



The Scientific Revolution: Its Classical and Christian History with Dr. Ted Davis

Lecture 5: Plato's Universe

Outline:

Plato's Universe - Timaeus

- Timaeus is a dialogue in two parts from Plato's mature years; it is the only surviving member of a trilogy. It features a slave, Timaeus, who tells a story about the beginning of the world.
- Timaeus takes the form of a "likely story" of the beginning of the world. Plato believed that one cannot in principle give a certain or true account of any aspect of the ever-changing world of the shadowy world of Becoming – the world in which we live. The best one can do is tell a "likely story" that might in some ways convey partial truth.
- In Plato's view the real world is the world of the mind rather than the world of the senses.
- Plato's story shows a moral purpose for the world:
 - It was made with intelligence.
 - It possesses a soul.
 - It is better than a world without these features (that of the "atomist" philosophers).
 - Our own souls derive from the world soul (macrocosm (universe, big order)/microcosm (human body, small order) analogy)
- According to many scholars, Timaeus must be understood as a moral story rather than a confession that the world was actually made at some point in the past. If so, then it is not actually a creation story – although medieval Christians (who always had copies of this work) read it as such.
- Plato's story has two parts:
 - Part one: Creation of the heavens by his god, the Demiurge. This is the same Greek word used in Hebrews 11:10 ("For he [Abraham] looked for a city which hath foundations, whose builder and maker (craftsmen) is God").
 - The Demiurge orders pre-existent matter by imposing on it pre-existing ideas ("forms"). Various entities are present at the beginning, in addition to the Demiurge:
 - Chaotic, formless matter
 - Forms, including the idea of the Good – the most important of all



- “the nurse of becoming,” or “the receptacle,” something like empty space although Plato did not actually think that genuine void existed in the physical world
- The Demiurge tries to impose perfect mathematical forms on chaotic matter, but the matter is recalcitrant (it resists his efforts), so he is not wholly successful. As a result, matter is not completely intelligible; it merely “participates” in form. (Left to itself without the Demiurge, chaotic matter would remain wholly unintelligible.)
- The Demiurge fashions the soul substance. From this he makes the two great circles the world, the Same (celestial equator) and the Different (the ecliptic). Celestial bodies move eternally in perfect circles around Earth.
- Part two: The Demiurge gives order to matter.
 - This is a labor of divine goodness, *a necessary act of a good god who cannot do otherwise*. Demiurge is not free: he *must* create the world.
 - “The Principle of Plenitude,” a term coined by Arthur Lovejoy: God *must* create all possible things, or God would not be good. This idea is related to the Great Chain of Being – the notion that all created beings can be ordered hierarchically, from the meanest things all the way up to the angels.
 - The Demiurge makes three dimensional atoms for each of the four elements of Empedocles (earth, air, fire, & water), whose atoms have the form of four Platonic solids. Two kinds of triangles – equilateral and isosceles – are assembled into their faces. The dodecahedron is used for the body of the heavens; each face carries one of the 12 signs of the Zodiac.
- Plato’s basic attitudes were ultimately more important than the details: the necessity of teleology (a principle of order) in science & the idea that reason is required for knowledge of pure forms.
- The influence of Timaeus on subsequent Western thinking cannot be underestimated; there simply is no more important Greek text than this one – it was the only extensive Latin translation of any of Plato’s dialogues that was available for many centuries.
- In the 1st century BC, the great Roman poet Cicero translated a section of Part One into Latin. In the 4th Century AD, Calcidius made a longer Latin translation (about 2/3 of the book), adding a Latin commentary that was very influential during the Middle Ages.