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Writing with Light: Analyzing the Technical and Creative Significance of Light in Photography

Sarah Dean

SENIOR THESIS APPROVAL

This Honors thesis entitled

"Writing with Light: Analyzing the Technical and Creative Significance of Light in Photography"

written by

Sarah Dean

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meets the criteria for acceptance
and has been approved by the undersigned readers.

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Carey Roberson, thesis director

_____

Donnie Copeland, second reader

_____

Jackson Carter, third reader

_____

Dr. Barbara Pemberton, Honors Program director

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Contents

Introduction

The Greek words *photos*, which means "light," and *graphos*, which means "write," combine to form the word "photography" (Norton 21). Photography is bound to light through its use to capture imagery, and the artistic element it lends in the manipulation of it to provide the setting of mood, visual tones, emotion, and a visual narrative. Light allows us to do so much in photography. It is what makes it possible to take photos, and it is the tool that we use in all manner of ways to accomplish our vision in the content we create.

I have always been drawn to the beauty of light. I quickly learned when I took up photography that it's all about light and how to analyze, harness, and manipulate it. More recently, I've been playing more with consciously seeking and using light to achieve specific things in my own work. Before, I just worked with whatever conditions I happened to be in. Now, I go through more of a process to seek out specific lighting conditions or create them. Thinking more about light and understanding it has had a big impact on my work.

In this thesis, I will touch on the importance of light to photography. I will write about how photography uses light, how different kinds of light can change a photo, and analyze some of my own work. Through my photography, you'll see how the use of light creates and can transform a photo.

History

Photography and the idea of cameras were born of the camera obscura, which means “dark room,” according to Newhall. It was made from the idea that light entering an enclosed and darkened room through a small hole in the wall would form an inverted image of what was on the outside. It wasn’t until this concept went from an actual room to being portable, that it became more practical to use, and even then, it was primarily used by artists to trace (Newhall 9). The camera obscura would become the photographic camera through advancements in optics and chemistry (Pritchard 6).

In 1727 Johann Heinrich Schulze, a German natural philosopher, realized that certain salts of silver can be altered when exposed to light. Schulze had been attempting an experiment to produce a luminescent substance, and in doing so he stumbled upon the discovery (Newhall 9-10). Many years later, sometime in the late 1700s, Thomas Wedgewood would be the first to use this knowledge to try to record a camera image. He did so by conducting experiments in which he made paper or leather sensitive to light by coating it in silver nitrate and then he set flat objects onto the surface and exposed it all to light. Wedgewood found that upon exposure to light, the sensitized white paper or white leather would change color from white to almost black. Areas that were covered and not exposed would remain white. The results of his experiments were called “sun prints”. Ultimately, though he tried, he never found a way to desensitize the paper or leather from light. Because of this, Wedgewood’s “sun prints” had to be kept in the dark less they become images of total blackness (Gilbert 2).

In the 1800s two men, Joseph Nicephore Niepce and Jacques Louis Mande Daguerre, made breakthrough discoveries. The two did not know of each other and worked in different parts of France. Both sought to find a process that would allow the making and development of an image. In their experimentation, they prepared plates and placed them into camera obscuras with the goal of creating an immediate image (Gilbert 2). Niepce was the first to successfully fix a camera's image onto something. The only proof of this that still exists was made in 1827. However, according to letters, he succeeded a decade before (Newhall 13).

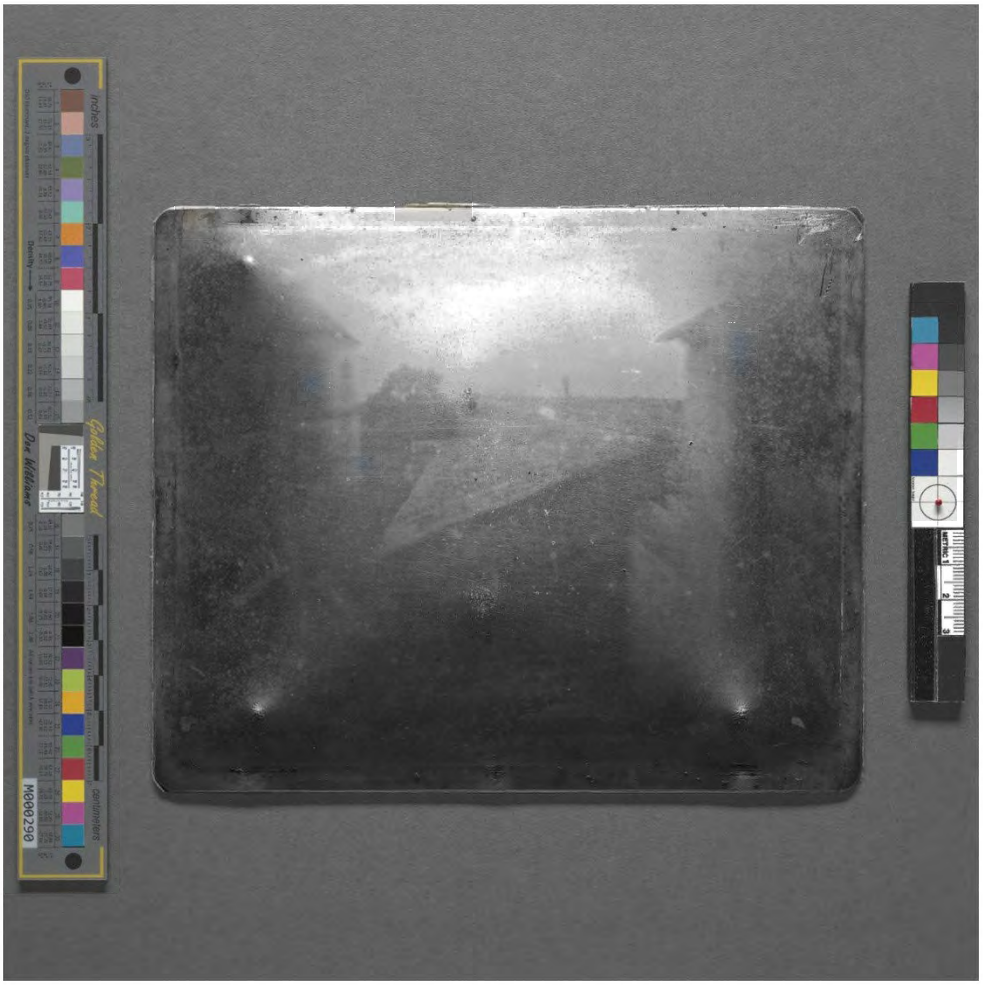


Figure 1: Joseph Niepce, *untitled,* 1827

In the year 1826 Daguerre first learned of Niepce's similar experiments. The two then corresponded about their shared interest for some years until Niepce's death in 1833. A couple years later in 1835, Daguerre inadvertently found that the vapor of mercury could make an image appear on an exposed plate. Through this discovery, Daguerre came up with his own process to take and record images (Gilbert 2). The daguerreotype process was officially announced in 1839 (Pritchard 6).

With Daguerre's new process also came a new rendition of the camera obscura. An extended relative of Daguerre's, named Alphonse Giroux, was a cabinetmaker. He took the camera obscura and modified it to make his own updated version. His design was a wooden box with an open side that could slide into the opening on another larger box, which had a lens fitted to it. To focus, the boxes would be adjusted either closer or further from each other (Gilbert 7).

While Daguerre came up with his daguerreotype process, a man named William Henry Fox Talbot was doing his own experimentations with the creation of pictures. Talbot's first experiments, which began in 1833, were done by bathing writing paper in sodium chloride, letting it dry, and then bathing it in silver nitrate. This created silver chloride, a light sensitive salt. He then would put items on top of the paper and secure them with a glass plate before exposing it to sunlight, which would darken the exposed areas. In his experimentation he found that he could fix the prints by washing them in a solution of potassium iodide. After he succeeded in that, he placed salted paper into small camera obscuras. The size of the obscuras was an intentional choice. With a smaller

camera obscura, the light entering the box would be stronger than it would be in a larger one. By doing this he was able to create small negatives using exposure times as long as half an hour. Talbot then developed a process to turn negatives into positives, which resulted in photos called calotypes. He was able to create small very detailed photographs through this (Gilbert 25-26).

