The Artist Residency and Lumen Printing

Austin Cullen, Faculty Sponsor Wesley Berg (School of Art)

The artist residency is a critical and informative experience that is privileged to few, and revered by many. Creating work in a completely foreign environment can yield beautiful and new work that the artists could have never conceived of making. Artwork could be made about anything, but choosing a specific subject matter, or theme, can be very challenging. This difficulty arises from lack of knowledge, experience, or most importantly, being bored with one's surroundings. Artist residencies, often being in other countries and always providing a new atmosphere, can be a great way to jumpstart new artwork. Residencies are incredibly difficult to be accepted into, and are almost impossible to receive as a young artist. Seeing the value of this experience, faculty in the school of art at SFA put together a maymester trip to Iceland in conjunction with the Baer Art Center to provide an authentic residency experience.

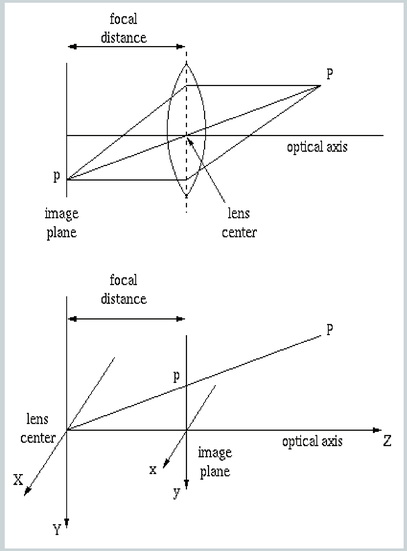
My experience in Iceland was one of preparation and failure that resulted in heavy experimentation with the materials I had on hand. I had planned a project months in advance, which included: building a pinhole box camera, ordering the equipment to build a minimal darkroom, and envisioning the kind of work I would make there. When I arrived at the residency, however, I realized that I was lacking some crucial supplies, which meant that I had to shelf my original project. The result however was much more true to the place and the spirit of artist residencies. I had to work with supplies taken from kitchens, sheds, and other studios- and then combine those supplies with my mixed bag of a darkroom supplies. The result was a completely improvised series of lumen prints that featured foliage alluding to the beauty and sublimeness of the place I was staying. It wasn't anything remotely similar to what I normally do, or would have ever envisioned to do, but it has forever changed the trajectory and themes within my work.

http://www.patrickmikhailgallery.com/news/jessica-auer-is-in-summer-residencies-in-iceland

Lumen Project Artist Statement

My time in Iceland was brief, but memorable. Being surrounded by such an overwhelming and sublime landscape contrasted the small, forested, town that I live in. The land felt pure and was mostly void of the human presence and interruptions that I was accustomed to. I wanted to make work that respected and represented the simplicity and power of the place, but at the same time I wanted physical prints to represent the essence of the place. These prints were created over long stretches of time because of the inconsistency of the daylight. This resulted in staining from the botanical specimens, and some of the other materials just sticking to the paper permanently because of their prolonged contact. Afterwards, I returned the materials to where I found them, but their presence remained- imprinted on a few small sheets of paper.

Preparation and Pinhole Camera Construction



http://www.dis.uniroma1.it/~iocchi/stereo/triang.html

My original plan for the residency was to shoot landscapes with a constructed pinhole camera that would expose images onto photo-positive paper. A Pinhole camera is an object that has black and white darkroom paper on one side, and a tiny hole (aperture) on the other for the purpose of letting light through. The aperture projects the light of the scene being photographed very dimly onto the paper. Because the aperture is so small, the exposure becomes much longer than a typical aperture of 8 or 11 creates. For example, shooting at f8 on a sunny day may require a shutter speed of 1/500 of a second, while the aperture for my camera, 322, requires around 3 minutes. To get a sharp image, the hole must be a very precise size that is related to the distance between the hole (aperture) and paper plane. The formula to discover the correct size of the aperture is:Aperture=1.9(Wavelength of Light (.00055) x Focal Length (Distance from Aperture to film plane) If you are turning a found object into a pinhole camera, then typically you measure the focal length and try to find the aperture, but if you are constructing a camera then you are only looking for the aperture because you have the dimensions of the camera in mind.

I choose photopositive paper because it would give me positive imagery, instead of the traditional negative, or inverted, imagery. Typically, shooting negatives is perfectly fine if there are darkroom enlargers or computer scanners available, but the residency had neither.

I accounted for the camera construction to take a lot of time, but what I did not account for was the supplies needed, and how to get them to the residency. For this process I would need: a darkroom to develop my prints, a darkbag to load paper into my camera so I could take multiple pictures before returning to develop them, trays, tongs, mixers, beakers, and chemistry to actually transform the blank paper into images. The ordering of chemistry is where I made my crucial mistake that caused me to change my whole project. I had ordered a much weaker developer that was meant for black and white film and not paper, so developing full prints was no longer an option. Luckily there are several processes that do not rely on the chemical developer, and the one that I decided on was the lumen process.

Lumen Printing

First used by Henry Fox Talbot in 19th century England, lumen printing has become one of the premiere cameraless photographic processes because of how few materials it requires. Lumen prints are created by pressing an object (typically a thin organic specimen) against black and white darkroom paper, and then leaving it under light from anywhere from a few minutes, to several days. The time decides how much light is let through the pressed object. For example, an object that is only exposed for 15 minutes will only be seen on the paper as a silhouette, while an object that is exposed for longer will have much more detail. Giving your image more time to expose allows the light to shine through the transparent parts of the object for longer, creating more detail in the subject. You then take the exposed paper and put it in the darkroom chemical, "fixer". It gains the name fixer from its ability to "fix" the image in place once it appears. This chemical is typically used when printing darkroom prints. Once out of the fixer, a water bath is the last step to the lumen print process. The water bath is necessary because it washes the fixer off, leaving no chemical stains that change colors over time.