

TRAVELING WITHOUT TRAVELING

Rachel Gering

Thesis Project Deliverables

2021-2022

# Artist Statement

Painting and I have been best friends since childhood. It helped me explore my world, my imagination, and was magic on a flat surface. It was also a coping skill that I never knew I needed. When I was fifteen my life changed forever when I received a lasting traumatic brain injury (TBI). Despite my new limitations, painting was a blessing that I didn't have to let go of. It has improved my quality of life, and has turned into my coping mechanism, my way to travel, and my escape.

Traveling can be a great way to relieve life's stresses. However, taking trips can be challenging for many who have a disability. *Traveling Without Traveling* is a glow-in-the-dark landscape series that explores traveling from home as a form of visual coping. My family has meaningful ties to all of the locations, and I hope to see each of them someday. Right now, however, that would be a challenge due to my TBI. I still try to take trips when I can, and when I can't, I paint the places I hope to visit someday. This way I can travel to them through my paintings, and I hope others can too.

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TRAVELING WITHOUT TRAVELING

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Thesis Proposal

December 1, 2021

How can images, like paintings, be used as a visual coping mechanism for those who can't travel? When anyone has chronic pain or a disability that causes pain, visual coping and guided imagery are methods often employed by the medical field in conjunction with medication. These methods create a deep state of relaxation through picturing places you've been to, or places you would like to visit someday. This type of relaxation helps reduce the chemicals our brains produce that cause our nervous systems to react to pain.<sup>1</sup> Traveling with a disability can be extremely challenging, because you never know what days will be good. So, visualization can be an effective way to escape the pain. Six and a half years ago, I received a lasting traumatic brain injury (TBI). Through my recovery, landscape painting became a visual coping mechanism that allowed me to escape the constant pain I am in due to my TBI. Traveling is still a challenge for me. Despite it all, I still try to take trips when I can, and when I can't, I paint the places I hope to visit someday. This way I can travel to them through my paintings.

Traveling can be a great way to relieve life's stresses. However, taking trips can be challenging for many who have a disability. Often vacations can increase symptoms, require extra planning, and need increased time for rest periods. I wonder how images, like paintings, can be used as a visual coping mechanism for those who find it hard to travel. Can artwork be used to create the feeling of traveling without taking a trip for those who find it difficult to see the world? Is that something the artist only feels, or does the audience feel it as well? How can someone capture a place they have never been and give it life?

When Covid started, I decided to use my landscape painting practice as a visual coping mechanism for my TBI. The paintings I created became my own trips around the world from home. I explored places I love to travel to, places I hope to visit someday, and forms of

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<sup>1</sup> Ann-Marie D'arcy-Sharpe, "Visualization & Guided Imagery for Pain Relief (The Complete Guide)." Pathways (blog), May 30, 2020. <https://www.pathways.health/visualization-guided-imagery-for-pain-relief/>.

transportation I would struggle taking now. Like regular travel, I wanted these landscapes to be visible when viewed in the dark, so I began developing techniques using a glow-in-the-dark pigment called strontium aluminate. I researched artists who work in light-based mediums like alumni Laura Hughes and contemporary artist Olafur Eliasson. Exploring light also led me to look at impressionist Claude Monet and post-impressionist Paul Cézanne.

I will be working with acrylic paint and strontium aluminate powder. Strontium aluminate is a non-radioactive, non-toxic, photoluminescent relative of salt. I will be mixing the strontium aluminate powder with my acrylic paint, as well as glazing with it in a clear acrylic medium to build a light-based value ranging from dark to visible light. Strontium aluminate powder, created in 1996, has been used by very few artists.<sup>2</sup> Over the past year, I have been developing techniques to produce paintings that live in the dark. Once the strontium aluminate is applied, the paintings charge with warm white LEDs and Ultraviolet LEDs mounted with a handmade lamp. After three minutes of exposure, the painting is fully charged and will glow when the lights dim.

For my proposed project, I will be creating six 18" x 14" acrylic paintings with strontium aluminate powder, focusing on traveling from home as a form of visual coping. I will be selecting places that have connections to my ancestors and immediate family. Some familial places could be the Alps, Banff national park, France, Rome, etc. Each place is a location that I hope to visit someday, but would be a challenge at the moment due to my TBI. The paintings will be compiled from free source images found on websites such as Unsplash or Pixelby, and will glow in the dark. They will be installed in a windowless gallery with the lights on a timer that turns off every ten minutes.

