

finite being toward participation in the essential reality of all possibles' (*On the Eternal in Man*, 1960). But way before any of these, the Greek philosopher Aristotle (384–322 BC) simply said that it begins with *wonder*.

PART ONE

The Wisdom of the Ancients

6th century BC to 1st century AD

The first philosophers were called Presocratics, because they worked in the period before the Greek philosopher Socrates (c.469–399 BC), from about 585 BC to 400 BC. The prefix *pre-* tells us that Socrates is a chronological marker indicating a change in thought. There is a *before* Socrates and an *after* – the before period is popularly understood as being characterized by a fragmented approach to knowledge, with the after Socrates period constituting a more systematic and sophisticated approach. But the work of the Presocratics might seem more fragmented than what came after only because the evidence we have of it is fragmentary. Very few original texts remain, and most of our knowledge of Presocratic thought is filtered through the verbal accounts, translations – and therefore prejudices – of those that followed.

For philosophy (and I include here the concepts of *thought* and

thinking in general), the Socratic moment is important in the way that the moment represented by the birth of Jesus Christ (c.5 BC–c.AD 30) is important. The establishment of Christ's birth as the year zero of Western civilization trumps the Socratic moment, for it determined that time and history would henceforth be regarded as Anno Domini (AD), 'in the year of the Lord', the past being referred to as Before Christ (BC). Socrates and Jesus Christ the man (Socrates made no claim to divinity!) had several things in common: both were teachers; both were executed for their beliefs; both left behind schools of followers who would guarantee the longevity of their ideas; and both abided by a one-word commandment. For Socrates it was *think*; for Christ, *love*.

Socrates' disadvantage

One advantage Socrates had over the Presocratics is that his thought was recorded by his pupil Plato (c.428/7–c.348/7 BC) and so survives intact to this day. The disadvantage that Socrates, Aristotle and the other Greek fathers of Western philosophy endured is that their light was hidden under a bushel for more than a thousand years, while Christian thought prospered and became dominant.

A fact that might annoy contemporary Islamophobes is that we owe our knowledge of the Greek philosophers to Islamic scholars

who transcribed their texts into Arabic at a time when the Greek tongue had been lost in the West as a result of the dominance of Latin, the language of the Roman Empire.

Arabic translators preserved classical thought, and it is from their texts that the Greeks eventually found their way into Latin in the twelfth century, and into the vernacular during the fifteenth and sixteenth centuries. It is remarkable to note that the first complete English translations of Plato and Aristotle (384–322 BC) did not appear until the nineteenth century. They were made by Thomas Taylor (1758–1835), and published posthumously in 1804 (Plato), and between 1806 and 1812 (Aristotle).

The Presocratics: wonder and wealth

The Presocratic philosophers were driven by the wonder that Aristotle describes as the chief motivator in philosophy. When I wonder, I do many things. I wonder about how the stars came to be in the sky – that is, I ask questions about how and why there are stars in the sky. Looking at the sky I am in a state of wonder as I behold its vastness; I am wonderstruck, yet I want to know: how big is the universe? I may also be filled with doubt: I may wonder if so-and-so's explanation of how the stars got there is correct. My doubt may even extend to wondering if my own explanation is correct.

The Greek city-state of Miletus – on the western coast of Anatolia in what is now modern Turkey – was the birthplace of Western thought in the sense that the first Presocratic philosophers lived there. Among the most famous were Thales (c.624–c.546 BC), Anaximander (c.610–c.546 BC), and Anaximenes (c.585–c.528 BC). While it is tempting to group thinkers together into ‘schools’, or to ascribe some common preoccupation among them, at the end of the day all that can said with any certainty is that these early men of ideas lived in the same place at the same time.

If we were to wonder why our Western tradition of thought began at Miletus, we could do worse than to notice the geographical position of that city: it was on a trade route that linked it with the cultures of Babylon, Lydia, Egypt and Phoenicia. As the classicist Robin Waterfield has remarked in *The First Philosophers* (2000), ‘ideas always travel with trade’. We might also notice something about philosophy (and philosophers) that is true from the very start: it is an occupation of the leisured – and, therefore, wealthy – classes. The association of wealth with ideas is dominant right into the modern period: Michel de Montaigne’s (1533–92) father was an extremely successful trader; Søren Kierkegaard’s (1813–55) was a rich wool merchant; Isaac Newton’s (1643–1727) family were rich landowners; Ludwig Wittgenstein (1889–1951)

came from one of the wealthiest families in Europe; Bertrand Russell (1872–1970) from one of the noblest in England; A. J. Ayer’s (1910–89) mother was a member of the Citroën family, the eponymous French car manufacturer.