Figure 2: Francis Grice, *Unidentified man and woman, seated, facing front, 1855*

Figure 3: Samuel Buckle, *Foliage and Figures,* 1853

Fast forward a little over a hundred years into the late 20th century, when digital photography was born. One of the biggest contributors to digital photography was the development of computers. Russell A. Kirsch was an early contributor to computers and the creator of the square pixel. He also made the first digitized image. It was 1957, and Kirsch had a photo of him and his infant son. He cut out a two-inch square from the photo and he, along with his colleagues, scanned it successfully with a scanner they had built to digitize it.

Figure 4: Russell Kirsch, 1957

Digital cameras work by exposing a sensor to a scene. The light enters the camera through a lens and falls on the sensor. The sensor then takes that light and turns it into electrical charges that it stores. The electronic signals of the sensor are processed and stored as a digital file so it can be seen and reproduced. William S. Boyle and George E. Smith invented the charged couple device, or CCD, which was used as sensors for digital cameras (Rosenblum 666-667).

The first portable, working, prototype digital camera was created in 1975 by Stephen Sasson, who was a Kodak engineer, and colleagues of his. This camera was 8 pounds,

about the size of a toaster, and had an exposure time of 23 seconds to capture a single image. The first digital camera model to become commercially available was the Dycam Model I in 1990. From there, technology advanced to steadily improve digital cameras. Photographers were hesitant to switch over to digital right away. It wasn't until 1999, when the Nikon DI was put out that a new era of photography began. This digital camera had a 2.7-megapixel CCD sensor. As this technology was refined, it eventually caused the use of film to decline (Rosenblum 668).

In 2008 a camera was introduced that once again changed photography. Panasonic created the Lumix DMC-GI. This camera, instead of a reflex mirror and optical viewfinder, had an electronic finder to digitally display whatever the lens is pointed at. This mirrorless camera allowed for smaller, more lightweight bodies. More mirrorless cameras have been released since then, and photographers are steadily making the switch to using them over cameras with the mirror mechanism (Rosenblum 669).

With new advancements in technology cameras have become easily accessible by almost anyone. This art form that lacked popularity due to its complicatedness has now become one of the most popular. Not only have consumer cameras become accessible, but with the creation and development of phone cameras, most people don't need to even buy a camera to take photographs anymore.

Understanding Photography Basics

Photography includes three main elements that are needed to understand the art form. These elements are shutter speed, aperture, and ISO, and can be controlled when a camera is in manual mode. Adjusting these gives photographers the ability to control different aspects of the photos they take, and to get the desired effects in their photos.

The first element is Shutter speed, and it is the rate at which the camera shutter opens and closes. In DSLR and older cameras, the type of shutter used is a mechanical one. A mechanical shutter is a pair of curtains situated in front of the sensor that open and close. The newer technology of mirrorless cameras does not have that shutter mechanism, but rather an electronic sensor that will turn on and off. When the shutter opens, it lets light into the camera. The slower the shutter speed, the more light is let in. This also affects the amount of motion blur seen in the photo. If the subject is moving, that will show in the image shot with a slow shutter speed. If there isn't any motion blur in a photo of a moving subject, then it was taken with a fast shutter speed. Shutter speed is measured in seconds, or fractions of a second (Arena 35).

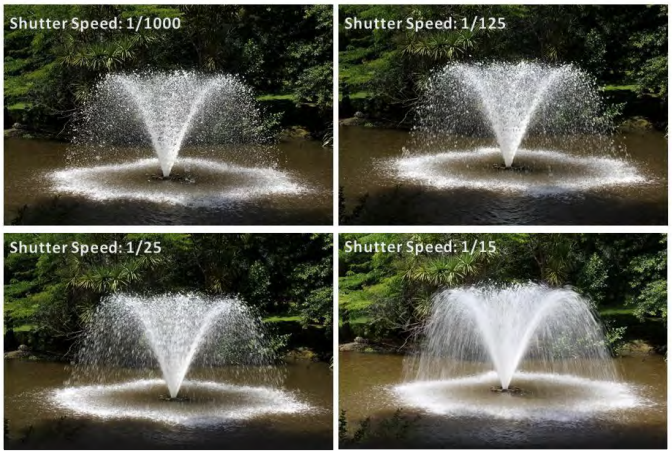
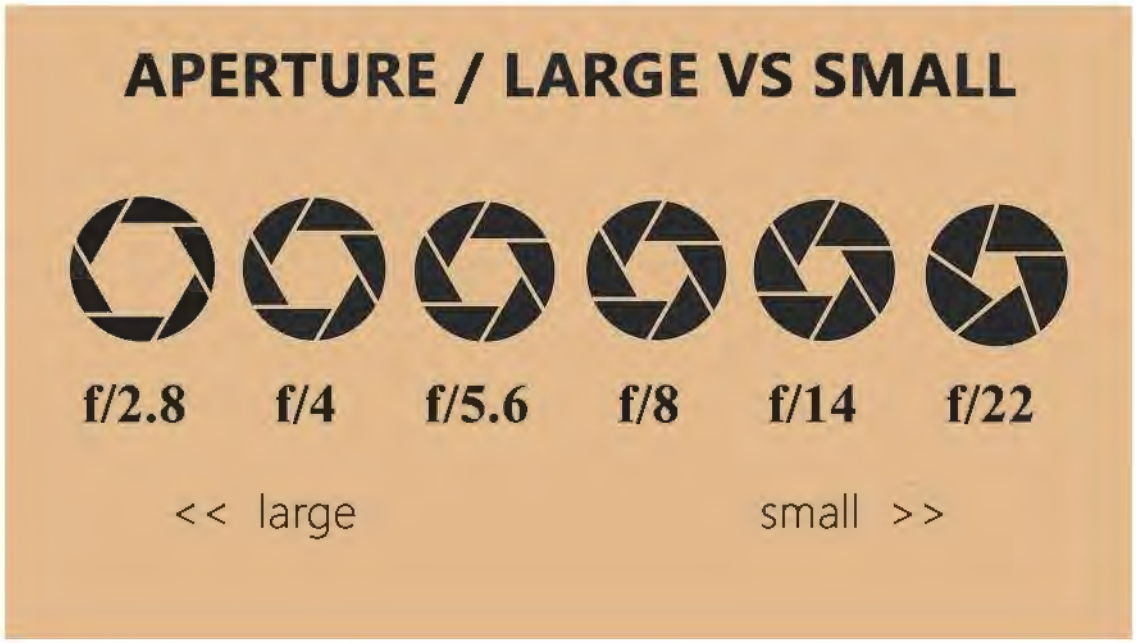
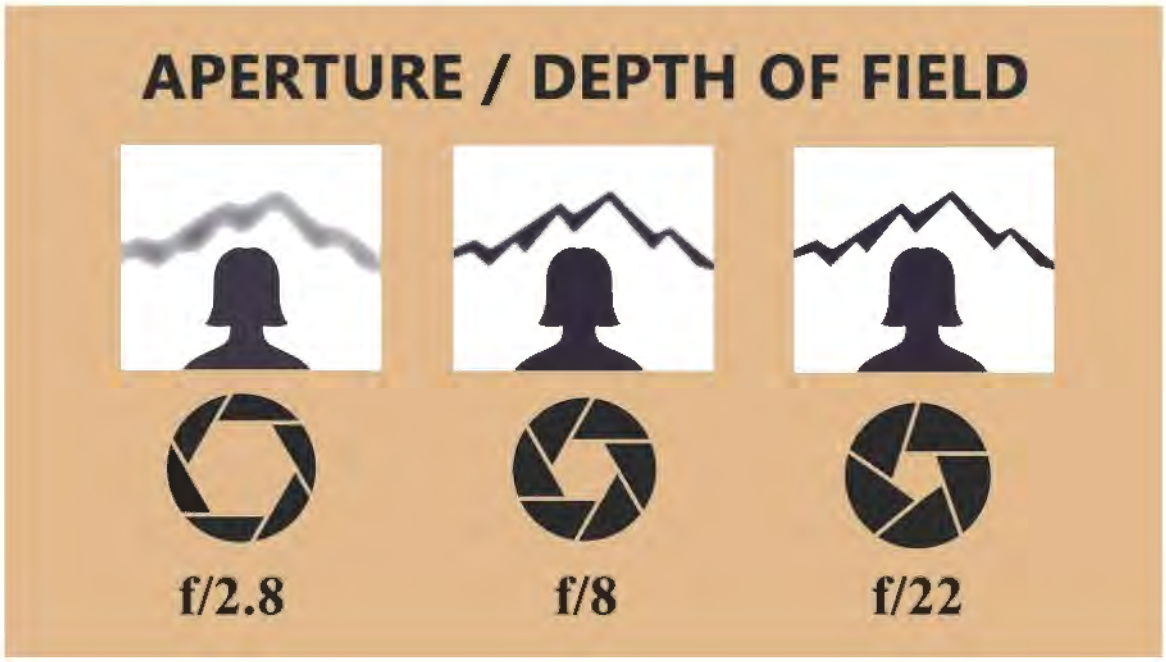


Figure 5: shutter speed illustration from Photography with Tiffany, n.d.

