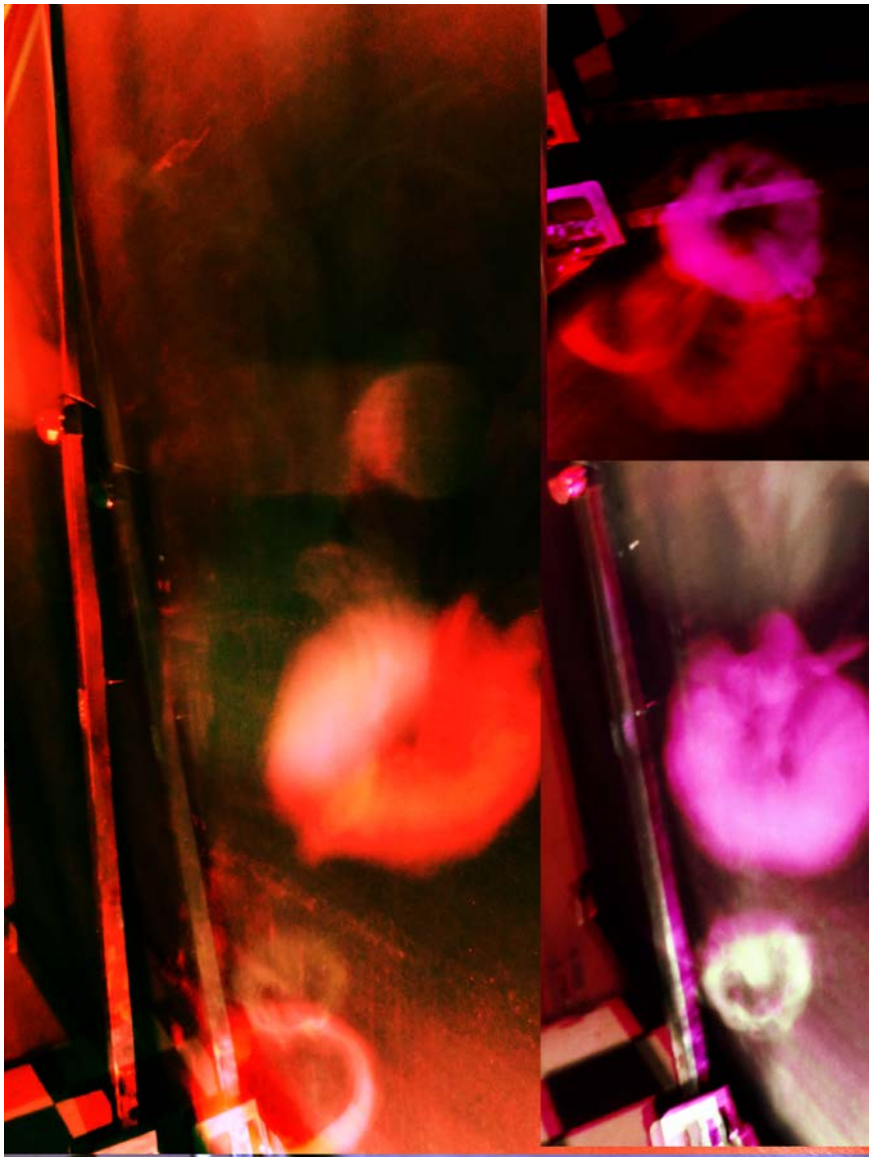

By: Lotem Sella
Team: Paul Sweazey, Wayne Russell, Kelsey Spurr, and John Porras
FILM 4200
3/14/13

Purpose:

The purpose of the first group assignment was to collaborate on a team concept and then create an individual picture. When our group met we decided we wanted to create a controlled experiment that was both simple and aesthetically pleasing. We eventually decided on creating smoke rings out of a vortex creator, so that we could take pictures or videos of the rings forming.

Team:

1. Paul Sweazey
2. Wayne Russell
3. Kelsey Spurr
4. John Porras

Materials:

To create our images we used a few materials.

