout Dimensions and Composition Notes

I studied this thumbnail's composition to understand the artistic principles behind its strength. I spotted variety, balance, and dynamic natural lines in Ramen Swamp's composition. During this time, I also decided on traditional layout dimensions for Ramen Swamp, using Request Station as a reference. I then enlarged and printed Ramen Swamp's digital thumbnail for the layout stage.
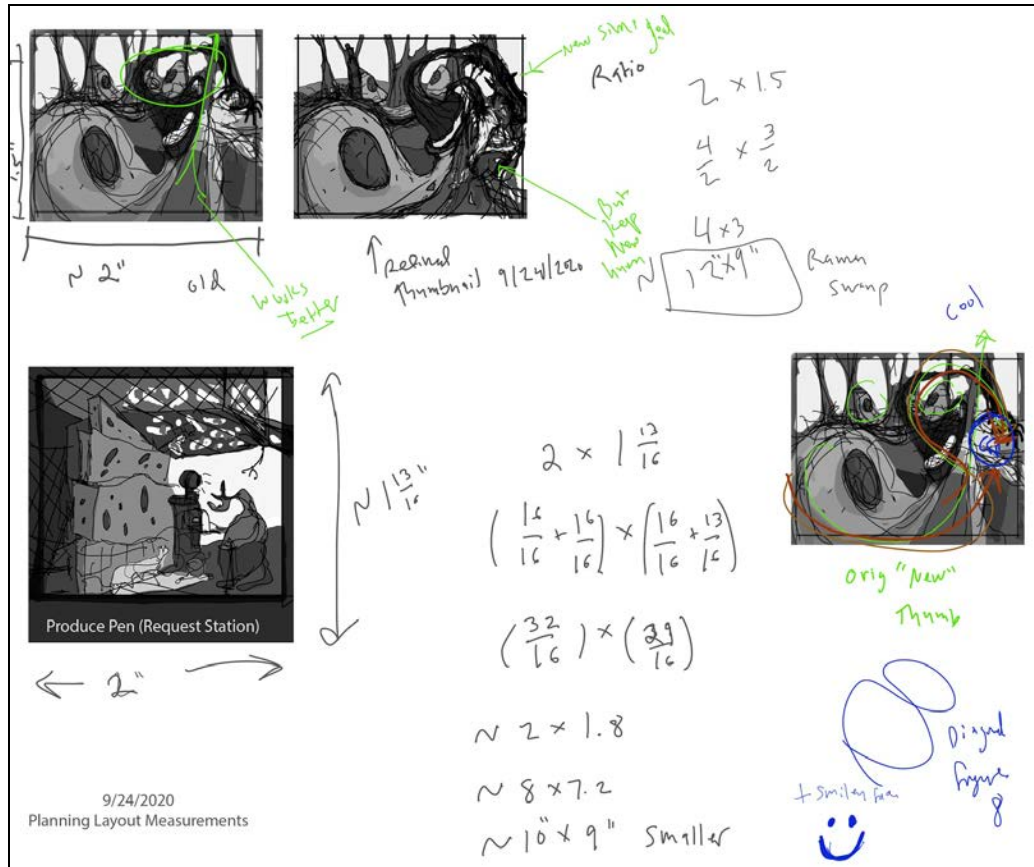
Ramen Swamp Composition and Layout Dimension Notes

5.8.4 Ramen Swamp Layout and Color Studies

After printing the enlarged digital thumbnail, I used transfer paper to trace the composition onto watercolor paper. I then removed the transfer paper and developed linework from the tracing with a graphite pencil. In this first layout attempt, egg creature shapes did not lie correctly in space. I felt the shapes of the humanoid pose and background beer bottle could be simplified but was unsure how to adjust the linework. As such, I changed tasks to complete three color studies. I hoped the miniature paintings would provide helpful insights into layout improvements.

Ramen Swamp Layout Version One (Weaker Shapes)

I completed three color studies for Ramen Swamp using gouache. The first color study's blue water felt too similar to earth's oceans. I wanted Lugelle, a whimsical world filled with fruit architecture, to feel distinctly separate from typical observed reality. The second study's color palette was not as balanced. The yellow, red, and orange/brown elements overwhelmed the painting with warm colors. The third study felt more balanced between the yellow, blue, and red components. I noticed an appealing complementary relationship between the blue Lugellian and orange egg yolks. After painting ideas for color, I noticed stronger, simpler shapes emerged for the humanoid, background eggs, and beer bottle. I adjusted my layout to reflect simpler, stronger shapes I came across in these color studies.

Ramen Swamp Color Studies

Ramen Swamp Layout Version 2 (Stronger Shapes)

5.8.5 Ramen Swamp Final Traditional Painting

With my layout complete and color palette chosen, I moved onto the final traditional painting. I looked at my reference images and color study for guidance as I mixed gouache and applied paint onto the watercolor paper.

Ramen Swamp Traditional Painting Progress One

Ramen Swamp Traditional Painting Final Progress

5.8.6 Ramen Swamp Digital Edits

After completing the traditional painting, I documented Ramen Swamp with both a DSLR camera and Epson Expression 12000XL scanner to continue forward with digital edits. I began by cropping the painting in Photoshop to a desirable aspect ratio.

Ramen Swamp Digital Edits Progress One

I then adjusted contrast, color balance, and saturation and continued with digital painting to clarify the composition and increase colors' chroma.

Ramen Swamp Digital Edits Progress Two

Lastly, I used digital painting techniques with layer modes to adjust the beer bottle's lighting. I also added small trees in the background. These smaller shapes add variety to the shapes within Ramen Swamp and help emphasize the egg creatures, Simi, and blue Lugellian. Their simpler, stick-like shape language contrasts the more complex character forms. I set Ramen Swamp's final digital edits file aside to insert into the *Book of Worlds* InDesign project later on.

Ramen Swamp Digital Edits Final Progress

6. Evaluation and Results

I received feedback on *Book of Worlds* during both Alphafest and Showfest. IMGD students, faculty, and staff provided feedback through verbal comments and Google Forms surveys.

6.0 Alphafest

On November 20th, 2020, I exhibited *Book of Worlds'* progress at Alphafest, an IMGD event which showcases undergraduate student projects. Due to circumstances arising from COVID-19, IMGD students showcased their work online via Discord and an Alphafest webpage. I showcased an in-progress chapter of Lugelle to receive feedback on works of art, prose, and chapter formatting. I received feedback on *Book of Worlds'* art verbally and also made online surveys available during Alphafest.

I created pre and post surveys for participants to complete before and after viewing the Lugelle chapter in progress. The pre-survey requested demographic data regarding participants' exposure to mental illness and fine art. The post-survey requested feedback from participants regarding *Book of Worlds'* art and prose. This survey asked viewers to describe their personal experiences viewing my paintings.

The exact population of survey participants is unknown as surveys did not require volunteers to provide their name. However, IMGD students, faculty, and staff likely comprised the majority of surveyed participants due to the Google Forms' peak availability during Alphafest (an IMGD event). Participation in *Book of Worlds* surveys was voluntary. I collected very limited identifying information in an effort to maintain confidentiality. Four students did provide an email address for playtesting credit. Screenshots of pre and post Alphafest surveys can be seen below.