The second element, aperture, is set by the blades in the lens barrel that let light into the camera. In addition to changing the amount of light let in, aperture also changes the depth of field in photos. Depth of field is the clarity of the background or foreground of a photo. A shallow depth of field will have the subject stand out in clarity with a blurred background. A deep depth of field will have everything in the frame focused more clearly. Aperture is measured in f-stops. These are, like shutter speed, also measured in fractions. The measurements of f-stops are as they appear in the figure below.





Figures 5 & 6: Aperture graphs from Furoore, 2022

This is sometimes confusing, but the higher the f-stop number, the smaller the aperture, and the lower the f-stop number, the bigger the aperture. In order to achieve a shallow depth of field the aperture should be wide (big), so you want it set on a low f-

stop. For a deep depth of field, aperture should be narrow (small), with a high f-stop number (Arena 37, 38).

The third and last element is ISO. This is the sensitivity of your sensor to light. The higher the ISO, the more sensitive your sensor will be to light. However, in making your sensor more sensitive, you also sacrifice the overall quality of the image. With a higher ISO setting, your photos might look very grainy and noisy. This is because, with the added sensitivity, the image processing will be less stable. When the processing takes place in the camera, some information won't be recorded correctly, and the camera will insert its best "guess" of color into the pixels. It is best to keep a low ISO when a clean look to photos is the goal. Alternately, a more vintage and aged feel can come from the added grain with a high ISO (Ingledew 234).

Understanding these three basic parts of photography aids in both taking photos and understanding photos. Photographers work to master these three things and use them to achieve their artistic vision. How each photographer uses the three elements can vary and show their own unique style.

Other Photographers

Some photographers that I really admire include Chris Burkhard, Bohdan Lee, and Daniel Casson. All have a unique style and a specific niche that they are into within photography. I love how they use light in their work and how they view the world.

Chris Burkhard is one of the first photographers I ever followed on social media. He is a photographer based out of California. He travels the world doing various projects, and I fell in love with his nature photography.

His photos have beautifully rich colors both from his subjects and from the way he edits them. They also have great contrast and a wide variety of perspectives. He has a lot of work taken from the air which is a fun point of view that not everyone gets to see.

He shoots often during the day, using natural light in most of his work. His photos are very bright and have a lot of contrast. He also depicts color beautifully in whatever landscape he is in.

Bohdan Lee is a 20-year-old photographer from Vancouver, BC. His photos often show dark settings with moody lighting. A majority of his work was taken at dusk, night, or with overcast skies. Because of this, his work has a very serene but moody style.

He depicts a mixture of landscapes and cityscapes. Sometimes a person is featured in the composition. I enjoy how his photos aren't too busy and that he gives nice emphasis to the subjects.

Daniel Casson, from Sheffield, England, is a landscape and commercial photographer. Like the others, I found his work on Instagram. His landscapes really stuck out to me because he has a really distinct style. His photos have a very vintage look. He captures a lot of dramatic lighting by shooting at golden hour, when the sun casts golden light before it sets. The light in his photos becomes a big part of the subject. Green, yellow, and gold are colors that show up in most of his work, tying it all together. His idyllic England countryside photos are my favorite.

You can view all of their work on their respective websites linked below.

https://www.chrisburkard.com/

https://bohdanlee.darkroom.com/

https://www.danielcasson.co/travel

How Photography Uses Light

Thinking of light from a photographer's standpoint, there are two major ways to evaluate it. These ways are by quantity, how much light there is, and quality, the strength of the light. With knowledge of the two, a photographer can assess lighting in a situation and adjust their settings accordingly or use it to set up the lighting to achieve what they want.

Quantity of light is important. It has to do with how much light there is, and that affects the exposure or how bright or dark your photo will be when you take it. Exposure can be adjusted intuitively or by using a meter within the camera. The camera meter can be seen on the camera screen or on the side through the viewfinder as a bar with a moving mark. It shows if your settings are correctly exposed, underexposed, or overexposed for the scene the camera is pointed at. With a correct exposure, the moving mark will be situated in the middle of the bar.

Quality of light can't be measured by a meter. One element of light quality is the direction (Norton 21, 28). There are five angles of light: frontal, overhead, side, rim, and backlight. Frontal light has the advantages of even lighting across the subject, few shadows, and it emphasizes color. However, this kind of lighting can appear flat or harsh. Overhead light can produce harsh shadows and works well when the area is lit well. It is not as popular because it is considered to not be as dramatic as other angles. Conversely, side lighting is loved for its ability to produce dynamic shadows and highlights for a dramatic three-dimension effect. Rim light, also known as hair light, is when a highlighted outline on the subject is created by the primary light source. When used, the

subject can be in darkness or illuminated by other sources dimly to keep the rim light the brightest. Another direction of lighting that provides a sense of drama is backlight. This lighting is used to create silhouettes or to emphasize the shape of the subject. With the light coming from behind, details in the subject such as texture could be lost. Subjects lit from this angle will be given a three-dimensional look if that light is paired with other light sources (Stoppee 20).

Different Kinds of Light

Within quantity and quality of light, there are different kinds of light. Light can be bright or dim, and it can be concentrated or dispersed. The color of the light is another factor to be considered. Light can be warm or cold and can affect the appearance of colors.

The light on a clear sunny day would be an example of bright light. This kind of light produces very stark shadows on surfaces, and it can make colors stand out. Weak light would be like the light when the sun is setting. There can be complications with shooting at dusk and dawn because of the weakness of the light at those times. Exposing a photo just right is key to get what you want out of a photo, and when the light is less intense you might run into problems (Stoppee 15).

Concentrated light is light that is focused and from a singular source or direction, like a spotlight. Whereas dispersed light is light that has bounced off of different surfaces and is spread out. Light that is concentrated can give a nice sense of direction for the eye, and it will produce more defined shadows. Dispersed light, such as light on an overcast day, softens everything including shadows, and creates an evenly lit area.

In their book, *Stoppees' Guide to Photography & Light: What Digital Photographers, Illustrators, and Creative Professionals must know*, Brian and Janet Stoppee say that "Throughout the day, the sun travels across the sky; the color of light

changes. What we shoot at 7:30 a.m. will have a different color base than what we shoot at 12:30 p.m." That change is caused by the distance the light travels. When the sun is directly above us, the light is traveling straight down and does not have to pass through as many air molecules, which scatter the rays. As light travels through those molecules, the color changes. There are times of the day when light has further to travel, such as in the morning or as night falls (Stoppee 14).

Light temperature is measured on the kelvin scale. The further down the scale, the warmer the temperature, and the further up the scale, the cooler the temperature. At 1,000 K on the kelvin scale, candlelight has a warm light temperature. Conversely, skylight on the opposite end of the scale is measured at 11,000 K and has a cool temperature.

When shooting outdoors, the light is a combination of sunlight and skylight, which is the light the sky reflects onto the earth. Between the two, color temperature varies. When sunlight is weaker than skylight, such as on a cloudy day, the color will appear bluer. (Stoppee 16, 17)

The time known as golden hour happens at dawn and dusk. During this short period of time, nature is cast in a golden hued light. To maximize shooting time, some planning must be done, as the golden hours are brief (Stoppee 14). Golden hour is well known by many, not just photographers. The natural glow it lends to subjects is highly sought after for its aesthetic.

Blue hour is the time when the sun is just below the horizon, also known as twilight. It is caused by the sun's rays going into the upper atmosphere and reflecting back to the earth. Photos taken during twilight often need to be done with long shutter

speeds to pick up the weak light. Because all the light provided is skylight, everything during this time has a cool blue tint. In addition to gentle blue light, blue hour also softens the quality of scenes (Arena 62, 63).

