

“Modern” Philosophy: Introduction

[from *Debates in Modern Philosophy* by Stewart Duncan and Antonia LoLordo (Routledge, 2013)]

This course discusses the views of various European philosophers of the seventeenth century. Along with the thinkers of the eighteenth century, they are considered “modern” philosophers. That might not seem terribly modern. René Descartes was writing in the 1630s and 1640s, and Immanuel Kant died in 1804. By many standards, that was a long time ago. So, why is the work of Descartes, Kant, and their contemporaries called *modern* philosophy?

In one way this question has a trivial answer. “Modern” is being used here to describe a period of time, and to contrast it with other periods of time. So, modern philosophy is not the philosophy of today as contrasted with the philosophy of the 2020s or even the 1950s. Rather it’s the philosophy of the 1600s and onwards, as opposed to ancient and medieval philosophy. Classes in ancient philosophy typically focus on the work of Plato and Aristotle, who lived in the fourth century BCE. Famous medieval philosophers include Thomas Aquinas, John Duns Scotus, and William Ockham, who lived in the thirteenth and fourteenth centuries. Compared to Plato or Ockham, Descartes and Kant are relatively recent authors.

But there’s a better answer. Many people have thought that certain seventeenth and eighteenth-century philosophers were doing something new—something radically different from what their ancient and medieval predecessors were doing. One might doubt this. But certainly many seventeenth and eighteenth-century philosophers themselves thought that they were doing something different and new.

In his *Discourse on the Method*, Descartes praised previous philosophers, saying that philosophy “has been cultivated for many centuries by the most excellent minds.” But he also said that those excellent minds had not made much progress: “there is still no point in it [philosophy] which is not disputed and hence doubtful.” And he set out a new method for investigating the world, free from the “defects” of previous methods, that would let him construct his own new, better system in metaphysics, the sciences, and even ethics.

No doubt some of this was a matter of exaggeration, indeed of advertising. But Descartes and many

of his contemporaries (e.g. Thomas Hobbes) did see themselves as engaged in a new project in philosophy and the sciences, which somehow contained a new way of explaining how the world worked. So, what was this new project? And what, if anything, did all these modern philosophers have in common?

Two themes emerge when you read what Descartes and Hobbes say about their new philosophies. First, they think that earlier philosophers, particularly so-called Scholastic Aristotelians—medieval European philosophers who were influenced by Aristotle—were mistaken about many issues, and that the new, modern way is better. (They say nicer things about Aristotle himself, and about some other previous philosophers.) This view was shared by many modern philosophers, but not all of them. Among the next generation, for instance, Gottfried W. Leibniz argued that there was more good in the work of Scholastic Aristotelians than moderns like Descartes and Hobbes had realized. Second, they think that mathematics has been far more successful than philosophy at achieving consensus and finding certainty, and that it would be good if philosophy could emulate this success. Mathematical learning, says Hobbes, “is free from controversies and dispute,” but elsewhere “there is nothing not disputable.” And Descartes too notes, “mathematicians alone have been able to find any demonstrations.”

The more you read about modern philosophy, the more you will discover people who have grand historical stories about what was going on. So, you might read about the Scientific Revolution, the Enlightenment (or various Enlightenments), the mechanism replacing Aristotelianism, or the conflict between empiricism and rationalism (or British Empiricism and Continental Rationalism). Indeed, several modern philosophers had their own views as to what the overarching story of modern philosophy was. Both the seventeenth-century thinker Pierre Bayle and the eighteenth-century philosopher David Hume characterized modern philosophy as a view about the unreality of “colors, sounds, tastes, smells, heat and cold.” Hume’s contemporary Thomas Reid thought that an important part of the history of

modern philosophy could be told in terms of different theories about the nature of ideas. Another eighteenth-century thinker, Immanuel Kant, gave Hume a pivotal role in his history of modern philosophy: “Since the Essays of Locke and Leibniz, or rather since the origin of metaphysics as far as history reaches, nothing has ever happened which could have been more decisive to its fate than the attack made upon it by David Hume.”

A great deal has been said about such narratives of modern philosophy. Even those with the most supporters have opponents. And because they’re broad and general, they omit many details, and can easily mislead the unwary. Instead of discussing general narratives at length, we need to focus on debates about smaller issues, about the interpretation of particular views of particular philosophers. So, the questions we ask are not questions like “should we think about modern philosophy in terms of rationalism and empiricism?” nor even like “was Descartes a rationalist?” but more like “what exactly did Descartes believe about causation?” and “how should we study the history of philosophy?”