The Greek philosopher was a wealthy, upper-class man whose leisure time was purchased with slave labour. So, with some exceptions, philosophy was a male profession from which women were excluded. One such exception was Theano (sixth century BC), who may have been the wife of Pythagoras (c.570–c.495 BC), and whose school was said to contain twenty-eight women. We can compare the situation of philosophy in ancient Greece with our own time, in which – despite the fact that more philosophers may be women or people of colour or come from modest social origins – it remains a profession dominated by white men.

Thales: philosopher and scientist

Thales was the quintessential Presocratic thinker. He was more than ‘just’ a philosopher; he was an engineer, a mathematician and a scientist. Increasingly, the philosophers of our own age are specialists who cultivate a very narrow patch of knowledge that is of interest only to other professional philosophers (which, lucky for them perhaps, is a surprisingly large number – more than 10,000

worldwide). But every now and again a person is born with the wonder and the intellectual wherewithal to be a philosopher like Thales; in modern times, the American C. S. Peirce (1839–1914) comes to mind.

Thales was regarded as something of a wizard by his contemporaries, for he correctly predicted the solar eclipse of 28 May 585 BC. (In fact, he predicted a range of dates *within* the year 585 BC, not the precise date.) During these early years of philosophy, an epistemological sea change was taking place, a move from mythology-based belief systems to a systematic use of reason to acquire knowledge. However, this was known only to a very small group that comprised philosophers themselves, their students and their friends. The shift from belief to knowledge occurred over a very long period of time, and it involved a minority of people, because of the hierarchical structure of Athenian society. The slaves who made up a significant portion of the population in ancient Greece were not educated, and nor were most of the 51 per cent of Greeks who were women. So, while Thales' prediction of the solar eclipse of 585 BC was based more on science than superstition, most people would not have appreciated the difference.

How did Thales predict the eclipse? Babylonian astronomers had kept a record of eclipses called the Saros cycle. There was also a second, more accurate cycle called the Exeligmos cycle, and

it is likely that Thales knew both of them. In examining such records Thales was doing what most scientists do every day of their working lives: that is, bench science, working with experimental data and the observations of other scientists, moving knowledge along inch by inch.

But Thales was also doing wholly original philosophy when he asked the question: what is the primary principle at work in the world? What is the one thing that is irreducible? His answer was *water*. For Thales, water is the substance from which everything originates, and to which everything returns. In water Thales saw the kinds of transformations into different states – solid, liquid, gas – that would account for many other natural phenomena.

Thales says that the world is held up by water and rides on it like a ship, and what we call an earthquake happens when the earth rocks because of the movement of the water.

Seneca, *Questions about Nature* (c.AD 65)

(trans. Robin Waterfield, 2000)

Thales was important because he sought to explain the natural world without reference to gods. He replaced the divine with the physical. He proposed that the stuff of the universe was one primary, organizing substance. He set off a tradition that made the search

for one irreducible substance a kind of grail quest in philosophy. Aristotle would later say that several substances exist in their own right, without being dependent upon any others. But the Presocratics wanted one ultimate substance and it was variously proposed to be water, fire, air or earth. Thales' contemporary Anaximander contributed the wholly original concept of *apeiron*, which translates as 'without limits' or 'boundless'. Like many philosophical concepts that would follow, *apeiron* was mysterious and hard to grasp. Sometimes, philosophers are praised for their precision and clarity; such diverse figures as John Stuart Mill (1806–73) and William James (1842–1910) would be good examples. And then again, philosophers are sometimes prized for their opacity: the German Martin Heidegger (1889–1976) is a fine twentieth-century example; he and Anaximander would have made good colleagues.

Ultimately, Christian philosophers of the medieval period would replace the natural concept of ultimate substance with that of God; later still, G. W. F. Hegel (1770–1831) would posit the Absolute or Spirit as the ultimate substance.

Anaximander says that the first living creatures were born in a moist medium, surrounded by thorny barks . . .