1. 5 Gallon Bucket from the Home Depot
2. Duct Tape
3. Cardboard
4. Projector Screen
5. 500-Watt Halogen light
6. High Speed Camera

Procedure:

To create our vortex machine, we did a little bit of MacGyverying. First of all we purchased a five gallon orange bucket from the Home Depot. Then we drilled a hole on the bottom solid layer of the bucket with about a two-inch diameter. At this point we realized we needed a flexible base to hold the smoke in the bucket and be able to bounce it out of the hole. We settled on using duct tape to create a layer of film over the open source of the bucket. From here, we blew smoke from a stage smoke machine into the hole and then tapped the duct tape to see smoke rings come out. After a while however the hole broke and we

decided on carving holes out of a strip of cardboard so that we could lay it over the broken side. The cardboard sizes were changed throughout the experiment and the final images are yielded from our final adjustment.

These were the materials to create the experiment; in terms of aesthetics we used the backside of a projector screen as the backdrop for the image. Then we shined a 500-watt halogen source light from the floor up towards the configurations of smoke. All other room lights were turned off in order to ensure a mysterious tone.

Fluid Dynamics:

The phenomenon that we set to exploit was smoke rings. These rings were created from a forced pressure causing smoke to shoot out of a tiny hole in the shape of a circle. When the smoke was injected into our makeshift vortex machine, the pressure within the vehicle increased. As it increased we released concentrated amounts, by pressing on the duct tape film, which shot out a small amount of smoke through the hole. When we experimented with different sized shapes or numerous holes, no recognizable shape was made. I think the reason for this is because a circle is the most naturally simple shape in existence. No other shape has smooth corners like a circle, and its tendency to support the infinite allows for the circle to create the best smoke rings. As the smoke went through the orifice, the smoke collected itself on the outside border of the circle, but was empty in the middle. Therefore the pressure created from the instrument shot the smoke up in a concentrated manner, and the inherently perfect shape of the circle allowed for rings to come shooting out.

Photo Technique:

To create this image we first collaborated before the experiment and during the experiment, but the edited image was a product of our individual

choices. We used Kelsey's high-speed camera in order to capture the rings, which led to some of the group submitting videos as well as photographs. During the experiment the group traded off holding the camera and we would simply take numerous images from the same location. The thinking behind taking various pictures from a set space was then in editing we could see the progressive path the rings would take and maybe that would inspire us in some way. Eventually there were thousands of pictures on the SD card and the group was ready to submit individual works.

When I got to work I chose seven images that were framed from the same location, but had rings in different areas of the composition. From there I proceeded to color correct each picture in order to highlight a certain color on the color wheel. At this point I took two pictures with complementary colors and superimposed them on one other. This combination led to me having three composite images, as opposed to the original seven. From here I layered the three on top of each other in order to create a dizzying effect. The first really big one was set on the left side of the frame, then about half the width of the first one and two thirds the height was set on the bottom right side. Finally a third, rotated, image that was the same width as the bottom right one, but only a third of the height was placed at the top right corner. My reasoning for composing my image like this was that I wanted to subvert the golden ratio.

A ratio discovered by Da Vinci, 1:1.618, is said to be the most perfect ratio found on Earth. It has been used in photographic composition to create naturally appealing figures for human beings. The ratio has ground in the rule of thirds because those lines can make ratios of length that relate to the golden ratio. So I placed my three images along the lines first, but then I moved them over slightly in order to throw off the formal qualities. The first image on the left covers roughly the left two thirds of the lines, and then the second one covers the other third of the vertical lines, but is covered by the top third horizontal line. The third image was rotated in the final corner to give an added sense of distortion. Overall the image tried to follow formal qualities, but went "punk" on them in order to create an image that would be uncomfortable and bizarre.

Conclusion:

Our group had a lot of fun in creating our individual images. I think we slightly bonded with one another, meaning that we can work well with each other. I am excited for future projects because I think we now know how to collaborate with one another in order to truly create bold compositions. This project was simple, but we made it more complicated as we went by. By following such a method I think we were able to create better images because we weren't constrained by highly technical and abstract concepts, instead we could execute a fully realized idea. I think that this is the way the best art is made, because if the creator cannot fully grasp the concepts at hand then the work will be inherently flawed.