

Landscapes, Science, and Memories

Science throughout history has used the tools of photography to capture the world, reorganizing it in an understandable way. In the early 1800's, when photography was first introduced as a craft, scientists eagerly accepted the ability to capture images of the world around them. With these images, scientists were able to organize and categorize new species of animals, plants, and cultures. As technology progressed, these images were sent around the world and allowed others to experience life beyond the front door. By the 1960s photographic technologies rapidly changed allowing artists such as Jerry Uelsmann to use the darkroom to create worlds that could only be seen in his minds eye. The twenty-first century has also brought the digital age the ability of other artists such as Maggie Taylor and Brooke Shaden to digitally categorize and create new worlds through the experience of their reality. Uelsmann, Taylor and Shaden, as well as early scientists, used and still use photography to better understand the world.

With my work, I break down the people and places of my past life; not as a way to judge the person or place, but as a way to reconstruct past environments to create a new map to better understand my present self. During the mid to late 1830's, photographers were using photographs to better understand their world as well. They collaborated with scientists to capture images of plants, animals, and landscapes so they could be categorized, cataloged, and researched at later dates. In the same way, I have used the camera as a way to capture the landscapes from my past in order to analyze and reorder them according to the memories they evoke. The landscapes I have chosen to photograph all point to specific challenging events in my life. Each landscape is a site of personal change and growth, both good and bad, such as an old

home where my family lived and the brush-filled ditch where a friend's body was found, all of which hold strong memories for me.

The scientific understanding of memory has been of great interest to me as I have been creating this body of work. More specifically my interest lies in the scientific understanding of memory as it relates to personal experience. This course of study has transformed over the years as technology has improved and tracking and the reading of brainwaves has become less complicated and more reliable. Endel Tulving, an experimental psychologist and cognitive neuroscientist from the University of Toronto, introduced the concept of separate memory systems that work together to create different types of memories. The two main types of memory systems that Tulving introduced were episodic memory and semantic memory (Tulving, 3). Before Tulving's discovery it was widely believed that memory was governed by a single cognitive function in the brain. Tulving explains in his essay, *Episodic Memory: From Mind to Brain* that humans have the unique ability to use their brains to travel through time (Tulving 1). This time traveling happens with the combination of a number of cognitive brain functions that piece together personal experience, emotion, concept-based knowledge, and fact-based knowledge. This ability for humans to time travel plays a large part in my work as I think back to the moments of my past and bring back the emotions of each singular memory. While learning how memory is deciphered in the brain I delved further into Tulving's work to study the two main types of memory systems that work together to form our landscapes of the past.

The first cognitive function of memory, according to Tulving, is semantic memory. Semantic memory refers to memories that are concept-based or general facts. For example, semantic memories may include birthdays, directions to a place, dates, or memories of meanings and understandings. These memories are events that can be backed up by fact, usually by hard copy evidence such as maps, written histories, and birth certificates. Another term that is used in

conjunction with semantic memory is the term “noetic.” The word noetic comes from the Greek word Noesis referring to the perception of the mind. According to Tulving, noetic awareness or noetic memory relates to mental activity or intellect (Tulving 4). Although semantic/noetic memory is important to Tulving’s discovery of multiple cognitive systems of memory, I have chosen to direct my attention towards his concept of episodic memory.

Episodic memory is tied directly to memories of autobiographical events. In other words, episodic memory is the cognitive process that allows humans to recollect time, places, and the associated emotions connected to those recollections (Tulving 5). The encompassing of time, place, and emotion makes episodic memory one of the major neuro-cognitive memory systems of the brain. Much like semantic memory is tied to the term noetic, episodic memory is tied to the term “autonoetic.” Autonoetic awareness is the ability of humans to mentally place themselves in the past, future, or in counterfactual situations (Tulving 3). According to Tulving, it is this autonoetic awareness, combined with the human ability to subjectively sense time that allows humans to time travel and re-experience past experiences.

It is said that episodic memory develops in humans around the age of four years. This, according to Tulving, could be one reason as to why children have the ability to learn and absorb information faster than many adults. As humans grow older the developing of episodic memory influences fact-based knowledge with emotional responses to experiences of time and place.

Through this knowledge of ever changing memories I use the reconstruction of landscapes from my past to create new landscapes that reflect the episodic memory process of my brain. Although my landscapes appear to be seamless, they do not fit together formally or logically in some cases. The illusion of seamlessness creates a flow to the image that represents the flow of our memories through the cognitive functions of our brains. The placement of homes, bodies of water, fields, and other elements into new settings is a representation of fact-based

knowledge being interrupted by the episodic memory process. In other words, as our experiences influence our memories they change our emotions about places and times of our past.

The science of the neuro-cognitive functions of the brain as they relate to memory are very important to the development of the landscapes I create, but science as it relates directly to photography has also been a great influence in my work. As with photography, my life has revolved around the study of science. I grew up with parents and other family members in the medical field, and because of frequent exposure to the hospital setting I have been fascinated with the functions of the body as well as its structure. In the mid-1800s when photography was first made public it was used by scientists to explore and document the animal, as well as the human structure and function.