Some historians of philosophy engage with their subjects in roughly the same way contemporary philosophers engage with each other, analyzing, criticizing, and building on their arguments. They may think that the main reason to read historical philosophers is that their views are closer to the truth, at least on the issue at hand, than contemporary views. Other historians think of themselves as primarily trying to understand past philosophers, putting their views into a broader context to see how their problems, assumptions, and even conceptual schemes differ from our own. Such historians typically think that the history of philosophy is valuable in itself, like history in general. But they may also think that learning from past philosophers requires contextualizing their views so that we avoid projecting our own assumptions back on to the past.

Galileo, Newton, and the Mechanical Philosophy

For modern philosophers, there was no clear division between philosophy and science. Many of them pursued the project of “natural philosophy”—a project that produced such works as Isaac Newton’s *Mathematical Principles of Natural Philosophy* and Leibniz’s *Discourse on Metaphysics*. Seventeenth-century natural philosophy was extremely diverse:

people’s opinions differed about the aims, methodology, and conceptual vocabulary of science as well as about particular scientific theories. But all the philosophers we discuss were influenced by the research program known as “mechanism” or the “mechanical philosophy,” which attempted to explain all the behavior of the material world in terms of the size, shape, and motion of tiny bits of matter.

Why did the mechanical philosophy emerge in the seventeenth century, rather than earlier or later? One answer is that mechanism is what emerged when two quite different currents of thought happened to come together: the Galilean science of motion and the revival of ancient atomism. When we think of Galileo (1564–1642), we typically think of his defense of the Copernican view that the sun is the center of the solar system and the earth revolves around it. This conflicted with the official view of the Catholic Church that the earth was the center of the solar system, and because of this conflict Galileo was confined to house arrest and his books were banned. Our modern philosophers—most of whom were devoutly religious, many of whom were Catholics—would have seen this as a mistake by the Church rather than evidence of a fundamental conflict between science and religion.

The relation between philosophy and religion in this period is complicated. You see a number of interpretive debates concerning the role of God and religion in philosophical systems. These debates involve a variety of questions. In the *Meditations* Descartes gives an argument for God’s existence that is supposed to show that he can be certain that his clear and distinct thoughts are true.

Galileo said, “Philosophy is written in this all-encompassing book that is constantly open before our eyes, that is the universe.... It is written in mathematical language” (*The Assayer*, 1623). This alludes to the notion that we can learn about God in two ways: by reading the book of revelation (the Bible) or by reading the book of nature (doing science). But it also marks an important shift in how people conceived of science. In comparison with the science of today—or even the science of the eighteenth century—Aristotelian philosophy was mainly qualitative rather than quantitative. Thus, emphasizing the search for mathematical laws of nature was a major change in strategy. And it went along with a major change in focus. Galileo began

with the science of motion, studying inanimate objects; Aristotelians had typically focused on—and been most successful in explaining—the behavior of living beings.

A central thesis of Aristotelianism was that dogs, trees, stones, and all other physical objects are composites of matter and form. For example, think of a piece of clay. The clay cannot exist without having some form or shape, whether that form is the form of a statue or just a misshapen lump. But the form cannot exist on its own either: it doesn't make sense to have a statue or a lump that's not made out of anything. But a piece of clay isn't really matter without form: there's already some form in it that makes it clay rather than sand or wine. And form needn't be literally shape: the form of a dog is what determines its growth and behavior, not just its shape. But the example does give a sense of what the Aristotelians meant by form and matter.

Philosophers who viewed themselves as modern opponents of Aristotle often denied the existence of forms, and tried to explain the behavior of physical objects by matter alone, which they typically thought of as composed of atoms or corpuscles. Atomists thought that the material world was made out of small, indivisible particles. Their non-atomist mechanist contemporaries didn't believe there were any genuine indivisibles, but still thought that material things could be explained by thinking about the structures and interactions of small particles which they called "corpuscles" (from the Latin *corpusculum*, "little body").

Those philosophers who wanted to explain the physical world in terms of matter alone all thought, unlike the Aristotelians, that matter had properties. But they disagreed about what the properties of matter were and whether all matter has the same properties. Some chemists, for instance, argued that there were three or even five kinds of matter: salt, sulfur, mercury, and, perhaps, earth and water as well. Other philosophers thought of the parts of matter as homogeneous, differing only in size, shape, and motion. Each of these properties is readily quantifiable, which makes it easy to describe matter in mathematical terms. Hence this version of corpuscularianism combined well with the Galilean science of motion, creating the mechanical philosophy.

