DIGITAL
KALEIDOSCOPES

THE SYNERGY BETWEEN
GRAPHIC DESIGN AND PHOTOGRAPHY
THROUGH VISUAL PERCEPTION.

WRITTEN AND DESIGNED BY
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DIGITAL KALEIDOSCOPES: THE SYNERGY BETWEEN GRAPHIC
DESIGN AND PHOTOGRAPHY THROUGH VISUAL PERCEPTION.

by

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A Thesis submitted to the faculty of Radford University,
in partial fulfillment of the requirements for the degree of
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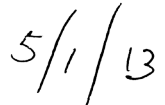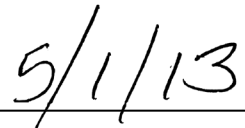Committee Member   Date

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Abstract

"Everything in color has beauty, but not everyone can see it.”

This series, *Digital Kaleidoscopes*, is a series of original works that infuses my graphic design skills with newly acquired photographic tools. This body of work explores creating abstract patterns, complex images and design using photographic manipulation to introduce the idea of illusion and character into the images. I give a conscious identity to an otherwise, lifeless object. In doing this, I am allowing the viewer to conceptualize an aesthetically pleasurable experience.

Creating images for this series consists of using digital manipulation techniques that feature mirroring, repeating and repositioning an image from a basic composition and into an abstract composition. The motivation for these techniques explores the viewer's cognitive perception of how the brain processes art.   In my work, I enjoy deconstructing the view of subjects to create new abstract compositions and inspire mental/emotional attachments in relation to what's displayed in the image.

With the perceptual motivation for my new style of abstract digital art, I have conceptualized myself as an artist and designer. This allows me to present several approaches for composing abstract photographs, and sparking human insight through the use of alternative visual perception. Displaying and offering these abstract reflections of me, is one of the most meaningful aspects of my work.

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Department of Fine Arts, 2013
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Dedication

In loving memory of my Father,
Reverend William "Danny" Reynolds:
Dad, for being the first artist to ever inspire me,
May you rest in sweet peace.

Acknowledgement

First, I would like to acknowledge God for his many blessings because it was through His grace and mercy that I was able to achieve the goal. I thank God for being the greatest artist ever known—your masterpiece of heaven and earth will never be surpassed.

I dedicate this work to all my family members, my church and extended family. I hold all of you in high regard as my foundation and I could not have done it without your help and support. To my grandmother, Army Jean— Thank you for introducing me to my first camera and being the number one fan of my artistic abilities. I would also like to thank my mother, Diana, who has done a tremendous job raising my brother Devan and myself to be upstanding, committed men that create our own paths in life. Your hard work and love is truly appreciated. Finally, I extend a loving thanks to my brother Devan for your continued support. *Love you bro!* I am certain that Dad would be extremely proud of the lives that we have built.

I would like to thank all of my colleagues, professors, and family members that have supported me in this endeavor and have uplifted my growth as a person, student, and artist. To my committee, I am thankful for the opportunity to work in this capacity and to be able to expand my ideas as part of this thesis. I would like to thank my graphic design advisors John O' Connor and Ken Smith for taking an interest in this project and for the many helpful suggestions in finding creative techniques to complete this body of work. I am grateful to Dr. Roann Barris and Leah Gose for your help to define who and what I want to be as an artist—your advice and instruction to remain both persistent and patient will encourage me to strive for success in the academic realm of art. Leah, I truly

appreciate how you helped me to develop my photography techniques by immersing myself in things that exhort my passion. Finally, to my cousin, Andre Clayborne, I thank you for your assistance to edit my thesis and for your role which reminds me to live life on my terms and not letting anyone dictate my journey.

I would like to acknowledge my classmates and friends known as both the "Grad Pack" and the "Motley Crew": Beth, Karie, Jerome, and Aaron. Words cannot describe the impact that each of have made in my life. Each of you holds a special place in my heart and I attribute the successful completion of this program to your motivation, support, and inspiration. Karie and Beth your kindness, generosity and knowledge is unmatched. To Jerome, we started this journey together in 2010 and finished with an impressive MFA Exhibition. I was extremely proud of our artwork and I am appreciative to have worked with you to put together a great showing. I would like to thank Aaron, Joanna, and family for allowing me to invade your home and for treating me like a member of your family. Your friendship and advice has been very valuable to me during this process. *You are living example of a "Re-Modern" artist.*

I am thankful to my close group of friends from the "Fellas Crew": Wes, Travis, Tone, Mike, Duane, JD, and Scott. I am so proud to call you my friends and my brothers. I often reflect on how we have developed from being wild college students at VSU to successful men with fruitful families and careers. Even from afar, each one of you supported me in this endeavor. Thanks Danielle for checking to see if I have my sanity on occasion. A note of special thanks is extended to Derrick and Autumn for never letting me give up and for pushing me to the finish line. I am comforted in knowing that we can support each other, even through our hectic schedules and academic challenges as

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we pursue higher education. We have achieved so much and experienced many highs and lows over our friendship. I cannot wait until we all have graduated and we can celebrate our success somewhere tropical. *I'm so lucky my friends are so freaking smart!*

I would be remiss if I didn't thank my Advance Auto family for your support and training during my internship and beyond. To my mentor, Kurt Goddard: You changed my life as an artist and how I design, especially using Adobe InDesign. *I will never export another file without checking my kerning first!* You are the definition of a great mentor and you taught me to have fun at work while simultaneously getting the work done.

Finally, to my beautiful girlfriend who saw things in me at time where I didn't even want to see them myself. In 2007, you told me that I was destined for great things and that my talent superseded the situation I was working in. You encouraged me to pursue my graduate degree. Keyana, I love you and appreciate you more than you will ever know. Your patience and support through this process is what makes you the great woman you are. *I am truly blessed that I will one day be married to Dr. Key, an intelligent, kind and ambitious woman*! At times, I still can't believe my fortune of sharing a life of success, love and dreams without limits and with you. I don't know how I can ever repay you for what you have done but I will spend the rest of our lives working to do so.

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Chapter 1: Introduction

There is a difference between taking a photograph and creating an image. In the superficial world we live in, we have become obsessed with image perception. Our perception of images causes us to ask the questions: Is this real or fake? Could this be an illusion? Is my mind playing tricks on me? In fact, we all make assumptions about the external visual aspects of our environmental surroundings. We allow our eyes to see, but our minds perceive and interpret the visual stimuli. However, if we can change the mind's perception of the artwork that is visually in front of us, the experience may lead to an instantaneous, fundamental, and inherently pleasurable reaction to the artwork. My current work, *Digital Kaleidoscopes*, explores an artistic presentation of graphic design and a juxtaposition of artistic expression using photographic manipulation. This series reflects the difference of observing artwork with our physical vision and allowing the mind to change our perception of what we're looking at.

Throughout this series I focus my methodology on taking photographs of agricultural and industrial machines, then transforming them into abstract compositions. The use of mirroring images, enhancing the color and compositing through the use of Photoshop creates colorful, concise and artistically abstracted images with perceived human or lifelike qualities. My motivation for using these techniques is to allow the viewer to explore a cognitive perception of how the brain processes art. By using a range of visual elements, including color and photographic manipulation, the work evokes an emotional response and sparks fascination in the mind of the viewer. "Digital Kaleidoscopes" uses design principles and photographic manipulation to create abstract compositions full of complex elements. Those elements breathe life into lifeless objects

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thereby creating a subconscious living identity for the viewer.

My reason for choosing this subject matter is due to the fact that machines only come "alive" when they are turned on to mow the lawn, remove dirt or construct something. But I wondered what would happen if my images utilized some of the smallest most complicated details of each machine. By focusing on those details such as wires, piping, and gears a new abstract image is created. The intention of this is not necessarily to challenge you to believe human machines exists, but to challenge the idea of looking at life through an alternative thought process.

I feel that every individual in this life has his or her own perception of themselves and their existence. In choosing to show my unusual outlook of the world, *Digital Kaleidoscopes* was birthed. When looking at the basic and mundane subjects through my eyes, there are questions of how can I change its construction, personality, and general identity. This becomes an outlet for me to express my most inner thoughts, about who I am beneath my external appearance. Having the ability to see through a different set of artistic eyes while looking deeper at the world, allows me to become part life's beautiful complexity.

To embed this uniqueness of complexity into "Kaleidoscopes" I composite, mirror, and repeat in sections of photographs within each piece. Each work for this series was specifically chosen because of its individual colors, shape, and interesting form. This exhibition consists of ten digitally manipulated agriculture and industrial photographs. All of my manipulated images are created to call into question what the viewer is observing when viewing the body of work. Tools used for putting together this body of work consist of Canon 60D DSLR and Adobe Photoshop CS5.5. Large scale photographs

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of 3x4.5 and 2x3 feet in were chose in order for the body of work to dominate presence and engage the audience. Each image is printed on premium luster paper, and then mounted on gatorboard.

Throughout this thesis, I discuss the various areas of how this body of work came into realization. Starting in Chapter 2 by discussing my work, its new beginning in photography and how it can be the foundation for successful graphic design compositions. Throughout Chapter 3 I discuss the manipulation of digital images, the basic nature of viewer interaction, visual processing, and illusion. In Chapter 4, I review the artistic inspiration behind my current style of work.   In Chapter 5, I discuss a range of techniques used to address my methodology of design. While also critiquing my current work, I lay out basic problems of photography, composition and postproduction. Finally, in Chapter 6 I discuss future goals and aspirations for my career in art and design.

Chapter 2: The Importance of Photography in Design

This chapter begins by discussing the importance of photography in graphic design and its ability to grab the attention of a designated audience. Throughout this chapter I also explore the comprehension of human interaction with artwork, by utilizing visual perception.

