Approachi Significans

Luke Shaw

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APPROACH SIGNIFICANCE

LUKE SHAW

THESIS

Submitted In Partial Fulfillment of the Requirements for the Degree of Master of Fine Art in Imaging Arts; School of Photographic Arts and Science, College of Imaging Arts, Rochester Institute of Technology.

School of Photographic Arts and Sciences
College of Imaging Arts and Sciences
Rochester Institute of Technology
Rochester, NY
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Approval:

______________________________  _______________________
Greg Halpern, Committee Chair              Date

______________________________  _______________________
Christine Shank, Committee Member         Date

______________________________  _______________________
Clarence Sheffield, Committee Member      Date
Approachi Significans is a demonstration of the interference patterns created by scientific and artistic logics. It promotes immersion in the everyday world through experimentation and a search for novel experience, as such efforts prime the mind for novel thought. It is loosely based in a search for constellations of experiences that prompt Eureka moments and an effort to illustrate the organic nature of the scientific process. The title is derived from the phrase ‘approaching significance,’ which is used to indicate that experimental data is moving towards the confirmation of a hypothesis.
Approachi Significans
Approachi Significans: Approaching Significance

Luke Shaw, 2013

Today I found a tick on me. It was an American Dog Tick (*Dermacentor variabilis*) – either a male or a female that hadn't been there for long, so it was very small: about 1/8 inch from anterior to posterior. It looked like a tiny scab from a tiny cut that was never inflicted. I reached to the tiny brown spot and plucked it, exerting a surprising amount of force to remove the parasite. I then speared the organism with my thumbnail against the fleshy tip of my index finger, pressing with as much strength as my fingers could exert. I wanted it to pop, but it didn’t. I wanted to feel the faint mist of my own fluids sprinkle on my skin as they were ejected by the forceful explosion of the organism. Instead, the creature just stretched out its limbs, a likely result of the extreme pressure building in its body. When I retracted my nail its limbs curled slowly, only to be extended again when I placed my nail back in the dent I created in its abdomen. I placed the deceased in a jar for safekeeping, as a record of an experience I had yet to draw a conclusion from.

Similar occurrences form the foundation of *Approachi Significans*, a book of photographs about a scientific process mediated through experience, creativity, and chance. It is contrived, joyful, and imagines exists in a state of awareness that primes the mind for novel thought. I am interested in how a scientist, for example, deals with the necessity to create, just as an artist would in situations when the pool of if/then possibilities dries up and the solution to whatever problem is not immediately apparent.

*Approachi Significans* is a manual of sorts, a guide through the memories of a mind that is open and receptive to the possibility of unpredictable solutions. They are the potential precursors to solutions, which would function to subconsciously break down any typical method of problem-solving by relaying strange or unexpected experiences. The tendency to think of science and art as diametrically opposed entities or mindsets limits their combined potential. Science needs to be able to conceptualize phenomena in different ways. Art needs a procedural ground to stand on.

Approaching significance is a term that is used to indicate that experimental data is statistically moving towards the confirmation of a hypothesis. Typically a lab wouldn't try to publish data that is approaching significance rather than significant, but for my purposes it implies a process. *Approachi Significans* is a transformation of that term into a form that alludes to the binomial nomenclature used to officially name and classify organisms. I wanted to give flesh and blood to a process that sometimes hides the inventive and imaginative minds churning beneath the surface. Imagination and creativity are two concepts that seem synonymous with being human. They are symptomatic of the way our brains are fundamentally structured.

I began to think about the idea of the shared mindset of creative problem solvers, specifically artists and scientists, when I read an essay entitled *Ed Ruscha, Heidegger, and Deadpan Photography* by Aron Vinegar. Although it seamlessly spans the fields of cinema, comedy, philosophy, and fine art, its central themes only suggest a discussion of the sciences. To summarize, Vinegar provides a philosophical analysis of Ruscha’s photobooks through a relation constructed through the aesthetic indifference of Ruscha’s works, the stone face of Buster Keaton, and Heidegger’s discussion of Dasein’s manner of existence from *Being and Time*. As Heidegger notes, "understand of being is to begin with indifference." The indifference that Vinegar reads in Ruscha’s work and Heidegger discusses as a means for self-discovery alludes to distance, automaticity, an absence of bias, and a transparent objectivity: in other words the hallmarks of scientific inquiry. The absence of that comparison initiated a feeling that there was something in the gray area that I needed to flesh-out. It took almost two years to fully put all of the pieces together.