Not all the philosophers of the period accepted mechanism, but all were influenced by it in one way

or another. Many key issues in modern philosophy arose because people recognized problem areas in mechanism and tried to figure out how to deal with them. Three of these problem areas are relevant to the debates we will discuss: causation, the place of the human mind in nature, and what's called the problem of individuation.

First, causation. Aristotelians thought of matter as passive and form as active: they thought that forms caused all change. Their opponents who denied the existence of forms worried about the source of activity in the material world. These worries led to differing views, such as Malebranche's "occasionalist" claim that God is the only genuine cause and Hume's psychological analysis of causation. The notion that only God can really cause things is a strange one to us, but it was undoubtedly an important and influential view.

The notion of causation is discussed again, in a different way, regarding Spinoza. For some commentators, Spinoza thinks that many important notions, including causation, should be understood in terms of intelligibility. Critics object to the claim that causation and other notions can all simply be reduced to intelligibility.

A second problem area within mechanism was the human mind. Many modern philosophers found it incomprehensible for the human mind to be just one more piece of matter. The tradition of Christian philosophy, and the established churches of the time, insisted that human beings survive bodily death. To many thinkers, this was best explained by positing an immaterial, immortal soul. Moreover, it seemed inconceivable to philosophers—who thought that the only properties of matter were size, shape, and motion—that matter could think. Descartes famously made the mind an immaterial substance completely separate from the body, raising the problem of how mind and body could interact. Descartes tried to explain this in his correspondence with Princess Elisabeth of Bohemia, but readers from Elisabeth on have wondered whether he really had a good explanation.

A third problem area within mechanism concerned what philosophers call "individuation." Matter is divisible into tiny parts; the bodies we interact with are composites. So, mechanists wondered, what makes it true that an animal is one thing, while something like an army or a flock of sheep—

also a structured collection of parts—is many? This is a problem that Leibniz struggled with for decades, and it's often thought that even after he adopted the view that reality fundamentally is composed only of “monads”—indivisible immaterial, mind-like atoms—he still struggled to come up with a good explanation of the obvious fact that some parts of the world we experience are unified individuals and others are not.

Despite philosophical puzzles such as these, the mechanist project persisted throughout the second half of the seventeenth century, and even beyond. But the notion that the world could be completely explained by the motions of small parts pushing on each other, like a giant piece of clockwork, came to have increasingly many scientific problems. In particular, Newton's views about gravity, which seemed inescapably to involve action at a distance, posed a great threat to the mechanist approach.

The Broader Context

It is easy to think of people like Descartes and Leibniz as just names attached to philosophical positions. But these historical figures were, of course, real people, who lived in particular places and times and participated in political and religious upheaval, learned various true and false things in the course of their education, and talked to others about their work.

Few of them were professional academics. Both Spinoza and Leibniz turned down offers of university positions. Descartes was educated in the famous Jesuit school at La Fleche and studied law at the University of Poitiers. But after that, he didn't become a lawyer or a professor. Instead, he joined the army, serving in Prince Maurice of Nassau's army in 1618–19, and then spent a decade traveling around Europe before finally settling in Amsterdam in 1630.

Amsterdam was an important city for intellectuals because books could be published there without the sort of official approval from government or church required in other countries. Descartes published his *Meditations* in Amsterdam, avoiding official scrutiny. He spent most of his working life in the Netherlands, remaining there until he moved to Sweden in 1649 to tutor Queen Christina. He took this job to help popularize Cartesianism, but not for the money. Unlike the rest of our philosophers, Descartes came from a wealthy family, so finding a job was never a necessity.

During his time in the Netherlands, Descartes met and then corresponded with Elisabeth of Bohemia, one of a number of early modern royal and aristocratic women interested in philosophy. Although she was the daughter of someone who was (briefly) king of Bohemia (now part of the Czech Republic), Elisabeth was living in Holland. She was there because of the Thirty Years' War, a complicated and protracted conflict that originated in disputes between Catholics and Protestants, but also embodied the struggle for European supremacy between the French Bourbon monarchy and the Hapsburgs who ruled both Spain and Austria. Elisabeth came from a family of intellectual women: her sister, Electress Sophie of Hanover (mother of George I of England) talked and corresponded with Leibniz about many philosophical and other subjects, as did Sophie's daughter, who became Queen Sophie Charlotte of Prussia. One fascinating part of Elisabeth's correspondence with Descartes contains his attempts to console Elisabeth about her brother's conversion to Catholicism—something Descartes, who was a Catholic himself, would not have seen as a bad thing.