As the saying goes, "A picture is worth thousand words." Therefore, as a visual artist and graphic designer, photography is essential to my work. Well-photographed images and even manipulated images can enhance aesthetics in visual communication. Photography is one of the most important elements of most graphic design. Not only does the image attract the viewer first, it is usually the last thing the viewer remembers after turning the page, causing the text to become secondary. Furthermore, people generally view a photograph as a literal depiction of reality, even when the image is highly manipulated. This gives the photographer the power to alter reality greatly and still present it as reality, something that not many other art forms possess. (Graham 85)

The importance of photography in visual communication is the foundation of images used for advertising, in magazines, on posters and on flyers. They may be straightforward depictions of a product or a model, or they may incorporate complex graphics and use post-production techniques to show the combination of two mediums. Capturing creative photographs that tell a story and set the mood for the product is therefore an important skill for any photographer to learn.

Insight Through Visual Perception

A guiding inspiration behind the theme of my current body of work, *Digital Kaleidoscopes,* is my fascination with visual processing, illusion, patterns and ambiguous figure/ground perception. More important is how the viewer interacts with artwork by visually implanting subconscious characters, shapes, or scenes in a work of art (Heller 211). The perception of images in the viewers mind can differ from the reality of what they are observing. The reaction of such consistent differences in responses suggests that visual insights are being made at an early age. This implies that organized visual perception is an unlearned capacity of the human organism. However, the brain acts as the visual processing center for the sense of sight. (Fantz 296).

Newborns show a preference for following moving faces within the first 30 minutes of being born. This image recognition method occurs in the very early stages of life (Schaefer-Simmern 110). Whether we are looking at a painting, a photograph, or the world around us, the eye takes pictures of these visual images in front of it, that are transmitted to the brain, generating mental representations of scenes (Rock 92). The idea of storing memorable images is the reason upon viewing my work people walk away discussing familiar images they have observed inside the composition.

For example when people view my piece "Bubo's Concrete Heart" they use the juxtaposition of tires, buttons, and large metal sections to create fictional characters (see Figure 1). This can sometimes be childhood robots from a cartoon series or a mechanical owl from a movie like Clash of the Titans (see Figure 2). Even though the images are abstract and have no discernable subject.
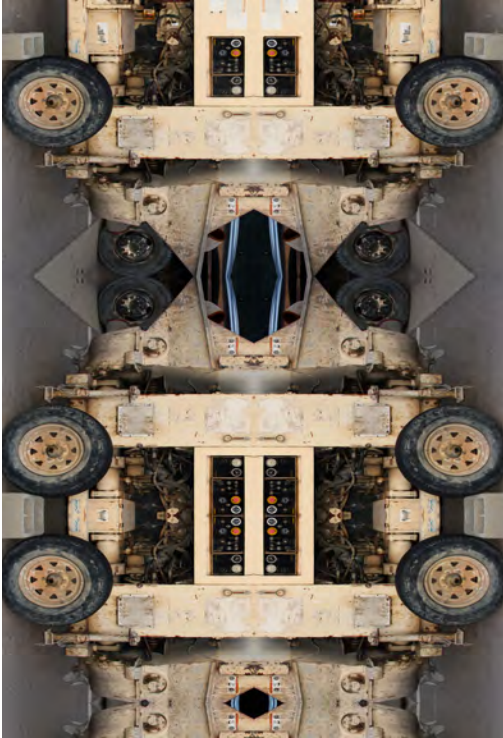
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Figure 1: Bubo's Concrete Heart   **Figure 2: Bubo**

Perhaps the best known example of perception is the impression we have that eyes in pictures of faces always seem to be looking at us no matter how far off to the side we stand. This is implied when the person in the picture has been painted, manipulated or photographed looking at the location of the artists' eye or the lens of the camera. For example, a photographer takes a portrait photograph and hangs it in an art gallery. The spectator will view the portrait from the same position from which the artist has taken the picture or the center of projection (Rock 97).

This aspect can be best shown if one considers the "Mona Lisa*" by Leonardo Da Vinci*. In this historical painting, the eyes are painted at eye level, but looking to the right of the painting (see Figure 3). In my piece "Kaleidoscope Country Boy*"* the implied

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eyes (created by darkened machine tires in contrast to the orange background) are positioned with respect to the eye looking straight on the piece (see Figure 4).

Typically, in visual recognition one will decipher each object by finding the closest match of our observations in life. This implies a process-oriented approach in working with artistic methods that support the concept of perceiving and understanding. Psychologist *Bjarne Sode Funch* states art appreciation is divided into aesthetic pleasure and cognitive art in the form of an aesthetic experience. Pleasurable experiences allow our visual perception and recognition to relate to objects we are familiar with. Pleasure seems to be both an active event and an engagement with the mind. We value our visual experiences because they are attractive to what we want to see on a regular basis. Through pleasing patterns they depict beautiful things like flowers, something very familiar, which can be associated with positive memories, such as a wedding or celebration (Roald 59).
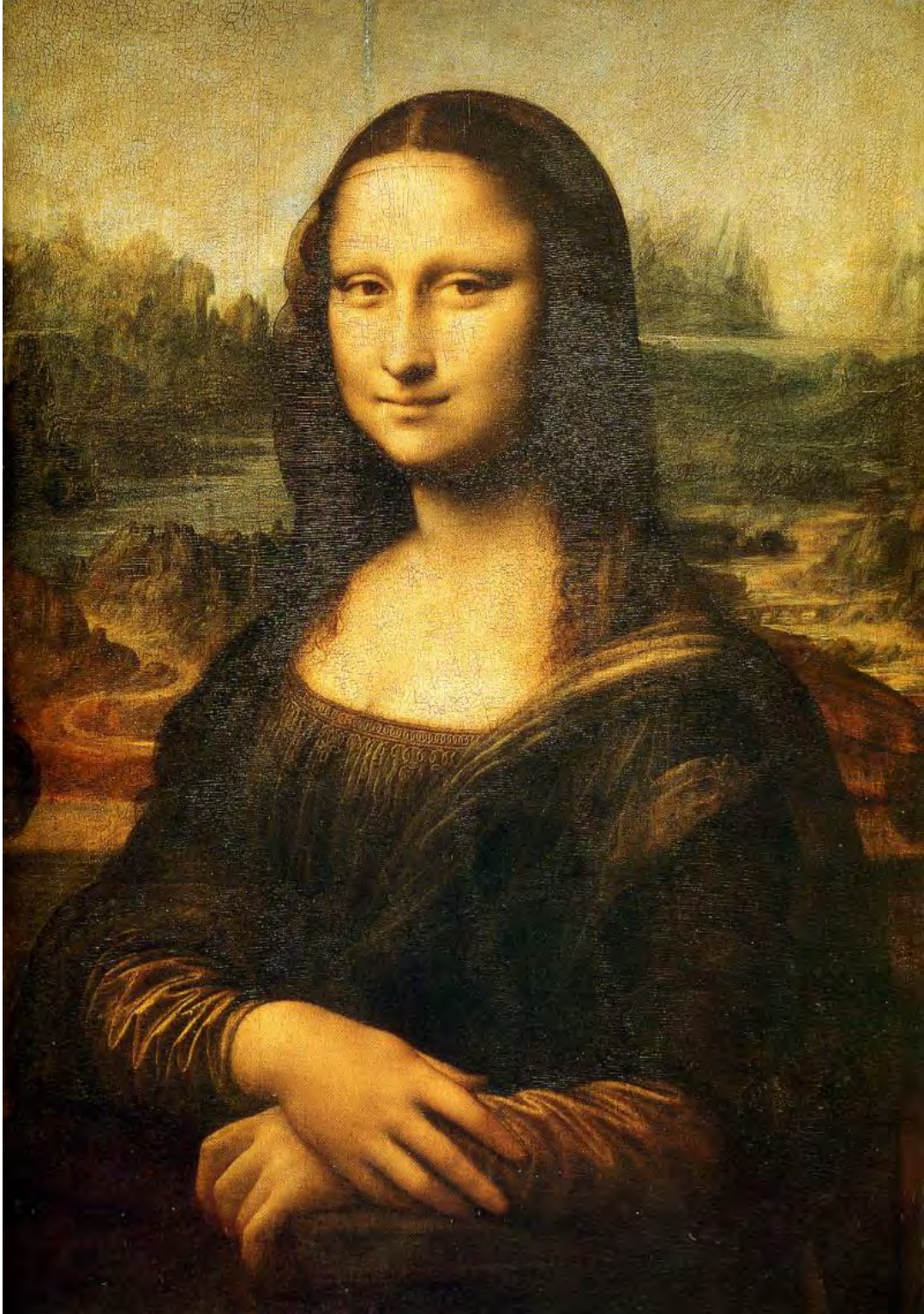
Figure 3: Mona Lisa

Figure 4: Kaleidoscope Country Boy

Visual Organization in Art and Design

In the field of graphic arts a work of visual design can govern visual thinking, it prompts an effect on the viewer as to how you construct unity in a composition. The mind attempts to create order, make connections, and seek a whole by grouping or perceiving visual components by location, orientation, likeness, shape and color (Landa 31). This is the foundation for the perception of things as organized wholes, primarily what our mind organizes as visual data.

Our human nature is to try to create a sense of order and simplify artwork we observe. Knowledge of visual perception suggests people instinctively include what's important to them and what isn't in an image. We tend to enforce order and beauty on the unformed void that is our blank computer screen or canvas. We do it in different ways, creating an organized layout, writing text and content first, or even basing a design concept on an image, a color palette, or something that visually stimulates the mind. Wherever you gain your inspiration, it's often not just the particular element that sparks your artistic impulse; it's the complete element and its surroundings. When you force elements to be reconfigured, parts of the composition suddenly make sense and seem to "fit." This restructuring creates an impact of an insightful "aha" experiences produced in *Digital Kaleidoscopes*.