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<sup>2</sup> Ivita Bite. "Novel Method of Phosphorescent Strontium Aluminate Coating Preparation on Aluminum." *Materials & Design* 160 (December 15, 2018): 794–802. <https://doi.org/10.1016/j.matdes.2018.10.021>.

Can images be used as a way to travel without traveling? Can painting be used as an active way to manage pain? Will the viewer feel relaxed as well? I plan to explore new landscapes that connect to my family as a form of visual coping. Since these places will feel like an escape for me, I plan to give the paintings as much life as possible by using glow-in-the-dark pigment. I hope to visit these places someday, and even if I can't, I will at least enjoy them through my paintings.

## *Traveling Without Traveling*

**Abstract:** Traveling can be a great way to relieve life's stresses. However, taking trips can be challenging for many people who have a disability. Often vacations can increase symptoms, require extra planning, and need increased time for rest periods. This problem made me wonder how images, like paintings, can be used as a visual coping mechanism for those who find it hard to travel. Can artwork be used to create the feeling of traveling without taking a trip for those who find it difficult to see the world? Is that something the artist only feels, or does the audience feel it as well? How can someone capture a place they have never been and give it life?

When Covid started, I decided to use my landscape painting practice as a visual coping mechanism for my traumatic brain injury. The paintings I created became my own trips around the world from home. I explored places I love to travel to, places I hope to visit someday, and forms of transportation I would struggle taking now. Like regular travel, I wanted these landscapes to be visible when viewed in the dark, so I began developing techniques using a glow-in-the-dark pigment called strontium aluminate. I also researched artists who work in light-based mediums like alumni Laura Hughes and contemporary artist Olafur Eliasson. Exploring light also led me to look at impressionist Claude Monet and post-impressionist Paul Cézanne.

*Traveling Without Traveling* is a glow-in-the-dark landscape series that explores traveling from home as a form of visual coping to places I am interested in visiting. My family also has meaningful ties to all of the locations. Since these places feel like an escape for me, I gave the paintings as much life as possible by using glow-in-the-dark pigment. I hope to visit these places someday, and even if I can't, I at least enjoyed them through my paintings.

## *Traveling without Traveling* - Oral Presentation

How can images, like paintings, be used as a visual coping mechanism for traveling for those who deal with pain? We all deal with life's stress and pain in a variety of ways. Some people journal, others vent to a friend, some clear their racing minds through walking, and some people take trips around the world. Likewise, pain can be managed through medication, physical activity, rest, and more. Chronic pain, or a disability that causes pain, can be managed with visual coping and guided imagery in conjunction with medications. This method works by placing "our mind into a state of deep relaxation, reducing the presence of stress hormones, decreasing muscle tension, and ultimately shifting our attention away from pain".<sup>3</sup> Likewise, traveling and vacations similarly reduce stress hormones that can cause pain responses.

Traveling can be a great way to relieve life's stresses. However, taking trips can be challenging for many who have a disability. Often vacations can increase symptoms, require extra planning, and need increased time for rest periods. This problem made me wonder how images, like paintings, can be used as a visual coping mechanism for those who find it hard to travel. Can artwork be used to create the feeling of traveling without taking a trip for those who find it difficult to see the world? Is that something the artist only feels, or does the audience feel it as well? How can someone capture a place they have never been and give it life?

Seven years ago, I received a lasting traumatic brain injury (TBI). Throughout my recovery, I have used visualization techniques to help manage my symptoms. In 2019, I began to capture the images I used to relieve my pain through my art. The first piece I created around this topic was a colored-pencil still-life of symptom management items, such as sunglasses, noise-canceling headphones, and medication. I found this form of display crossed the

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<sup>3</sup> Ann-Marie D'arcy-Sharpe, "Visualization & Guided Imagery for Pain Relief (The Complete Guide)." Pathways (blog), May 30, 2020. <https://www.pathways.health/visualization-guided-imagery-for-pain-relief/>.



all-important line of what personal information to share as an artist. The drawing was challenging for me to talk about, and it even made my symptoms worse. After that, I created a narrative illustration series on the images I used during hypnotism appointments. These drawings felt like a successful way to communicate through art about coping strategies and disabilities. While I was working on these pieces, I was still painting landscapes of places I had been and places I would love to visit someday. These pieces led me to use my landscape painting practice as a visual coping mechanism to escape the constant pain from my TBI.