Benedict Spinoza came from a very different background than Descartes, but he too benefited from the greater freedoms of the Dutch Republic. His family, then the Espinosas, had come to Amsterdam as refugees. They had been part of a large Spanish and Portuguese Jewish community that had at times flourished and at other times been persecuted under Islamic rule. But when Ferdinand and Isabella finally completed the Catholic Reconquista of Spain in 1492, they expelled the entire Jewish population—many of whom, like the Espinosas, fled to Portugal only to be driven from there a generation later.

Spinoza himself was born and grew up in Amsterdam, where he was educated in the Portuguese–Jewish community's Talmud Torah school, and later worked in his family's business. But in 1656 he was excommunicated by his congregation, presumably because of early versions of views he would later publish. Spinoza's ideas on the existence of God and immortality of the soul were, to say the least, highly unorthodox, as were his views about scriptural interpretation. As the years passed, Spinoza acquired a broader reputation for atheism, becoming a hero of the radical wing of the Enlightenment and a villain for mainstream thought.

Despite the free intellectual life of Amsterdam,

Paris was still in many respects the intellectual capital of seventeenth-century Europe. In the first half of the seventeenth century, many of the most prominent philosophers were in contact with the Parisian monk Marin Mersenne, who acted as a middleman for correspondents throughout Europe. Among those correspondents were Descartes and his critics Thomas Hobbes and Pierre Gassendi. Mersenne had the unenviable task of keeping the peace between some very ill-tempered philosophers. The so-called Mersenne circle was very much aware of Galileo's work. Their discussions and books (such as Mersenne's 1634 *Galileo's Mechanics*) contributed a good deal to the growing awareness of Galileo's work.

Later in the century, Paris was an important intellectual center. It was the home of the French Cartesian philosopher Nicolas Malebranche. He may well be currently the least famous of the philosophers we discuss, but his contemporary Pierre Bayle (himself an enormously prominent figure whose work is now little read) described him as "the premier philosopher of our age."

While Malebranche was a Parisian by birth as well as education, others made considerable effort to get to this important city. An important part of Leibniz's early intellectual career was the time he spent in Paris in the 1670s. Leibniz was very much impressed by Paris: "One finds here, in all branches of knowledge, the most knowledgeable men of the age, and one needs much work and a little determination to establish a reputation here" (Leibniz to Duke Johann Friedrich, January 1675). Leibniz only spent a few years in Paris though, and for much of his life lived and worked in Hanover. "I am not," he then complained "in a great city like Paris or London, where there are plenty of learned men from whom one can benefit and even receive assistance.... Here one scarcely finds anyone to talk to" (Leibniz to Thomas Burnet of Kemnay, March 1696). Thus, for Leibniz, as for many other intellectuals of the time, correspondence was an incredibly important part of his intellectual life. Long before people complained about having too much email, Leibniz was said to have a hundred unanswered letters—not because he was lazy, but because he was constantly corresponding with a great many people about a great many things. That was despite the great difficulties of correspondence at the time. Before the nineteenth century there weren't really organized national postal systems, so sending letters wasn't just a matter

of buying a stamp and walking to the mailbox. And letters traveled slowly too, just as people did, in an unmechanized age. It's probably no coincidence that Paris, Amsterdam, and London, the three capitals of the seventeenth-century Republic of Letters, are within a few hundred miles of each other. Europeans could and did write to people in China at this time, but such long-distance communication was a very slow affair.

For all the importance of correspondence and the difficulty of travel, many prominent philosophers did move around Europe. And many were interested in places outside Europe. Leibniz was fascinated with China and its written language, because it could be read equally well by groups of people who couldn't understand each others' spoken words. He envisaged in this a way of healing the linguistic divisions of Europe, just as he sought a way to reconcile the Catholic and Protestant churches. He was fascinated with Egypt, although that fascination took the more sinister form of trying to persuade Louis XIV of France to invade it.

Discussing the scientific context in which philosophers wrote often helps us understand why they chose the topics they did. Knowing something about their lives can also help us understand them. We often read 17th-century philosophers translated into contemporary English. This makes it easy to forget that in reading something like Descartes' *Meditations*, you are really reading a text from a foreign culture, regardless of your own cultural heritage.

When you begin reading about the history of philosophy, it's easy to assume that there has to be one right answer to every question, one correct interpretation. But this just isn't true. There are lots of wrong answers and silly interpretations—but there's hardly ever just one clear right answer. Instead, there are usually several plausible interpretations, each with its own advantages and disadvantages.

Study Questions

1. How is the mechanical, atomistic philosophy of the early moderns different from the qualitative, "form"-based science of Aristotelian philosophy?
2. How are causation, the mind, and individuation problems for mechanistic materialism?
3. What role do Amsterdam, Paris, and London play in early modern philosophy?