The making of the images found in this book occurred over the course of a number of conceptual transforma-

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1. Its formatting as I present it does not comply 100% with the rules set by the International Code for Zoological Nomenclature. The proper formatting would be *Approachi significans* Shaw, 2013.

tions, all orbiting around a comparison of the logics of art and science and a visual extrapolation of those findings. Over two years, an archive of images was formed. I conducted experiments in time, combustion, silliness, randomness, and entropy that weren’t always meant to function properly. Throughout those studies I embodied two forms of fictional scientist: an orange jumpsuit-clad technician who wore leather gloves and set up self terminating pyrotechnic displays was the first. The second was a more stereotypical laboratory-coated researcher who wore latex gloves and ate chicken wings. Much of my initial imagery was produced by using those characters to construct a simple, fictional world that I would enter and photograph. Although the images implied the aftermath of experiments conducted by these individuals, no true experiment was ever conducted. There was no data and no repetition. I was more interested in setting up systems that defied their own nature as systems, demonstrations akin to the video collection *Signer's Suitcase* (1996) by Roman Signer, Fischli and Weiss’s *The Way Things Go* (1987), or the Rube Goldberg machines that inspired Fischli and Weiss. I was interested in toying with my training as a scientist to revel in something that could have any number of conclusions.

In addition to studio-based projects, I went looking in the world for relationships that reminded me of my studio practice. I was drawn to the curious and strange in my surroundings. By strange I mean the sorts of things that made me look longer than usual or wanted to look at for longer than usual in the form of a photograph. These things typically demonstrated a high degree of complexity that could be confused with randomness, or simply anomalous. I was subconsciously searching for the roots of the consciously structured images as they existed in lived experience. Neither these images nor the faux-experiment images were taken with the intention of making a book of photographs.

The structure of the book evolved as I accumulated a large amount of photographic material and my ideas about science and art had matured to a point of arguing for artistic solutions to scientific problems and scientific solutions to artistic problems. I decided to play a game. I stopped considering my images in terms of their representation of lived experience or points in my conceptual development and made a selection of images that had a degree of referential blankness, were capable of alluding to my conceptual framework, and were charged in some way with a strangeness marked by unpredictability, complexity, and the breakdown of a system. I took this collection of images and gave them an initial sequential order through free association, which yielded an obvious pathway through the images guided by formal relationships—color, gesture, and repeating elements such as the hands and grids that abound in this book. I then imagined the way my conscious mind typically works through problems and broke up the initial sequence to mimic those tangible yet erratic patterns. A book is a temporal and sequential experience much like a video, but unlike a video the viewer is capable of random access throughout the pages. Because thought is not linear, the relationships that develop in the book occur outside of the linear logic of a sequence.

This work is about the precursors to creativity. On one level, the questions I am asking have to do with how unique experience can prime the mind to exit practiced mental workflows in a problem solving process. There is a deeper level, too, that contributes to the process at the level of neurochemistry. A novel idea is manufactured within the confines of a brain and our brains are wet chemical systems. Any controlled chemical reaction conducted by even the most practiced organic chemist will inevitably result in the production of unintentional byproducts, impurities formed by improbable and unpredictable side reactions. If we apply this phenomenon to the more macro setting of a brain, a mass of unfathomable simultaneous chemical and electro-chemical activity, there are destined to be brain events that result from the mis-steps of the clockwork chemical machinery that directs our mental activity. These events would occur outside of a pre-determined causality and, in a very optimistic light, could be the seeds of truly unique thought patterns, things that we might consider to be epiphanies or eureka moments.

This point essentially has to do with the positive potential of biochemical stochasticity, which forms the groundwork of anything from evolution to cancer. Seeking out visual exemplars of this chemical tendency has informed many of the images found in this book. For example, the image of the suspended water droplets over the blue pool liner grid is, metaphorically, the biochemical analogue of the dog feces shoes displayed atop the black and white grid, which alludes to a tangible experience. Although I do not expect a viewer to read brain chemistry into any of the images, it is something that was on my mind while making this work.
There is a long history of artists and photographers who have engaged in the scientific process. From its conception, photography was appropriated by engineers and surveyors as a tool for providing visual evidence. In 1887, Eadweard Muybridge published an exhaustive study of creatures moving in front of a camera. It consisted of 781 gravure plates and was called *Animal Locomotion*. Contained within the pages are photographic grid-based studies of animals in motion. There are horses, dogs, large cats, birds, humans, and a slew of other creatures performing physical feats in front of Muybridge’s timed photographic apparatus. Muybridge used the camera to reveal imperceptible scientific truths contained within nature’s framework. Events that unfolded before him were frozen and flattened to yield image-based data. Similar classical examples are the images left behind by Duchenne de Bologne, Alphonse Bertillion, Etienne Jules Marey, and Frank and Lillian Gilbreth. All these individuals shared the common drive of demonstrating the capabilities of a technological process – either by demonstrating a novel photographic process itself or using the photographic image in a grander demonstration of ingenuity. As the photographic process evolved and became functionally simpler, more and more researchers, developers, scientists, and engineers began building massive archives of photographs as documents of their various projects.