Louis Agassiz was a scientist who became famous for using photography to record and discover new species of animals and plants in South America. In 1850, he partnered with daguerreotypist J.T. Zealy to create a series of images depicting African American slaves from Colombia, South Carolina. The slaves were shot in profile against a black background, some with measuring instruments capturing the length of arms, legs, and torsos. The measurements were used by Agassiz to analyze the physical features of the slaves in comparison to other races. In recent history these images can be linked directly to the start of extreme racial profiling and the false legitimacy of studies such as phrenology and the belief of one superior race. Agassiz's use of the measuring tools was specific in his scientific studies because he wanted his viewers and colleagues to have an easily readable reference to the actual build of his subjects.

In my work I by no means condone the use of imagery to discriminate against others, but I do use similar notation of basic measurements to direct the audience to parts of the images that are significant. Many times the circles and lines that represent measurements are place holders

for objects that have long disappeared or changed over time. In the image *Circling Vultures* I have reconstructed a landscape out the image of a home I lived in while my mother was married to my stepfather. The image of the home is the recent image of a home I have not been in for over a decade. The home itself represents the person that my stepfather was and the landscape transforms into the entrance of the Shiawassee County fairgrounds, a place that depicts the fun and freedom of a happier time. The symbols of measurement etched into the image point directly to the bushes my mother and I planted by the driveway and the place of the missing shed that housed my stepfather's hunting equipment and other possessions. The other circles and lines are used as readable signs that represent missing objects or change in the landscape over the time that I have been away. This home was once a place of comfort that now is the residence to a new owner who is unfamiliar to the history and stories that unfolded during my mother's marriage and after her devastating divorce.

Like the landscapes I photograph, my memory of events has also changed. Images in my mind's eye that were once so clear have started to fade as I have become older. Homes I once lived in have become foreign to me as I return years later to photograph them. New people have moved into the homes, trees have been cut down along roadsides, and new buildings have formed where fields once were. The landscape of my childhood has transformed for a new generation of memories to be made. The reconstructing of landscapes in my work is a way to capture the essence of that transformation. Some of the landscapes are miles apart while others are only feet apart, but when one transforms into the other a narrative is formed. This transformation can be seen throughout my work.

Failing First Grade, one of the first linear landscapes created in this body of work, combines the images of the home of my grade school best friend with images of my elementary playground and a local liquor store. All three of these images independently represent different

parts of my hometown and my feelings towards it. My best friend's home was where I spent many of my days playing in the sun, where I learned about religion, building forts, and being part of a larger community. This place was located about five miles outside of town and became a safe haven away from the safety of my own home. It was also a place of stability when my family went through stressful times, such as the divorce of my mother and stepfather and the illness of relatives throughout the years. The playground that transforms into the home also served as a safe haven. The playground at my elementary school was the sight of a clash between innocence and creativity. When we were young we never dreamt of the hardships of reality. We never thought about death or the inevitable heartbreak of lost friendships and love. We were innocent in the creation of our own worlds where we could be whatever and whomever we wanted. The loss of this innocence is present in the liquor store with its temptation of discounted booze and the freedom of adulthood.

As an adult revisiting the places of my childhood I have noticed the destruction of the town and the destruction of the innocence I used to see in every aspect of the city; the pain of lost community members, friends, and family, the lost businesses from economic breakdown, and the inevitable change that time has had on the landscape and the memory of places of the past. My landscapes are created to combine the fragmented memories of the episodic memory process and the representation of the relationship between the science and photographic worlds. They are memories that flow together, but are not perfect in any shape or form; they are organized, yet disjointed.

The organized and disjointed nature of my imagery creates a number of dualities within this body of work. *Failing First Grade* represents the duality of the innocence of childhood and the harsh reality of adulthood. *Big Red*, an image of my college residence placed in a grove of trees, represents the duality of growing up and the contrast of feeling safe in a community of

friends in a small university town with a fear of the outside world that looms beyond the trees, in the reality of life beyond a Bachelor's degree. Another example of duality is in the image titled *Sturdy, but still Battered*. This image depicts my mother's home from my childhood being battered by a wave. The duality of this image lies in the looming destruction of the rogue wave and the comfort of home. As children we grow to feel comforted by the stability that our homes bring us when the outside world can seem confusing and dangerous. *Sturdy, but still Battered* captures the sturdy walls of home, as they stand strong against the outside world's incessant beating.