My Personal Work

In the past year, I have been focusing more on light, and how I can use light in my own work. I explored this through many different photoshoots. In doing so, I was able to learn a lot, and create some of my favorite photos.

A lot of my own photography, especially in recent years, has a common feeling of nostalgia and sentimentality. I think this is because in my life I try to savor the moments that are special to me, but those moments come and go so fast I worry I didn't enjoy something as much as I should've. In the season of life that I am in now, I am growing and changing every day and at the same time looking back at who and where I once was. Through photography, I can encapsulate an exact second of my lifetime and the world that I was once in and preserve a version of it forever. My photos are a combination of how I see the world and how I want to remember the world.

Photo 6-1

Photo 1-7

Photo 1-8

Photo 1-4

Photo 1-5

Photo1- 6

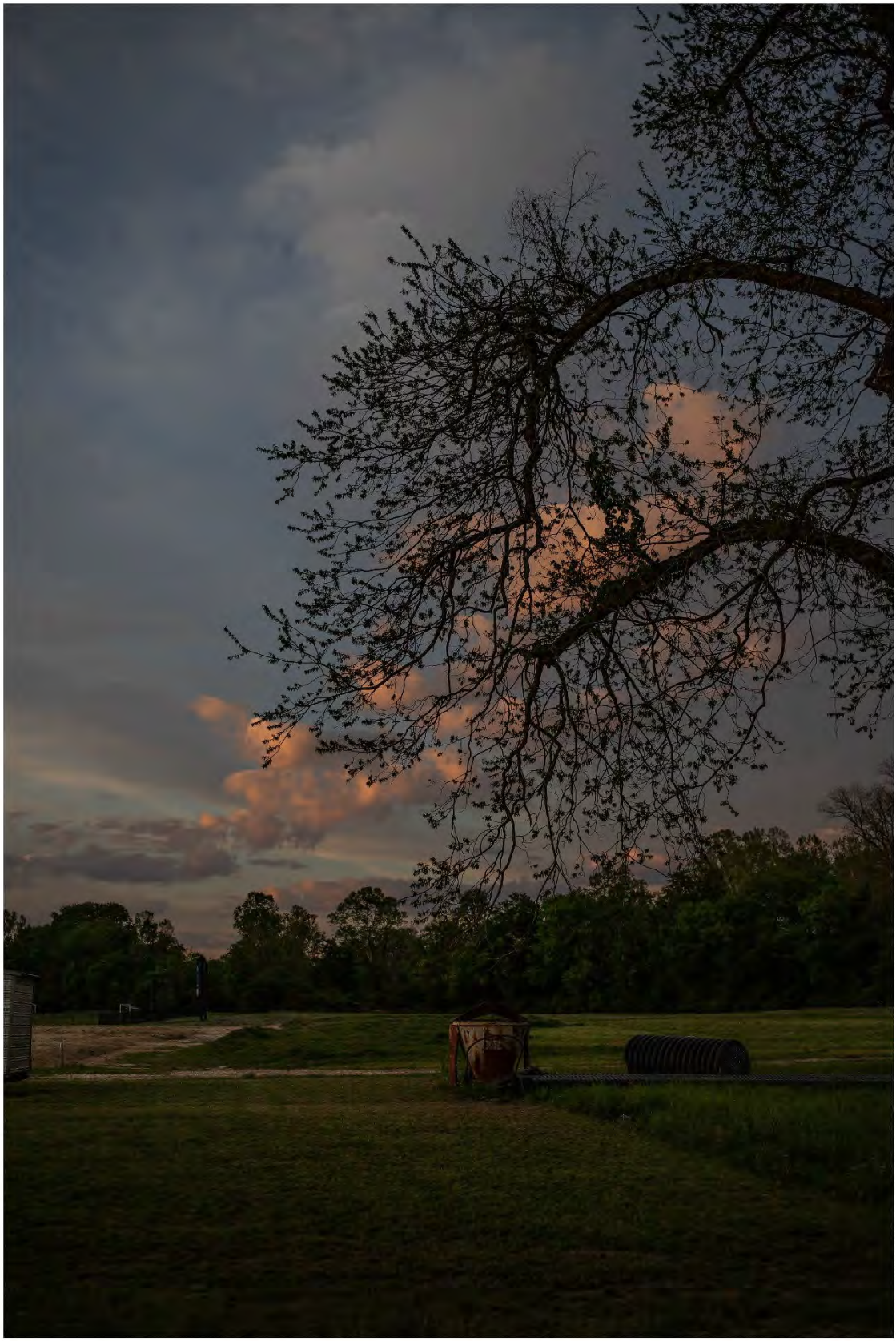


Photo 1-7

In the first of these shoots, I photographed my suitemate and friend, Brynlee, in a field of wildflowers at sunset. It was springtime, and we had been wanting to go down to a field to take photos together for a while. Finally, one evening we were both free, and we walked from our apartment to a nearby field.

You wouldn't know it looking from the road, with a rather unattractive football facility blocking the view, but the area was quite nice, and perfect for pictures. The ground was covered in thick grass, and a variety of little flowers. In the surrounding area were many trees and further back, the beginnings of a wood.

We made a little bouquet of flowers and used it in some of the photos. We started by taking some photos with the bouquet in different poses and we also played around with action shots of her blowing dandelions into the lens. I had her do things like spin and run to play with different shutter speeds.

Brynlee made a great model. She had an effortless way of posing. I try to avoid the classic staged look of having the subject look straight into the camera and smile. This is because I feel like that pose can lack personality, and from a viewer's standpoint, it blends in with all the photos people take on the regular. In the photos she looked so natural and achieved the solemn, but whimsical feel that I wanted.

Photos 1-3 were some of the first we took. The sun was in the process of setting, but there was still a lot of strong light. It was golden hour then. In the photos, the sunlight is coming from behind Brynlee. This caused the highlights in the sky to be very strong, and the light illuminating the subject was soft.

The backlighting caused the shadows to be nice and dark, such as that of the tree line in the background. In addition, the shadows contrasted well on her hand and face with the dress and flowers, in the first two photos. The position of the sun, in addition to the soft light as it set, prevented the light dress from being blown out or too bright.

By the time we took photos 4 and 5, the sky changed and displayed beautiful colors. The light off of the clouds glowed pink and purple giving the photos a fairytale feeling. With the sun lower in the sky, the light was very dispersed now. The soft light gave a whimsical and dream-like look. The purple and pink of the sky is reflected in the field of purple flowers of the top photo as well as the tone of Brynlee's skin from the light.

In this collection, photos 2 and 7 are set apart in that they are open frame instead of closed frame. The viewer's attention enters photo 2 from the top left, following the tilt of the face into the bouquet of flowers. There, the stems provide different paths to follow until it drifts down the stems to where the hands are holding them in the bottom left of the frame.

For photo 7, the swoop created by the clouds and tree branches gives direction into the left and out of the right side. The darkness of the branches against the sky draws the eye into the right side of the frame. They curve up and down, and then are met with illuminated clouds that continue the motion out the left side of the frame. From there, you can go back into the frame on the left, following the line of gravel pointing to the equipment before following the diagonal of uncut grass out the bottom right.

For me, these photos encapsulate the wonder and playfulness of childhood summers. They remind me of when I was a kid and used to play outside until the sun set, and how I used to pick flowering weeds, feeling bad for them because people don't think they're as beautiful as flowers. This shoot being done at sunset adds to those emotions of the beauty and solemnity of something coming to an end. There are many times when I have enjoyed a sunset, and that always makes me wish it could last forever while knowing that even as I wish it, time is bleeding away into darkness.

The black and white shots are high in contrast, but at the same time they have a very lighthearted and happy emotion in them. The dandelion photo with the dramatic light in the clouds coming from behind and the dandelion seeds floating up makes me think of wishes for the future. The photo of Brynlee spinning makes me think of how we can have joy in the little things. A slower shutter speed allowed for more of that clean light to come into it and show the twirling motion of her dress and hair, yet her head was steady enough that her smile was clear to convey that emotion in the photo. As I already said, photos 4 and 5 are wonderfully fairytale-like. The soft but intense colors helped create a world that my childhood self would want to live and dream in forever. The sundress, I think, ties the themes together of childhood and wishes and fairytales.