During the beginning of the covid pandemic, I had become more symptomatic. I found it hard to go to places such as the beach, so I began capturing my 'happy places' in paint. Painting familiar landscapes increased my joy and made me curious about exploring other places around the world through painting. I picked locations that have connections to my ancestry and my immediate family. Some familial sites were Vancouver, Canada; Bandon, Oregon; Nice, France; Amsterdam, Netherlands; and London, England. Each place is a location that I have been to or hope to see someday, and these paintings have allowed me to travel the world without leaving my studio. After completing these works, I decided to create a series of four paintings for my thesis on places I have never been, but would love to see someday, and can't right now due to my TBI.

One of the many things I noticed while creating these landscapes was that the escape ended once the lights turned off. When you visit new places, you get to see landscapes both during the day and at night. This dilemma piqued my interest and led me to explore luminescent materials to allow the painting escape to last in the dark. In my work, I use acrylic paint and strontium aluminate powder to create the illusion of night and day. Strontium aluminate is a non-radioactive, non-toxic, photoluminescent relative of salt. Since it was first created in 1996,

and only a few artists use it, I have had to learn many new techniques on my own.<sup>4</sup> I mix strontium aluminate powder directly into my acrylic paint and into acrylic medium to create glazes.

It has been helpful to me to consult with artists like Laura Hughes, who have previously worked with glow-in-the-dark paint. She is no longer working with glow-in-the-dark pigments, but her new work explores how audiences perceive light, shape, and forms in space. She does this by creating and exploring reflective sculptures and installations. Known for his multimedia installations, Icelandic-Danish artist Olafur Eliasson is another contemporary artist whose work captured my attention. He uses a variety of mediums in complex fashions to create a unique atmosphere, and his work is an excellent example of how light can be used as a medium. I was also drawn to his use of science and mathematics.

I started my college career in biomedical engineering. Working with these new materials allowed me to connect my science and math brain with my art brain. Once the strontium aluminate is applied, the paintings charge with warm white LEDs and ultraviolet LEDs mounted in a lamp attached to a frame. After fifty seconds of exposure, the painting is fully charged and glows when the lights dim. I hand built each of the lighting mechanisms, wired battery packs to the light sources, and created my own coding for an Arduino board to allow for smooth transitions from dark to light.

After looking at contemporary artists, I began exploring the art historical canon. Before light was used as a physical medium, impressionists like Claude Monet and post-impressionists like Paul Cézanne were working on capturing light through paint. They would use complementary color schemes and brush techniques, like stippling, to capture light in nature.

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<sup>4</sup> Ivita Bite. "Novel Method of Phosphorescent Strontium Aluminate Coating Preparation on Aluminum." *Materials & Design* 160 (December 15, 2018): 794–802. <https://doi.org/10.1016/j.matdes.2018.10.021>.

Although these two artists differ in their handling of paint, both do a masterful job of capturing light. I love Monet's visible tiny brushstrokes and his layering of complementary colors to increase eye stimulation. Likewise, I love Cézanne's implementation of high contrast to create strong atmospheres in his artwork. These two artists influence the color schemes and contrasts I try to paint with when I am capturing a landscape.

I also considered the role landscapes played throughout art history. I specifically focused on the art in the sublime of the 18th century and the picturesque period of the 19th century. In 1757 Edmund Burke coined the term sublime landscapes, which represented the terror, drama, and thrill mother nature can produce. This led to pastoral landscapes, which try to capture man-made effects on nature, such as farming. Afterward, in the 19th century, picturesque landscapes came about as defined by George Gilpin. These were meant to capture the world's scenery in its natural state. Although I was not directly considering this historical influence on my work, I can say each of my pieces landed somewhere in the sublime, pastoral, and picturesque definitions.