Aëtius (c.396–454), *Opinions*
(trans. Robin Waterfield, 2000)

Four elements, four humours: philosophy, medicine and the Presocratic worldview

Thales' contemporary Anaximenes thought fire was the ultimate substance, but one that could be transformed in various ways to become earth, air or water, thus accounting for all four elements. The concept of the element is an enduring one, as can be seen from the periodic table first proposed in 1869 by the Russian chemist Dmitri Mendeleev (1834–1907). In 1789 the Frenchman Antoine Lavoisier (1743–94), who is sometimes called the father of modern chemistry, had published a list of 33 chemical elements. Mendeleev's periodic table now contains 118 of them. But the Greeks had just four elements, and these would correspond to the four *humours* of Greek medicine as developed by Hippocrates (c.470–c.360 BC).

Hippocrates is the father of Western medicine and his most enduring legacy is the Hippocratic Oath, which is still sworn by new doctors in the twenty-first century. The oath is ascribed to Hippocrates, although it might have been composed by another – some claim it was written by followers of Pythagoras. No matter, for it is the spirit of the oath that counts: 'In every house where I come I will enter only for the good of my patients.' But the Hippocratic Oath is more than a promise not to harm present and future patients; it is also a promise to honour the past teachers from whom physicians had received their knowledge. It is the

document that best summarizes the value that ancient Greeks placed on learning: ‘To consider dear to me, as my parents, him who taught me this art; to live in common with him and, if necessary, to share my goods with him; to look upon his children as my own brothers, to teach them this art.’

The development of medicine and the rise of philosophy in ancient Greece are contemporaneous, and the researches of physicians and philosophers inform one another. For instance, the concept of the four elements finds a correspondence in the four humours by which Hippocrates understood the human body and which he used to diagnose and treat ailments. The four humours or basic elements of the human body were *black bile*, *yellow bile*, *phlegm* and *blood*. It is worth pausing to look at the relationship of these concepts with those of the four elements of air, fire, earth, and water, because it constitutes what mid-nineteenth-century German philosophers would come to describe as a *Weltanschauung* or *worldview*. A worldview is an orientation towards the world that is shared by a large number of people at a given time; it is the way a society or group views the world, and it reflects the knowledge, beliefs, traditions, theoretical tendencies and prejudices that determine the way in which the world is understood. In the period before the Presocratics, the prevailing worldview was mythological. Starting in the seventeenth century, the scientific worldview arose and challenged that

of the Church (we find, again, a conflict between knowledge and belief).

Prayer is a good thing, but one should take on part of the burden oneself and call on the gods only to help.

Hippocrates (c.470–c.360 BC), *Dreams*
(trans. J. Chadwick and W. N. Mann, 1950)

The worldview developed by the Presocratics was a complex mix of metaphysics and science, as can be seen from the humoral pathology of Hippocrates and his followers (who followed him all the way into the nineteenth century, until experimental science and medical technology developed sufficiently to replace Hippocratic ideas). The four humours of blood, yellow bile, black bile and phlegm corresponded, in order, to a range of organizational and conceptual quartets. The corresponding elements were air, fire, earth and water. The temporal correspondences were spring, summer, autumn and winter. The four humours corresponded to the organs thought to govern health: the liver, gall bladder and spleen, with phlegm doing double duty governing both brain and lungs. Qualities were associated with the four humours: warm and moist (blood); warm and dry (yellow bile); cold and dry (black bile); and cold and moist (phlegm). Four temperaments are identified with the humours: sanguine (blood);

choleric (yellow bile); melancholic (black bile); and phlegmatic (phlegm). Apart from melancholic (sad, suffering from melancholy), the human characteristics ascribed to the humours have fallen out of common usage. But, up until the Second World War it was not uncommon to hear someone described as sanguine (healthy, optimistic), choleric (passionate, angry) or phlegmatic (calm, unemotional).

Homer to Heraclitus: the emergence of the soul

The clash of religious belief and philosophy took a new turn with Xenophanes (c.570–c.475 BC) who roundly rejected the prevailing religion that was based on the poetry of Homer, who is thought to have flourished around 850 BC, and was the author of the epic poems the *Iliad* and the *Odyssey*. Homer's religion was populated by gods who lived on Mount Olympus and were ruled by Zeus. The gods were immortal and had human form. Xenophanes dispensed with Homer's polytheistic, anthropomorphic religion and replaced it with a single god who, while he might be embodied, did not take human form. Xenophanes influenced Heraclitus (c.535–c.475 BC), though not other contemporaries. Xenophanes' cosmology was not as sophisticated as those of his fellow Presocratics, but he did introduce the idea that the earth had once been covered with mud, and would be again.

As evidence of this he cited marine fossils that he discovered inland – the type of fieldwork that in a later age would lead Charles Darwin (1809–82) to develop his theory of evolution and the origin of species.