Photo 2-1

Photo 2-2

Photo 2-3

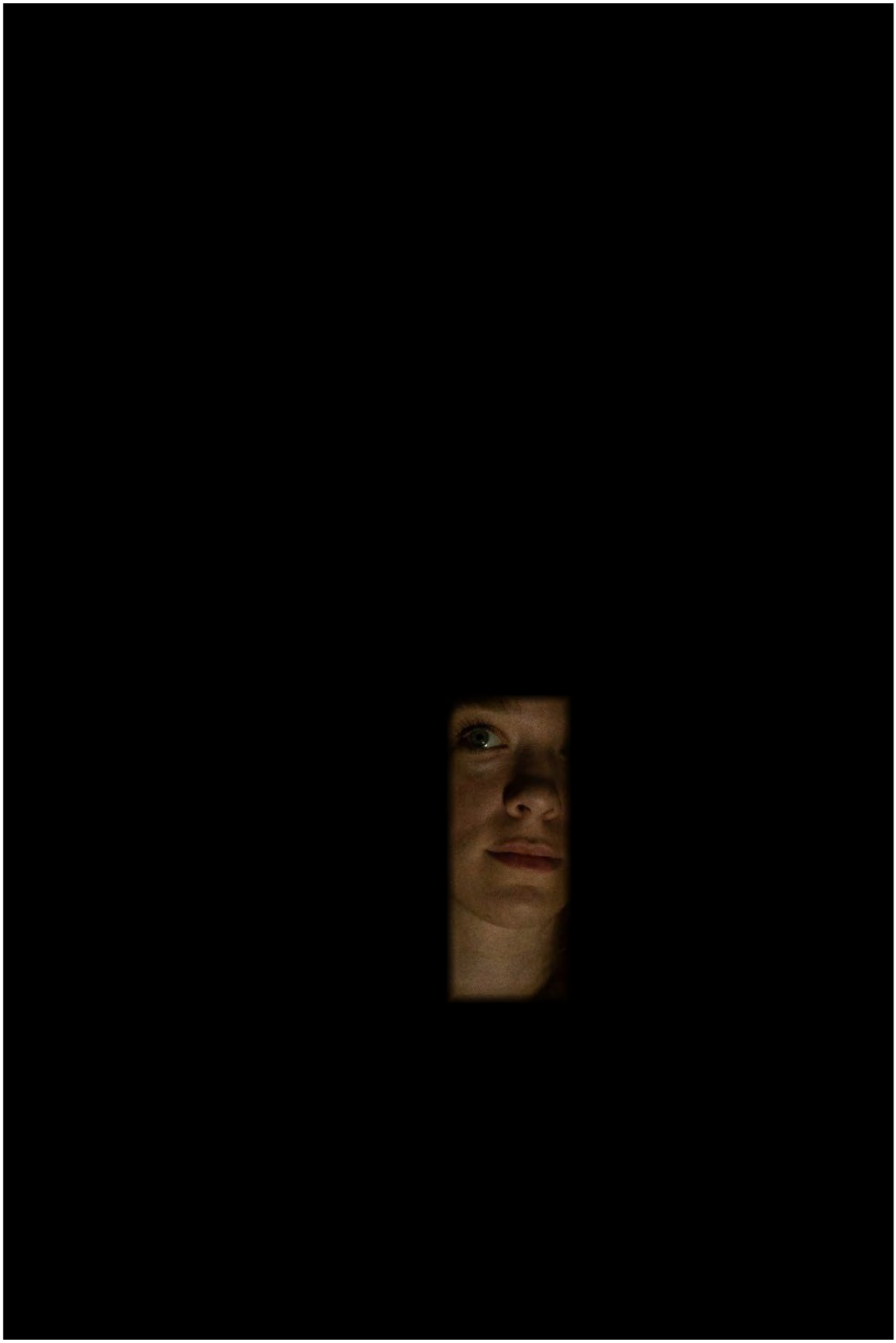


Photo 2-4

Photo 2-5

Photo 2-6

Photo 2-7

My second photoshoot was also done on campus. In the Moses-Provine art building was an old green tiled bathroom. I had noticed it, and thought it held potential for some cool photos, so I went with Brynlee and a friend of ours, Grace.

When preparing for this photoshoot, I knew I wanted to play with the colors of the tile, as well as with different lighting, so I took a floor lamp that I had in our apartment. Brynlee owned a little clip desk light and some gels of different colors that we also took for the photoshoot. Grace came in one outfit we had picked for the photos and had some extra clothes to change into.

We drove with all our stuff to the building late one night during finals week. It took us a while to set it up. Even though we didn't have much, the floor lamp ended up being a problem because we couldn't find an outlet inside the bathroom, and it didn't reach the outlet out in the hall. We ended up having to get an extension cord, and we ran it through the door, which we cracked to prevent light from coming through. That way we could work exclusively with our controlled light.

For some of the photos, like photo 1, I stood on top of a little table to get a raised point of view. It was a fun perspective and it showed off the different patterned tile on the floor in contrast to the wall tile. In that photo, the light comes from the left side of the frame where we positioned my floor lamp with an orange gel. That way the left side of Grace was highlighted, and it created some very nice shadows on the right. In photo 1 the combination of the perspective, lighting, and her facial expression make her appear small and somber. This is in stark contrast to photo 2 where a lower perspective, and colored light give her a sense of power.

Photos 3 and 4 were both shot using the bathroom mirror. Brynlee held the floor lamp in front of where Grace stood to backlight her. It was enough to the side that it wasn't in the shot. This allowed her face to be illuminated and reflected in the mirror while keeping everything else in relative darkness. For photo 3 I shot through the rim light on her hair for that light haze.

We mostly used either the floor lamp, the clip light, or a combination of the two for the light source. We did use the fluorescent overhead lights a little at the end, and I wish we had used them more. The photos in that lighting had a very retro vintage look to them, like in photos 6 and 7.

In playing with colors, we used a variety of colored gels held over the lights. The pink was the most successful of the colors because it contrasted the best with the tile. Blue made all of the tiles appear blue, and orange wasn't strong enough to show up in the photos, though that may have been due to the intensity of the light and our lack of ability to adjust it.

These photos all have different emotions in them. The first one has a combination of feeling small and trapped. I think it is the perspective of the viewer looking down on her, the way she is posed, and her expression. The second photo shows a more powerful pose. Her expression is more positive and the pink light contrasts well and brightens up the photo both visually and emotionally.

The third, fourth, and fifth photos to me represent a disconnection of self-identity. In the fourth and fifth, she's got a kind of dissociative stare. Only being able to see part of her face in some of them and the distortion on the edges of her reflection reminds me of

when we take a good look at ourselves, we don't see the whole as we truly are. We might only focus on the bad or the good. Or we might be distorting our own view of ourselves.

Photo 3-1

Photo 3-2

Photo 3-3

Photo 3-4

Photo 3-5

Photo 3-6

This collection of photos is from a trip I took to the Pacific Northwest. The trip was almost two weeks, and we flew into Oregon, drove down into northern California, and then back up along the coast to Washington. The sights were some of the most beautiful I have ever seen, and I took photos all along the way.

One of the first stops we hit was Crater Lake. I had wanted to visit the lake since I read about it in a schoolbook as a kid. At Crater Lake National Park, the main attraction of course is the lake. There's not much else, but the lake is so big, and with the nature trails and things surrounding it there was plenty to see. We were there for a whole day. We staked out where we wanted to be when the sun began to set, which was at the Watchmen Observation Station. That is where I took photos 1 and 2. Everything had a nice soft glow from the sun. It was setting behind us, so the mountains were picking up the golden hour light and showing off beautiful colors. As I was out there taking photos, a deer appeared and walked right past me looking to graze. As it walked around, I was able to snap some shots with plants in the foreground, the deer in the middle ground, and mountains in the background. Because the sun was in the process of setting, not as much light was hitting the ledge I was standing on or down in the lake. I just brightened those areas in editing later. With the light being so dispersed, there were no harsh shadows.

In the photo of the sunset over the water, the clouds create a lot of interest, leading you into the picture from the top. The direction of the sun caused the pier to be backlit with very little detail.

