Grays, White, Black, and Yellow

Lotem Sella

FILM 4200

Flow Visualization

Jean Hertzberg

April 16, 2013

Purpose:

For my last clouds assignment I wanted to capture a moment in time that would be helpful for both technical and artistic knowledge. My intention was to

understand the best way to take a black and white photograph when using different colored filters and different exposure values. By the end of this photographic experiment I was hoping to learn the best way to capture cloud composition without any postproduction manipulation.

Approach:

In order to complete this assignment I chose a day that the clouds weren't covering the sky in a fill light sort of way. That day was April the thirteenth at approximately one in the afternoon, when only very clear single clouds were out in the atmosphere. I started out by pointing my Pentax SLR at the same point in the sky, and exposing the composition without a filter. From there I exposed the cloud at normal and two stops over exposed, I would have done two stops under exposed but normal exposure without a filter was already at F22 meaning I couldn't stop down any further. Then I went through five different colored filters, red, orange, yellow, green, and blue, bracketing each filter five stops. The bracketing with the filters was easier to do than without any and it allowed me to experiment with a range of two stops under to two stops over with each filter.

Visualization Technique:

There was more photographic than visualization techniques involved with this process, due to the clouds forming into shapes beyond my control. However when looking at the skew T diagram for the day it was revealed that the clouds were unstable due to the saturation mixing ratio line falls in between the dew point and temperature curves. When looking at the photograph I would have to say that the cloud is a cumulus due to its shape and because of the information from the skew T diagram.

Photographic Technique:

When taking the photograph I loaded my Pentax up with Arista Premium 400 35mm film, which is a black and white film stock. My reason for using black and white film is because I have heard in the past when photographers were

shooting with this type of stock that they would use color filters to affect contrast in the final composition. Since the stock can sense the effects of different sized wavelengths but can't truly show them, the use of filters was subtle but effective. I had originally thought that the orange filter would give the best result due to it being the opposite of the blue sky, but it turned out that the green filter did an even better job than the orange one. In the end the yellow filter gave me the best result and I would have to assume it is because the mixture of the different whites and grays in the clouds. That combination seemed to be able to seduce the best qualities out of the yellow filter and make the best contrast in the image. Also I experimented with a blue filter to see if it actually made any difference, and when I compared its result with the no filter set the difference in density found on the negative was negligible. The reason for this is because the film stock I was using was more sensitive to blue light and if I added a blue filter than there wouldn't be much of an effect on the contrast.

Conclusion:

By the end of this experiment I found that the yellow filter would accomplish the best density when using B&W film to capture clouds. This is probably due to the small range of grays to whites found in clouds, which favor only subtle manipulation. The yellow filter is in between the other filters and therefore its properties aren't so bold. In the end using this filter as well as exposing the composition 2 stops under the normal meter value, gave a natural contrast that doesn't feel incredibly manipulated. I made all my conclusions about quality by going into the darkroom and examining the density of my negative. The frames that were too dense or too thin were immediately thrown out and that left me with a few pictures from the red, orange, yellow, and green set. From there I compared the best negative from each set, which was determined by the overall evenness of grays, whites, and blacks. The green set was pretty even, but when looking at the negative closely on the light box I decided that the yellow was the best one. I ended up scanning both just to see if I could see any differences on

the computer, and just like I predicted earlier the yellow filter was the best. I like the overall grain in the final composition; I felt that it gave this surreal and unnatural feeling to something we see every day. So the grain mixed with the contrast gave me the image that I think is a fine guideline to capturing the best B&W cloud composition.