An example of this would be my piece "Danny's Friend…Bootzilla*,"* I asked my colleague to give an account of what he observed in the image (see Figure 5). He states that at first he saw bright colors of red and a distinct line in the foreground of the image. Below layer one, his eye began to notice repeating elements of what appeared to be a pipe and tank. I suggested that he look away from the image and turn back to the image.
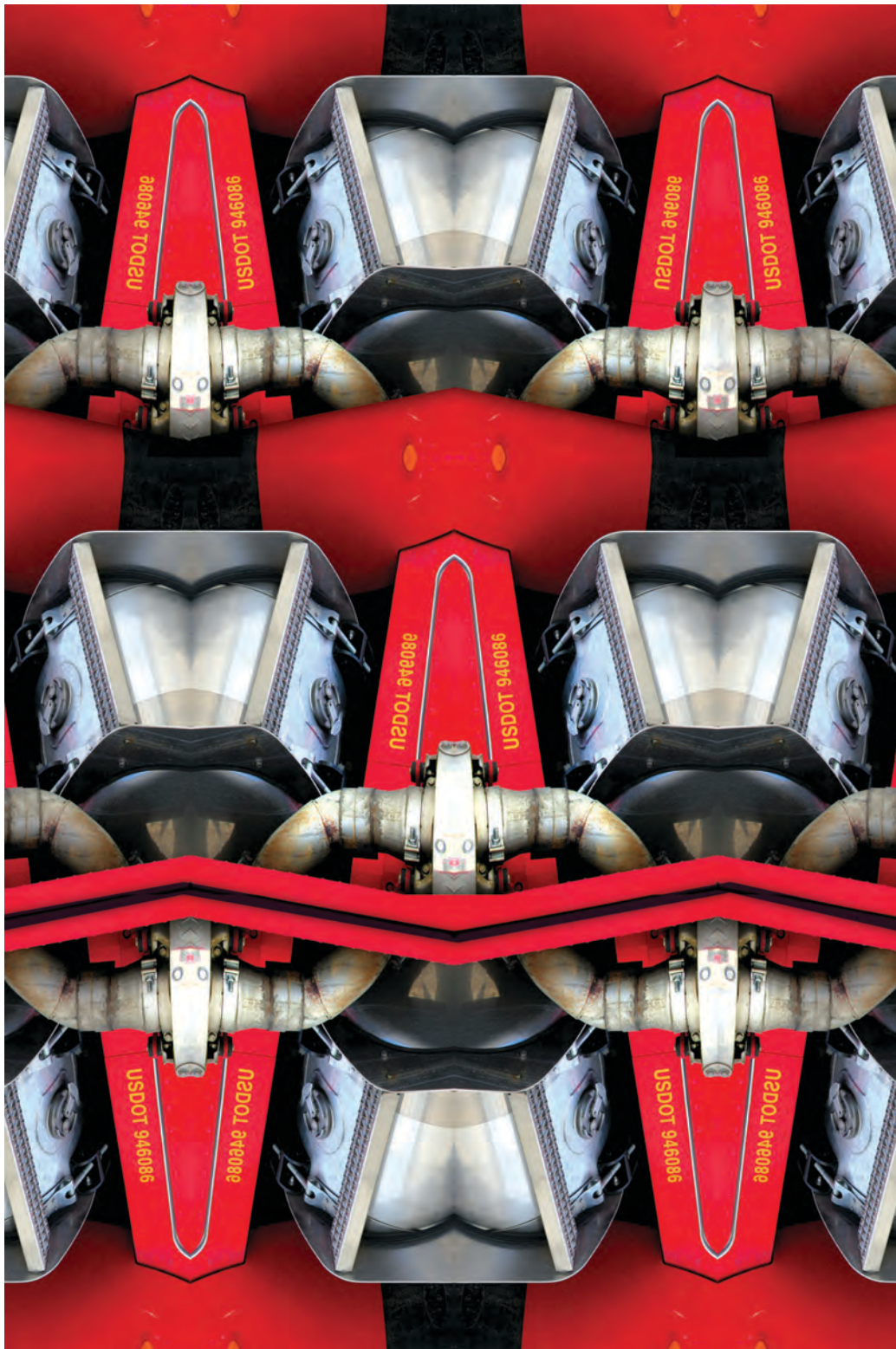
Figure 5: Danny's Friend...Bootzilla

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As he continued to observe each element in the image, he began to organize the elements into facial characteristics.

He began to see two eyes created by the tankers positioned on the left and right, the rusted piping and slanted centerpiece that creates the bridge of a nose. Finally, he completed the facial structure by implying he had seen an open mouth at the bottom of the composition by the reversed position of the metal tank.

Knowing that as a viewer you want a greater understanding of what is being displayed gives a clear direction for your subconscious mind to go to work and find an answer. If you are looking for a person, machine or building in the work, you're more apt to find it. That's as true for finding insights as it is for tracking down a lost pair of socks. Insights are those "aha" moments when looking at clouds and then a person, place or thing appears and the solution to a problem arises right in front of you. These moments happen when fresh new light is spread on a subject you've considered for some time, but with insight, we enjoy wisdom, balance, and perspective.

When looking at the work in my series, at first glance you may see wires in the machine, a window or samples from the original image taken. But in another assessment, you will see the head of a cartoon character, the rib cage of a skeleton or a beautiful abstract composition, for example my piece "Inner Visions of a Cosmic Aquarium" (see Figure 6). In this image the viewer observes green cords that border the edges of photograph, while hovering over a group of red, green and blue cords. But as I mentioned earlier the mind looks to associate unrecognizable images with objects we are familiar with.
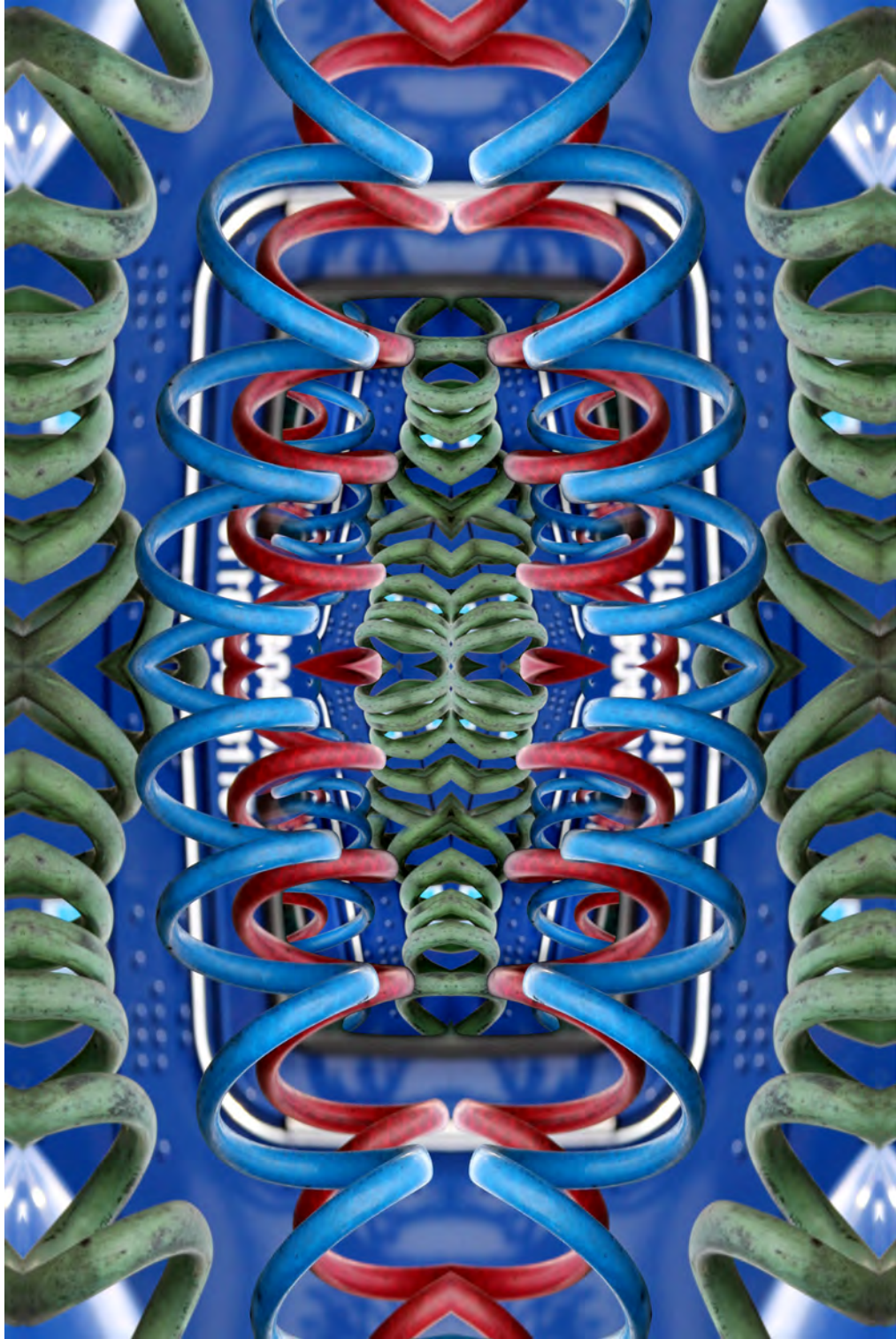
Figure 6: Inner Visions of a Cosmic Aquarium

This holds true in "Inner Visions" as the blue coils in the center of the image resembles the human rib cage or a rubber skeleton. This rubber skeleton seduces the viewer to fall deeper into an abyss of colorful lines. Because the viewer has no recognizable image to associate by what is being viewed the mind searches for an image or thought that makes sense. We have all experienced these moments of deep understanding, even if we might not know what to call them or how to describe them. Suddenly, when we are not consciously thinking about the subject, an answer pops into our heads (Kiefer 15).

Chapter 3: Manipulation of Digital Images

My objective for this chapter is to discuss my use of shapes, colors, textures and repetitive elements on mechanical equipment we see in our everyday life. The choice of subject matter is based on the farming area that is connected to my childhood and my time living in the Richmond, Virginia area. There was a transition from living around farm equipment (i.e. - tractors, hay bailers, lawn mowers, etc.) then moving into areas with railroads and industrial parks are dominating the landscape. My choice of these familiar items is because I wanted to give the cold and mundane objects an alternate personality, by turning them into large, colorful and abstract images. What intrigued me about this subject is the relationship between humans and machines. The human to machine relationship is generally aimed at the human having control the machine or "telling it what to do", whether it is a computer, lawn mower, or a car.

