

What Is Modernity?

One way to characterize the modern period is to inventory the conceptual transfigurations that distinguish modernity from renaissance thought. Somewhere between 1550 and 1750, the intellectual horizons of modern thought (exclusive of philosophy *per se*) shifted as follows.

I. **Logic and Mathematics.**

- ❖ from synthesis to analysis (includes analytic geometry and the calculus)
- ❖ development of number theory and therefore theory of computation
- ❖ emergence of probability theory
- ❖ foundations of the propositional calculus rediscovered

II. **General Grammar.**

- ❖ shift from designation by resemblance to designation by representation
- ❖ distinctions drawn between naming and asserting
- ❖ distinctions drawn between showing and saying

III. **Theory of Perception.**

- ❖ distinctions drawn between physical and sensory qualities
- ❖ puzzles of the interior and the problem of scale (microscopes & telescopes)

IV. **Terrestrial Physics.**

- ❖ from teleology to mechanism
- ❖ law of free fall
- ❖ law of inertia
- ❖ principle of relativity
- ❖ $F=ma$

V. **Celestial Physics.**

- ❖ Copernican revolution
- ❖ Kepler's laws
- ❖ Newtonian synthesis: UNIVERSAL GRAVITATION

VI. **Chemistry.**

- ❖ the chemical revolution: quantitative analysis of chemical phenomena
- ❖ models based on attraction and repulsion replace essential natures

VII. **Biology.**

- ❖ natural history: the rise of enumerative, continuous, ordered tabulations
- ❖ medicine: from essence to autonomous disease entities
- ❖ the rise of epidemiology

VIII. Politics.

- ❖ contract theory, and therefore the problem of the public and the private
- ❖ revolution: breaking the apriori character of class distinctions
- ❖ reinvention of democracy

IX. Economics.

- ❖ double entry book-keeping, and therefore
- ❖ the invention of investment capital
- ❖ the new world and the exploitation of natural resources
- ❖ the new world and the development of export markets
- ❖ statistical analysis of wealth
- ❖ money as a sign rather than intrinsic value

X. Jurisprudence.

- ❖ from inquisitorial to adversarial models of justice

XI. Literature and the Arts.

- ❖ from allegory to symbol
- ❖ from essential "everyman" to the individual (the accidents of circumstance)
- ❖ from depiction to expression (plastic arts)
- ❖ from the didactic to the ironic
- ❖ dance: from ritual meaning to symbolic gesture
- ❖ music: from polyphony to counterpoint
- ❖ in sum: the invention of "open interpretation"

XII. Religion.

- ❖ Reformation and counter-reformation, and therefore
- ❖ the rise of religious persecution *within* Christianity
- ❖ slow deterioration of ecclesiastical authority
- ❖ emergence of demythologized interpretations of scriptures