Alphafest Pre Survey Results:
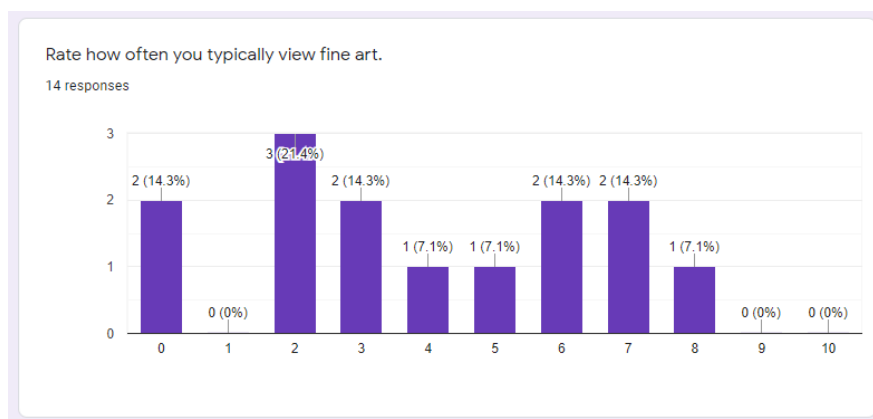
Alphafest Pre Survey Results: Previous Fine Art Exposure
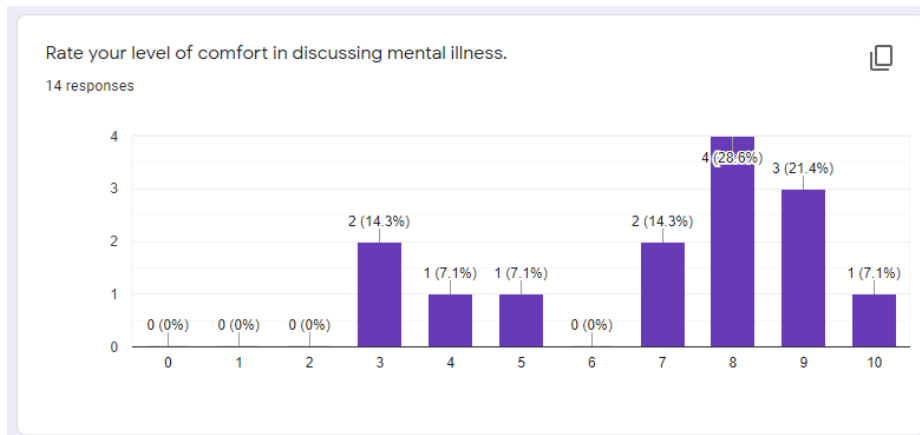
Alphafest Pre Survey Results: Comfort in Discussing Mental Illness
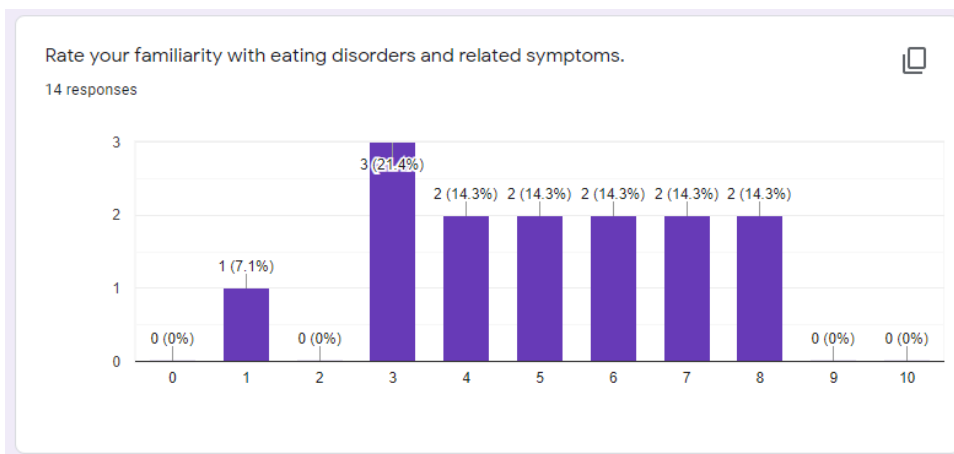
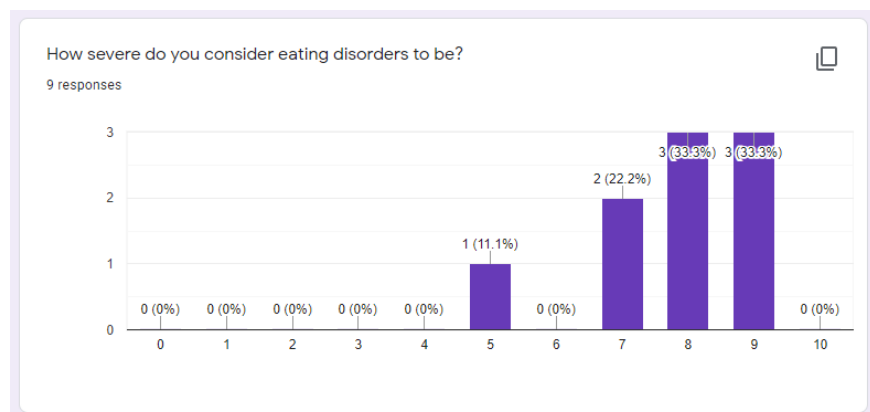*Alphafest Pre Survey Results: Familiarity with Eating Disorders*
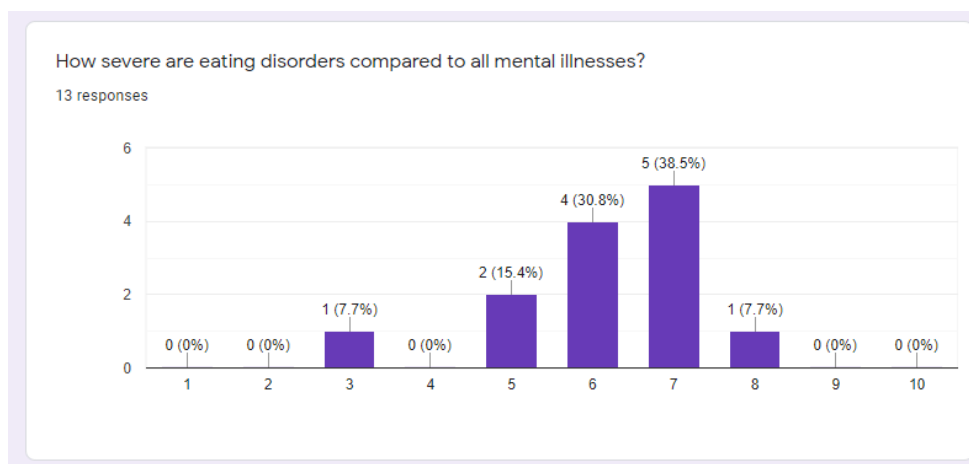
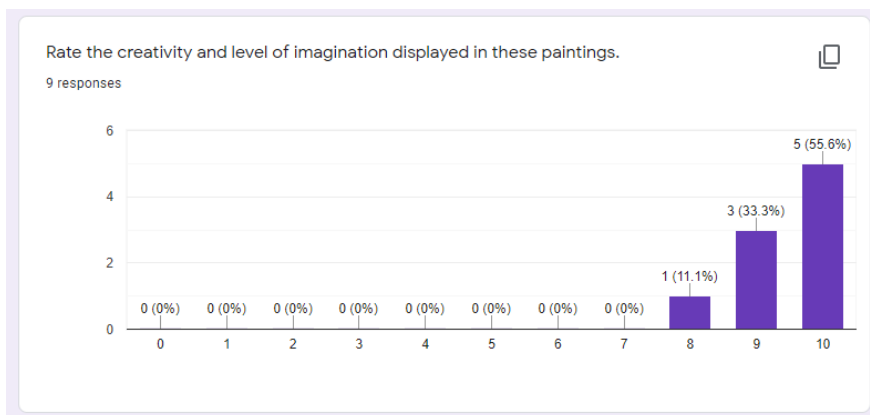*Alphafest Pre Survey Results: Participant Perception of Eating Disorder Severity*

Alphafest Post Survey Results:
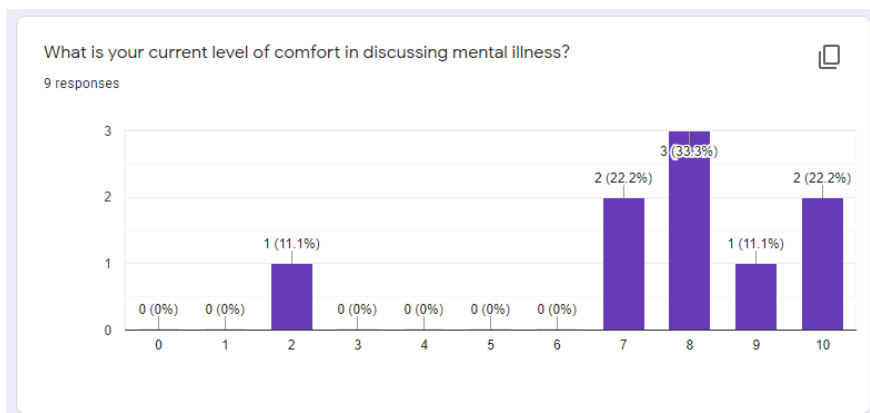
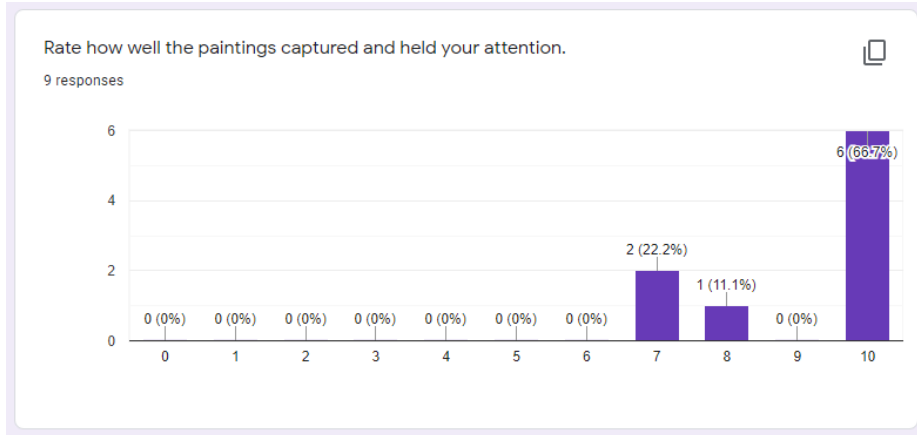*Alphafest Post Survey Result: Comfort in Discussing Mental Illness*

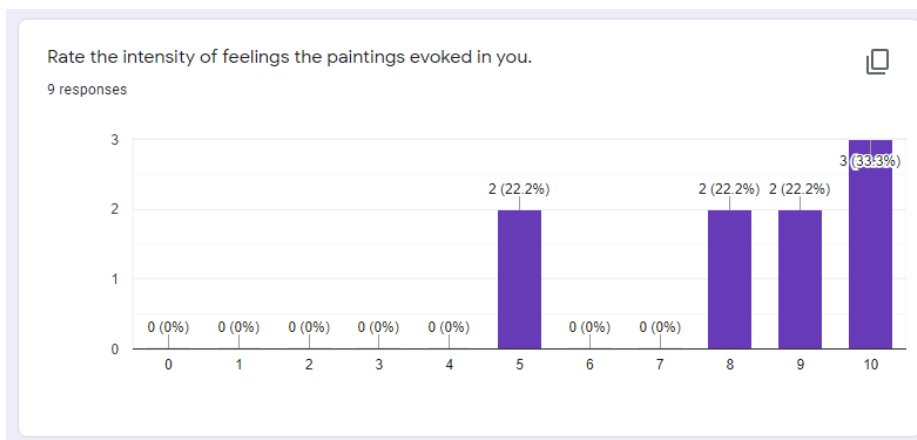*Alphafest Post Survey Results: Participant Perception of Eating Disorder Severity*

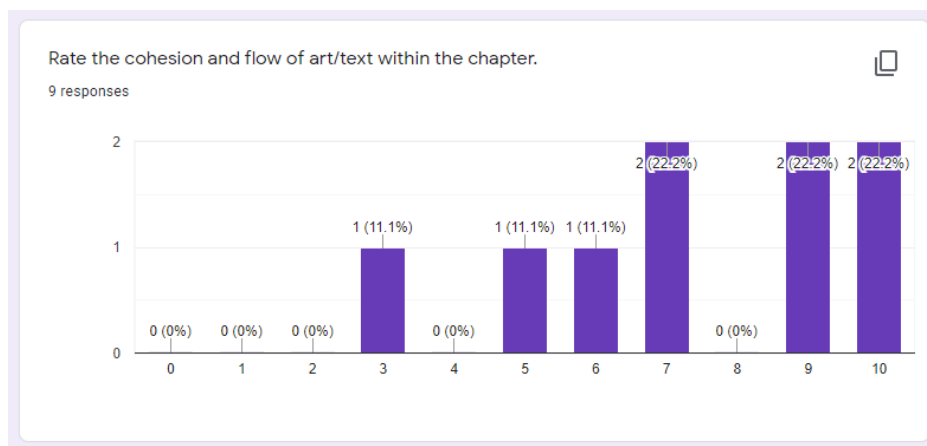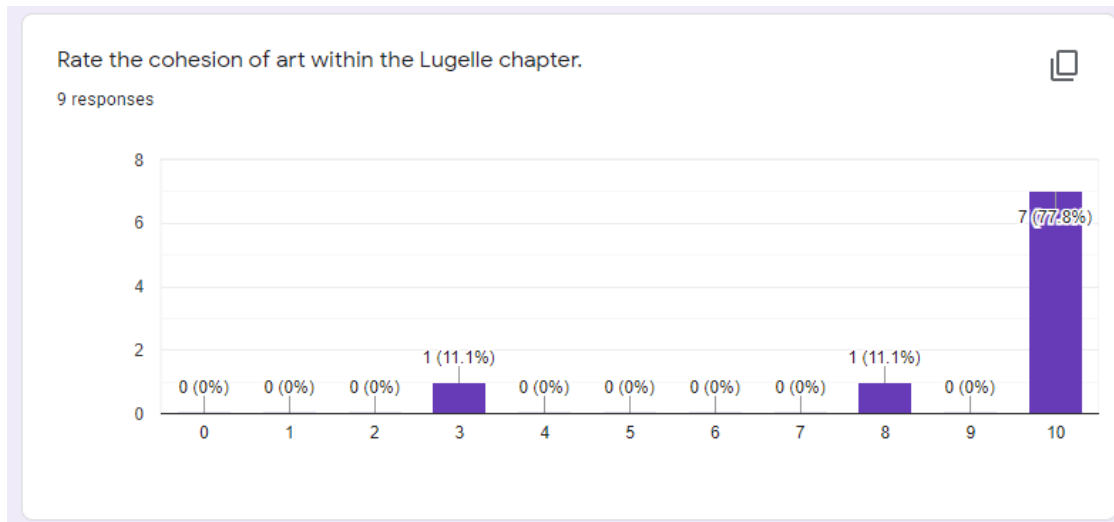*Alphafest Post Survey Results: Creativity and Imagination Displayed in Paintings*

Alphafest Post Survey Results: Degree Paintings Captured Attention

Alphafest Post Survey Results: Intensity of Feelings Experienced

Alphafest Post Survey Results: Chapter Flow

Rate the cohesion of art within the Lugelle chapter.

