

Boundaries

For my entire life I was interested in both art and science, but I was always taught that they were separate things. Science class was a time for objective observation; there was no creativity and no emotion. Art class was a time when I was encouraged to express myself, when I was told to display my emotions, but there was a lack of objectivity. I tried to combine the two, but it always felt forced. There was never a place where combination fit. I felt like I had to make a choice until I was introduced to scientific illustration. This seemed like the perfect, and literal, way to combine what I still believed were two mutually exclusive subjects. Looking for a place to combine my two interests, I chose a liberal arts education at St. Mary's.

However, as I progressed in my liberal arts education, I came to the realization that art and science were in fact just two different ways of processing the world around me that could not be separated; all art requires science just as all science requires art. In art, there must be a great deal of objective observation. To paint or draw accurately requires understanding of light, space, and color. Even abstract artists must have a deep understanding of their subjects before they can abstract and stylize with accuracy. Just as art requires objectivity, science requires the creative and subjective thinking of art. A scientist must pass observation through the same internal filter as an artist. For hundreds of years, objective observation suggested that we live in a geocentric solar system. It took a creative leap to figure out that we in fact orbit the sun. There is an inherent emotion that comes with understanding. We, as humans, cannot escape our humanity no

matter how objective we strive to be. Without this human creativity, scientific discovery would not be possible.

I have always used a combination of art and science to interpret the world. As a child, I was very fascinated by scientific principles and events such as insects and natural disasters. I would read books about these subjects as well as make observations in my own life to satisfy and fuel this curiosity. What I didn't understand, I would draw. There was something about putting the pen to the paper that solidified my comprehension of my subject matter. By applying a creative mindset to my objective observations, I was able to process them in a new way. The synthesis between the two allowed me to learn. In my art, I also applied my scientific sensibilities by way of my choice of subject matter and objective observation. I always struggled with creating abstract and conceptual artwork; my understanding of art was as a transcription of the world around me. I thought that talent meant being able to draw or paint what I saw exactly as I saw it. As I progressed in artistic career, I learned that art could not be just transcription. I needed more than objective observation to be successful; I had to learn how to incorporate emotion. I learned that successful art was not just a transcription of what one sees, but a transcription of what one feels.

This realization played a crucial role in how I progressed through my SMP. I applied my scientific and objective mindset to how I chose my subject matter. I knew I wanted to paint landscape coming from my landscape painting class at the Schuler School of Fine Art. *Pinus taeda*, or the loblolly pine, native to Southern Maryland, is botanically significant to St. Mary's; with a scientific mindset, it made sense to paint. I applied myself academically and studied the pine trees. My artwork was based solely in

observation; I was making transcriptions. But these transcriptions were static and failed to create a real and emotional viewing experience for the viewer. The pine trees were easily identifiable from places around campus, but there was no movement and no life. I was receiving negative critiques, and I felt stuck; objective observation alone was insufficient.

For help with these issues I looked to Andrew Wyeth, who painted landscapes and interior scenes that serve as portraits of their inhabitants. Wyeth was a landscape painter who was active through much of the mid to late twentieth century, primarily in Pennsylvania and Maine. At first glance, Wyeth's paintings appear very static and observed. However, as I researched I discovered that his paintings are actually full of symbolism and meaning. For example, his painting *Off at Sea* (Fig. 1) appears to be an innocuous scene of an empty room and a wire coat hanger. However, this room actually tells a story about the suffering of the people living in a small fishing community in Maine. Out the window you can see a flat, grey landscape and a stormy sky. This emptiness is reflected in the room, heightened by an empty coat hanger, which suggests not just emptiness but absence. The coat hanger seems to be waiting for someone to use it, as if the coat has been removed and is in use, leaving the hanger there until its return. This absence symbolizes the many men in Maine who leave their families to go fishing at sea in order to earn a living (Anderson, 33). The lives of those left behind are filled with a sense of loss and fear, never knowing whether or not their loved one would return safely home. This tension is reflected by the square composition, which causes a pull between the vertical and horizontal lines present in the bench and the window frame (Anderson, 33). Even though this painting seems polished and carefully observed, it

actually involved a great deal of simplification and stylization. In studies, the painting was horizontally formatted rather than square, which lessened the tension that Wyeth wanted to communicate (Anderson, 33). Furthermore, in earlier versions of the painting, there was a boy sitting on the bench rather than an empty coat hanger. The boy very literally represented the fisherman who would leave his family while he was off at sea (Anderson, 33). However, this literal communication of the idea lacked emotion. By including an empty coat hanger instead of the boy, Wyeth makes clear the sense of absence. Wyeth stylized and eliminated these elements in order to allow the viewer to focus on that which was most important and have a more complete emotional experience; objective observation alone was not successful, emotion had to be included as well.