To this universal Reason which I unfold, although it always exists, men make themselves insensible, both before they have heard it and when they have heard it for the first time. For notwithstanding that all things happen according to this Reason, men act as though they had never had any experience in regard to it when they attempt such words and works as I am now relating, describing each thing according to its nature and explaining how it is ordered. And some men are as ignorant of what they do when awake as they are forgetful of what they do when asleep.

Heraclitus, *Fragments* (trans. G. T. W. Patrick, 1889)

Of the four elements, it was fire that most fascinated Heraclitus. His fragments are full of images of war and fire. He not only believed that the soul was animated by fire, he is also thought to have concluded that the world was periodically consumed in a fiery conflagration.

Heraclitus was the first philosopher to identify the self with a soul, rather than the body. His manner was prophetic, a quality

exaggerated by his key concept, which he called the *logos*. The literal translation of *logos* is *word*, but Heraclitus means more than that. He talks of wisdom as being the ability to open oneself to the *logos*, which speaks through him, and can be heard by those with ears to hear. The concept of *logos* harks back to the *apeiron* of Anaximander, and forward to the Absolute or Spirit of Hegel. From our current perspective we could argue that Heraclitus was a kind of pre-existentialist of the Heideggerian kind. It was Heraclitus who first described time as a river into which one can never enter twice at the same place. Indeed, much of Heidegger's thinking is an attempt to continue ancient Greek thought, rather than trade barbs with his contemporaries on the interpretation of Immanuel Kant or Hegel in early twentieth-century German philosophy. In the winter semester of 1966–7 at the University of Freiburg, Heidegger and Eugen Fink (1905–75) conducted a seminar on Heraclitus, finding common themes of life, death and being, and relating it all to Hegel.

[Heidegger] wanted to rejoin the Greeks through the Germans, at the worst moment in their history: is there anything worse, said Nietzsche, than to find oneself facing a German when one was expecting a Greek?

Gilles Deleuze and Félix Guattari, *What Is Philosophy?*
(trans. Hugh Tomlinson and Graham Burchell, 1996)

Heraclitus' politics and ethics foreshadowed Christ's exhortation to 'Render therefore unto Caesar the things that are Caesar's; and unto God the things that are God's' (Matthew 22:21) in that he distinguished two types of obedience: that which is given to the *logos*, and that which is given to the one leader of a country. Heraclitus' concept of the *logos* would find its ultimate development in the New Testament Gospel of John (where *logos* is translated as *word*): 'In the beginning was the Word, and the Word was with God, and the Word was God' (John 1:1). John uses the Word to refer not only to God in the sense of a supreme being in heaven, but also to Jesus Christ: 'And the Word was made flesh, and dwelt among us' (John 1:14). Unlike the Christians, Heraclitus did not believe in an afterlife. He identified human existence as taking place in a world of constant flux, in which one was required to make one's own destiny.

'It is impossible to go into the same river twice,' said Heraclitus; no more can you grasp mortal being twice, so as to hold it. So sharp and so swift its change; it scatters and brings together again, nay not again, no nor afterwards; even while it is being formed it fails, it approaches, and it is gone. Hence becoming never ends in being, for the process never leaves off, or is stayed.

Plutarch (c.AD 46–120), *On the E at Delphi*
(trans. A. O. Prickard, 1918)

Parmenides: philosophy as poetry

One of the chief arguments between contemporary philosophers of the analytic and continental camps involves the charge levelled by analytics that continentals practise forms of philosophy that aren't really philosophy. They are said to be practising 'literary criticism' under cover of philosophy. The French post-structuralist Jacques Derrida (1930–2004) was the main target of this accusation. Continentals are also charged with reading philosophers who aren't really philosophers at all, but are rather writers of 'literature' – Friedrich Nietzsche (1844–1900) stands thus accused. However, the practice of literature and philosophy was, from the beginning, seen as inseparable. The philosopher whom some regard as the greatest of the Presocratics, Parmenides (early fifth century BC), left as his only work a long metaphysical poem divided into two parts, 'The Way of Truth' and 'The Way of Appearance'. In the first poem Parmenides encounters a goddess who shows him two paths: being and not-being. In following the path of being, Parmenides argues that *being* is all there is; there can be no such thing as *not-being*. He sets the tone for much of the metaphysical argument that would follow for the next 2,500 years by arguing that one cannot formulate an expression with a subject followed by the term 'is not'. Only what *is*, what *exists*, can be imagined, discussed, known. Parmenides then goes in search of what is, defining *being* as homogeneous, unchanging

and enduring through space and time. Parmenides' world differs utterly from that of Heraclitus; where Heraclitus found change, Parmenides finds the eternally true and enduring.