For this project specifically, I began by creating a list of places that I hope to visit someday that had connections to my immediate family and ancestry. Once I had narrowed it down to four places, I began searching for free source images on websites such as Pixelby and Unsplash. I had considered using family photos, but I was looking for very specific locations and chose to go this route instead. Once I compiled a cluster of photos together of each location, I would adjust color and composition. I limited my changes as I wanted to capture the place and its full reality.

For all of my paintings, I started with an underpainting. This allowed me to grasp the space and gave me a platform to make mistakes. From there, I would mix the glow-in-the-dark

pigments in with my acrylic paint until I got values from dark to bright light. I would then start by building in the sky and the horizon line, and I would work my way to the foreground. I was also carefully considering the color palette and how it related to the impressionist movement. This led me to focus on the use of complementary colors. Once the painting was an accurate depiction of the location, I would then glaze over the top of it with more pigment to heightened areas of light.

The four locations I selected were Hallstatt, Austria, Banff national park, Canada, the Scottish highlands, and the white cliffs of Dover, England. Each of these locations has connections to my family and my ancestry. The glow-in-the-dark images each had their own functioning goals, such as capturing a village at night or creating a starscape. Throughout this process, I discovered that each painting did create the sensation of traveling for me. After receiving some feedback, and through research into what landscapes do to our stress recovery processes, I found that my paintings also influenced my audience. Now, it may not have created a sense of travel for each viewer, but it did positively impact their emotional state.

Visual coping skills have been taught throughout history, but can images be used to travel without traveling? Will the viewer be able to feel relaxed as well? From my project, I have concluded that landscapes can function as a way to travel from home. As I continue in this endeavor, I hope to capture more of the places I hope to visit someday, as well as memories of other places people have been. I still hope to see these places someday, and even if I can't, I at least enjoyed them through my paintings.

## Bibliography

“5 Famous Artists Who Used Art as Therapy.” Accessed September 28, 2021.

<https://www.masterpeacebox.com/post/5-famous-artists-who-used-art-as-therapy>.

dealt with physical, emotional, and mental pain. The artists are; Van Gogh, Edvard Munch, Frida Kahlo, Francis Bacon, and Louise Bourgeois.

This article details several artists who used their artwork as self therapy. These artists

Bite, Ivita, Guna Krieke, Aleksejs Zolotarjovs, Katrina Laganovska, Virginija Liepina, Krisjanis Smits, Krisjanis Auzins, Larisa Grigorjeva, Donats Millers, and Linards Skuja. “Novel Method of Phosphorescent Strontium Aluminate Coating Preparation on Aluminum.” *Materials & Design* 160 (December 15, 2018): 794–802.

<https://doi.org/10.1016/j.matdes.2018.10.021>.

This article is about the history and chemical composition of strontium aluminate. Strontium aluminate was created in 1996, and has changed slightly over the years. This article also talks in detail about its natural components, and why the compound is non-toxic.

Brown, Daniel K., Jo L. Barton, and Valerie F. Gladwell. “Viewing Nature Scenes Positively Affects Recovery of Autonomic Function Following Acute-Mental Stress.”

*Environmental Science & Technology* 47, no. 11 (June 4, 2013): 5562–69.

<https://doi.org/10.1021/es305019p>.

This article discusses the visual effects images of nature have on our stress recovery systems. The study discovered that images of nature increase our recovery time by fifteen percent or more.

D’arcy-Sharpe, Ann-Marie. “Visualization & Guided Imagery for Pain Relief (The Complete Guide).” *Pathways* (blog), May 30, 2020.

<https://www.pathways.health/visualization-guided-imagery-for-pain-relief/>.

This is a blog article on visualization techniques, how they work, why they are used, and personal success stories. This article is very interesting to me, as I have learned and done some of these strategies for my traumatic brain injury. I really loved learning the science behind it.

Dockrill, Peter. "Just Looking at Photos of Nature Could Be Enough to Lower Your Work Stress Levels." ScienceAlert. Accessed May 5, 2022.

<https://www.sciencealert.com/just-looking-at-photos-of-nature-could-be-enough-to-lower-your-work-stress-levels>.

This is another article discussing studies that show the positive effects of nature images, and how they should be included in work places.