The image *Sturdy, but still Battered* also depicts the use of the home as a vessel that symbolizes a specific person in my life or from my past. Although my mother does not currently live in the home from my childhood, this specific dwelling was the home my grandparents helped her buy after her divorce from my stepfather after ten years of marriage. This home became a place for her, my sister, and me to rebuild our lives. We had previously lived in the country, the home previously described in *Circling Vultures*, in a three-story home on fifteen acres of field and grass. Our family had planned to live there for the rest of our lives so it came as a massive jolt to our routine when we found ourselves in a small three-bedroom home in the city. My mother has always been one of the strongest women in my life, always fighting; whether to keep her family safe or more recently with illness. With my emotions running high from my mother's recent battle with breast cancer, I found it was fitting to place the home that symbolized her in my memory among the hazards of a swelling ocean wave. The sturdiness of the house against the wave is also a symbol of my mother's life-long fight against all of the obstacles that life has thrown in her path.

The home as the symbol for a specific person from my present or past has become increasingly important as this body of work has evolved. Clare Cooper Marcus is an author and

researcher whose topics of study focus on the psychological and sociological aspects of architecture, landscape, and urban spaces with specific research and emphasis on human connections with environment. In her book *House as a Mirror of Self: Exploring the Deeper Meaning of Home*, Marcus describes the unconscious ties humans have to the homes and environments they have lived in with a series of interviews conducted over a number of years. One of the key points in her book and something that she points out right away is that there is a difference between the ideas of home and house. She describes “house” and “home” as too different entities; “house” being the physical place where someone lives and “home” being the emotional connection that someone may have to an environment. Marcus states that “home” is more than just the place where you sleep and eat, but rather a vessel of memory, a refuge from the outside world, a cocoon of nurture, and a place to let down your guard (Marcus 4). This concept of home is why she says the question, “Where is home?” can have different meanings for different people.

Clare Cooper Marcus believes in the philosophical thoughts of Carl Jung. Unlike Sigmund Freud who believed that the unconscious mind was a dangerous place where symbols of impulse and conflict were depicted in dreams because our conscious minds needed to conceal our true desires, Jung believed in the notion of individuation or the idea that we consciously and unconsciously are striving to achieve inner wholeness (Marcus 9). Carl Jung’s philosophy clarifies Clare Cooper Marcus’s belief in the human attachment to environment by explaining why we not only invest time and emotion into the people in our lives, but also why we create homes and environments that even after our deaths can be reminders to our loved ones of who we once were. According to Marcus, we selectively choose who, what objects, and what places we invest our emotions into in order to navigate through a complex world (Cooper Marcus 10). The investing of emotions allows us to gain self-awareness and wholeness. The places and

objects that we choose to invest our emotions in serve as the settings and props for the characters in the production that is our lives (Marcus 12).

In my work I use Clare Cooper Marcus's notions of home to symbolize my emotional connections to both people and environment. All of the structures I use throughout my body of work embody Cooper Marcus's idea of the home. Even the church, which is a re-occurring structure in my work, symbolizes the idea of the "home" as a safe haven, a refuge, and the emotional value placed on an environment. The homes that I use symbolize my emotional investments in places, objects, and people and I use the reconstruction of my landscapes in order to create new settings and props for the characters in the production that is now my present life.

The flow of my work is also as important as my use of the home as symbol for an individual. I have utilized encaustics not only as a way to create an object out of my images, but also to reinforce the physical binding of my fragmented landscapes. I add different pigments to some of my images in order to highlight the liquidity of the wax and its flowing nature when it is heated. The pigments are added with a loose hand and moved around with the use of a heat gun. This technique of applying the colored wax has helped to emphasize the indiscriminate nature of memories as they change over time. The colors are chosen to constitute the creation of an atmosphere that represents the ambience of the original memory. In images that do not have the presence of wax and color, the element of digital manipulation is more apparent as the binder and natural elements become the stand-in for the emotional force in the image.

As I move forward with and develop this body of work, I will continue exploring both the historical and scientific relationships between photography and memory. My work has become my therapy and my voice, allowing me to visually represent the confusion of childhood and my frustrations with ever changing memories. Science, throughout history, has used the tools of photography to capture the world, to reorganize it into understandable information. My own use

of photography follows this tradition, and serves as a tool to help me organize and better understand my own world.

Bibliography

- Cooper Marcus, Clare. *House as a Mirror of Self: exploring the deeper meaning of home*. Berkeley: Conari Press, 1995.
- Uelsmann, Jerry. Interview by Robert Hirsch. *Maker of Photographs: Jerry Uelsmann*. Photovision: Art and Technique, 2003. Web. 18 Mar. 2013.
- Marien, Mary Warner. *Photography: A Cultural History*. 2nd ed. New Jersey: Pearson Prentice Hall, 2006.
- Micklos, David A. "Modern Museums." *Nature* 431.7010 (2004): 743. General OneFile. Web. 26 Nov. 2011.
- Smith, Shawn Michelle. *Photography on the Color Line: W.E.B. Du Bois, Race, and Visual Culture*. North Carolina: Duke University Press, 2004.
- Tulving, Endal. *Episodic Memory: From Mind to Brain*. Annual Reviews, 2002.







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THE WIFE SAID, NEVER GIVES UP HER DEAD







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