9 responses

Alphafest Post Survey Results: Lugelle Chapter Art Cohesion

How did you feel when viewing the art?

8 responses

Confused, but not totally. More that the lack of clarity (lines, colors, etc) was conveying something. I didn't feel as much negativity as I expected from pieces related to mental health

I was intrigued in the story behind each piece

I felt very interested in what the words had to say with the images.

I was impacted by the worlds you created, and it made me think about the harsh realities of eating disorders

I was very drawn in by the artwork. It made me curious, and also a bit concerned.

Intrigued

I was very intrigued about what I was seeing.

I felt like I was in a really cool fantasy world

Alphafest Post Survey Results: Feelings Experienced When Viewing Art

Were there any paintings, characters, or concepts you especially liked?

8 responses

I enjoyed Chebbie Pens and Punishment because it reminded me of roman emperors and their absolute authority.

I really liked the tape measure creatures

I really liked the eggs in the ramen part(I LOVE RAMEN!!!)

Art style is very whimsical, the colors in each painting go well together, the use of food items in architecture is really cool, and it was really neat to see the sketches and concepts in-progress, I especially liked the berry drone painting and the simis painting

I liked all of them, honestly, they were all very creative and well-done. I like the colors and the shading.

Fro

I liked the egg creatures the best.

I really liked the berry drones. I could definitely see all these creatures/characters being in a great fantasy

Alphafest Post Survey Results: Concepts Viewers Especially Liked (Part 1)

Fro

I really liked the eggs in the ramen part(I LOVE RAMEN!!!)

I liked all of them, honestly, they were all very creative and well-done. I like the colors and the shading.

I really liked the tape measure creatures

I enjoyed Chebbie Pens and Punishment because it reminded me of roman emperors and their absolute authority.

Alphafest Post Survey Results: Concepts Viewers Especially Liked (Part 2)

Were any page spreads difficult to read or view?

7 responses

No

No.

no

It was a little hard to read the text because of its size. It also was a bit hard because the pdf made the pages smaller.

The font was a little small. In the inhabitants section, separating the images of each species and adding a label would make it easier to tell what is what. Bold title of request section to match other titles.

Mesuramba studies was a little small compared to the other pieces so it required some zooming in.

Alphafest Post Survey Results: Page Spread Clarity

If you have additional comments you would like to share, please use the textbox below.

6 responses

I think your project is really cool and unique!

The pages and presentation look very professional- I really like your book so far!

Fantastic work! It really looks professional and it is clear you put a great deal of care and effort into it! Good luck and I am sure it will turn out great!

--

It seems like part of the book goes to a region of Lugelle, then talks about mini sections (the pens), before going back to another region. It may flow better if it's grouped all regions and then pens, or regions-things only thing that region-new region with a section of things common to all regions. I may be misinterpreting some of the different places talked about, however

I'm looking forward to more stories from the Book of Worlds!

Alphafest Post Survey Results: Miscellaneous Project Comments

As can be seen from the Alphafest pre and post survey results above, participants generally ranked both their comfort in discussing mental illness and the severity of eating disorders higher after viewing *Book of Worlds* artwork. Participants expressed varied fine art exposure; over 50% of surveyees ranked their fine art exposure as 5/10 or less. Most surveyees felt highly captivated by my artwork. Three participants ranked their captivation at 7/10 or 8/10 and six responded with 10/10. Most surveyees also reported experiencing intense feelings when viewing the *Book of Worlds* artwork. 50% of participants ranked the intensity of feelings experienced at 5/10 or above and seven out of nine surveyees ranked their feeling intensity at 8/10 or above. Seven out of nine participants felt all Lugelle artwork belonged to the same world, whereas surveyees' feelings regarding chapter flow were more varied. One participant expressed they felt Lugelle's chapter flow was disjointed and could be better organized by landscape regions.

Two participants noted difficulty in reading text due to font size. I increased *Book of Worlds'* font size to address this issue. Participants noted various feelings they experienced when viewing art and text. Four out of nine participants responded they felt intrigued or interested in *Book of Worlds* artwork or text. One participant noted they expected to feel more negative feelings when viewing mental health-related artwork, yet another responded that *Book of Worlds* made them "think about the harsh realities of eating disorders." At least four participants expressed positivity in their written responses regarding *Book of Worlds*. One participant felt concepts, paintings, and characters were "creative and well done." Two participants noted they felt the *Book of Worlds* in progress PDF looked "professional."

7. Limitations and Considerations

I would like to note several limitations regarding both *Book of Worlds* survey results and general project aspects.

7.0 Survey Limitations

While surveys contained questions requesting quantitative and qualitative responses, art is subjective. I gained insight from viewing survey responses, however humans have unique perceptions and feelings. It is difficult to gauge my artwork's impact on individuals from merely viewing participant survey responses to quantitative rating questions. Participants may not recognize their own feelings and terms like "creative" and "imaginative" are difficult to quantify.

Additionally, it can be difficult for viewers to judge art quality if they themselves have not been exposed to professional quality art or have not worked as professional artists. The very notion of "professional" quality artwork can be difficult to define. Personal preferences or "tastes" may also shield unbiased consideration of an artwork's quality. Due to the many limitations surrounding *Book of Worlds* surveys, responses may not accurately represent individuals' experiences or reflect artwork quality.

Lastly, it is of note that 14 participants completed the Alphafest pre-survey while only 9 answered post-survey questions. The difference between pre and post survey responses was likely caused by Alphafest's unusual online Discord format. The Discord format obstructed my survey locations, causing some confusion and variable response rates among participants.

Due to low volume of initial survey responses, I requested feedback from participants. While survey participation was voluntary, I did request certain individuals to view my work., I felt requesting survey participation would bring more benefits than harm to *Book of Worlds*. Consequently, feedback from viewers during Alphafest may have been positively biased as many participants knew of me and my work prior to viewing the *Book of Worlds* chapter in progress.

7.1 Project Limitations

I conducted research on mental illnesses before developing each world. However, my sources were mainly from the United States. It is of note that American healthcare professionals mainly use the DSM-V while other continents rely on the ICD for mental illness diagnostic criteria. Throughout history, perceptions and definitions of mental illness have changed and continue to evolve. *Book of Worlds* was largely inspired by modern research conducted in the United States. While I reference modern American study results, it is possible mental health prevalence statistics claimed by organizations do not accurately reflect the population of mental illness sufferers in the United States. I acknowledge this project limitation and suspect the likely disparity arises from mental illness stigma, response bias, lack of research funding and/or resources and human error.

Individuals experience mental illness symptoms in very different ways. *Book of Worlds* artwork is a reflection of my own feelings regarding mental illness as defined by the DSM-V and personal experiences; interactions with individuals suffering from mental illness symptoms. I did not aim to represent the entirety of a specific mental illness in any imagined world. The relativity of mental illness definitions throughout history and world locations limits my perception of mental health, though I attempted to gather credible sources as part of *Book of Worlds'* inspiration.

8. Conclusion

In the end, I did not complete *Book of Worlds* in accordance with my original vision. I originally envisioned eight worlds but instead finished with three highly detailed fictional landscapes inspired by eating disorders, bipolar spectrum disorders, and trauma-related disorders. While the quantity of worlds shifted, I was able to explore my feelings regarding mental illness more thoroughly and spend longer brainstorming concepts for each world. As a result, I conceptualized stronger worlds composed of more engaging characters and more imaginative environments.

Working on a solo MQP meant less students to assist with *Book of Worlds* production. I was solely responsible for all project tasks including drawing/painting, documentation, writing, and page layout design. As such, I learned a considerable amount of information on topics spanning Photoshop digital edits, graphic design, concept art work flows, printing processes, and paper stretching techniques. I also gained experience creating a theme-driven body of work, a valuable skill if I were to participate in future gallery exhibitions. I could have worked with other artists to include more artwork in *Book of Worlds*, but I wanted to conceptualize worlds according to my own artistic vision. Working alone, I executed *Book of Worlds* to my own standards. The quality of art and text was limited only by my abilities and work ethic.

I would say I achieved my goal of creating imaginative worlds and high quality pieces of art which captivate viewers. I may not have created the volume of final paintings originally envisioned, but through *Book of Worlds* development, I better understand my personal workflow and therefore have more confidence as an artist. It is of note that I may be pursuing gallery representation with *Book of Worlds* artwork. MQP advisers Professor Gonzalez and Gutierrez encouraged such an endeavor which suggests my artwork and artistic process have now reached a professional level.