Only one story of the way is still left: that a thing is. On this way there are very many signs: that Being is ungenerated and imperishable, entire, unique, unmoved and perfect.

Parmenides (fifth century BC), 'The Way of Truth'
(trans. Richard McKirahan, 2009)

The English philosopher Alfred North Whitehead (1861–1947) famously remarked that all of Western philosophy was merely a footnote to Plato; but Wittgenstein's student Elizabeth (G. E. M.) Anscombe (1919–2001) wittily noted that Plato's work was a footnote to Parmenides. However, the line of thought that leads from Parmenides to Plato is not a straight one, and it takes a few important detours.

Zeno, Pythagoras and Democritus: mathematics and metaphysics

Zeno of Elea (c.490–c.430 BC) was a student of Parmenides and is celebrated for formulating paradoxes intended to prove his master's theory of *immutability*. An example would be the arrow

paradox, which states that an arrow cannot move at a place where it *is not*; equally, it cannot move at a place where it *is*. A flying arrow is always where it is, so it is at rest. But if it is at rest, it is also not moving. This kind of riddle exercised Aristotle very much (indeed, Aristotle would call Zeno the father of dialectic), and put pressure on early mathematics to come up with concepts that could account for the apparent conflict of stasis and motion.

Fate is the endless chain of causation, whereby things are; the reason or formula by which the world goes on.

Zeno of Elea (c.490–c.430 BC) (trans. Jonathan Barnes, 1987)

Pythagoras (c.570–c.495 BC) and his followers were concerned with using number to explain the universe. The geometrical theorem which states that in a right-angled triangle the square of the hypotenuse is equal to the sum of the squares of the other two sides is called the Pythagorean theorem. The Babylonians and others had made use of it, but Pythagoras (or his followers) demonstrated it. One of Pythagoras' most enduring teachings was the concept of *metempsychosis* or reincarnation of the soul (sometimes called transmigration). It is one of Plato's essential ideas; it is also fundamental to a number of Eastern religions, and was key to the thought of the American transcendentalist Ralph Waldo Emerson (1803–82) and the

Indian advocate of passive resistance, Mohandas K. Gandhi (1869–1948).

Another Presocratic idea that has had an enormous impact on thinking right up until the present day is atomism: the idea that the world is composed of indestructible, irreducible building blocks. Atomism was first developed by Leucippus (early fifth century BC) and continued by his student Democritus (c.460–c.370 BC), who believed that things are composed of atoms, which exist in an infinite void (space). Aristotle would reject Democritus' form of atomism because he thought it lacked a teleological order or sense of direction. Teleology – the notion that things have a purpose, tending towards a perfect (or at least meaningful) end – was important for Plato and Aristotle, and the medieval Christian philosophers. For Christian thinkers, the purpose of things was to have been created by God and to fulfil his divine plan. Christian resistance to Charles Darwin's theory of the origin of species (1859) stemmed from its contradiction of the belief that species exist in accordance with a preordained divine plan.

Democritus said that the atoms had two properties, size and shape, while Epicurus added weight as a third.

Aëtius (c.396–454), *Opinions*
(trans. C. C. W. Taylor, 1999)

Socrates, Plato and the Socratic dialogue

Plato claimed not to like the group of philosophers who have come to be known as the Sophists, because he thought they used their philosophical skills solely to win arguments, and to attract paying students who wished to develop their rhetorical skills for profit. (Plato did not charge students who attended his Academy.) The most famous of the Sophists was Protagoras (c.490–c.420 BC) who, ironically, many scholars credit with creating the style of debate that led Plato to develop the Socratic dialogue.

... he thinks that he knows something which he doesn't know, whereas I am quite conscious of my ignorance.

Socrates, from Plato's *Apology*
(trans. Harrold Tarrant, 1954)

Socrates – Plato's teacher – challenged Athenians' received opinions. As a result, he came to be admired and despised in equal measure. As a young man Socrates was a brave soldier, who fulfilled his duties of citizenship (including political service) honourably. Otherwise, his life was devoted to philosophy, which for him was the active pursuit of knowledge rather than the passive contemplation of problems. Socrates *philosophized*.