Through controlling the machine, we either take on the personality of the machine or bestow upon it a personality of its own, making it more personable. This personification is what I believe will connect the audience to the machines when they view my photographic artwork. Each machine has its own interesting elements and principles of art intertwined. The machines are interesting because none of them are built the same; each has its own identity and personality.

In my current series the kind of machines I am using to create my abstract images doesn't matter. What matters is how the angles, tonal values and shapes are combined to create the finished product. My piece "Swallowing the Sky*"* is completely different from the *"*Keys Curve Appeal*"* piece because *"*Sky*"* has geometric shapes, rusty textures and a warm orange tone with a masculine appeal. "Swallowing the Sky*"* has an opening in

the center of the image that creates a focal point, pulling the viewer's eye towards sky in the middle of the image. This focal point creates the implied aspect of an open mouth with teeth eating the sky. At the top of the composition the harsh angles garnished by orange and yellow create a pair of angry eyes looking down at its prey (see Figure 7).

In contrast *"Keys Curve"* has very free flowing lines, smooth textures, cool tonal qualities and a feminine aspect to the composition. The outline created by the engine parts resembles the female figure sometimes referred to as curvaceous. The emphasis is linear based, which causes the eye to move throughout the smooth metal textures and organic attributes (see Figure 8).

Figure 7: Swallowing The Sky
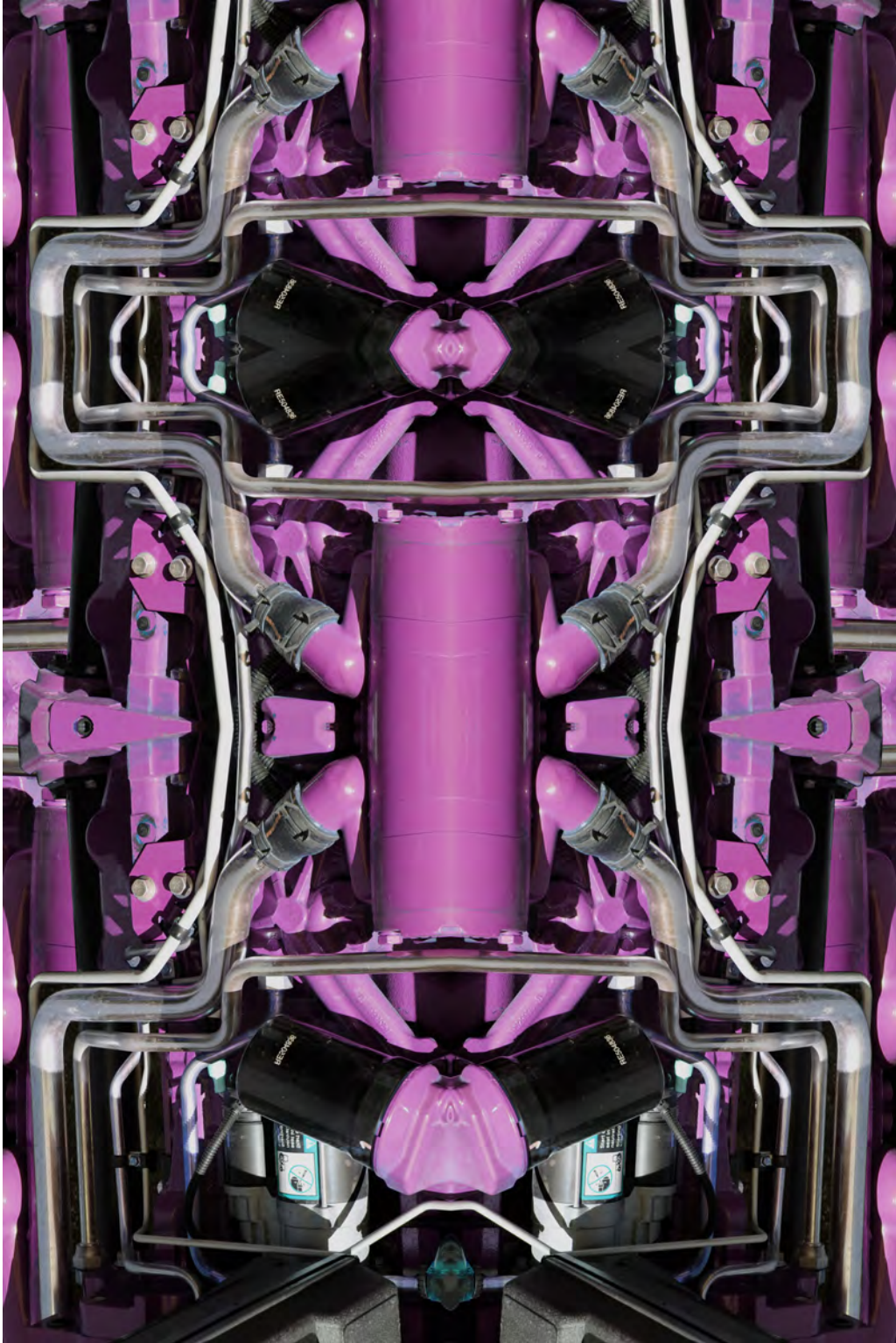
Figure 8: Keys Curved Appeal

Deception and Visual Illusion

My use of photographic manipulations comes from my love of the surrealist movement, autostereograms and an interest in visual perception. An autostereogram is an optical illusion that creates a sense of three-dimensional space from flat images that reveal an additional image after you cross your eyes and trick your brain. The interesting aspect of autostereograms is the way that people interact with them (see Figure 9). People hold the picture extremely close to their face or cross/soften their eyes to try and find an image that the mind has tricked them into seeing. My work is similar to the autostereogram, because it seduces you to truly observe the composition up close and from a distance, in order to see what is possibly happening in the image.

Figure 9: Autostereogram

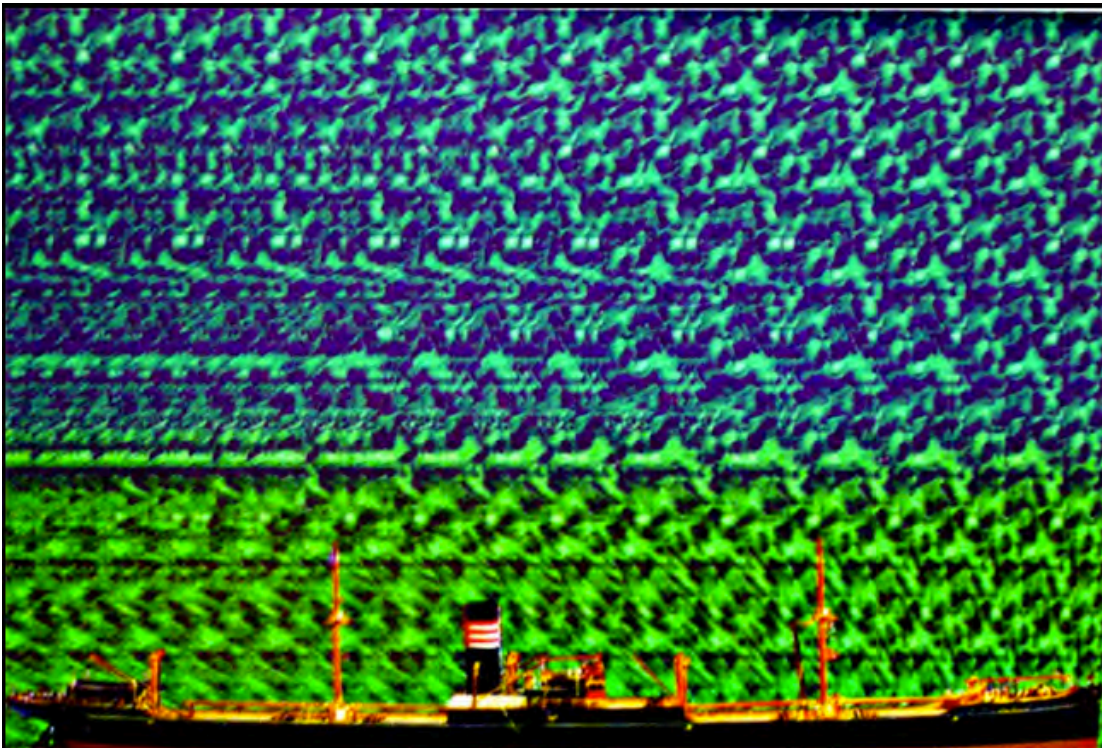As an artist I find the idea of how the human brain processes art into what the eyes visualize to be riveting. The brain uses the differences between the images from each eye to perceive depth. When you look at something that features a repeating pattern, like an autostereogram, the brain can have a hard time matching the images from the eyes accurately. The image in an autostereogram will pop out when you successfully match segments of the image that aren't usually paired together when viewing an image normally. When this happens, the brain can be tricked into seeing an image that appears to be in front or behind the real image.

Work created for this thesis project relies heavily on the execution of photographic manipulation through repeating design elements to create an optical illusion with ambiguous patterns. Pattern can be described as a repeating unit of shape or form, but it can also be thought of as the "skeleton" that organizes the parts of a composition. Those patterns in conjunction with deceiving the mind are important aspects of my work that emulate the critical techniques of making optical illusions in *"Op Art."* In the style of *"Optical Art"* artists use a method of painting concerning the interaction concerning illusion and picture, between understanding and what the viewer sees (Houston 29).