When Mike Mandel and Larry Sultan scoured the archives of nearly 80 research, engineering, and development institutions for their book and exhibition *Evidence* (1977) they engaged in a process very similar to mine, though on a much grander scale. They set up parameters for their image search, decontextualized their photographic findings, and sequenced their selections to induce a feeling of strangeness and surprise. The result was a peculiar act of appropriation. The images they selected and included in their book were not examples of scientists and technicians unwittingly creating photographic art. The art of *Evidence* is in the gesture of the act and the veil of absurdity constructed by Mandel and Sultan. This book was an important stepping stone for *Approachi* because it is a succinctly curated window into the reality of research and development work places. Although the artists specifically mention seeking out examples of the “amputation of human sensitivity into the service of of technological development.” I noticed the opposite in their selections. I saw traces of inextricable humanity despite the mechanical settings and awkward cropping of hands and faces. The messiness, the strangeness, and the unpredictability of the images themselves allowed me to imagine things about the minds of those engineers, which facilitated associations between art as I have experienced it and their processes of prototyping, industrial design, and research.

*Laboratorium* (1999), a cross-disciplinary curatorial experiment in the nature of an exhibition organized by Hans Ulrich Obrist, is a particularly powerful example of a mutual exchange between the arts and the sciences. The project was inspired by the work of Alexander Dorner, an early twentieth century curator who believed that the museum is a laboratory with multiple identities, that “it both instigates and pioneers; it stands for relative rather than absolute truth, and serves as a bridge between art and other disciplines.” The design of the exhibition was amorphous and sprawling; it guided viewers through workshops, laboratories, and studios embedded within the abandoned office spaces of Antwerp where artists and scientists displayed their processes of creation rather than finished installations. Laboratorium was unique in its execution due to its overt inclusion of scientific practitioners. The accompanying publication co-edited by Obrist and Barbara Vanderlinden includes interviews with a wide spectrum of scientists and science theorists whose practices embrace relativity and openness and break the mold of the stereotypical scientific process.

In a similar vein, there is a significant subset of artists who have appropriated scientific thought as a part of their artistic practices. Critical Art Ensemble, an artist collective founded by Steve Kurtz and Steve Barnes in 1986, has pursued the practice of donning lab coats for public “tactical media” demonstrations for social and political purposes, usually uncovering irresponsibility in the development and dissemination of information, weapon, and bio-technologies. In the realm of contemporary photography, photographers such as Lucas Blalock, Jay Gould, Peter Happel Christian, and John Chervinsky have appropriated personas and imagery from the sciences to toy with a scientific experience of the world and truthful photographic representation. Furthermore, the installation and sculptural works of Mark Dion make direct allusions to scientific inquiry to contemplate the trappings of authority. The tenden-

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cy in almost all of these examples is an appropriation of science and its philosophies into artistic or political activist workflows. One of the main suggestions I would like to convey through *Approachi Significans* is that the unique creative perspective that art overtly demonstrates feeds and must feed into scientific workflows.

*Approachi Significans* is about looking for things in the world in a manner that exacerbates our creative potential. It is about giving credit where credit is due and maintaining an even sense of wonder in experience and understanding. Wonder is a feeling that results from not being able to comprehend something. It results from trying to fit an experience into practiced manners of understanding and realizing that maybe it's time to change the rules. It is similar to awe in its effect of inducing a feeling of smallness, but maybe it helps us manage our smallness better than awe does. Awe is oppressive. Awe makes us ants under Zeus’s sandal. Wonder is more parsimonious in its effect. We are very small. And we know very little. Rather than cling to the things we know, the ways we have come to know them, and our conceptions of knowledge itself, it seems useful to scramble the rules we have set for ourselves and embrace either a controlled sort of randomness or a higher degree of complexity in our *approachis*.

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lukeshawinfo.info
lukeshawinfo@gmail.com