

Presence and Absence through Memory

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The sense of wonder has always captivated me. Trying something new and learning another way of completing a task or compiling information. Moving and traveling in a new and different direction than before makes me learn new skills and challenges me in different ways. I have always been intrigued by photography and many of the alternative photographic processes, cyanotyping is one of these alternative photographic processes. Unlike many of the processes, cyanotyping can be done on any surface that is able to absorb moisture. At the end of the cyanotyping process there is an image that is comprised of lines, tones and patterns. It is these lines, tones and patterns that have sparked my interest in my studio research. Lines and patterns play a big role in the classic games of Chess, Othello and Pentec. In these games the players' pieces are moved and guided in a pattern by these lines. By placing the movements of the board onto the pieces themselves, I am creating an inter-connectiveness between the piece and the space that they occupy. I am appropriating the lines and patterning of classic game boards and their respective pieces to create a metaphor for presence and absence, using the signifiers to focus on presence and memory that is based off of my own experiences of travel, displacement and acceptance.

The surfaces of these ceramic pieces are finished in many different ways. Depending on the different tools I use and the way I use them, I am able to get a wide range of physical textures, from smooth and tight to rough and open, each surface absorbs moisture differently. In addition to the physical treatment of the surface, the firing temperature has a great effect on the absorption rate of the piece. An example of this is a piece fired to cone 012 which is 1,582 degrees F with will absorb more water than a piece that is fired to cone 04 which is 1945 degrees F,¹ and thus the piece that is fired to cone 04 will be more vitrified and less absorbent. At this stage there are many combinations between surfaces and firing temperatures to get the right absorption rate for the absorption of the Cyanotyping chemicals. For my work I use rough and open textures on the surfaces of my pieces and I also fire them to cone 012, so that are less vitrified and more absorbent and the application of the Cyanotype is a bit easier.

After the right combination of firing temperature and surface treatment is found the next step is the application of the Cyanotype. Cyanotype "involves treating a surface with iron salts so that it darkens as it develops in the light".² This process is made possible with the solution of Green Ferric Ammonium Citrate and Potassium Ferricyanide reacting with Ultra Violet Light or Sun Light. These two chemicals are prepared separately and later they are combined. In one container, 25 grams of Green Ferric Ammonium Citrate is dissolved in with 100 ml of water (this is Part A) and in another container 10 grams of Potassium Ferricyanide is dissolved in 100 ml of water (this is part B). After these two solutions are made, then equal parts of A and B are mixed together to make the final Cyanotyping solution. One ounce of Part A and one ounce of Part B is enough to cover 36 square inches of absorbent ceramic material. Once the solution is completed then comes the application and exposure processes.

With the application of the Cyanotype there are two main variables that affect the final outcome, thickness of application and the correct amount of exposure time. These two variables determine contrast, or how dark it gets, and it allows me a version of the 'gray scale' to work with. If the application is too thin the tone will be very light and there will be no contrast, too thick and there will be no variation, there will be an immediate transition of blue Cyanotyping to the buff white color of the clay. After the application comes the moment of truth, it is time to expose. Exposure can be done two different ways: 1. Inside a darkroom with a 250 watt U.V. light bulb or 2. Outside in the U.V. rays of the Sun, I have done both. In my studio I made a 'darkbox' that allowed me to control the exposure time and 'printing distance' more accurately. 'Printing distance' is the distance from the light bulb to the surface that the Cyanotyped is on. It distance is very important because the Cyanotype exposes from the heat in the U.V. light. So a shorter printing distance will develop faster than a longer printing distance. For best results when printing inside, the printing distance should be between 12 and 24 inches. I have made my 'darkbox' to have a printing distance of 18 inches. I have also taken Cyanotyped pieces out into the Sun light and exposed them.

In short, there is no contest between the power of the Sun and its U.V. light rays versus a 250 watt U.V. bulb. When I began this work I was using my 'darkbox' for most everything but slowly I began to move my work outside for a more intense and rapid color change. Now I do most all of my work outside and use the U.V. lights from the Sun. There is however drawbacks to printing outside, there are more variables so it is a little less conveniently accurate. If there is a cloud in the way or a day with no direct Sun light, these are factors that are out of my control but they play a role in the outcome of the final surface. The final step is "fixing" the surface of the piece. This is done by running water over the surface of the piece, the water washes away all of the extra or un-developed Cyanotype. This washing and rinsing is done for 5 to 8 minutes. Washing and rinsing can be done two different ways. 1. Take the piece to a sink and run water over the surface of it or 2. Take a hose to the piece and spray it down. When I expose inside taking the piece to a sink is more manageable, and when I am outside, a hose is more effective. Once exposure has started it is difficult to make it stop immediately, so timing is crucial. The 15 to 20 seconds it takes to walk to the sink could be the difference between 'correct exposure' and 'over exposed.'

When the piece is dry and the Cyanotyping process is complete and the final image is comprised of line, tone and pattern. The completed process of Cyanotyping onto manipulated ceramic forms reflect my experiences of memory through presence and absence.

1) Mile Hi Ceramics, Inc. http://www.milehiceramics.com/Orton_Cones.htm

2) Ware, Mike. [Alternative Photography http://www.alternativephotography.com/process_cyanotype.html](http://www.alternativephotography.com/process_cyanotype.html)