The very existence of "Op art" is based on its ability to fool the eye. *"Op"* compositions create a visual tension, in the viewer's mind, that gives works the illusion of movement. Artists like Bridget Riley and graphic designer M.C. Escher are masters of Op Art. For example, look at Bridget Riley's "Movement in Squares*"* for even a few seconds and it begins to dance and wave in front of your eyes. In reality we know the work is flat and two-dimensional (see Figure 10). Your eye, however, begins sending

your brain the message that its observation has begun to waver, flicker, and throb. This tricks the mind into thinking the squares are actually moving. "Op Art" is, almost without exception, non-representational. The elements employed in the style are specifically chosen to achieve a full effect. Positive and negative spaces are equally important when looking at different compositions using the style (Follin 85).

The implied abstract patterns in my art and design create an engaging "eye candy," employing the idea by bringing together a diverse mix of mechanical components, metal textures and vibrant colors. Repeating patterns are everywhere in our environments, clothing and everyday objects. When you think of patterns in art, abstract designs may pop into your head. But this doesn't mean that patterns only appear in abstract art they can be a part of a wide variety of art styles, including photorealism.
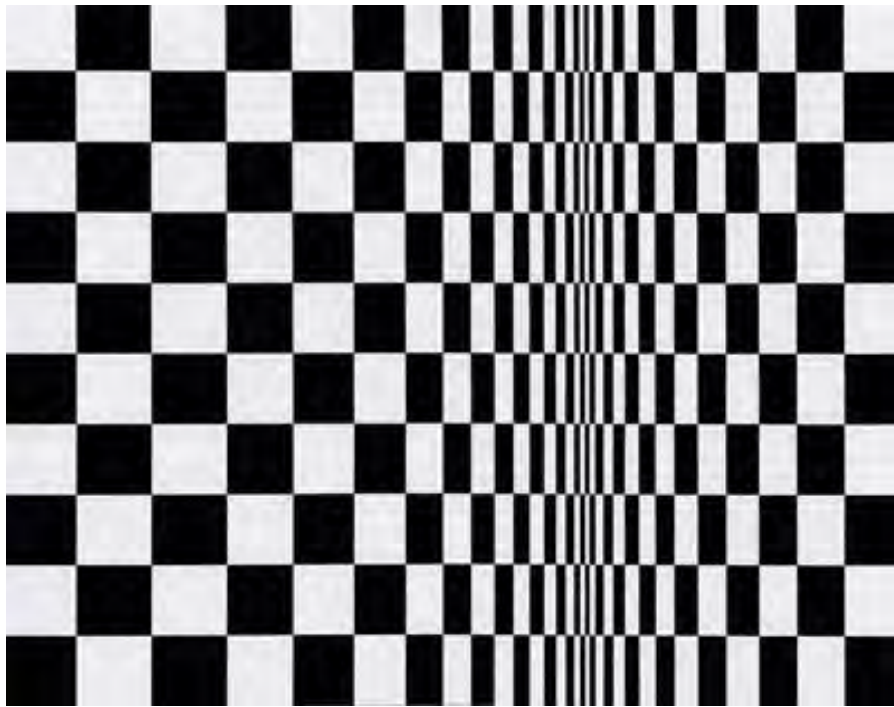
Figure 10: Movement in Squares

The idea of patterns is an underlying arrangement that organizes surfaces or structures in a consistent, regular manner. Intricate shapes, repeating patterns, and bright, vivid colors will provoke an emotion, a memory, or relate to some kind of sensory input the viewer has experienced in the past.

In *Digital Kaleidoscopes* each piece has an individual pattern created by flipping various sections in the original photograph. For example, *"Willow Wisp Pipe Dreams"* is created by taking a photo of a several pipes positioned on top of each other at a construction site (see Figure 11). Each pipe in the pile lay at varying lengths, which is an element in the final image that created depth and an added 3-dimentional aspect to the composition. The original photograph featured PVC piping that shows rhythm and repetition. Because of the pipes' smooth texture, when I manipulated the image the feeling of an abstract illustration was created unlike the metal in my other images.

This abstraction can indicate a departure from the reality in the depiction of my original imagery. At the most basic level, a connection to pattern, shape, asymmetry and symmetry can be implanted into our creative consciousness. This departure from a figurative representation can be partial, or it can be complete. In "Willow" repeating large geometric circles and ovals combined with the cool ocean blue tones are quiet and light yet cause the eye to fall into different shadows of the 3D inspired image.

Altering the placement of pipe sizes in front of the image and making the foreground objects overlap a confusing background helps maintain and establish perspective, since objects in front, obscure the viewer's observation. Although the image is abstract and full of movement and energy the blue is quiet, like a jazzy piece, mellow
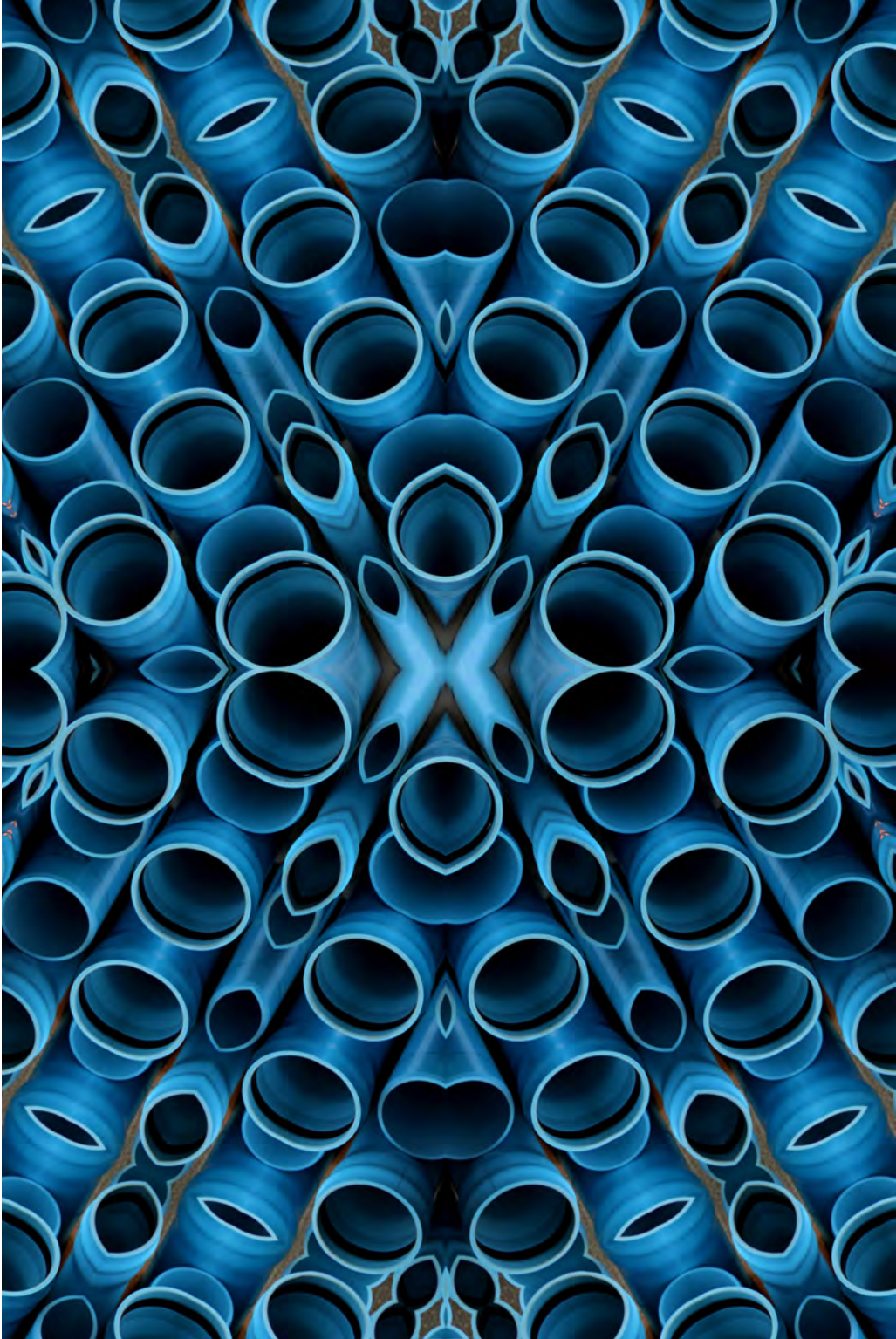
Figure 11: Willow Wisp, Pipe Dreams

and peaceful. That is one of the reasons I chose to name the piece "Willow Wisp, Pipe Dreams" after one of my favorite jazz songs by Miles Davis.

In my *Digital Kaleidoscopes* series, image transformations into abstract art can make the audience uneasy because they don't automatically know what the art is about at first glance. I am embracing this because my work is about interacting with complex image manipulations, which create mirages in the mind. Some abstract art doesn't contain recognizable objects, so there is nothing to grasp or hold onto. This can be confusing, or uncomfortable to a viewer who is not used to assigning their own connotation to what they see before them.

Chapter 4: Artistic Inspiration

In this chapter I will discuss artists Salvador Dali, Jerry Uelsmann and Andreas Gursky's use of illusion and visual perception. Each artist has an different technique that features various design elements such as manipulation, patterned repetition or photography. Artistic expressions are used to induce the audience to interact with visual illusions in terms of trying to interpret or perceive the artwork they are observing. Like these artists, I create work that engages the viewer in questioning the identity of images through the aforementioned techniques. These methods subconsciously cause the viewer to create their own subconscious image and to question if they recognize alternative characters in the composition they are looking at. I use these techniques to push my work toward an enjoyably, interactive level.

Digital Kaleidoscopes is inspired by the work of Surrealist Salvador Dali. For years I have been amazed by his ability to draw an audience into one of his paintings by creating images that cause the viewer to look more then once and search for something they don't usually see at first glance. "Swans Reflecting Elephants*"* a painting from his Paranoiac-critical period contains one of Dali's famous double images (see Figure 12). During this period, the object began being thought of not as a fixed external object, but also as an extension of our subjective self. According to Dali, these objects have a minimum of mechanical meaning, but when viewed the mind evokes phantom images which are the result of unconscious acts (Paranoid-Critical).

He explained his process as a "spontaneous method of irrational understanding based upon the interpretative critical association of delirious phenomena."

