

- E. *Dialogue Concerning the Two Chief World Systems* (1632)
1. The *Dialogue* -- written in Italian, and not Latin -- was obviously aimed at the general educated public, not the international community of astronomers and "scientists"
 - a. It succeeded in this respect, becoming the primary source on the controversies over astronomical systems and on new telescopic discoveries for much of the educated public, abroad as well as in Italy -- a wonderfully accessible, entertaining book
 - b. Has remained wide-read and influential ever since -- primary source of our stereotypical views about 17th century science -- Ptolemy vs. Copernicus, the scientific revolution, etc.
 2. Dialogue style, adapted with great success from Plato, enabled him to portray the dogmatic opposition of the Peripatetics with a great deal of scorn and humor
 - a. Salviati: a learned proponent of Copernicanism
 - b. Sagredo: a thoughtful, well-educated, open-minded layman
 - c. Simplicio: a rigid follower of Aristotelian, that is, Scholastic, doctrine
 3. First Day: a sustained attack on Aristotelian natural philosophy (*Physics*) and Cosmology (*De Caelo*), the philosophical world-view Scholasticism had attached to the Ptolemaic system
 - a. An attack on Aristotle's account of motion (natural and violent), invoking experiments (mostly thought experiments)
 - b. An attack on Aristotle's claims about the perfections of celestial realm, invoking telescope observations (e.g. Moon and Sun)
 4. Second Day: responds one-by-one to all the traditional arguments against the diurnal rotation of the Earth, arguing that the phenomena are more straightforwardly saved by postulating it
 - a. Attacks on Aristotle -- even more so, on the dogmatic followers of Aristotle who accept him blindly as the ultimate authority -- especially strong in Second Day
 - b. Mentions for the first time in print his findings on projectiles, falling bodies, and pendula (see *Two New Sciences*)
 5. First two Days thus amount to a devastating attack on Aristotelian natural philosophy, at least as put forward by the Scholastics, and an espousal of Galileo's new natural philosophy
 - a. What the book is now most famous for, painting a portrait of intellectualism in late Scholastic years
 - b. Many attributions of advances in physics by Galileo stem from this half of the *Dialogue*, in which he uses thought experiments to teach a new way of thinking
 6. Third Day: a sustained defense of the Copernican system, especially of the annual motion of the Earth, covering both Copernicus's non-empirical reasons and the evidence from the telescope
 - a. Includes discussions of stellar parallax, limitations in the astronomical observations of the times, etc., and even an extended discussion of Gilbert's *De Magnete* (pp. 464-477)
 - b. Brings out forcefully the impact of the telescope -- e.g. on planetary sizes
 7. Fourth Day: presents Galileo's "proof" of the diurnal and annual motions of the earth, turning on the claim that the tides can be explained by, and only by, such motion