A Universal Truth:
Exposing the Illogicality of Religion Through the Scientific Exploration of Biological Systems

Integrative Project Thesis

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To most people religion is a comfortable construct used as a way to understand the world and make sense of their lives. They find virtue in having religious faith and value its traditions. This is problematic and is actually very dangerous because it allows them to rely on false information that is in no way grounded in fact. In a section on "Evaluating Credibility" in the book *Psychology Themes and Variations* it states, "Every person is not equally believable. In deciding what to believe, it is important to carefully examine the evidence presented and the logic of the argument that supports the conclusion," (Weiten, p. 672). I feel that this statement sums up the reasoning behind my work. With my artwork I hope to dispel the misconception that blind belief is in any way positive, and explain that in fact those views are detrimentally flawed and have significant consequences. I hope to show that there are logical alternatives to religion based in scientific exploration and that basing our beliefs on evidence, free from the religious delusions that are so irrelevant and destructive to our lives, is the correct path.

Inspired by structures found in the biological systems of our universe I have created an installation and costume-based improvisational performance that discusses some of the issues regarding science and religion. These pieces are used to facilitate greater scientific understanding of the natural world while ultimately showing how we benefit from questioning the way things work rather than taking religion's word for it. Using scientific knowledge, regarding the inner workings of these biological structures, I hope to show how limiting religion is in the quest for knowledge and truth.

My installation consists of a series of neuron forms made first of armature wire and then wrapped in wool roving which I have dyed various red and orange hues. The larger part of the neuron contains the cell body, or the soma, and dendrites branch off

from there. One of the branches on each of the neurons that stems off from the soma is the axon, the site at which information travels from one end of the neuron to the other. The neuron then ends in terminal buttons off of the axon at the other end, which are what link up to other dendrites on other neurons. These neurons link up through the use of snaps which function as synaptic junctions; the sites at which electrical impulses travel from one neuron to the next during thought processing. One side of a snap has been sewn on one neuron, either on a dendrite or terminal button, and the other side of the snap has been sewn onto another neuron. There are many places along each neuron where snaps have been sewn on, allowing the neurons to link up with one another in multiple configurations.

There are three different states that the neurons exist in; normal, robust, and unhealthy, and their physical characteristics distinguish between the different states. Glial cells, cells that help bring nutrients to neurons, are used as a metaphor for scientific inquiry while disease cells are used as a metaphor for religion. These components are made in much the same way as the neurons but differ in color and shape. Commentary, in the form of text that suggests a museum display, is mounted on the wall beside the neurons: “The neuron models displayed here are representative of the three different states that neurons can exist in. These small underdeveloped neurons are being attacked by disease cells commonly know as religion, a disease that limits communication and overall cell growth. In their natural state, as shown here, neurons remain unaffected by outside influences. Surrounding these robust-looking neurons are glial cells, also referred to as scientific inquiry, which hallow neurons to continue their growth passed normal development. Specifically they display significantly more dendrite branches and are

larger in size, allowing for greater communication overall." The text is used as a way to give my interpretation of what has happened to the neurons based on the influences of the science and religion cells.

The installation helps to bring virtually intangible structures, in that neurons cannot normally be observed unless special equipment is used, into a more physical existence and make them more relatable to the viewer. By creating a sculptural installation it allows the audience to view the components from multiple perspectives and thus get a better sense of how neurons might exist in physical space. Through this method of representation the critique of religion can also come across as a more concrete concept when conveyed with the help of tangible objects.

I created the eyeball costumes by first starting with the eyeball itself. The eyeballs are made of paper mache with I then covered in fabric. I made the eyelid forms from wedges of foam that I then covered in batting, and fabric that I dyed. I added extra fabric between a few of the wedges so that the eyelids are able to move up and down. The eyelashes were then attached to the eyelids by threading wire through the fabric and then wrapping the wire in yarn. I dyed wool roving and felted some of it into strands, which I then sewed on to act as the optic nerve. These costumes are intended as the basis for public performance pieces and are meant to suggest visual awareness of the world around us. In relating the costumes to science and religion they suggest that using our eyes as visual receptors allows us to gain understanding about how and why things work, which is what scientific inquiry is set up to do, while religion limits that reality and closes off the world.

I felt that the eyeball costumes lent themselves best to improvisational public performances. So I had two actors put on the costumes and walk around the University of Michigan's campus interacting with the public and watching their responses. Originally I had wanted to set up a verbal dialogue between the two eyeballs that discussed issues of science and religion, but ultimately decided that they would not speak at all. Since they were in fact eyeballs and eyeballs do not speak, I figured it was unnecessary for them to do so. Instead I took a more abstract approach and just let the eyeballs be purely visual. This I felt forced the audience to consider perception overall and evoke ideas of being visually aware of the outside world.

I chose to work primarily in the medium of fibers because I felt it spoke to the interconnected nature of my subject matter and helped to illustrate their structures most effectively. Working with fibers also enabled me to make forms that appear fairly whimsical, therefore making them easily approachable, which is helpful when trying to bring a controversial subject matter to a wide audience.

Many scientists and philosophers have explored the nature of belief and have written a great deal on the subject. Some have in fact concluded that science is the better authority on truth and that religion should not, and must not, continue to have an influence on the subject. These individuals, such as Richard Dawkins and Sam Harris for example, have made many arguments against religion and in support of science. In my art practice I sought to use those arguments as the basis for my visual work in order to present them in new and more visual and tactile ways.

The art community has been increasingly more centered on scientific research. Many artists work with the ideas that are found within scientific inquiry and even use

imagery obtained directly from scientific instruments. A project called *Imagining The Brain*, done in 2005, was a project developed to aid in the understanding of science through art. Students were asked to depict either the brain as an organ controlling the body and housing the mind, or synaptic transmission. This project relates well to some of the concepts I am working with and it is interesting to see the way others represent these systems. Betty Maguire, another artist, is looking at biology with her piece called *Workings of the Heart*, which is made of woven and felted wool wrapped around wire. In coming across this image after developing my own wire wrapping and felting techniques to create organic, biological based sculptural forms I thought it was very interesting to find someone else doing something along the same lines.

However, much of the artwork that deals with scientific themes does not seem to explore the dichotomy between science and religion as such, as far as I have seen, and that is why I felt I needed to address these issues in my work. A lot of images either critiquing or advocating for evolution have been very graphic design oriented. I feel that this can be an effective way to get the message across, however, with my work I wanted to elaborate further and explore the nuances within this subject.

Through my inquiry, grounded in scientific methods and a strong desire for knowledge, I seem to have resolved some issues while discovering many more in the process; all of which I hope to continue to explore in the future. The work that I have created up to this point I view as only a small exploration into this vast area of study. I feel that the body of work I could potentially create around these issues can and will be much larger as time progresses. By making this work I have consequentially developed

plans for many more pieces that explore these themes, which in a sense is exactly what I had hoped to do.

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