Figure 12: Swans Reflecting Elephants

Dali used this method to bring forth hallucinatory forms, double images and visual illusions that filled his paintings during the thirties (Dali 30).

Employing this method when creating a work of art uses a cognitive process of the mind to visualize images within the artwork. An example of the resulting work is a double image or the use multiple images, in which an ambiguous image can be interpreted in different ways. This is the same idea implanted into my *Digital Kaleidoscopes* series. My goal is to create confusion in the mind of my viewers when looking at *"RU Confused Engines"* (see Figure 13).

In working on *"RU Confused Engines"* I manipulated a Radford University facilities tractor engine, by reflecting its strong metal textures and rotating the image 90 degrees. Through the reflection/mirroring of this composition I shaped a robot like
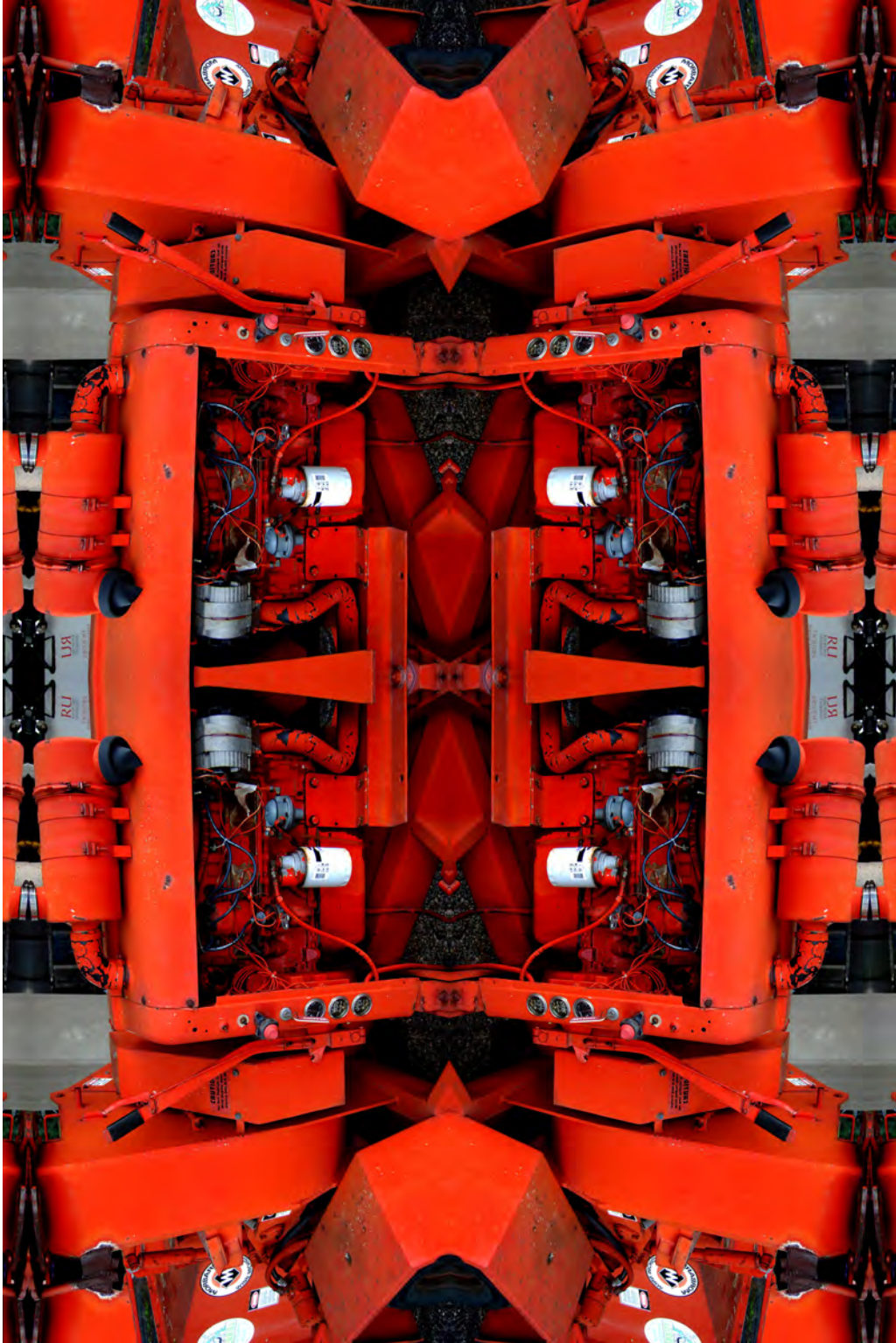
Figure 13: RU Confused Engines

feature that is created from the images dark tonal values and shadows. This causes a feeling of dominance and evokes an aggressive emotion with the color red. When looking at the 3-foot image, the viewer will be taken back by its size and fierce warm tones. Within this image, the focal point becomes the inner components of the engine. This highlights an assortment of lines, shapes, contrasts and colors. The large square that frames the center, features white oil cans, blue wires, silver plated alternators and other engine parts that lead the viewers eye through out the image. The top and bottom elements cause the viewer to question what they are observing.

The picture of a robot when observed from a distance depicts a character that is looking at its alternate self or who happens to be obsessed by his own exposed insides. The image can have different possible meanings, which I leave up to each viewer. To me it means that what we see in the physical world isn't necessarily what is seen on the inside "RU Confused Engines" has been interpreted as an image of open-heart surgery, a couple sitting a dinner table or an evil robot from the movie "Transformers."

Jerry Uelsmann is a photographer who exaggerated the compositing technique by merging various photographs of normal settings and using objects that don't belong together, to create surreal composited images (Uelsmann, Prodger 14). His photograph "Tree Goddess" creates a surreal landscape through its mix of a large tree combined with a face of a woman (see Figure 14). He adds intrigue to the image by placing the face of a woman on this massive tree in the foreground of a mirrored landscape. This is an example of his intricate compositing. These innovative images bring new perspectives into his observer's minds through the mirrored image.

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Figure 14: Tree Goddess

Uelsmann began assembling his photographs from multiple negatives years before digital software like Photoshop was available. Uelsmann's creative process begins when he uses the camera and interacts with the world by taking pictures of surroundings. Using as many as seven enlargers to expose a single print, his darkroom skills allows him to create interesting images that joins the realism of photography and the fluid visions of our dreams. His style in terms of the "photographic process" is intimately tied to his creative vision (Ueslmann ix).

In my piece *"Mars is Rising Down and Falling Up"* my approach was to create a surreal scene using an old abandoned Acme Building (see Figure 15). Using mirroring and compositing techniques similar to Uelsmann, I transformed an organic scene to entice the viewer into losing a sense of direction. The original image is taken from the outside of a grey building, where there are large streaks of black across the walls as dirt and grunge cover metal exhaust pipes. I have taken this abandoned area and created an unsettling, enchanting and oddly melancholy image. Using photomontage techniques inspired by Uelsmann's black and white work, I use the exhaust tubing as a tool of pulling in the viewer.

The gray scale tones, ridges and textures of the tubes are reflected, combined and mirrored. Reflecting those elements creates directions and pointers that lead the eye around the image and make it hard to tell what direction the image is positioned. In one perspective the image can be seen as looking up, while another viewer may think they falling into an endless space. This illusion is created through the use of windows, angles, shapes, and values that have been taken from different sections of the building; this takes on the shape of a diamond in the background.

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Figure 15: Mars is Rising Up and Falling Down

While utilizing elements of reflecting and cropping, I take the aforementioned image and manipulate it even further. In the center of the image an abstract image is created using the white, grey exhaust tubes that are framed by thin pipes. This was done to give the image a life-like character that appears to be looking back at the viewer from an alternate universe. A surreal like image creates a dream world, that allows the viewer to partake in a new dimension of what's up or down.

Andreas Gursky is a German artist known for his large format architecture and landscape color photographs, often employing a high point of view. He is known for seeking out formal patterns in real environments. The size of his work was an important factor in my choice of size for my work. Although my images are half the size of his work, I am aiming for the same overwhelming reaction in viewers that he conjures in his work. It is possible to get a disorienting sensation of an active element at work.