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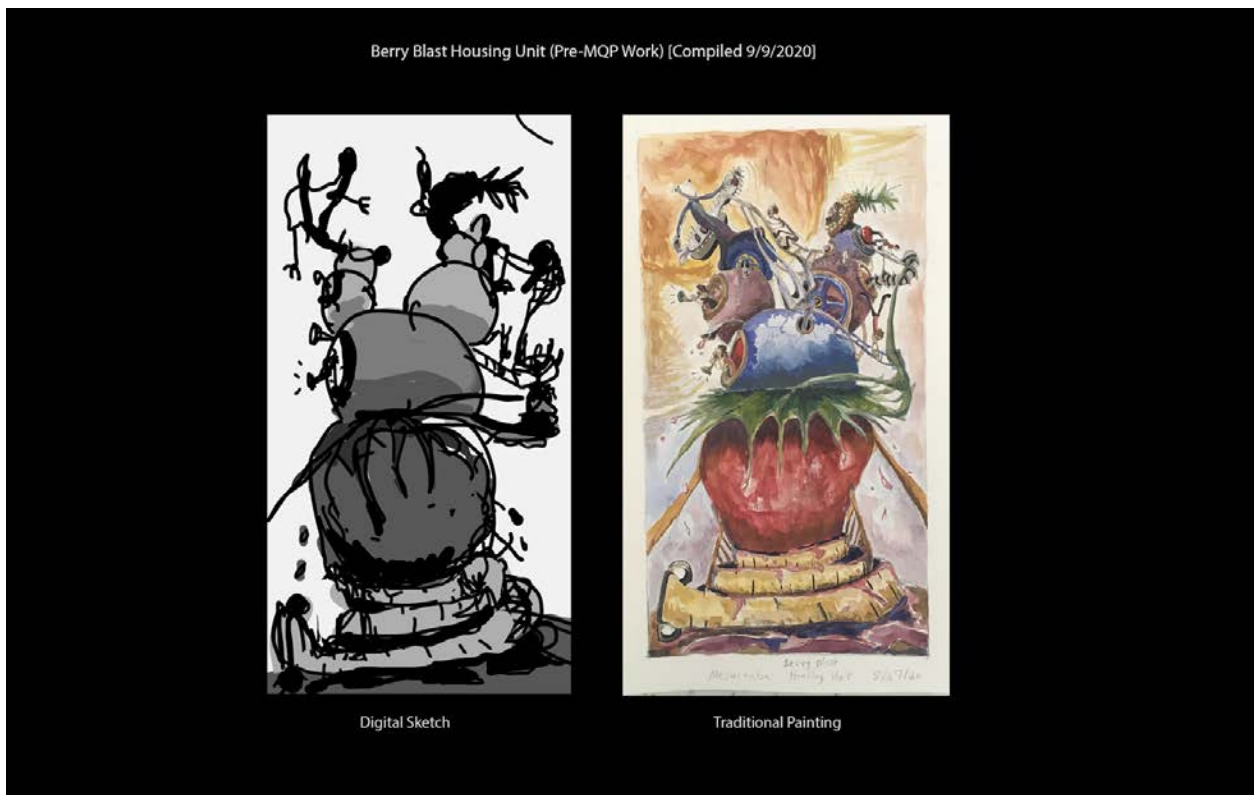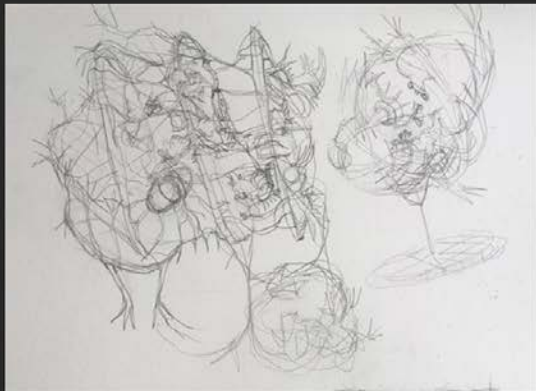# 9.0 Appendices

Appendix A: Select Reference Images (Lugelle)

Appendix B: Select Additional Concept Work (Lugelle)

Berry Blast Housing Unit (Pre-MQP Work) [Compiled 9/9/2020]

Digital Sketch

Traditional Painting

Chebbie Pens: Additional Exploration (Compiled 9/10/2020)

individual unit

fruit cake?

Chebbie pen

Chow Town Explorations (Compiled 9/9/2020)

Lu Comp Option 1

Lusky Growing Produce Near Banana House

Lu Comp Option 2

Grape Drones Load Delivery Bike at Lu

Chow Town Neighborhood Sketch
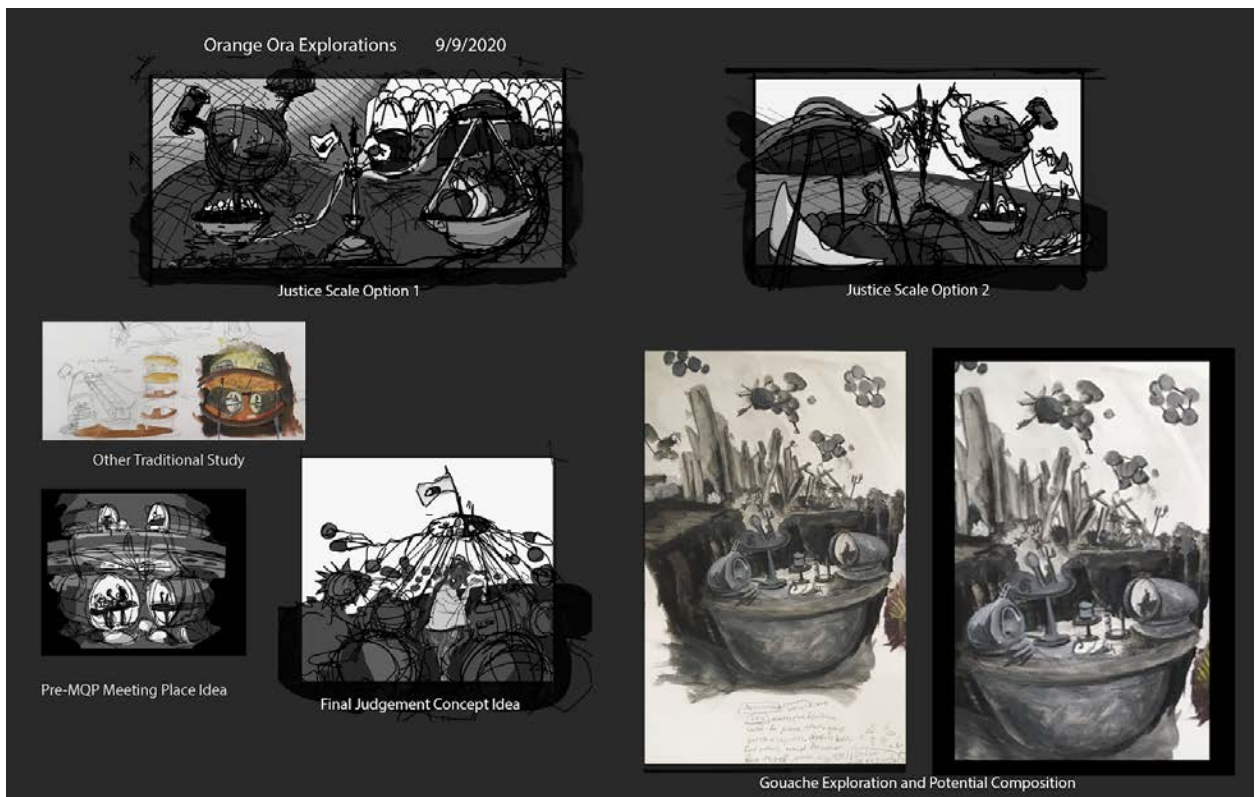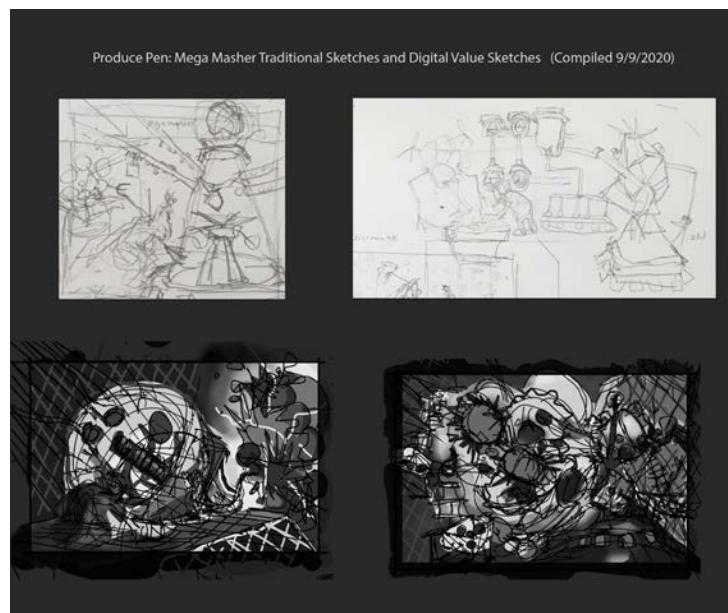
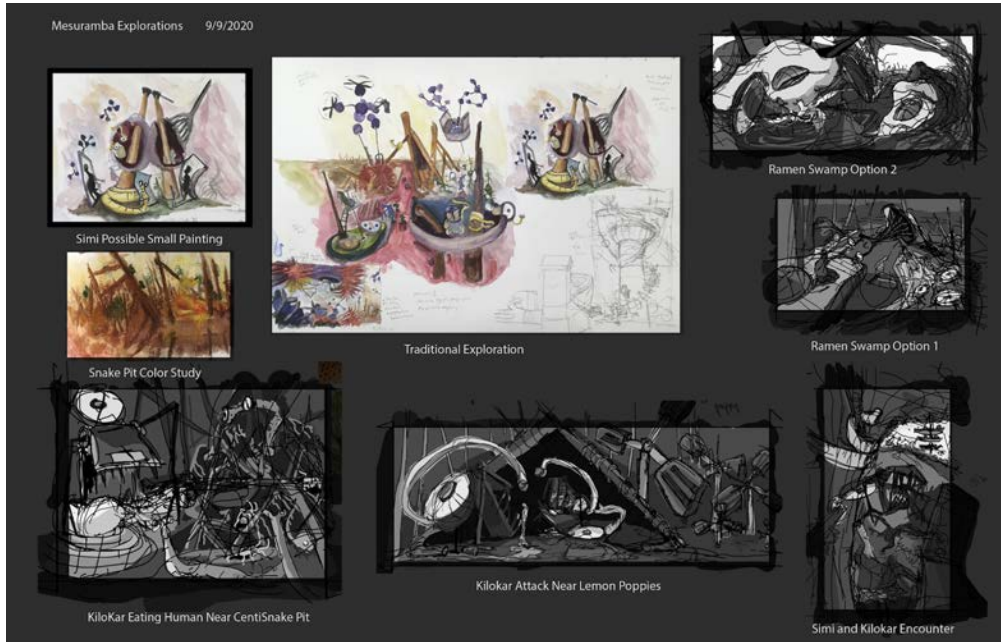Chow Town Value Study