We also went to Hurricane Ridge in Olympic National Park where I took photo 4. There were loops of trails you could walk, and while we were on them, we saw a lot of deer. There were about three that were walking toward us, and as they did so they passed

through the shadow of a tall tree. That created some interesting shadows on the deer. The light really highlights and brings emphasis to his head and neck. The dark contrasting shadows give more interest to the photo and add to the drama combined with the clouds and mountains in the background. This was taken late in the morning.

The photo of the space needle was taken at sunset. We went to a little park area where you could look down on the city as it got dark. The view was great with the buildings, the sound, and Mt. Ranier in the distance. The light reflected off the buildings nicely, helping them stand out against the sky. As with the other photos taken around that time, it displays soft blues and a dreamy quality of light.

The last photo was taken while I was on a whale watching tour. The sun was very bright, and I noticed it really making the little sailboat pop out. Because the light was so strong, this made the photo have a higher contrast. Shadows were made almost totally black. I had to adjust my settings right to focus on the sailboat and make sure it wasn't a white blob with no detail. In the composition of this photo, I used the rule of thirds, which says if you had four lines to divide a photo into thirds top to bottom and from left to right, and have your subject where those lines intersect, the photo will be more visually interesting. So I placed the boat in the bottom right third of the composition instead of placing it in the center.

All these photos sort of have an overarching theme of serene landscapes or cityscapes. The one that has the most story for me, is the photo of the people looking out on Seattle. I had been taking so many photos of the city with Mt. Ranier that looked almost the same, when I realized I should take a step back and try something different. Having the people within the frame changes the perspective. It really brings more context

to the photo and adds to the story. With them you still enjoy the scenery, but you also can look at the people themselves and question who they are, what do they see, and so on.