A visual sense of organization dominates the events shown in his pictures. He overpowers the real setting of what is going on throughout the overall concept of the picture. *"Pyongyang I"* one of his most accomplished photographs, is an example of his large-scale scene that is filled with small details and repeating patterns (see Figure 16). The camera's distance from these figures means they become de-individualized (Lippiatt 132). Apart from the constant patterns, Gursky is never interested in the individual subjects and you never notice arbitrary details in his work. Standing in front of the image, the viewer becomes consumed by the vastness of color. In a clever placement, thousands of individuals that are the subjects in "Pyongyang I," merge together into one, just like the constituent pixels that make up a photograph (Quick 14-15).
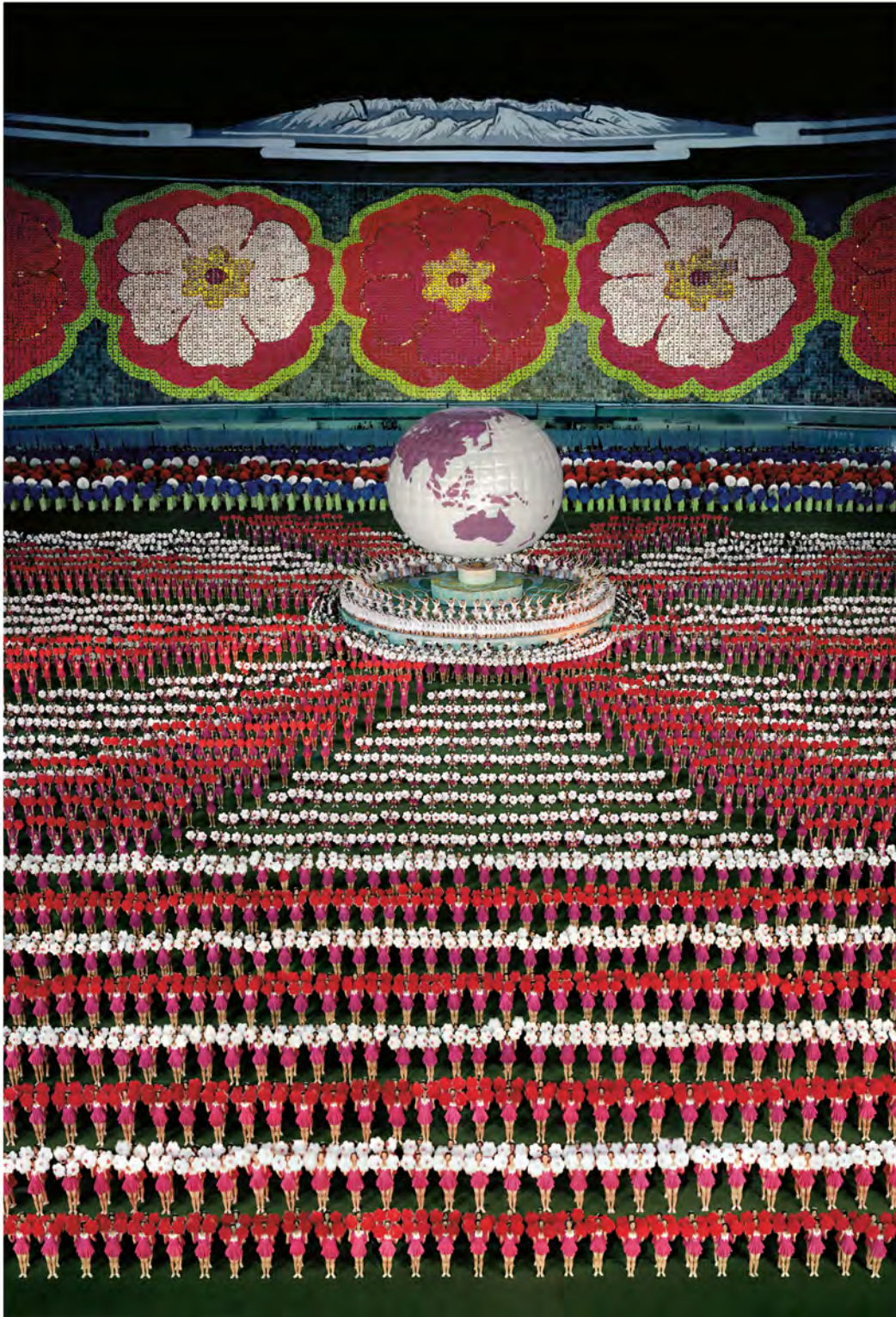
Figure 16: Pyongyang I

The images invoke the spirit of techniques used by impressionist painters, where an image appears very different from a closer perspective than at a distance. I noticed this when viewing my work; the piece took on a new identity when viewed at a distance in the gallery. As I observed the details of *"Kaleidoscope Country Boy"* initially I stood a couple of inches from it to observe the images detail for example the rust texture, traction on the tires and trees in the background (see Figure 4).

When I stepped back 6 feet it allowed me to view the image in its entirety; instead of seeing the small details, that now formed larger elements in my view. For example a small tire transformed into multiple images of tires positioned in a close proximity to create a set of eyes and rotation/reflection of the metal frame on the farm equipment formed a large mouth. Like Gursky's photographic works my images are based on a multitude of shots. These are elaborately compacted together on a computer, becoming one essential composition.

Gursky initially starts off searching for images from a digital catalog he has created. The images do not just appear out of nowhere. They are based on pictures, which existed previously in his reality. He works in his home studio on the pre-picture of the composition, using image-editing software until it matches what he had in mind. He stated in an interview *"What I do it is not purely photography."* All of his images draw from direct visual experience, from which a prominent idea is developed. Which is tried and tested in the studio, by adding and removing components in terms of their worthiness of being used for a picture, and finally developed and rendered precise on the computer (Ohlin 23-25).

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Chapter 5: Methodology and Digital Process

In this chapter I discuss the methods and digital process used to create my series *Digital Kaleidoscopes.* For me, creating Digital Kaleidoscopes brings two separate mediums together in graphic design and photography. I wanted to explore abstract transformation; specifically the transformation of ordinary, unique and everyday machines into something unrecognizable. I used this idea to convert cold and boring subjects into something worthwhile; something beautiful that people can appreciate and be moved by. Combining the two mediums together allows me to create a complex composition by refining colors and shaping several parts of the image. These refined elements generate a repetition and rhythm that feels cohesive and complete.

My process began by scouting locations throughout Virginia, which consists of construction sites, equipment rental companies, dealerships and farming communities. These locations and machines were selected based on their similarities of subjects to stay consistent with the theme of my project, but also for their individuality in terms of form and composition. At each location there was a conversation with the owners about what I planned to photograph on the property and my reason for each of their machines. I also asked them what some of the machinery's functions were so my understanding of the subject being photographed was sufficient.

Several photographs were taken at various stages of work when compositing images. These photographs show intricate details such as wiring, piping, and components that are concealed during later steps of production. These pictures are often used to highlight certain aspects of work equipment usage, and modifications. When I photograph large equipment or machines like cranes or bulldozers, a series of pictures at

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different angles is one of the best ways to cover the subject. Some of the pictures were planned in a way that would record important details of the subject. For example, detail in various components and parts of the equipment then my positioning to take the photos.

Complexity of each photograph has its own way of leading the viewer's eye throughout the picture. The beauty of these images comes from the audiences' interpretations of what they perceive in each mirrored image. My goal is to have viewers observe the photographs while allowing their minds to analyze the different layers, angles, and colors of the image through ambiguous focal points. Using a machine as a subject is a great metaphor to observe in terms of dissecting a person or objects depiction beneath the surface. It is our human nature to look at the outer shells of things as a representation of their identities. But just like our identity as people, when you look beneath the hood you find all the fascinating components that completes its uniqueness, composition, and deeper meaning.

Acknowledging that everybody who views my work will not understand it or see what I see is an idea that is comforting to me. This is most gratifying about my work because not everyone understands me as person or what I am trying to display in my artwork. That's why I feel it is important to awaken the creative awareness of our visual perception, but to also appreciate the beauty and personal meaning of it. Of course, this only works if you collaborate with the artist. My position is to create an image that is rendered so cleverly that, when you look at it, what you see actually changes what you feel at subconscious level. In order to enjoy the images this series, my viewer has to clear their mind of thoughts and preconceptions in order to allow them to be influenced by what they are seeing.

Digital Process

It was important that my subject have an interesting appearance that included mechanical components and textures full of vibrant colors, abstract shapes, lines and great lighting.   Natural light enhanced each machines color, texture, and setting.   This is a key component because every aspect of the image scenery is important for an effective manipulation. When taking photographs in RAW I made sure that my camera settings produced accurate color renditions and "clean" noise-free images. By setting the file output to "RAW", I retain complete control over developing the image while keeping important details in the photograph.

It's important that these settings were in place because I knew that the finished product would be tripled in size. Therefore, the image quality had to be as sharp as possible to withstand the amount of cropping, reflecting, and enhancements once I began most work in the design software Photoshop CS5.5. A period of 4 months was spent shooting, cataloging and editing images, to capture the most visually interesting aspects of each subject. After that a photo bank is created a full of visually pleasing and interesting images before testing manipulation techniques in Photoshop.

The success of this series is based on the lighting, sharpness and the construction of each machine in the photograph. I approach each image with the forethought that every image will be duplicated and transfigured into an abstract composition.   Using this technique alters each machine to create a visual expression that's not basic, but one that engages and excites the viewers mind. This is determined by how each repetitive element flows through the composition in conjunction with visually pleasing illusions.

Methodology

The photographs chosen have organic shapes and unique textures such as rusted metal or smooth plastic. There are also vibrant colors with bold flowing lines that make photographs usage in this process very successful. During this phase of production an abstract composition generates multiple patterns and layers to the point where the original image becomes difficult to recognize. Next, I return to the image and use the marquee tool in order to draw a box around the most interesting sections from the engine to the tires on the machine, and prepare to manipulate.

While my images become abstract in the end, I rely on squares, rectangles, and lines when putting together these puzzles. My goal is to allow the lines of pipes, cords and textures within the machines image to unify and fall into place naturally once mirrored or rotated. Each time a new piece begins, my start points are in the top or bottom corner of the page, pulling guides from the ruler section to make sure the measurements are correct and the images are aligned when duplicated.

Once I am inside of Adobe Photoshop, my guides are put in place, the image is rotated 90 degrees to see what the best starting point will be, and the layer is copied and flipped horizontally. This creates the bottom portion of my image by unifying the shadows, colors and mechanical components from the first section. Step one is duplicated, but by grouping the two new images together and flipping them vertically. The new image that combines the four alternating sections generates a visually pleasing composition. I then choose to look inside the image and dictate how each pattern works together. From that observation, the photograph's approval is based off its uniqueness and how much extra potential for complexity and abstraction is available.

In his book *"The End of Print,"* David Carson states that what matters is that you have an intuitive design sense, listen to it and explore your uniqueness through your work. Create rules that work for you and the type of work you're doing" (Blackwell 6). This is what I do with my work; it talks to me without saying a word, speaks to my mind, and pulls me into a world of abstraction and illusion. During my working process I have 5 versions of one machine image, each version even more complex then the other. These options allow me to choose the most interesting piece for my audience to study, while observing the work.

When I finish the first image, I think about how the audience will interpret what they are observing. Certainly, the majority of my abstract images are not going to be particularly pleasing to everyone's eye. This should cause the viewer to question whether there is something more to it and begin to look through the image to find a familiar section. The truth is, yes, there is a lot more to abstract art than what meets the eye, and to see why, you have to free your mind from the perversions of reason and everyday experiences (Shapiro 2).