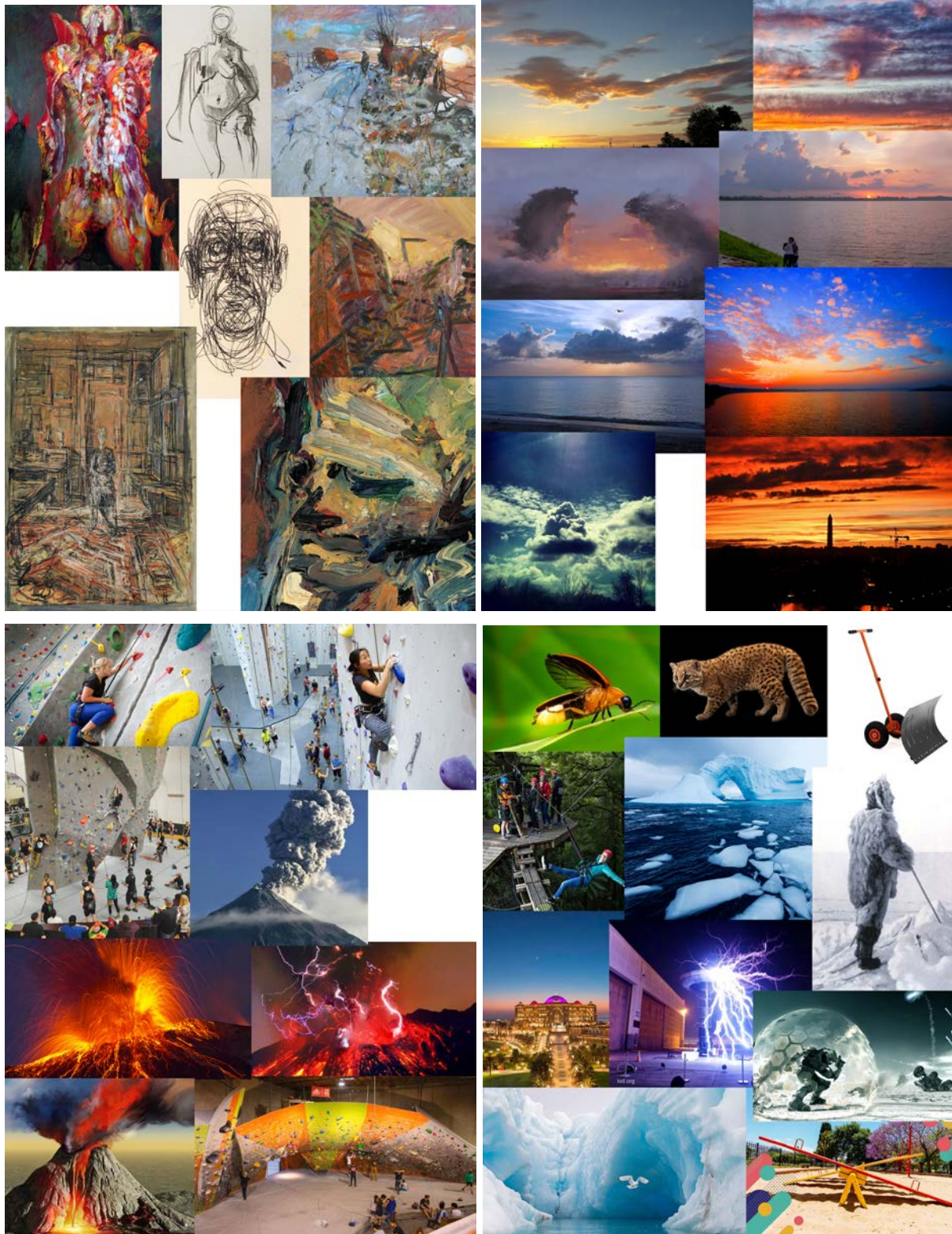Chow Town Neighborhood Color Study

Work Out Area

Misc. Studies for Feeling

Produce Pen Exploration (Compiled 9/9/2020)

Produce Pen (Exterior)

Produce Pen (Request Station)

Lucon Members Steal Food from Silverware Cages
(Interior of Produce Pen)

Fro Intimidates Sollace Before Punishment

Chebbie Chambers for Punishment

Fro and Ramen Watch Punishment in Chebbie Pen
(alternative composition)

Fro and Ramen watch CentiSnake Punishment

Orange Ora Explorations   9/9/2020

Justice Scale Option 1

Justice Scale Option 2

Other Traditional Study

Pre-MQP Meeting Place Idea

Final Judgement Concept Idea

Gouache Exploration and Potential Composition

Mesuramba Explorations   9/9/2020

Simi Possible Small Painting

Snake Pit Color Study

Traditional Exploration

Ramen Swamp Option 2

Ramen Swamp Option 1

KiloKar Eating Human Near CentiSnake Pit

Kilokar Attack Near Lemon Poppies

Simi and Kilokar Encounter

Lucon Sovereignty   (Compiled 9/9/2020)

Pre-MQP Digital Sketch

Color Study

Produce Pen: Mega Masher Traditional Sketches and Digital Value Sketches (Compiled 9/9/2020)