Art 'N Glow. "Glow FAQ - Tips and Tricks for Using Glow Paint and Powder." Accessed October 30, 2021. <https://www.artnglow.com/pages/faq>.

This is the fact sheet from the store where I buy my glow-in-the-dark pigment from. It has lots of valuable information on it about safety, clean up, charging, light, and archivability. After ten years it can lose 5-10% of its glow power.

Gogh, Vincent Van, and Charles, Victoria. Vincent Van Gogh. New York, [New York]: Parkstone International, 2014.

Vincent Van Gogh is another artist I am interested in in terms of how he used art as a therapy outlet for himself. This book covers his turmoil, his art, and the myths surrounding him. In terms of techniques I love being able to see the brush strokes in his pieces.

Gussak, David, and Rosal, Marcia L. The Wiley Blackwell Handbook of Art Therapy. Chichester, UK ; Malden, MA: John Wiley & Sons, 2016.

This book explores the vast history of art therapy, its usage around the world, its evaluation, and current problems. My main focus was on the history of art therapy and why it is used. Art therapy became a formal term in the 1940s, however, it has been

used a lot longer than that by many different cultures. The art is used in a mental health professional setting to aid in the well being of others.

Health, Center for Devices and Radiological. "Ultraviolet (UV) Radiation." *FDA*, August 19, 2020.

<https://www.fda.gov/radiation-emitting-products/tanning/ultraviolet-uv-radiation>.

This article is the FDA safety guidelines for the use of UV lights. It talks about side effects of exposure, the health benefits, and details which type of UV light is the safest one to use. I found this article very helpful, and I will put a disclaimer with the lamp that I built to inform users that there is mild exposure.

ideas.ted.com. "The 7 Types of Rest That Every Person Needs," January 6, 2021.

<https://ideas.ted.com/the-7-types-of-rest-that-every-person-needs/>.

This was a lecture by Dr. Sandra Dalton-Smith. It covers the different forms of rest besides just physical rest. I focused on her conversation about how to apply creative rest to your life in the form of landscape images.

Jensen, Mark P. *Hypnosis for Chronic Pain Management. Treatments That Work.* Oxford: Oxford University Press, USA, 2011.

This book is a fantastic resource to help better understand how pain works, and how hypnosis can be an effective treatment for chronic pain. Like art therapy the practice of hypnosis has been around for thousands of years, but was recognized in the 1700s. Hypnosis is loosely defined as positive suggestions guided by one person to another. Imagery suggestions help promote positive behavioral changes and pain management.

Kalitina, Nina. *Claude Monet. Great Masters.* New York, New York]: Parkstone International, 2011.

I have always been in love with Monet's work. I love how impressionists use color and painting techniques to capture light. This book talks about Monet's life and struggles as an impressionist, and chronologically showcases his work.

Kear, Jon. Paul Cézanne. Critical Lives (London, England). London, England: Reaktion Books, 2016.

There is a lot of myth around Cézanne, his practice, and the birth of modernism. This book details his life, and how his art path changed over time. I have always been drawn to his rendering of landscapes with an impressionistic and romantic flare. This book was very interesting as it gave more about his life story, and what critics were saying about his work in the late 1800s.

Laura Hughes. "Laura Hughes." Accessed September 28, 2021.

<http://www.laurahughesstudio.com>.

Laura is a Portland based artist and educator who works with light manipulation to change the perception of space. She is an alumni of PNCA who did her MFA project in glow in the dark pigment. I have gotten to interview her, and I consider her one of my influences.

Lucas, Jim. "What Is Ultraviolet Light?" livescience.com, September 15, 2017.

<https://www.livescience.com/50326-what-is-ultraviolet-light.html>.

This website discusses what UV light is, where it is found, its effects, the different types, and its wavelengths. I found that the safest wavelengths are between 315 nm-400 nm. The lights I use are 385 nm, so I am in the safest range I can be in.

UV Daily. "Reflected UV," August 9, 2016. <https://www.uvdaily.com.au/blog/reflected-uv/>.

This website is a blog about UV light and how much of it can be reflected. I found out that paint reflects UV light by 22%. Even though my light source is not shining at the viewer they are still getting a small amount of it reflected at them. This is why I will need to put a warning with my lamp.