I followed Wyeth's example, and thought about how I could simplify and stylize in my own artwork in order to create a richer emotional experience for the viewer. I thought about what the pine trees meant to me and why I was drawn to paint them beyond their botanical significance. I remembered the pine tree outside the window of my childhood bedroom. When I saw it I knew that I was home and safe. Here on campus there is also an abundance of pine trees, both the loblolly pine (*Pinus taeda*) and the Virginia pine (*Pinus virginiana*). There is a forest of pines outside my freshman home Queen Anne's Hall that I walked through every day on my way to classes. Again, the pine trees became symbols of a safe space. I found success when I stylized and invented a space that communicated the safety that I experienced when I saw the trees while still retaining their defining botanical characteristics which I had studied, the bare trunk with the concentration of branches at the top. This was my *Boundaries* series. The horizon line is a flat horizontal, suggesting calm. In front of the trees is green grass, which

appears soft and inviting. However, behind the trees a vague landscape of hills is suggested, but it is left uncertain, fading into the mist. This uncertainty, paired with the inviting foreground within the trees, conveys a sense of tension and unease. The trees serve as a divide, marking both the beginning of a safe and calm space inside their branches as well as the beginning of an unknown and sinister space beyond. To complete this series, I had to learn that objective observation and transcription alone were not enough; to be successful I had to think both scientifically and artistically.

As I finished the first semester, I felt that I had explored *Pinus taeda* to the extent that I wanted and was ready to move on and explore another subject. I visited the Grand Canyon over winter break and it was so new and different from anything I had seen before that I felt driven to paint it. I made my decision completely emotionally, a complete departure from how I decided to paint the loblolly pine. Last semester it took months to realize why I was painting these specific pine trees and to figure out how to bring emotion into my work. This semester I tried to consider emotion from the beginning. Last semester I was drawn to create safe spaces, perhaps because of my anxiety surrounding my impending graduation. However, by the second semester I had come to terms with my impending departure from St. Mary's. Perhaps this is why I was drawn to the wide-open spaces of the Grand Canyon; this space represented freedom whereas the spaces of the pine trees represented enclosure. Because stylization had been successful last semester, I jumped right into stylization again. I tried to decide from the beginning which aspects of the Grand Canyon fascinated me the most, and I immediately tried to focus on these aspects. I jumped to extreme simplification, and I was unhappy with my work; it did not convey the experience I had at the Grand Canyon. Like my

extreme observation last semester, my extreme artistic interpretation this semester did not work. I felt stuck.

Over winter break I had also researched Richard Diebenkorn, and I looked to him for inspiration to help me out of my rut. Richard Diebenkorn is identified as a San Francisco Bay Area painter who was active in the mid twentieth century. He began as a traditional landscape painter, focusing on scenes that surrounded him every day. However, over time he began to create extremely simplified paintings that, despite appearing very abstract, Diebenkorn still classified as landscapes (Carrier, 6). He kept the color and basic forms of his landscapes, creating paintings that captured the Bay Area without actually containing concrete representational details. His *Ocean Park* series perfectly illustrates his process of simplification. For example, *Ocean Park #115* (Fig. 2) captures the essence of San Francisco via the colors and simplified shapes (Bancroft, 2). The blues are reminiscent of the water and the sky, the green of grassy lawns, the white of clouds and whitewashed houses, the tan the worn wood of docks and porches. The grid-like format harkens to the arrangement of streets and docks in the marina. By choosing those elements that he believed were most important in his experiences of the Bay Area and eliminating that which was extraneous, Diebenkorn is able to convey to his viewers San Francisco as he saw it, not just how it appeared objectively. In this way, Diebenkorn combines objective observation of color and form with a stylized artistic interpretation in order to create a work that demonstrates an in depth understanding of the San Francisco Bay Area.

