

# Chapter 2

## Introduction to Modern Philosophy

### 2.1 Modern Times

**What period of history will we cover?**

- Period covered: mid-17th. century to French Revolution – Age of Reason + Enlightenment
- Preceding period: European Renaissance (14th-16th) and Protestant Reformation (16th)
- Following Period: Industrial Revolution (late 18th - early 19th)
- Modern philosophy is contrasted with ancient and medieval philosophy in the past, with German Idealism and contemporary philosophy in the future.

**What are the main events during this period?**

- Politics: Downfall of absolute kingdoms and feudal systems – revolutions and rise of democratic regimes (England, US, France)
- Religion: Downfall of Christendom as a unified political entity – last religious wars (Thirty Years war : 1618-48) and rise of tolerance
- Science: Rise of modern science and technological progress (Copernicus, Kepler, Harvey, Descartes, Leibniz, Pascal, Boyle, and Newton)

- Economy and Society: Rise of individualism and capitalism

As one can imagine, all this does not come in a nice and easy way...

### 2.1.1 Before: Medieval Times

**A hierarchical society** – Based on Aristotle’s worldview:

- Natural place, Natural hierarchy
- Authority
- Conservatism – nothing should change since it is already the best

**Authorized authorities** – Only a few detain the truth

- Ancient Philosophers (Aristotle, his followers – Christian reinterpretation of Aristotle)
- The Catholic Church and its authorized interpretation of the Bible (concils)

**What does roughly Philosophy consists in?** – The Scholastics’ ways of doing philosophy:

- Commentaries of Aristotle and the Bible
- Disputes in Universities among Scholars
- No genuine original work

**What are the scholastics’ concerns?** Philosophy is concerned with the place of man in the God-made universe

- Nature and limits of man’s understanding of God and the universe
- Conflict between man’s freedom and God’s sovereignty
- Purpose of the Creation
- Nature of the Creation: *Natural Philosophy*, i.e. physics, comes from Aristotle’s works.

## 2.2 The European Renaissance and the Protestant Reformation (14th-16th centuries)

**Printing Press** – Gutenberg 1439 – books are much accessible, and not only to a few religious scholars

**Travels and Discoveries** – New world, new men (who incidentally never heard of our God) – The world is not a small, cosy, Christian-centered cosmos, but is much larger and greatly diverse.

**Scientific Revolution** – Copernicus vs. Ptolemy – Men not at the center of the universe

- Ptolemy: geocentrism
- Copernicus: heliocentrism

Copernicus' system is not immediately accepted, far from it. Both systems are *empirically* equivalent. But in a sense, this makes things worse: how are we to decide which one is true?

The heliocentric system is adopted over the modern times: Galileo, Kepler, Newton.

**Universal Reason** – All human beings share some qualities, in particular rationality. *Rationality is what gives human beings their autonomy*, i.e. their ability to decide for themselves. Humans means to discover the truth are surely limited (our senses and our reason are not superpowers), but there are the best they have.

—→ *We ought to use our reason, by contrast to appeal to authority and blind faith in our search for the truth in all domains, including science, morality and even religion.*

**Humanism** – Humanism is a complex intellectual movement. A central idea is that *human beings possess a special value for being both rational and free agent*. This is in some sense the beginning of the idea of human rights. Whatever the color, religion, etc. human beings are to be valued. As a consequence, torture, murder etc. are banned.

**The Protestant Reformation** – 16th century, Martin Luther

The Protestant Reformation is complex, but an important aspect is that Luther borrowed from the humanists the idea that everyone, being provided by the same ability to reason, has also the ability to think for him- or herself. This is applied to religion, thus putting into doubt the authority of the institutional Catholic Church. Each person can have a personal relation to the Bible. Luther claimed

One important factor: the Church corruption and the abuse of indulgences

**2.3 The Challenge of Skepticism**

Ancient Skeptics, Montaigne: Can we *know* anything?

**Knowledge** – What is it?**Definition 1 Knowledge**

*Knowledge = warranted true belief. It has to be distinguished from:*

- *False belief*
- *Opinion – even true opinion: it is not enough to believe that something is true to truly know it.*

The question of the nature and scope of knowledge is the question of *epistemology*

**Definition 2 Epistemology**

*Epistemology is the discipline which studies the ways in which we know. (episteme = knowledge, logos = theory/study/science of. So: epistemology = theory/study/science of knowledge)*

**The rise of skepticism** originates in:

- The Renaissance – humanism and universality of reason
- The Reformation – appeal to the individual conscience for interpreting the holy texts
- The Scientific revolution

**What is it to be skeptic?** The consistent skeptic does not assert that he does not and cannot know anything, for to do so is yet another form of dogmatism. Instead, the consistent skeptic criticizes any dogmatic view, and suspend his judgment in all matters.