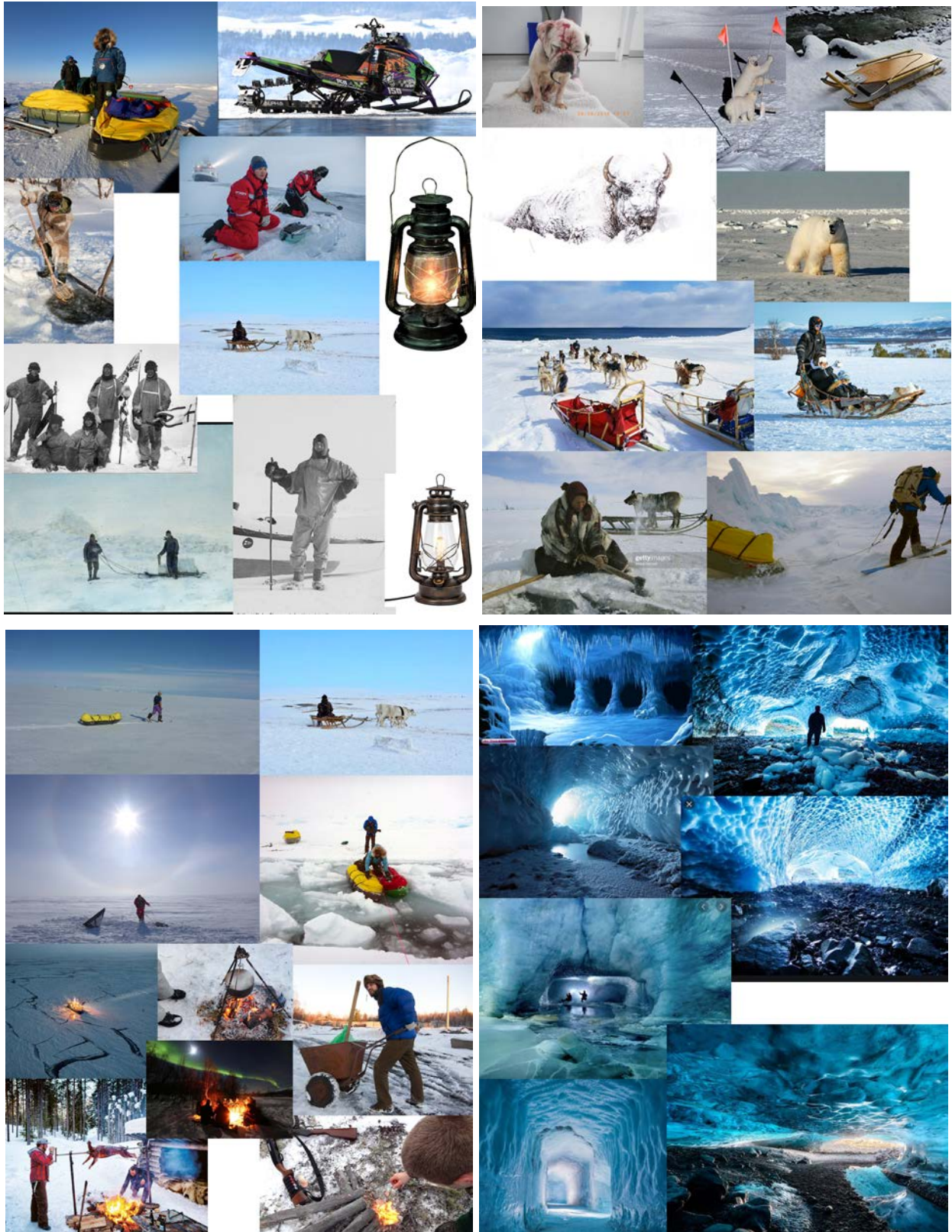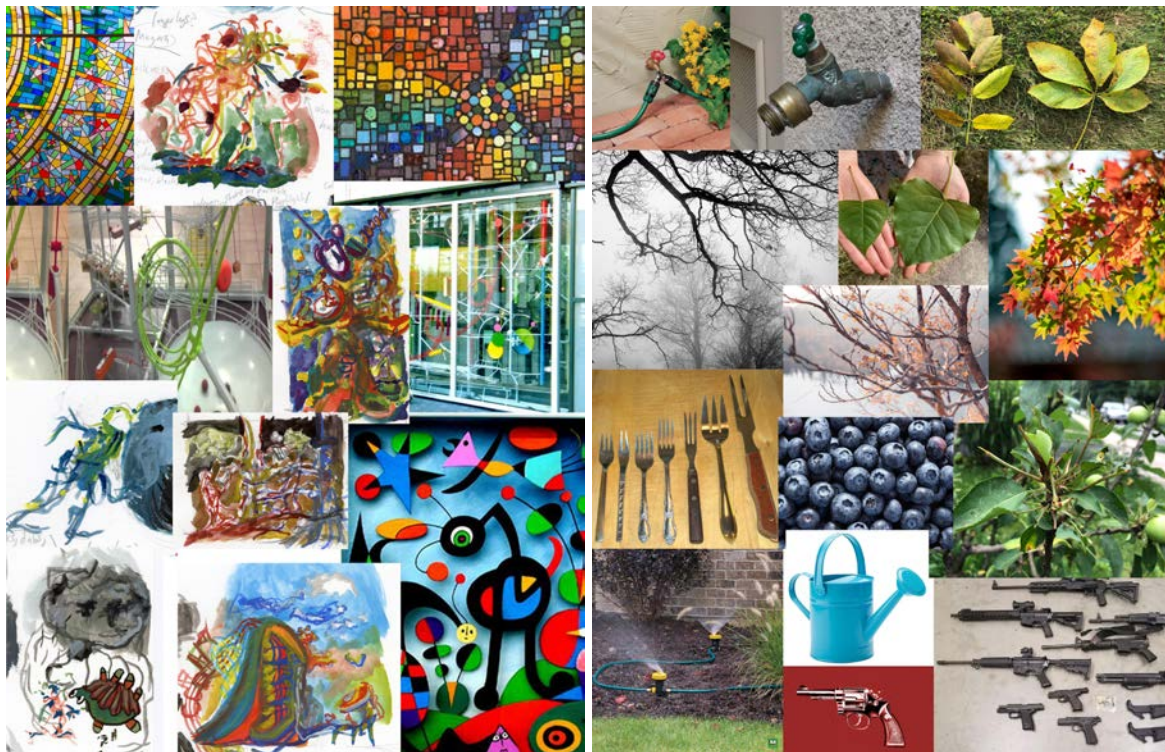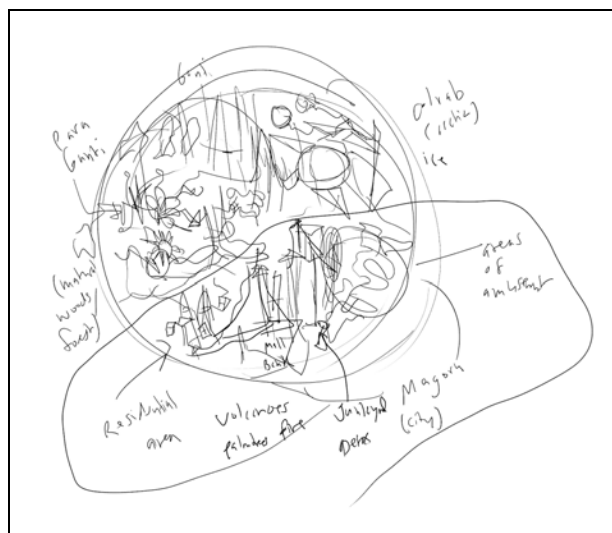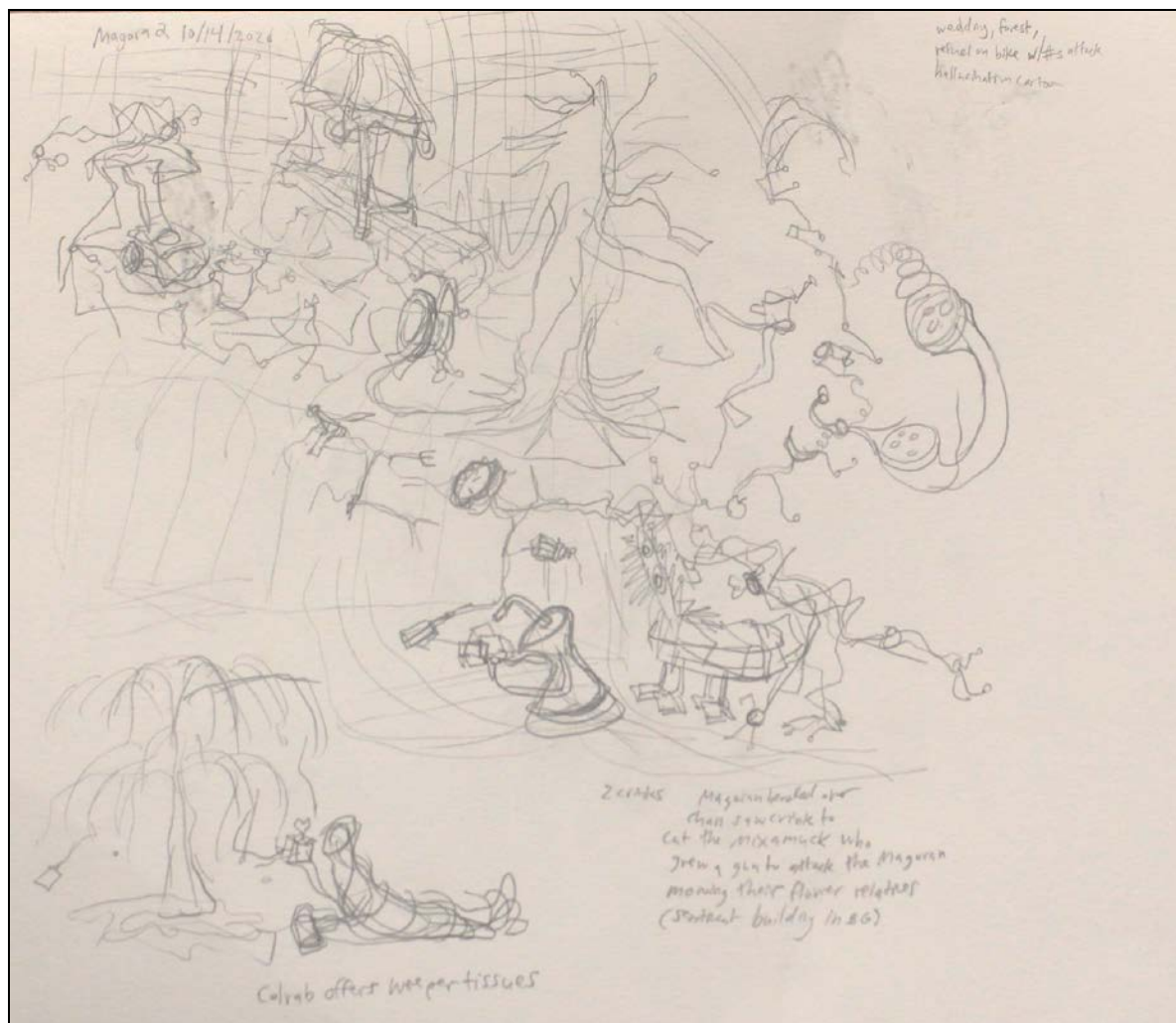Appendix C: Select Reference and Inspiration Images (Polarenti)
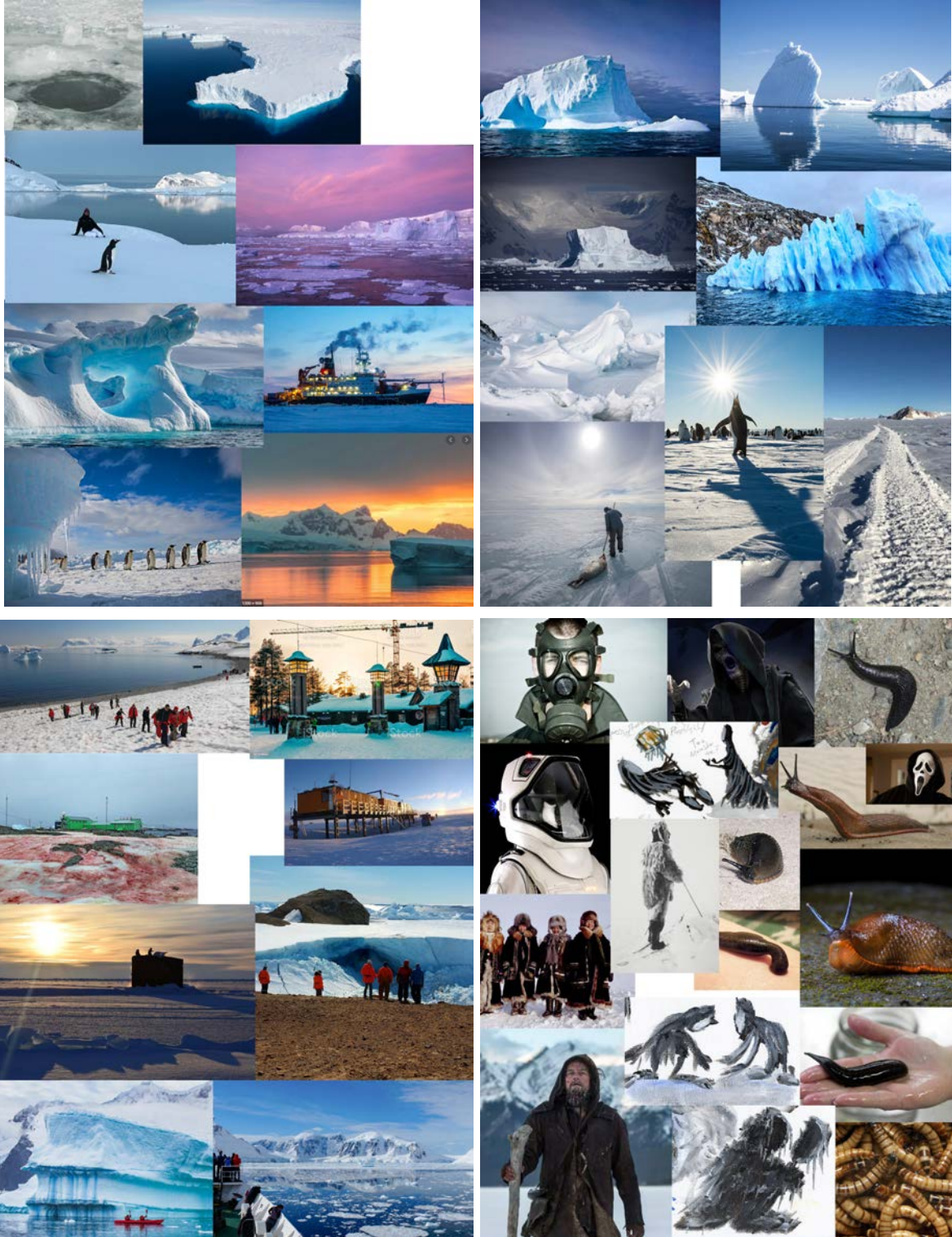
Appendix D: Select Additional Concept Work (Polarenti)

Additional Thumbnails for bipolar/schizoaffective into schizophrenia. Gloria composition still needs work. 3/18/20

