Ancien Régime Attacked

a. "The Scientific World View"
   i. introduction
   ii. Aristotelian-Xian 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
      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