In my process I also recognized that to truly appreciate a work of art, sometimes you need to see it as more than a single, isolated creation: there must be context. One of the purposes of art is to allow us indirect access to our inner being. This allows us a way to get in touch with the unconscious part of our existence, even if we don't realize what we are doing. In this logic, my role as an artist is to create something that, when viewed by an observer, evokes unconscious feelings and emotions.

If I am unsatisfied, I will scale it to half its size with the free transform tool and marquee tool that allows me to select and resize an object. Using the marquee tool, part

of the image is cropped to cut a portion of the new image off.   The remaining half of the image is duplicated and flipped horizontally, vertically or rotated to create the best image. This group of images is flattened and positioned around the page until I create a perception of illusion. I had a happy accident during the middle of this body of work.

At this stage I added an extra step by adding hidden elements that may be unnoticeable at first glance. In my manipulation process, I make them stand out without being obvious. I create this by moving the image up so that the proximity of shapes, lines, and shadows begin to subtly resemble eyes, heads, and other characteristics. I enjoy creating those attributes that are not initially noticeable.

For example my piece "Army's Labor, Diana's Vision" was originally set out to manipulate a bulldozer into an abstract form with geometric patterns and different shapes (see Figure 17).   In my excitement for the creative process, I began thinking about how my grandmother "Army Jean" would love this new body of work. This caused something in my psyche to connect. I thought about all the years she spent working hard as a maid cleaning homes, full of dirt and mess to provide for her family. She handed down this idea of hard work to my mother who also had that same vision for my brother and me. The idea behind it was not to let any obstacle stand in your way always create your own path.

When I returned to editing my abstract image, it had taken on a new identity because of the hard working metaphor based on my mother and grandmother. Ideally, this fit perfect with the character of two strong hardworking women and the definition of a bulldozer. The definition of a bulldozer is "a person, army, or other body exercising irresistible power, especially in disposing of obstacles or opposition." While

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reorganizing the composition, I looked at the pattern originally created and the elements featured in the composition. The patterns created in the image featured repeating dark diamond shapes, with large pieces of yellow metal that crossed to create an *x*-like structure.

Throughout the image you can see the rusted textures and hints of tires that have been cropped and reflected. I chose to crop a section out of the top right pattern to use as my abstract centerpiece, because the section looked like a pair of mask with a pair of eyes. To keep a consistency with my abstract compositions, I used the original pattern as my background and manipulated on top of that layer. The warm tones of the image allowed me to connect with my mother and grandmothers skin tones.

Once I had everything restructured in the image, I noticed that the diamonds in the four corners produced movement, which utilizes graphic design elements known as directions and pointers. This caused my eye to follow throughout the image and connect to the lines and shapes created by manipulation.

Several tools that are essential to my post production are contrast and color in adjustment layers, hue/saturation, levels that enhance the hues of my color and detail in each image. Enhancements were made to the abstract figure by using the burn and dodge tool to improve contrast and tonal reproduction in my images. I decided to add an extra element, by cropping the centerpiece, scaling it to a smaller size and rotating it to imply a character with dark eyes (the tires) is looking at my audience. As an artist I created this extra abstract element knowing what it means to me personally, but using the identity as a hidden message that allows my audience to come away with a personal assessment.

Figure 17: Army's Labor, Diana's Vision

Chapter 6: Conclusion/Personal Assessment

Throughout the thesis investigation, the intention is not to tell people what they should see when viewing my body of work. It was for the viewer to enjoy the experience of observing complex and abstract artwork, while viewing image creations. This work is a reflection of my personality as person and me as a creative artist. While I am very serious about my skill as an art and design major, I truly have fun with this gift God blessed me with. If my audience feels half as good about what they observed and discussed in my work as I do, then my goal is ultimately complete.

Interestingly, the body of my work is like a catalog of artistic thoughts in my life. For me, making work is like musician writing a song to clear his mind. Displaying and offering these abstract reflections of me, is the meaningful aspect of my work.

I chose to manipulate beautiful photographs in an abstract layout that allows the mind to find its own interpretation of what it is viewing. I create images using a digital manipulation technique that consists of mirroring and repositioning an image from a basic composition and into a pattern. The motivation for these techniques explores the viewer's cognitive perception of how the brain processes art. In my work, I enjoy deconstructing the view of subjects to create new abstract compositions and inspire mental/emotional attachments in relation to what's displayed in the image. I attach this to my idea behind breaking down the definition of what an artist or graphic designer can be to restructure that definition into something new and fascinating.

My plan for the future is to gain artistic integrity by continuing to create a cohesive body of work. I will continue using this manipulation and pattern technique by selecting different subject matter. I plan on creating several different series using the

techniques used in my *"Digital Kaleidoscopes"* series, but adding a 3D element to enhance the illusion of objects. For a future body of work I plan to use food, buildings, and animals to explore the idea of my mirroring technique. These various subjects will challenge me to work different textures, structures and colors that may not feature vibrant colors and sharp lines. Adding this new technique will enhance my process of returning to my client work. Combining my new style of design and photography affords me the opportunity to use my abstract images for packaging, advertisements, and other sections of graphic design.

The concept behind my abstract image creation is illusion and depth through the manipulation of objects. I generate abstract art that grabs the viewer's attention and makes them work. It is not a given. Each image creates a feeling of complexity, movement and abstraction within a motionless object. Understanding my art is not easy because it requires an open mind and a big imagination. I leave this complex and abstract art open to interpretation and that is one of the beautiful things about it.   The body of work doesn't start out and proclaim, "This is who I am and what you should see." Instead, *Digital Kaleidoscopes* requires you to have an unprotected thought and inquiring mind, as a viewer you must observe the image and see where it takes you.

This series forces you to explore the artwork and assign your own meaning to the piece. I believe this personal experience enhances a viewer's interaction with the artwork. Initially, I tried to separate graphic design and photography while trying to become an artist in the process. After this process, I realized instead of separating the two, I combined them together to become an artist who uses graphic design and photography as my most important tools when creating artwork. The intention of this

thesis is not to tell people what the right or best medium is. Beneath my affection for abstract and surrealist art, I built confidence in myself by stepping out on faith to create a new style of work that includes two of my favorite mediums.

It is not only about understanding the discipline, but also figuring out what my role as an artist is in creating something new and finding my strengths by figuring out my interests and developing knowledge of something new. This newness allows me to position myself in a versatile place to include my interests, passion, and talent. While my role as a Graphic Designer has expanded over the past few years by mixing photography into my skill set, the juxtaposition of the two has enhanced my ability to make artwork and create a unique design identity for future projects.

Work Cited

Ades, Dawn, Pinchot, Antonio, Sutton, Peter, and Zafran, Eric. *Dali's optical illusions*. New Haven: Yale University Press, 2000.

Blackwell, Lewis, and David Carson. *The End of Print: The Grafik Design of David Carson*. Rev. ed. London: Laurence King, 2000. Print.

Fantz, Robert L. "Pattern Vision in Newborn Infants Science." *Science*. 140.3564 (1963): 296-297. Print.

Follin, Frances. *Embodied Visions: Bridget Riley, Op Art and the Sixties*. London: Thames & Hudson, 2004. Print.

Galer, Mark. *Photography: Foundations For Art & Design: A Guide to Creative Photography*. 4th ed. Oxford: Focal, 2007. Print.

Graham, Donald W. *Composing pictures*. London: Van Nostrand-Reinhold, 1970. Print.

Heller, Steven and Ilić, Mirko. *Stop, Think, Go, Do: How Typography & Graphic Design Influence Behavior*. Beverly: Rockport Publishers, 2012. Print.

Houston, Joe. *Optic Nerve: Perceptual Art of the 1960s*. New York: Merrell Publishers, 2007. Print.

Kiefer, Charles F., and Constable, Malcolm. *The Art of Insight: How To Have More Aha! Moments*. San Franciso: Berrett-Koehler Publishers, Inc., 2013. Print.

Landa, Robin. *Graphic Design Solutions*. 4th ed. Boston: Wadsworth/Cengage Learning, 2011. Print.

Lippiatt, Matt. "Andreas Gursky: Pyongyang." *Flash Art (International Edition)* 40.254 (May/June 2007): 132. *Biography Reference Bank (H.W. Wilson)*. Web. 29 Apr. 2013.

Ohlin, Alix. "Andreas Gursky and the Contemporary Sublime." *Art Journal*. 61.4 (2002): 22-35. Web. 10 Apr. 2013.

"Paranoid-Critical Method: Salvador Dali." Tufts University, 28 December 2009. Web. 02 Apr 2013. <http://www.tufts.edu/programs/mma/fah188/clifford/Subsections/Paranoid Critical/paranoidcriticalmethod.html>.

Rock, Irvin. *The Logic of Perception*. New York: Scientific American Library: Distributed by W.H. Freeman, 1984. Print.

Roald, Tone. *Cognition in Emotion: An Investigation Through Experiences with Art*. Amsterdam: Rodopi Bv Editions, 2007. Print.

Schaefer-Simmern, Henry, Fein, Sylvia, Schaefer-Simmern, Gertrude and Abrahamson, Roy E. *Consciousness of Artistic Form: A Comparison of the Visual, Gestalt Art Formations of Children, Adolescents, and Layman Adults with Historical Art, Folk Art, and Aboriginal Art*. Carbondale: Gertrude Schaefer-Simmern Trust, 2003. Print.

Schapiro, Meyer. "Nature of Abstract Art." N.p. Web. 19 Apr 2013. <http://abstractpossible.org/2011/04/08/nature-of-abstract-art/>.

The Art Gallery, University Of Maryland at College Park. *Trajectories: Marking Time in Contemporary Art*. College Park: Art Gallery University of Maryland, 2008. Web.

Uelsmann, Jerry and Prodger, Phillip. *The Mind's Eye: Photographs by Jerry Uelsmann*. San Francisco: Modernbook Editions, 2010. Print.

Uelsmann, Jerry. *Jerry Uelsmann: Photo Synthesis*. Gainesville: University Press of Florida, 1992. Print.

APPENDIX

MFA Thesis Exhibition