Photo 4-1

Photo 4-2

Photo 4-3

Photo 4-4

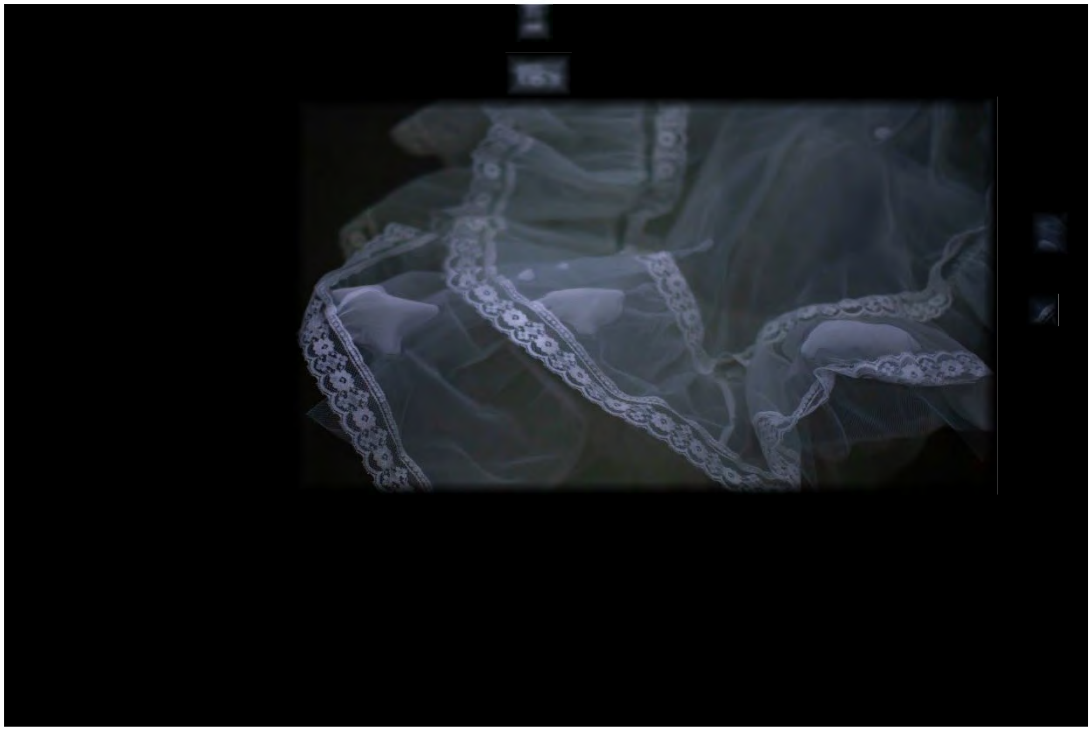


Photo 4-5

Photo 4-6

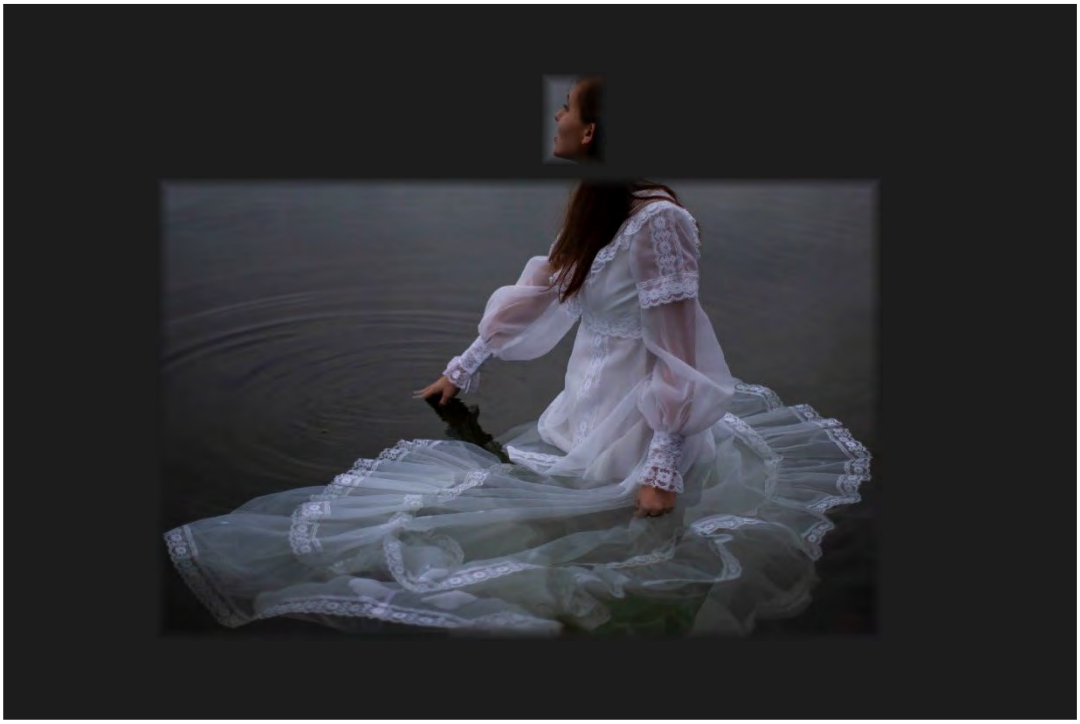


Photo 4-7

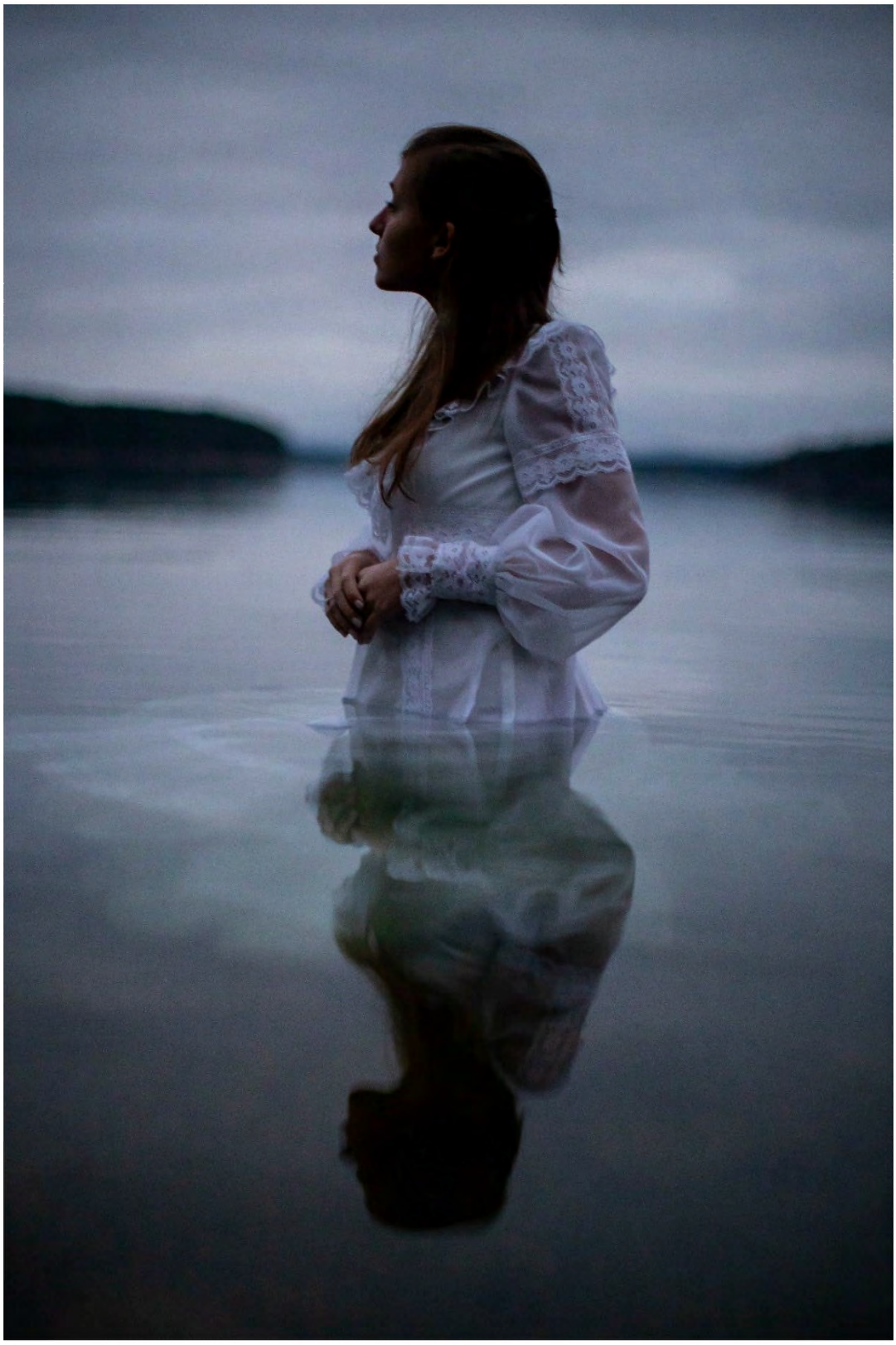


Photo 4-8

This photo shoot was done at Degray Lake near my college, Ouachita Baptist University. Brynlee thrifted a vintage wedding dress that had been at a thrift shop for years. We went in October right before the season changed to be super cold. Even so, it was still a bit chilly.

Of all the photo shoots, this was one that I thought out more than others. I wanted to get photos of her in the dress out of the water, in the water, and playing with the water. I knew I wanted it to be around sunset and dusk, and I also wanted to really represent the reflective aspect of the water in both a physically and a mentality sense.

We began with Brynlee outside of the water, and then slowly worked our way further into the lake. This way we could get the dress before it got wet. The first photos were taken during golden hour. It was a very overcast day so we couldn't see the sun at all, but golden hour still made those first photos have a bit more warmth to them, and the light was stronger. The clouds really dispersed the light and made it even. For photo 1, I used a slow shutter speed. This let in more light and, when I had her twirl the skirt of the dress, it brought it to life through motion blur.

For photo 4, I wanted her in the water far enough to be surrounded by it, but I didn't want the bottom detailing to be covered up by the water. To prevent that I moved a big rock into the water so she could stand on it. That allowed the hem of the dress to stand out still and keep the shoreline out of the shot.

Once she went waist deep the dress floating in the water gave such a cool effect in the photos. By that time, it was getting into blue hour. The coloring changed from warm

to cool, and the surroundings were cast in a faint blue light. With the sun below the horizon, I was just working with skylight which is weak. I had to use a slower shutter speed in order to let enough light in to see things in the photos, and I just hoped I was holding the camera steady enough to prevent the photos from being too blurry.

All of the photos have a very vintage and nostalgic feel to them. The age and style of the dress contribute to it, as well as the quality of light. The warmer tone of the photos taken before the sun fell beneath the horizon brings a happier and lighter mood to the viewer. The darker ones taken after the sun was gone have a more serious tone to them. Some of them might evoke a sense of sadness like photo 8, which I think has a peaceful melancholy to it.

For this shoot, I kind of had a loose story in my head. With the elements of the light, lake, and vintage dress together it made me think of a woman or a ghost of a woman haunting a lake. Maybe the brighter and warmer toned photos represent when she was alive or happy. Once she enters the water, she takes on a wistful mood and there is an element of time passing or time that has passed by.