Looking at Diebenkorn had taught me that I could not jump right to simplification and emotion without a more fundamental understanding of my subject matter; like I

could not have objective observation without artistic interpretation, I could not have artistic interpretation without a basis in objective observation. I needed to better understand the Grand Canyon so I returned to transcription. I began painting directly from photographs and sketches, studying the Grand Canyon like I had studied *Pinus taeda*. I looked at how the colors shifted from iron oxide reds to pastel pinks, blues, and violets. I studied how the light hit the rocks and the stark differences between the warm highlights and the cool shadows. I observed the layers of sediment and the shapes of the mesas they created.

Once I felt I had made a sufficient study of the Grand Canyon, I was able to decide which aspects were key to communicating to my viewer my experience of the Grand Canyon: color, space, and light. While I did not take simplification to the extreme that Diebenkorn did, I removed the details of the landscape in order to focus on these elements. In my Grand Canyon series I heightened the color shifts that I saw in order to illustrate the sense of immense space I experienced at the Canyon. At the Canyon I could see far enough without interruption to truly witness atmospheric perspective, which is the principle that states that shapes become smaller and colors shift to blues as they go back in space. I wanted to capture this depth in my work. For example, in my Grand Canyon 2 (Fig. 3) I switch from red to peach to blue as the rocks recede in space to illustrate the vast distance. When I painted I imagined light hitting the rocks and heightened the difference between the highlights and shadows in order to communicate to my viewer the bright desert sunlight that is so different from the sunlight here in St. Mary's. Where the sunlight hit the rocks, they glowed yellow and red and orange; however, where the rocks

fell into shadow they appeared blue and purple. What I had understood through objective observation, I was now able to portray in visual terms.

As I was painting I realized that I was capturing the Grand Canyon in another way: my process of painting mirrored the geological processes that formed the Canyon, as well as reflecting the time contained within the Canyon. The Canyon was formed by sediments deposited over millions of years when the Southwest was still covered by a great ocean. The sediments were then carved away by glaciers that became the Colorado River, leaving behind the stark mesas and jagged canyon. The sediments of the Canyon contain millions of years in their layers. I applied my pigment in layers so that the painted surface would be dimensional and transparent in places, allowing multiple layers to be viewed at once, communicating a sense of time through process. To further this sense of compressed time, I walk the viewer through different lighting conditions in *Grand Canyon I* (Fig. 4) so that the viewer can experience an entire day in only a few steps. When I considered time in my work I was strongly influenced by Claude Monet, an Impressionist painter. Monet believed that in order to completely understand a subject, an artist had to understand it both in space and in time (Schlain, 108). Monet termed this idea “Instantaneity” (Schlain, 108). Monet and the Impressionists sought to capture a moment in time, believing that the same view and the same atmosphere never existed twice. Therefore, they painted the same subject over and over again. This repetition is evident in Monet’s paintings of the Rouen Cathedral (Fig. 5 and Fig. 6). Although Fig. 5 and Fig. 6 obviously depict the same subject from the same viewpoints, the colors cause them to be viewed as very different paintings. For example, *Rouen Cathedral, Sunset* (Fig. 5) is primarily pale blue and lavender and yellow-gold. These

complementary colors create a harmony between warm and cool that is unique to that time of day. In *Rouen Cathedral, Full Sunlight* (Fig. 6) the colors are much more vivid. The blue of the sky is a bright cerulean and the highlights on the portal are orange. Those colors that Monet saw were never the same again. Monet's technique also highlighted the "Instantaneity" he sought to portray. The brush strokes are loose and fluid, and the layered effect is apparent. The edges are not clearly defined; both paintings seem to capture a fleeting moment in time. Monet focused on painting that which he saw every day, like Diebenkorn, highlighting the differences in atmosphere that he believed made his subject extraordinary (Tinterow, 5). By repeating the same subject in different lights, Monet felt he was gaining a complete understanding of his subject.

