Most of the readings and lecture notes on Monday were about Aristotle. (I’ve heard of Aristotle, but I never knew that much about him. He, Plato, Socrates, and others like them were just grouped into a category in my mind called “Greek Philosophers.” Nothing special.) Aristotle was an amazing thinker, though. He didn’t just focus on a narrow stream of subject-matter. He made advancements in logic, physical science, natural science, psychology, and philosophy. I think that this diversity is part of what makes him so great; he was able to shed insight onto so many topics instead of just one. Furthermore, the diversity of his subject-matter created consistency between the ideas since they all came from the same person. People didn’t have to try to sort through isolated, random philosophies.

Although Aristotle was Plato’s favorite student, the “Brain” disagreed with his teacher about how knowledge was acquired. Plato believed that it was attained through reasoning, that you could only learn about and discover things by thinking about them. This really shows how much of an impact the teachings of Parmenides had on Plato. Aristotle, on the other hand, thought that people acquire knowledge through perceptions. You have to see, feel, and experiment with things in order to really know them, i.e. the senses don’t lie to people.

Aristotle realized the impracticality of Plato’s Forms as well. The system of Forms was too complicated. It couldn’t account for everything in nature. A good explanation explains every part of the whole, not just one part of the whole. Plato’s Forms couldn’t explain motion. Aristotle, on the other hand, divided objects into two parts. There was matter, which was the material in something, and form, the arrangement of the matter. This sounds a bit like Plato’s Forms, though, which is why Aristotle was accused of being somewhat Platonic. However, Aristotle was able to explain motion. He said that there were two kinds of motion: natural and violent. Natural motion was any kind of motion that followed the object’s nature, like an acorn growing into a tree. Violent motion was everything else, like a projectile.

Aristotle’s precision with his thoughts was one of his trademarks. His categorization of motion, for example, showed that. Another instance of this shows up when he attempts to explain how things changed and why they did so. He said that there were three types of change. Alteration was the quality of something changing, like leaves changing colors or wax melting. Growth and Diminution was just that; when something grows or shrinks. The third type of motion was Locomotion, which was where he basically met his downfall. He explained that Locomotion was like an arrow flying through the air or an apple dropping. Things can’t move without some force acting upon them, and Aristotle thought that the air pushed arrows through the air. This was where Locomotion gave Aristotle trouble with his critics. Aristotle thought that in order for something to physically move, a force had to physically push it. But then how does an arrow fly through the air? Aristotle explained that as the arrow displaced the air in front of it, it rushed back to fill in the space behind the arrow, perpetually pushing the arrow forward. The critics attacked this by throwing all sort of new scenarios at him, like what about the arrow flying backwards.
Aristotle also said that to understand change, you had to decipher the causes, and he believed that there were four of them. The Material Cause was the material used to make the thing. The Efficient Cause was the process by which the thing was made, and the Formal Cause was the eventual form or shape that the thing would take. Finally, the Final Cause was the purpose of the thing that was being created. These four causes were the closest Aristotle got to modern physics. Despite this, his work was studied long after his death.

The Greeks also make some important observations in astronomy. Philosophers created several models through time, but there were a few constants. They knew that Venus and Mercury were related to the sun, Venus changed in brightness, and Mars wandered all over the place. Mars was of particular interest because of its irregular path. It would travel forward, and then backwards for awhile (retrograde) before going forward again. Philosophers like Pythagoras, Heraclites, Aristarchus, and Ptolemy attacked these issues and made some important astronomical advancements.

We talked about logic a lot on Wednesday. Boy, were people in ancient times impressed by its simplicity, practicality, and infallibility! There was Aristotle’s inductive and deductive logic, (usually) going from particulars to a universal and a universal to a particular, respectively. They were also in love with Aristotle’s baby, Syllogism. Syllogism was basically a series of formulas that phrases could be inserted into. (example: All a are b. This c is an a. Therefore, this c is also a b.) Maybe I just don’t appreciate it enough, but logic seems pretty common sense to me. I mean, if Socrates is a man, and all men are mortal, Socrates is obviously mortal, too. You can’t argue with that. There are sentences put together that look like logic that aren’t true, but that’s just it. They’re not true. You just have to think about it. (Platonist!)

In the meantime, art and architecture were evolving as well. Because of not only trade routes, but of the Crusades and other wars and battles, the cultural influences of the conquering armies would naturally follow in battles’ wake. Romanesque art and architecture spread in Europe, and that of Byzantine influence spread across northern Africa and into Asia Minor, both of them touching cathedrals, paintings, and sculptures. Gothic architecture and flying buttresses followed these movements, making it possible to construct cathedrals that were more massive in scale and beauty. (It seems ironic and a little tragic, though, that so much culture should follow war.)

A lot of the Greek philosophers’ work was scattered and even lost during this time, but after the conquest of Toledo, much of it was recovered. Many of their poems, essays, and dialogues had been translated time and time again, and it was difficult to determine which philosopher had written some of them. Through the cooperation of several nations, they sorted through the mess and rescued the knowledge from being forgotten forever.

Once Aristotle’s work got back into circulation again, the Church was pissed. They felt as if his doctrines of logic and the universals were challenging the existence of God. People had to learn in secret in the newly-founded universities of Paris, Oxford, Padua, and Bologna, or else face persecution or excommunication. Thomas Aquinas ended this feud by creating somewhat of a compromising summary of the two points of view. He just inserted Reason into Faith, and luckily, the Church accepted this.