**Why should one be skeptic?** A combination of reasons:

- The history of thoughts (Montaigne): the endless controversies over the centuries in all matters indicate that none of the dogmatic philosophers got it right.
- The unsettling discoveries from science: the sun does not go around the earth, but the earth goes around the sun; planets have craters; the earth is round; antipodes exist (and people there don't fall...)

**Sources of knowledge?** These discoveries seem to cast some doubt on what we take to be our sources of knowledge:

- 1. Senses are not reliable. – Many other arguments against the truthfulness of any knowledge acquired through the senses: lack of some senses, no consensus over sensations, contradiction between senses and illusions, influence of illness, madness and sleep
- PROBLEM: but aren't the senses all we have?
- 2. The Church is not a perfect authority in all domains  
The best authority of the times, the Bible, must be understood in a non-literal way – but how do we know then what is legitimate to believe in religious matters? How do we choose between competitive criterion of knowledge (personal interpretation vs. Church authority)?
- 3. Science itself can be mistaken  
If highly respected scientists (Ptolemy) could be mistaken, why would we believe that the theories of the most recent scientist are true?

SO: In short then, the best reason we have to be skeptic is that we do not have any means that we know for certain leads to true knowledge: the senses, reason, science, the Church all seem fallible. However, we are aware of many ways in which we get to belief false opinions.

- Side effect on politics: How to assess the legitimacy of political authorities?  
So, what's left?

Most of the philosophers we will cover aim at meeting the skeptical challenge in these various domains.

## 2.4 Answering the Challenge: Reason and Scientific Method

**Universal Reason** One idea that the philosophers of the Enlightenment share: that all humans share reason. Rationality is universal. Reason is what makes all human beings equal. This is not saying that we all detain the truth of course, only that we possess the faculty to search the truth. We all possess the *faculty to judge*. It remains to use this faculty well.

**The New Science as a Model** – One hope would be to design a new method of investigation of the truth. This is part of what the great modern philosophers are going to try to do.

- Almost all the philosophers of the period are also great scientists
  - Descartes: invention of analytical geometry (guess who invented the the Cartesian system and Cartesian coordinates)
  - Pascal: Fluid Mechanics
  - Leibniz: co-inventor of the infinitesimal calculus
  - SO: We have to keep in mind that ultimately, philosophy and science are not separated, and that all the systems of philosophy have modern science in their horizon
- The new science: quantity vs. quality
  - The scholastic ways of explanation: Natural kind, defined by essential qualitative differences, and explanation in terms of intrinsic qualities (virtu dormitiva of opium)
  - The new model for science: laws of nature expressed in mathematical language,
  - the world is reduced to material bodies and their properties, expressed in quantitative terms – mechanical model

## 2.4. ANSWERING THE CHALLENGE: REASON AND SCIENTIFIC METHOD<sup>21</sup>

- Secondary /Primary qualities: the qualities that appear to humans are irrelevant to science
- The scientific method
  - Bacon advocated a new method in science:
    - gather the data
    - infer the law by *induction*
  - Many recognize that this method is unpracticable:
    - no science is made this way
    - no science can be made this way
  - Necessity of hypotheses to inform the observation
  - That said, this poses the question of how much how much we should count on reason vs experience in proper scientific reasoning. *This question is the core question of the The rationalists/empiricists debate*

### **Rational method as a warrant to true knowledge** – Descartes:

- Logic and Mathematics are the model: the only domains where we have reached some certainty
- Renounce all previous beliefs, accepted without rational justification
- Reconstruct on true foundation our entire body of knowledge
- Analysis and Synthesis: method of problem solving from the mathematics as a model for all domains of human knowledge

Not all of the philosophers we will read follow this radical scheme. That said, all of them:

- Reject the authorities of the Church and of the Schools;
- Aim at designing a reliable method to true knowledge;
- Takes the “new philosophy”, which is nothing but the embryo of modern science, as a model.