# Documentation





Rachel Gering  
Fjord, 2021  
14" x 10"  
Acrylic, ink, aluminum aluminate  
powder, canvas



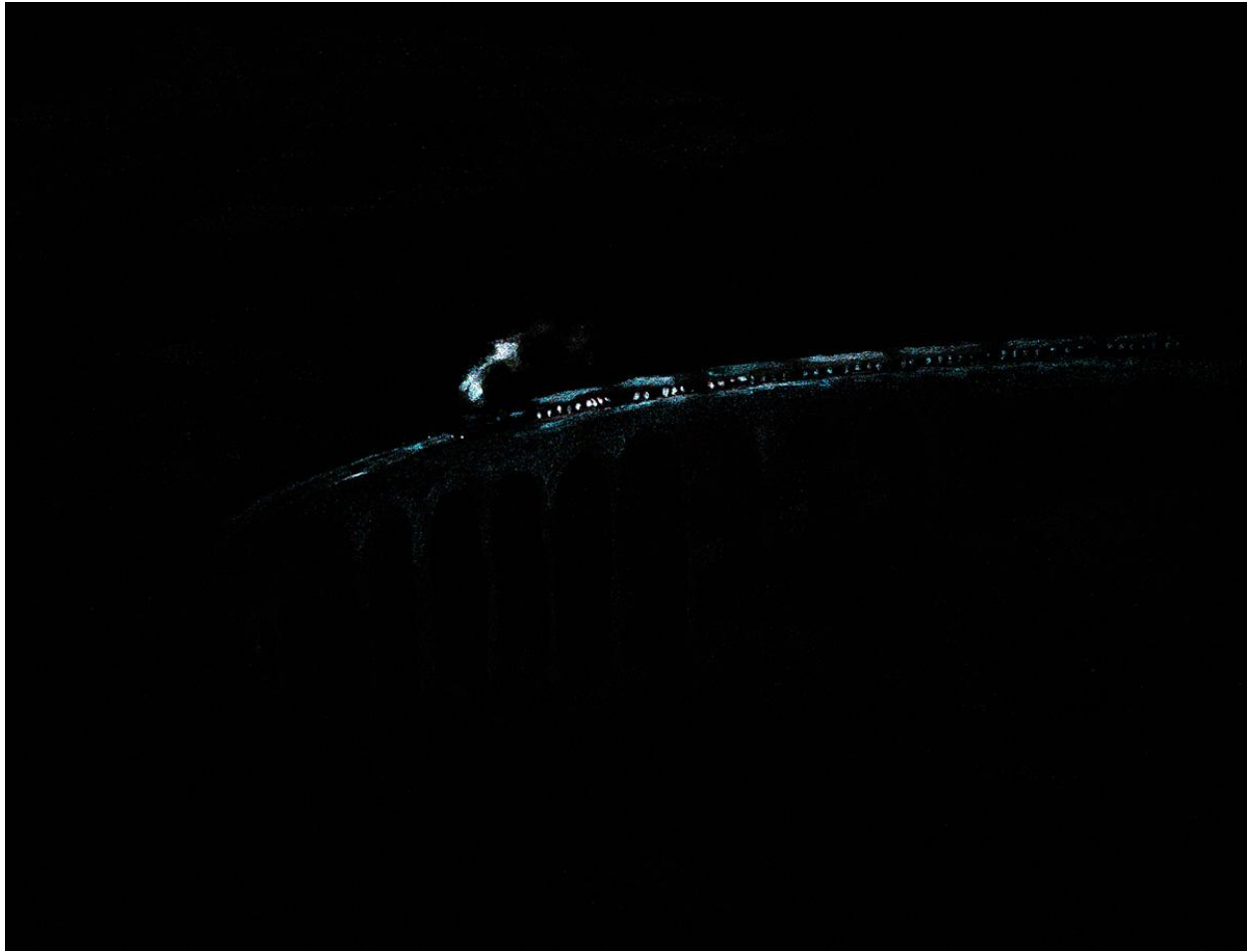


Rachel Gering  
Bull Mountain Park, Colorado, 2012  
14" x 18"  
Acrylic paint, aluminum aluminum  
powder, canvas