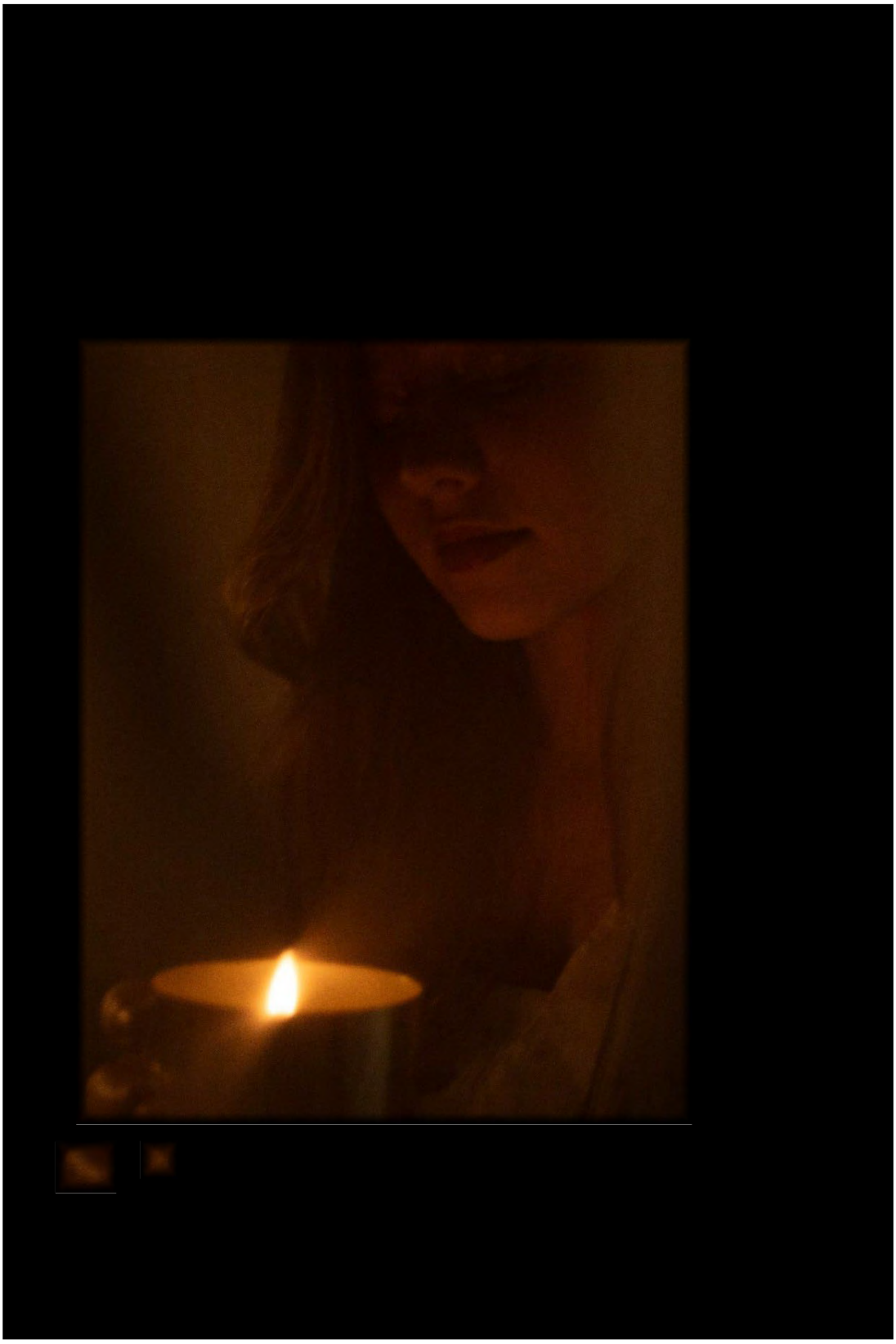


Photo 5-1

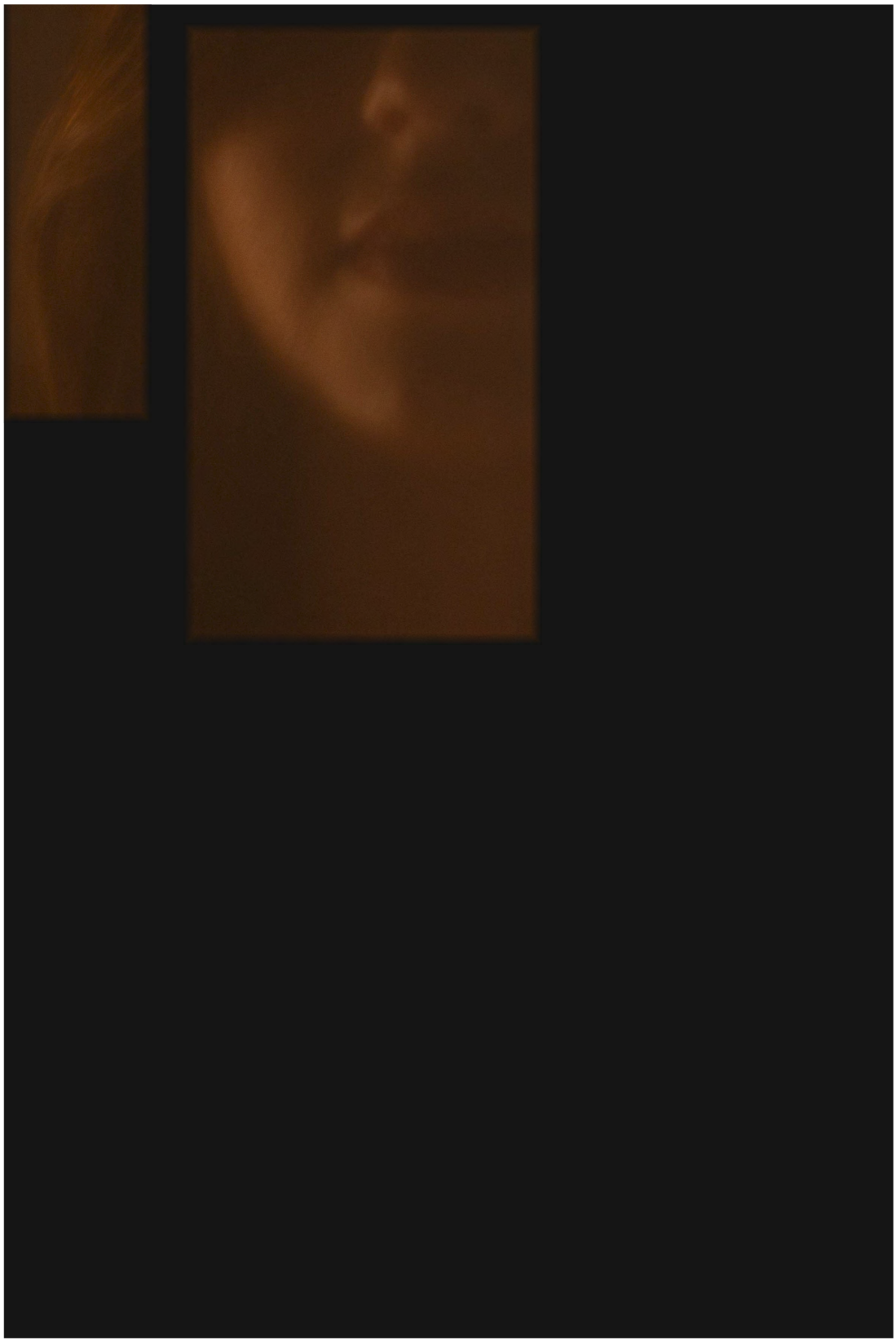


Photo 5-2

Photo 5-3

These three photos are from a little shoot Brynlee and I did. She needed concept photos for a painting she was doing on light, and along the way I took some fun shots for myself. This was a really simple set up. We just went into a dark room without windows and used a candle as the source of light. For these photos, I shot through a sheer piece of fabric to slightly distort the images and, like in photo 3, to catch the light in it.

Candlelight is low on the kelvin scale, so the light was very warm. Light from the candle reflected out from itself so while there were shadows and highlights, they were very soft. That effect was further softened by shooting through the fabric. The fabric blurred out the images and gave them a soft atmospheric look.

These photos have a very moody feel to them. Candlelight tends to bring a more intimate and cozier feel to a setting. I would also say that with the shadows obscuring many parts of the images there is a bit of mysteriousness too.

My Journey as a Photographer

Photography has not always been a major part of my life. It was something that slowly became more and more important to me as I got older. I really began to dedicate time to it in my teens. I don't know the exact moment I started taking photos, but I do remember one of the first times I ever took a creative photo.

It was the summer of 2015. I was at summer camp, and I was messing around on my iPod camera, when I realized the tree that I was standing under looked interesting. I leaned back, put my iPod camera close to the tree while angling it up, and snapped a photo. It had the texture of the bark and vivid green from both lichens and the leaves of the tree in the background of the photo. Light filtered through the leaves, highlighting some at the top. I didn't know it at the time, but I was playing with a shallow depth of field as the foreground was nicely blurred out. It's not a fantastic shot by any means, but I sure loved it and was proud of it.

The Photo from Camp

A big part of my journey as a photographer started with the road trips my family took growing up. My family loves road trips, and many of my best memories are from the extensive cross-country vacations we took. These trips gave me two things. One, an appreciation for the beauty of God's creation, and two, the desire to capture it in any way I could. I mostly used the camera on my iPod, then my phone when I got one, and in later years, my camera. During that time, I never watched any videos about photography, or had anyone teach me. I didn't even consider what I was doing as photography or myself a photographer.

Photos I took on my Phone

The photo I entered in the State Fair

In 2017, I entered some photos into the Tennessee state fair, and one of them won first place. That was the first time I ever got money for a photo. Soon after, my parents started to notice my interest in photography, and I got my first camera for Christmas. It was a Canon EOS Rebel T6, which is a great model for beginner photographers. Once I got it, I immediately began to watch videos on how to use it. I learned how to shoot manually, and what shutter speed, aperture, and ISO do. With practice I got better, and in the beginning of 2020, I got paid to take photos for the first time by a newly engaged couple in our church. By that time, I knew I wanted to pursue photography.

When I went to college, I got involved with the student photography team (or the photo lab as we call it). Through that, I got the opportunity to regularly photograph all

kinds of things from football games to theatrical performances. The variety of settings and types of events I covered really helped train me for all kinds of conditions.

I bought another camera that was higher quality, A Canon EOS 6D Mark II, and in my junior year, I became the co-editor of the photo lab. I grew a lot during my time in the photo lab. There is one thing that makes a good photographer that you can't buy or watch videos on, and that is experience, of which I gained a lot working on the team.

Another thing that had an impact on my photography was a class I took in the Spring of my sophomore year. The class was a Principles in Photography class. I learned a lot on how to edit, how to make a composition interesting, and so much more. The kind of photography I got to do for this class was different than I had ever done before, and through it I took the first photos that I felt were really in a style that I could call my own. The photo lab gave me experience, while my photography class gave me expertise.

During college I truly realized my passion for photography. I felt the desire to learn as much as I could, and to use it to make a difference somehow. Through those years, I grew so much both as a person and as a photographer.

Conclusion

As shown in this thesis, different uses of light can change an image. Photos taken on a sunny day will look vastly different from photos taken on a cloudy day. Photographers can use light in its many forms to achieve various looks in their work.

It can be said that photography is light. Without light, it wouldn't be possible to capture photos. While it is what allows photography to be possible, it is also what is used to add creative direction to each work. Through the different elements of a camera, photographers can create their images with different effects such as depth of field, motion blur, and noise.

Studying light and how it is used in photography has strengthened my understanding of the art form. With the knowledge of what light can do, I am able to manipulate it more and use it to achieve what I specifically want to. All that I have learned has contributed to my skills and who I am as a photographer today.

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