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AST-150

1 December 2016

<p style="text-align:center">Coming to the End</p>

In August when the semester started I was immensely excited to continue learning about the universe, a journey I started in The Search for Other Worlds and First Contact courses at Agnes Scott College. After taking these two courses, I had questions about religion and science that I wanted to be answered, and my belief was that taking the Science, Religion, and the End of the World course would answer them. My questions revolved around how science and religion--two disciplines I believed to be at war with one another--could interact. The Search for Other Worlds and First Contact introduced me to two novels, *The Sparrow* by Mary Doria Russell and *Calculating God* by Robert J. Sawyer, that seemed to circle around the interaction between science and religion. This is where my initial intrigue with this question began. Throughout the Science, Religion, and End of the World course, I have discovered how science and religion can interact with one another, but, as the course continued, new questions arose.

When the class started, I wondered if Professor DePree and Professor Douglas would be able to present both science and religion in a way that one would not overshadow or seem superior to the other. However, the professors were able to put both science and religion on an equal plain by blending together the two disciplines each week, offering their perspectives of their respective disciplines whenever the other professor was lecturing.The professors also never tried to discount one another or make their subject area seem superior to the other, proving that science and religion are able to interact with one another. The professor's ability to apply both

disciplines to one subject made me realize that science and religion are similar in the way that they are tools to be used to gain different perspectives on the world. Science could show you the mechanics and proven facts behind why something happened, whereas religion would give something meaning. The combination of these two allows humans to analyze and interact with the world around them. After realizing that science and religion could work in this way, I decided to use one of the reflection papers I had to write to expound on this idea. In the paper, I was able to show the benefits of both science and religion, and advocate for them as being tools at humans disposal.

While the lectures and readings resolved my question on the possibility of the interaction between science and religion, they made me ask myself new questions because of the issues that the professors introduced. For example, when we discussed the movie *Ex Machina*, the professors pointed out the ethical implications of having Artificial Intelligence. One issue that we focused on in particular was if Artificial Intelligence would be able to have human rights, or if they would even want them. In *Ex Machina*, the A.I. in the film seems to have feelings and motives or aspirations that do not come from that of her creator, giving her the qualities of a human being. If she is able to exhibit signs that point to humanity, then would she therefore be afforded the same rights that humans have? Could her creator decide that -- because he technically owns her -- that he can do anything he wants with her? An article by Langdon Winner titled "Are Humans Obsolete?" brought to my attention another aspect of the ethical issues surrounding Artificial Intelligence. Winner highlights the many writings of academics who advocate for Artificial Intelligence. Many of the people Winner examines believe that Artificial Intelligence would replace humans or be superior to them. In Winner's summarizing of what people have said about the emergence of A.I, he explains that with the advance of

technology humans will soon be able to upgrade themselves. They will be able to replace parts of their brains with neural implants, for example, and before long "humans and machines will totally merge, and the new creature's artificial features (in contrast to its biological ones) will be universally recognized as superior" (32). If people were to think in these terms, then issues like discrimination and supremacy would quickly arise. People who may not have the ability and/or the want to merge with machines would be made out to be inferior. Winner concludes that "the poor souls who do not find ways to download their intelligence into the mechanism will be excluded from any meaningful participation in the new order of things" (32). Slavery, colonialism, and groups like the KKK provides examples in human history that show what happens when a group of people believe themselves to be superior to another group of people. After watching *Ex Machina* and reading Winner's article, questions surrounding the ethics of Artificial Intelligence and the movement towards it have occupied my thoughts.

One of the numerous end of the world scenarios we discussed in the course was that humans most likely will cause their own destruction with the inventions they have made. This idea made me question if inventors take into consideration the long-term outcomes of their creations. This idea first came up when we read the novel *A Canticle For Leibowitz* by Walter M. Miller. In the novel, the Flame Deluge, which was a nuclear war, has engulfed the Earth and humans are living in a post-apocalyptic world. The novel spans thousands of years where humans repeatedly destroy one another with nuclear weapons. This novel showed the class how nuclear weapons that were, at their fruition, a sign of the greatness of human knowledge could be the very thing that ends life on Earth. Reading this novel made me realize that many of the things that humans invent may have negative consequences that haven't been fully considered. For example, the invention of mobile phones has allowed for quicker communication between

people, easily accessible information, and a new way to interact with the world. However, mobile phones have also been used as detonators for bombs, so that perpetrators are able to commit their crimes with less risk of being caught. Though inventions help move the world forward, humans must ask themselves if the perceived benefits will outweigh the possibility of people being harmed by what has been created.

The final projects that we are working on in our groups have been another catalyst for the questions I have about the implications of scientific/technological inventions. My group is researching the Aum Shinrikyo doomsday cult, who used the nerve gas Sarin to attack Tokyo Subways. Kevin Rafferty's and Martin Walker's article "Deadly Blend of Politics and Religion," said that sarin is "20 times as deadly as potassium cyanide" and that it is the "poor man's atomic bomb" (Rafferty and Walker 3). Some countries still have large repositories of sarin, and if a person with nefarious intentions were able to get a hold of it, then many people could be harmed or murdered. My research has made me question if inventors are taking into consideration what their creations may be used for in the future.

As I look forward to future courses, I hope to bring what I have learned from this class, as well as the questions that I have developed, and use those questions to help me make my education at Agnes more nuanced; I hope to use this knowledge to help people when I leave Agnes. The class has pushed me to question the ethical implications of different issues as well as the implications of what humans create. These are questions that will allow me to look at the world and question if the situations I see are problematic. If I am able to recognize problems, I may be able to take action and resolve these problems. Science, Religion and the End of the World has forced me to look at the world around me more critically and question problematic issues that I have, until now, been unaware of.

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