Rachel Gering  
Southern Highlands Train, 2022  
147 x 147  
Acrylic paint, oilstick, charcoal  
on linen canvas



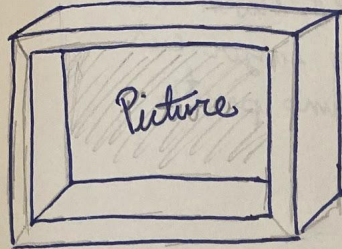


Rachel Goring  
White Cliffs of Dover, England, 2022  
14" x 18"  
Acrylic paint, strontium aluminate  
powder, canvas





# Lighting Conundrum



Shadow Box



Lamp

## Pros

- Hides chords
- Hides arduino

## Cons

- Uneven light
- Too much light to correct
- Bulky frame

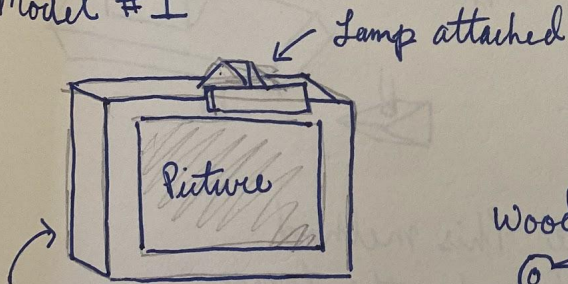
## Pros

- even light
- Full coverage
- Could include a frame
- Chords can be white

## Cons

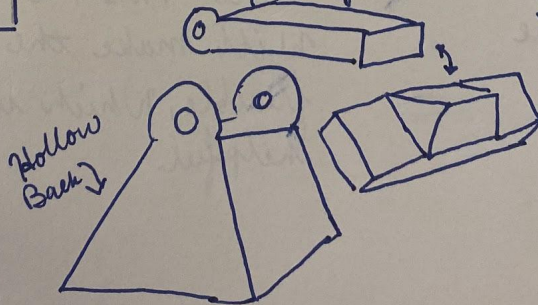
- Doesn't hid chords
- Not easy to manufacture
- Unsure how to get rounded light
- Can't hid arduino

## Model #1



Hollowed Back  
not inset pic

## Wood lamp

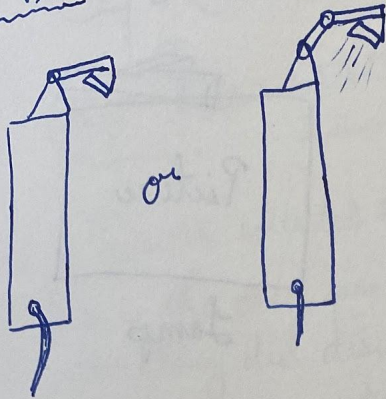


## Materials:

- Wood (Balsa?)
- Screws
- Wood glue

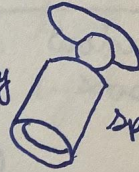


Side View

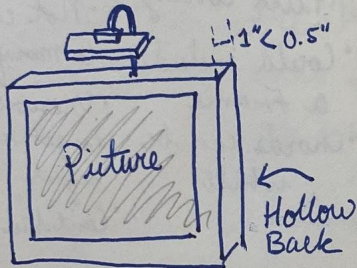


\*Note: May need to learn how to laser cut lamp parts.

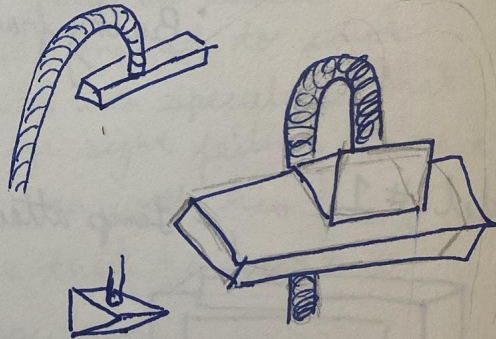
could be another way to light? Mom found tiny spot lights.



Model # 2



Lamp



Materials

- Electrical Conduit
- Copper wire
- Wood
- Wood glue
- Glue

Note: This method will make the lamp flexible, which would be helpful.