Journal Entry 3
Covering lectures and readings from the week of 9/13

This week’s lecture topics included a summary of Plato’s legacy (mostly Aristotle, but also his contributions to geometry), Aristotle (a brief history, his theories about causes and motion, some astronomy), Greek astronomy, and a bit of the medieval period, both science and art.

Aristotle’s work covers such a huge amount of material, it’s hard to believe that so much of it is still relevant to today. The way that he organized and classified everything, not just biology but also thought processes, and ideas such as different causes and types of change, makes it easier to take notes on him than anyone. Also, because he was so tedious in his classifications, centuries later people were able to pick up where he left off with violent motion and add their own discoveries and theories. He also took so many leaps in so many different areas, such as concluding that the earth was spherical, that it’s no wonder that when he was re-discovered in 12th century, it created a whole new period of scholarship and scientific learning.

I remember learning about the art aspect in high school, as far as representation beginning to become more realists. The example of the baby Jesus going from looking like a little adult to an actual baby is one that I remember, as well as the use of perspective. Most of the art is still religious in nature, though, and it takes a while to break away from that. The architecture, as well, I remember studying. The development of Romanesque into Gothic is a good example of art and architecture reflecting a changing culture.

Based on this week’s lectures and readings, I am realizing how much religion and culture tie into scientific advances. It is evident in St. Augustine’s adaptation of Platonism into the Catholic Dogma, the church’s ban on teaching Aristotle’s works in the 12th century, and any number of examples. It seems that where the church’s power is at a strong point in history, and the church has control over societies and governments, that is when the influence of both Greek thought and new contemporary ideas are at a low point. You would think that any culture would encourage asking new questions and finding new philosophies to help understand the universe, but the church seems to afraid that science will replace the need for organized religion, and if God is not the cause of everything, then the church loses it’s power. I don’t believe that politics should ever stand in the way of science, and it seems to me that this is what happened during the middle ages. When I was younger, I always wondered why most Christian groups opposed Darwin for so long. I always thought that one could believe that Darwinism was set in motion by God, that everything that could be explained by science was all part of God’s plan. But then again, my parent’s raised me to be atheist, and I never read the bible, and now that I’m older I can see how some doctrines would conflict with these beliefs.

I see the same problem with astronomy. Making a distinction between “the heavens” and “heaven” must have been very difficult for many centuries, because many people view heaven as something beyond the earth, and it is easy to visualize it as a place in this plane, but out somewhere in space.

The whole development of astronomy is amazing. I mean, to go from just knowing that the sun rises in the east and sets in the west, to the introduction of Anaxagoras’ spheres, to Aristarchus’ application of geometry to try to define distances,
everyone just added a new piece of the puzzle. Everyone who contributed had an almost completely new idea, a new way of thinking about the stars that no one had had before, and that is what it takes to make great advances. The models that were created in order to “save the appearances” such as Ptolemy’s epicycles were the most important aspect, I think, because I could not understand astronomer’s theories without seeing a visual representation of their idea of the universe. The readings in The How and Why (chapter four especially) were extremely helpful to me as far as understanding astronomical concepts goes.

Even though I found most of Park’s writing extremely dry and repetitive of the lectures, if I am playing close enough attention, he does through some comedy into the mix. He sites that the U.S. currently employs 20,000 astrologers, but only 2000 astronomers (p. 71). I found that quite amusing, but then again maybe it wasn’t supposed to be.

In chapter 5, Park writes that the Greeks seemed to be the only ones interesting in proofs, that everyone else found them tedious and not necessary. I can relate to that. In 9th grade geometry was probably my least favorite class, namely because of the proofs. If they were presented to me as part of a lesson, to explain why a squared plus b squared equals c squared, then that was fine, I would take notes and understand and think it was just peachy. But actually spending time making my own proofs was something that I dreaded. It seemed pointless to spend so much time making a proof that both the teacher and I already knew existed, when I could have been using geometry for more practical purposes. I suppose that is the difference between, say Plato and Aristarchus; Plato just wanted to think about things, but Aristarchus used his geometry to better understand the universe around him.

I can’t believe that I never connected the word lunatic with the moon (lunar) before this week. (Park, p. 71)

Park’s description of the cathedral of Chartres (Park, p. 85) reminds me of Dan Brown’s The Da Vinci Code. The way he connected the twelve Apostles to the twelve zodiac signs, the prevalence of the number seven (seven virtues, seven deadly sins, etc.), connecting religion to numbers, the existence of important numbers in all aspects of life, it read very much like Brown’s novel. Also, The way Aristotle wrote books about basically every subject did remind me of Leonardo Da Vinci, who also seemed to dabble in a bit of everything. In fact, during the Aristotle lecture, the term “renaissance man” came to mind several times.

I wish we had been able to talk about the Franciscans and the Dominicans more, and their role in Paris as far as trying to ban the teaching of Aristotle.

I would like to hear more about the art aspect of this part of history, particularly the architecture, because as Park shows us, the construction of churches and cathedrals and the ornamentation in them says a lot about the time period. And also, because the older I get (and the farther we go in this class), the more I realize that everything is, indeed, connected to every other aspect of life.