Magora 2 10/14/2026

wedding, forest,
retreat on bike w/#s attack
hallucinating cactus

Zerates   Magora bended over
than sewer toek to
eat the mixamuck who
grew gin to attack the Magoran
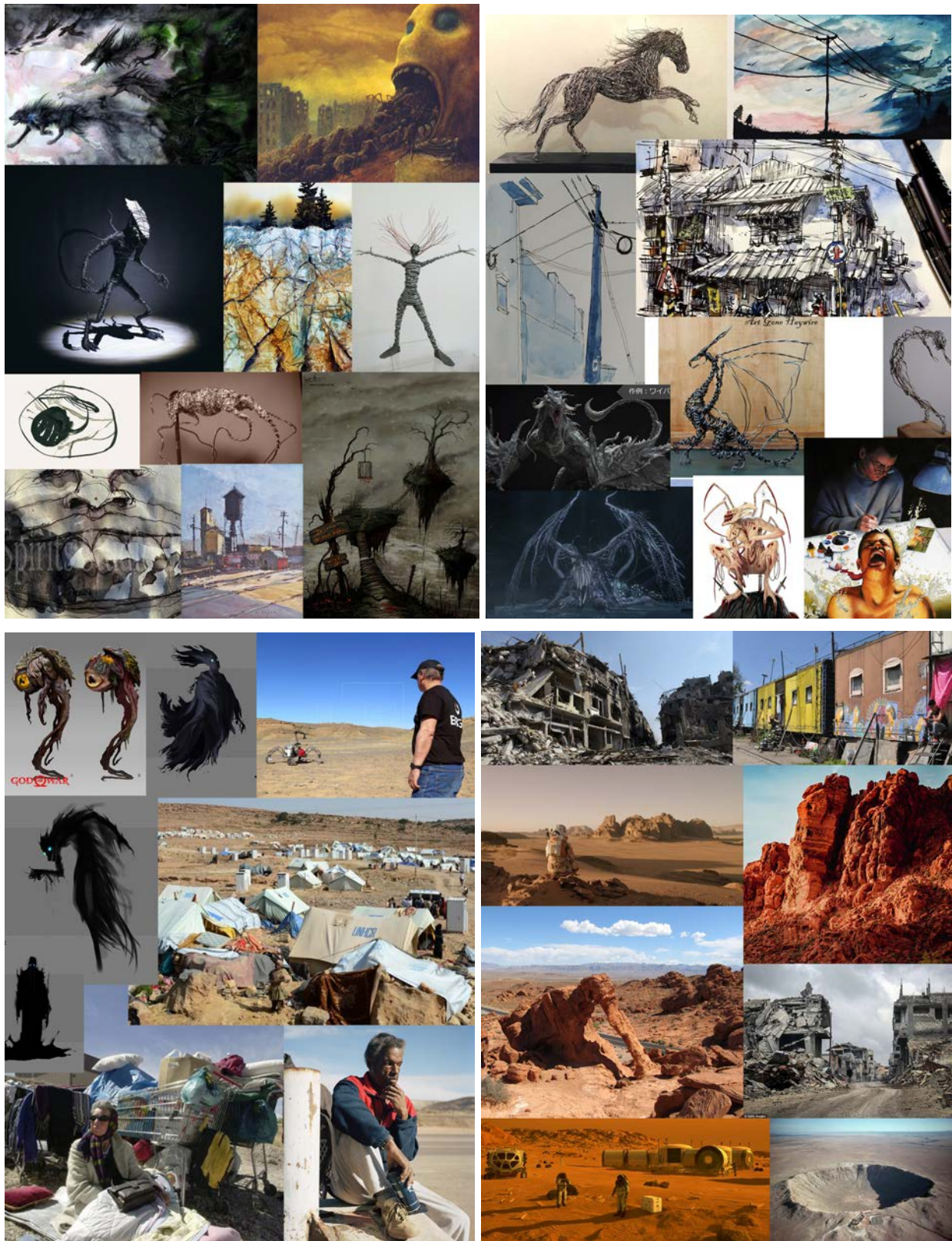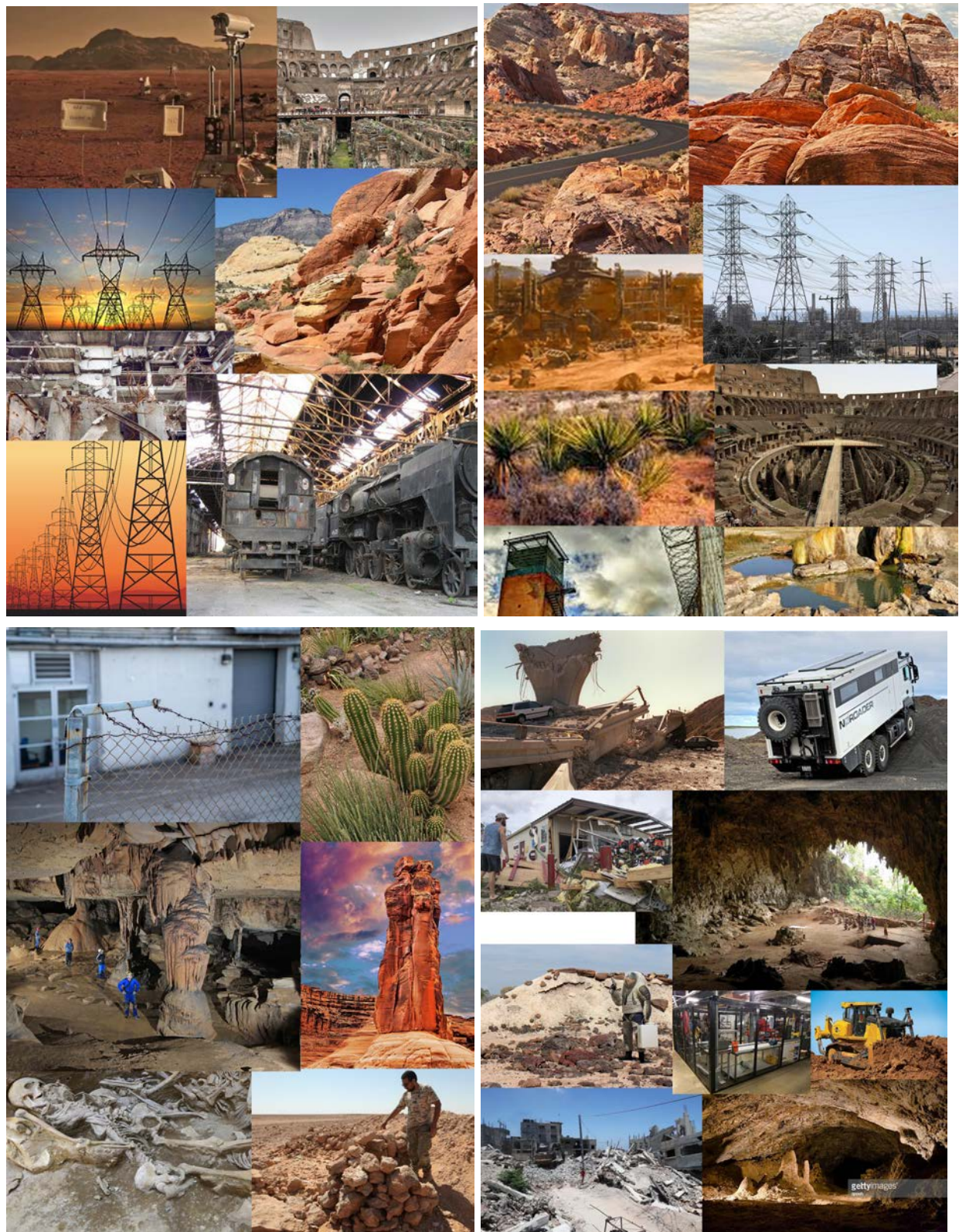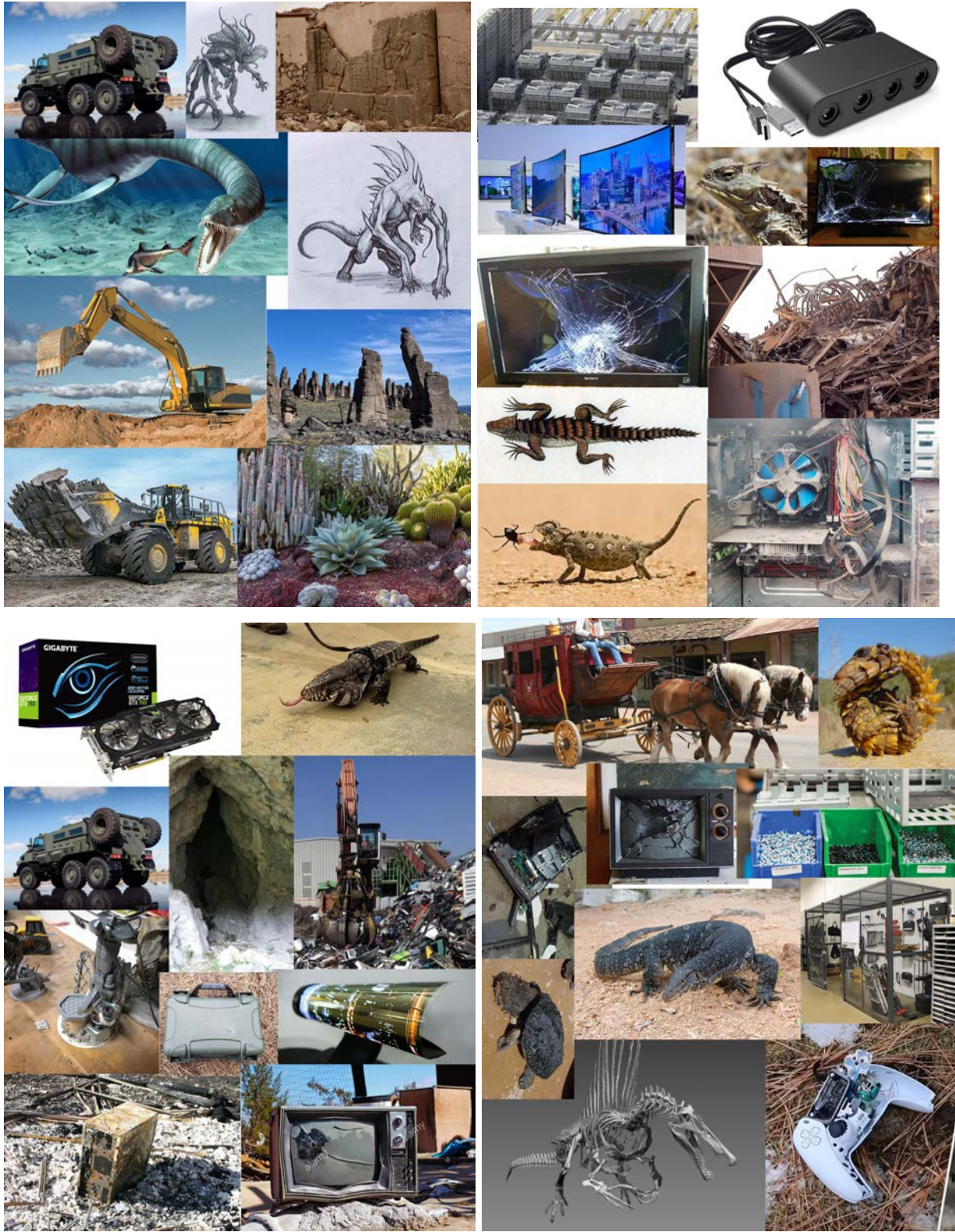money their flower relatives
(Sentient building in BG)