I too painted the same subject multiple times in different lights, both last semester and this semester. However, I was not trying to capture a moment as I saw it exactly in plein air as Monet did, but rather a moment in memory. Like Monet, I layered my paint and kept my edges unclear to communicate this moment. Like the way the atmosphere hits the rocks of the Canyon, I can never remember the Canyon the same way twice. Memories shift and change as the atmosphere does, and I want to capture these fleeting memories before they become lost or forgotten. I also decided to display my works as long panoramas so the viewer cannot take in the entire work from one place, reflecting the vastness of the Grand Canyon. In order to convey these aspects, I simplified the shapes of the Canyon so that the viewer would not be caught up in the jagged details, as Wyeth eliminated the boy in *Off at Sea* and Diebenkorn eliminated all recognizable detail in his *Ocean Park* series. The details are not important; what is important is conveying to the viewer the personal overall experience that I had at the Grand Canyon. Thus I was

able to use creative techniques to illustrate a scientific process, creating a fuller understanding of my subject matter.

Throughout SMP, I came to important understandings about seemingly separate ways of thinking of art and science that have been engrained in our society. Throughout this year I learned that what we learn as science is objectively looking at the world to draw conclusions, collecting data, and what we learn as art is actually the way we experience this data we have collected. I have realized that in any scientific or artistic setting, one has to use—and indeed cannot help but use—both ways of thinking. Successful science requires a creative mindset to interpret data and make discoveries. Successful art requires an understanding of the subject matter rooted in objective observation in order to successfully convey to the viewer the artist’s experience of the subject matter. There cannot be one without the other.

Figures Cited



Figure 1. Andrew Wyeth
Off at Sea; 1972;
Tempera on panel
<http://www.nga.gov/content/dam/ngaweb/features/slides/hows/Andrew%20Wyeth/images/DEX6.jpg>



Figure 2. Richard Diebenkorn
Ocean Park #115
1979; Oil on canvas; 8' 4" x 6' 9"
http://www.moma.org/collection_images/resized/528/w500h420/CRI_151528.jpg



Figure 3. *Grand Canyon 2*
2015; pastel; 11 x 70 in.



Figure 4. *Grand Canyon 1*
Oil on canvas
2015
120 x 30 in.



Fig. 5. Claude Monet
Rouen Cathedral, Sunset
1892; Oil on canvas;
[http://en.wikipedia.org/wiki/Rouen_Cathedral_\(Monet\)](http://en.wikipedia.org/wiki/Rouen_Cathedral_(Monet))



Figure 6. Claude Monet
Rouen Cathedral, Full Sunlight
1894; Oil on Canvas
[http://upload.wikimedia.org/wikipedia/commons/d/d1/Claude_Monet_-_Rouen_Cathedral,_Facade_\(Sunset\).JPG](http://upload.wikimedia.org/wikipedia/commons/d/d1/Claude_Monet_-_Rouen_Cathedral,_Facade_(Sunset).JPG)

Works Cited

Anderson, Nancy K., et al. *Andrew Wyeth : Looking Out, Looking In*. n.p.: Washington : National Gallery of Art, [2014], 2014. *St. Mary's College of Maryland Catalog*. Web. 29 Apr. 2015.

Bancroft, Sarah C., et al. *Richard Diebenkorn : The Ocean Park Series*. n.p.: Newport Beach, Calif. : Orange County Museum of Art ; Munich ; New York : DelMonico Books, Prestel, c2011., 2011. *St. Mary's College of Maryland Catalog*. Web. 29 Apr. 2015.

Carrier, David. "Diebenkorn Country." *ArtUS* 29 (2010): 84-91. Web.

Shlain, Leonard. *Art & Physics : Parallel Visions In Space, Time, And Light*. n.p.: New York : Morrow, c1991., 1991. *St. Mary's College of Maryland Catalog*. Web. 29 Apr. 2015.

Tinterow, Gary, and Henri Loyrette. *Origins Of Impressionism*. n.p.: New York : Metropolitan Museum of Art : Distributed by H.N. Abrams, c1994., 1994. *St. Mary's College of Maryland Catalog*. Web. 29 Apr. 2015.