Phil. 401: Discussion Questions Aristotle on Endoxa, Explanation and the Four Causes

February 7th, 2017

Readings: Sections 1-4 and 7-9 of C. Shields. "Aristotle". In: *The Stanford Encyclopedia of Philosophy*. Ed. by E. N. Zalta. Winter 2016. Metaphysics Research Lab, Stanford University, 2016.

Review Reading

In groups of five students, compare your answers to reading assignment ten, including the questions you were not required to answer in detail.

Aristotelian Explanation and Epistemology

- 1. Galileo argues that "nothing physical which sense-experience sets before our eyes, or which necessary demonstrations prove to us, ought to be called in question . . . upon the testimony of biblical passages." Do your best to explain how one might use Aristotelian epistemological principles to argue that Church doctrine, biblical interpretation, and the Bible ought to be considered equally reliable as experience and mathematical proofs.
- 2. Aristotle distinguished "natural" motions (e.g., a rock moving towards the center of the universe) from "unnatural" ones (e.g., a rock being lifted by a lever). An object moves naturally when its motion is a result of its nature/essence, whereas an object moves unnaturally when its motion is caused by some other object. Brainstorm reasons that one who accepts Aristotle's distinction between natural and unnatural/artificial events might find Boyles experiment untrustworthy.
- 3. Using Aristotle's four causes, explain the following two events.
 - A heavy, spherical iron ball is placed on an inclined plane in a grassy field. The ball rolls down the plane, and after rolling four feet in the grass, it comes to a halt.

- A heavy, cubical iron weight is placed on the same inclined plane in the same grassy field. It likewise slides down the plane, but it does so a bit more slowly. When it reaches the grass, it slides only a few inches before stopping.
- 4. A heavy, iron dodecahedron (a twelve-faced polyhedron) is placed on the same inclined plane as in the last question. Using Aristotle's four causes, predict what will happen.
 - (a) What causes are most important in distinguishing the outcomes of placing the three objects on the inclined plane?
 - (b) Open-Ended: Does Aristotelian causes allow one to explain *how* far and *how fast* each of the objects will roll down an inclined plane?