

Ancien Régime Attacked

- a. "The Scientific World View"
 - i. introduction
 - ii. Aristotelian-Xtian Cosmos
 - iii. The Change
 - (1) Copernicus to Galileo
 - (a) N. Copernicus, *On the Revolution of Heavenly Bodies* (1543)
 - (b) G. Galilei, *Dialogue on Two Systems of the World* (1632)
 - (2) Newtonian Synthesis
 - (a) Baconian empiricism
 - (i) Sir F. Bacon (1561-1626), inductive method of experiment
 - (3) Cartesian logic
 - (a) R. Descartes (1596-1650), *Discourse on Method* (1641),
 - (i) deductive method of logical breakdown into component parts and use of math
 - (b) Sir I. Newton (1642-1727), *Principia Mathematica* (1687)
 - (i) synthesis of two methods
 - (ii) single, simple, verifiable laws of motion
 - (c) Result
 - iv. Reasons for Change
 - (1) observing new worlds and new theories of first causes:
 - (2) rediscovery of Plato (neo-Platonists) different explanations of nature; rediscovery of atomists
 - (3) not Enlightenment figures, but obsessed with magical and secret knowledge about nature
 - (4) impact of Renaissance, re/viewing man and the natural world
 - v. Impact on Society (world as knowable, thus manageable)
 - (1) scientific societies/role of the State:
 - (2) towards world of a public sphere outside the religiously focused universities (*salons* in Paris; coffeehouses in London)
 - (3) applied science (trade and industry)
 - (4) impetus for the Enlightenment