

### Sir Francis Bacon (1561-1626)

- English
- Inductive Reasoning: deriving laws, truths and knowledge from simple observation
- anti-Aristotelian
- empirical method: experiment then draw conclusions based on observations
- all theories should be based on observation
- Idols or “false phantoms”:
  1. tribe: man is flawed because of his preoccupation with opinions, prejudices, etc.
  2. cave: from the allegory of the cave by Plato; environment
  3. marketplace: the words men use in everyday life; words weaken knowledge
  4. theatre: false notions, traditions, dogmas
- his flaw: he believed that after one observed, a hypothesis would present itself

### Rene Descartes (1596-1650)

- French
- Deductive reasoning: “all necessary inferences from facts that are known with certainty”
- “father of modern philosophy”
- wrote *Discourse on Method*
- formal logic; Aristotelian
- he insisted upon systematic, orderly thinking
- believed man had an innate understanding of math, the universe, etc.
- believed in the Socratic method of drawing on knowledge
- thought Bacon was flawed because senses can deceive you
- “I think therefore I am”
- proves the existence of God solely in terms of his rational awareness of his own existence and internal thoughts