Colrab offers weeper tissues
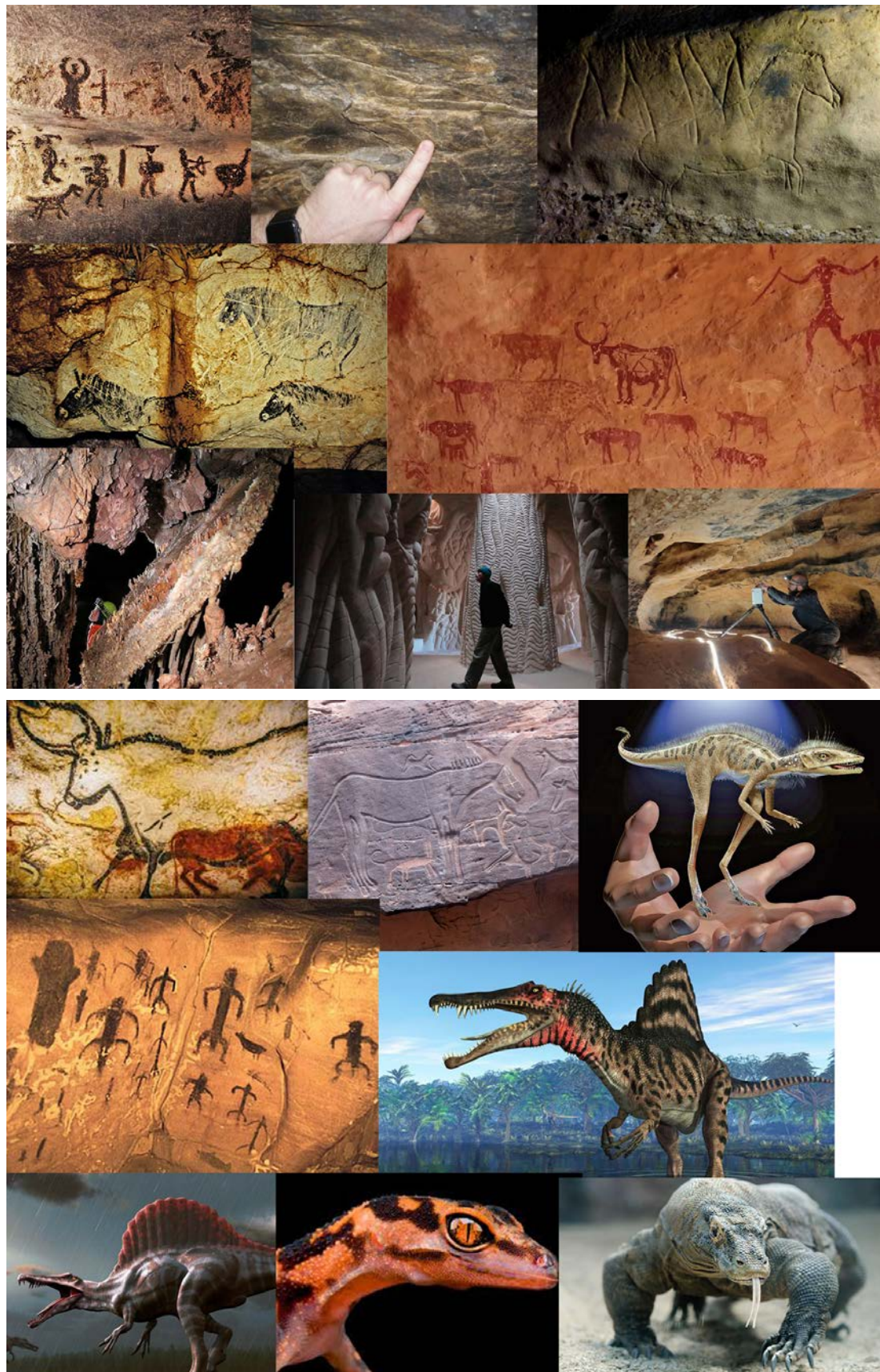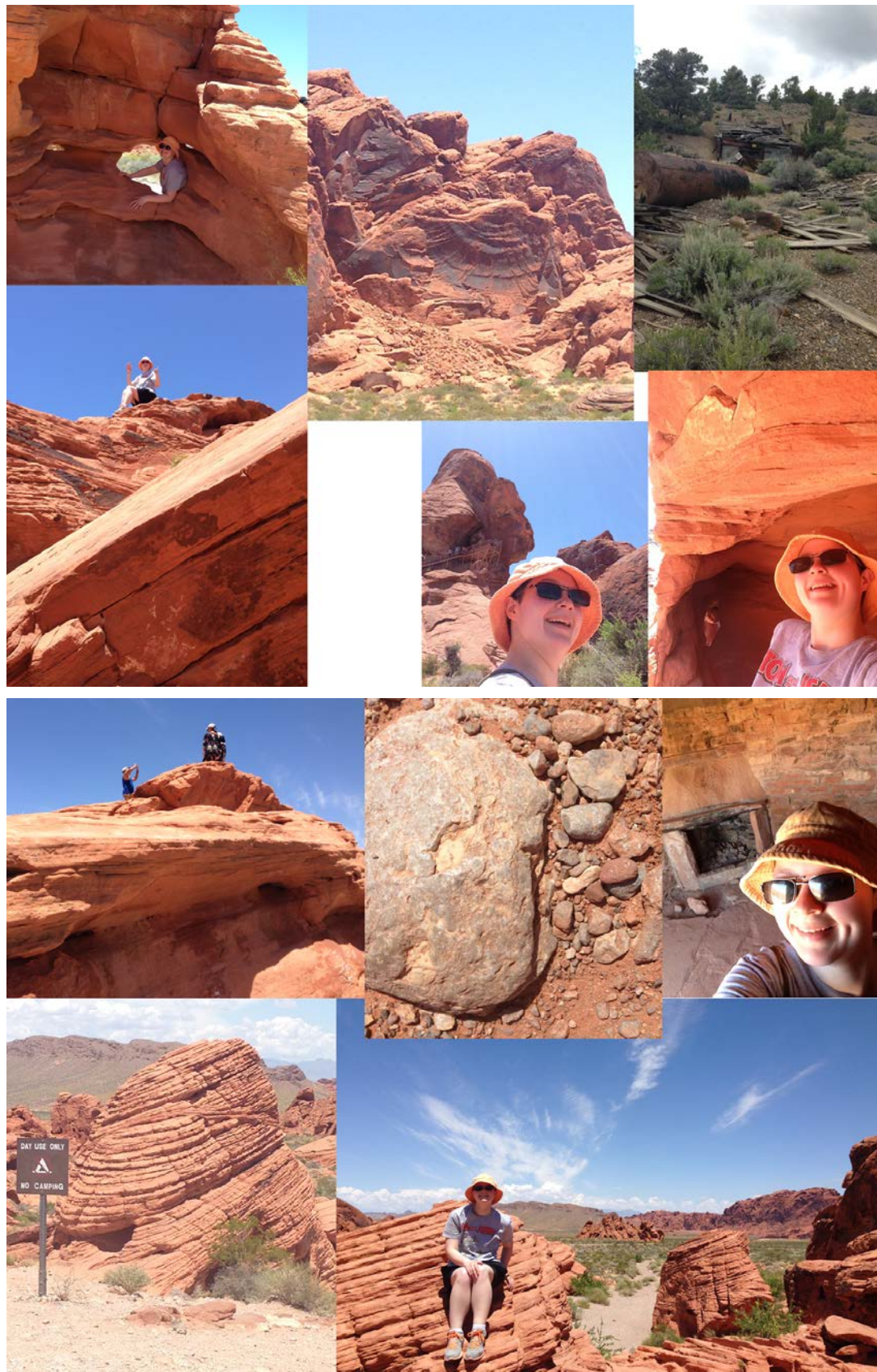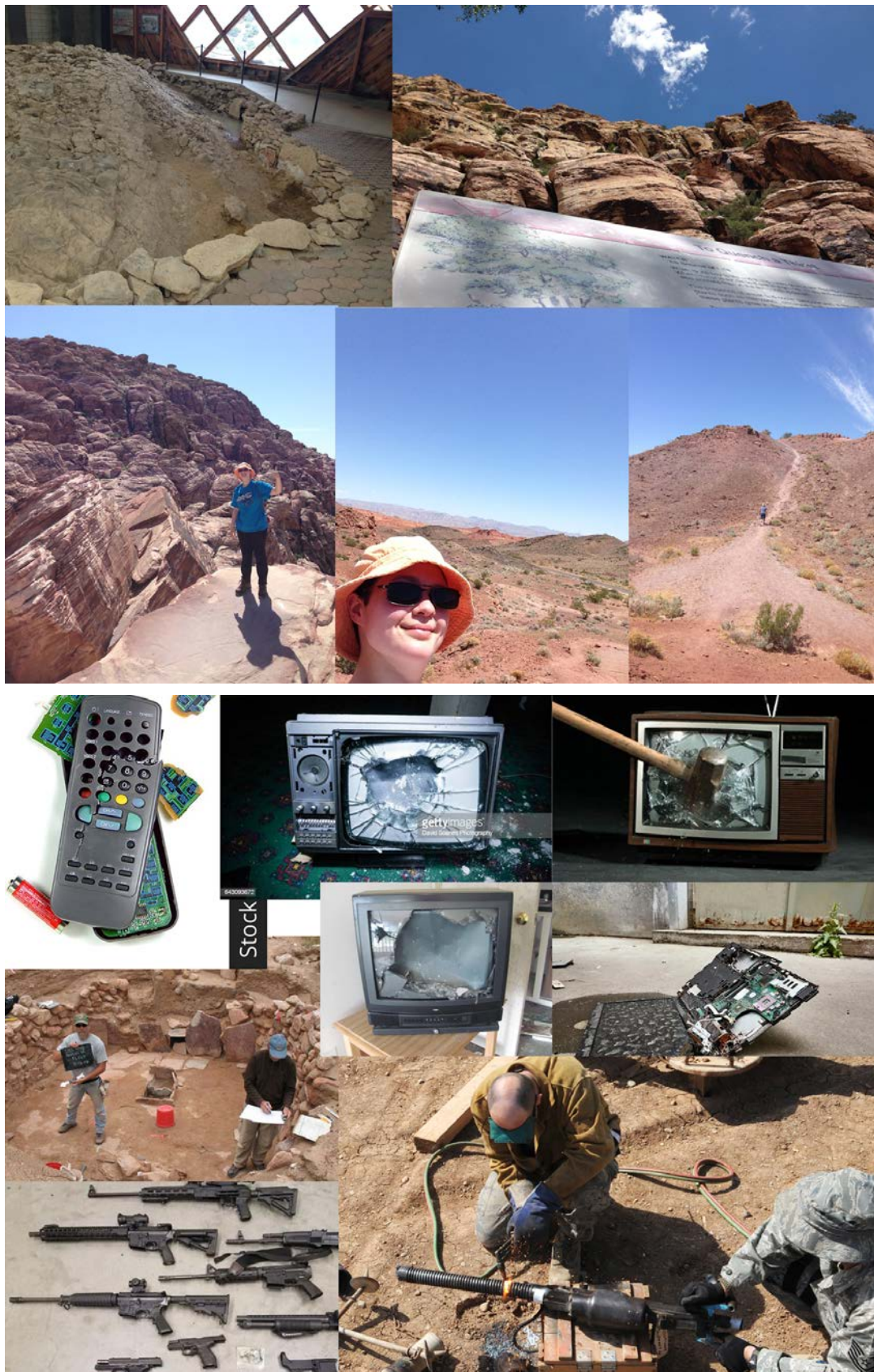
Appendix E: Select Reference and Inspiration Images (Damon)

Appendix F: Select Additional Concept Work (Damon)

Protector Irritated at Scavenger Late Night Human Capture

Human Youth Startles Nightmare Scientist

Protector Encounters Two Human Youth

Protector Irritated at Scavenger Late Night Human Capture (alternate)

Nightmare Teacher Warns about Dangers of Humans (wider stance)

Nightmare Teacher Warns about Dangers of Humans (alternate angle)

Elders Debate Captured Human Youth's Fate

Nightmare Teacher Warns about Dangers of Humans (teaching stance)

Damon Digital Thumbnails Presentation Page 2

Natalie Milgram   1/20/2021

Scavenger Lunch Break

Broken Down Nightmare Transportation

Scavenger Lunch Break (alternate with tech. alert)

Nightmares Gather Water From Rock Spring