

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.

A revolutionary period in all domains

- 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 Medieval Times – God, Man, and the Cosmos

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
- Rarely 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.

→ *Medieval times are characterized by a view of the world as strictly, perfectly and hierarchically ordered. Every piece of the Creation possesses its natural place within the whole. In particular, God has placed Man at the center of the cosmos. Man’s goal should be to understand, and to act in conformity with the order of the world*

2.2 Renaissance and Reformation – A New Order

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.

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

—→ *The medieval worldview is challenged. Accordingly, the authorities which were the advocates of such view are challenged as well. A new idea is born: that reason, by contrast to authority and blind faith, ought to be our guide when looking for truths in all domains, including science, morality and even religion.*

2.3 The Challenge of Skepticism

If we give up on appeal to authority and blind faith, we need to find alternative means to gain knowledge in our various domains of interest. What kinds of mean do we have available? How reliable are they?

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...)
- More systematically, *all the sources of knowledge that are available to us seem to be unreliable.*

Unreliable sources of knowledge? :

- Our 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.
- Scientists 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?

→ *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, all seem fallible. 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 challenge is then to find a reliable way to use our reason such that we gain knowledge. This is a good part of what modern philosophers try to do.

The New Science as a Model : The new science is *successful*. As such, it is believed to be *true*. For this reason, philosophers take the scientific method as a model for gaining knowledge.

- 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. 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
- 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: Mechanics and Mathematics. The world is reduced to material bodies and their properties, expressed in quantitative terms – laws expressed in mathematical language.
- The scientific method
 - Bacon advocated a new method in science:
 - gather the data
 - infer the law by *induction*

2.4. ANSWERING THE CHALLENGE: REASON AND SCIENTIFIC METHOD²³

- Many recognize that this method is unpracticable:
 - no science is made this way
 - no science can be made this wayNecessity 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.

—→ *When the traditional authorities are challenged, new means to gain knowledge are needed. To answer the challenge of skepticism, philosopher need to find a reliable method to gain knowledge. Such a method involves using our senses and our reason. The challenge is to figure out how these two can be combined such that we can gain knowledge. This problem is crucial for the rationalists/empiricists debate.*