Socrates philosophized in the street, at the marketplace, wher-

ever men gathered to converse. His technique was to seize upon a subject of the 'what is?' variety. What is good? What is virtue? What is knowledge? His method was to encourage his interlocutor to say what he thought those things might mean, and then, by a series of cunning questions, get him to admit that he has no idea what they mean after all. If it was any consolation to his partner in dialogue, Socrates himself would usually admit that he did not know the answer either. For many, participating in Socratic dialogue was invigorating, exhilarating, the highest form of activity. For others, however, it meant being embarrassed in public. These people became enemies of Socrates.

Socrates was famous throughout Athens, but doubts soon formed about him. Perhaps he asked too many questions, questioned too hard. Perhaps his questioning instilled too much doubt. He was the subject of Aristophanes' (c.448–c.380 BC) play *The Clouds* (423 BC), which poked fun at the intellectual life of fifth-century BC Athens. Unscrupulous teachers of rhetoric abounded, and though Socrates was not one, he was lumped in with them by Aristophanes, and portrayed as a crazed and godless scientist who twists the minds of the young and impressionable in a school called 'The Thinkery', which is burned down by an angry mob.

In real life Socrates became a martyr to philosophy when he was condemned to death in 399 BC. The charges against him included 'not believing in the gods in which the city believes, and

of introducing other new divinities'. He was also accused of 'corrupting the young'. Socrates' pupil Plato immortalizes his master's courage in the face of death in *The Apology of Socrates*. As his friends try to console him in his final hours, Socrates continues to philosophize, talking in particular of the immortality of the soul. He calmly drinks the hemlock that the executioner brings to him, after first discussing with the executioner the protocol of his death.

... the life which is unexamined is not worth living.

Socrates, from Plato's *Apology*
(trans. Benjamin Jowett, 1871)

Plato and the world of forms

Plato's key contribution was to look past sense experience and the material world to identify what he called Forms. Forms are a type of *idea* of things. For example, there is an ideal form of a chair; but any chair we might sit upon is merely a pale and inadequate representation of the ideal Form that exists for chairs. It is the same for qualities and virtues, and the Form of good as conceived by Plato is probably indistinguishable from God.

Plato took from his teacher Socrates the concept of philosophy as an activity, and he couches much of his teaching in the form

of Socratic dialogues in which knowledge is gradually revealed through the activity of thinking. Plato's epistemology (or theory of knowledge and how we acquire it) is best demonstrated in the *Meno*. What begins as a dialogue concerning the nature of virtue between Socrates and Meno – a follower of the Sophist Gorgias – becomes a demonstration of Plato's theory of knowledge as *remembering* or a 'loss of forgetfulness', a literal translation of the Greek term *anamnesis*. Plato argues that just as there are ideal Forms behind the world of shadows we inhabit, so knowledge already resides in the soul of man, if only he could remember it. Plato's Socrates chooses one of Meno's slaves at random and – in a cunning presentation of the geometry of squares – he gets the slave to appear to remember knowledge about the subject he originally possessed, but had forgotten.

The soul, then, as being immortal, and having been born again many times, and having seen all things that exist, whether in this world or in the world below, has knowledge of them all.

Plato, *Meno* (trans. Benjamin Jowett, 1871)

Along with the Forms, Plato's other great contribution to philosophy was his elaboration of Pythagoras' idea of the immortality of the soul. Plato was a dualist, which is to say he believed that

body and soul are separate entities. In the *Meno* he offers a proof for the immortality of the soul by suggesting that the immortal soul that resides in the body of Meno's slave is the source of his recovered knowledge of geometry. Dualism would be reintroduced into Christian philosophy in the seventeenth century by the French philosopher René Descartes (1596–1650).

Plato's *Republic*: the roots of totalitarianism?

The second half of the twentieth century saw a resurgence of interest in Plato's political thought as expressed in the *Republic* (c.380 BC). This was largely because Karl Popper (1902–94), an Austrian philosopher who fled the Nazis and became a British subject, declared Plato an enemy of democracy in his landmark work *The Open Society and Its Enemies* (2 vols, 1945, 1962). In a wide-ranging critique of theories of teleological historicism, Popper brackets Plato with Hegel and Karl Marx (1818–83) as the fathers of totalitarian ideology. (The first volume of his book is subtitled 'The Spell of Plato'.) Of Plato he wrote that the 'anti-equalitarian interpretation of justice in the *Republic* was an innovation, and that Plato attempted to present his totalitarian class rule as "just" while people generally meant by "justice" the exact opposite'. In the aftermath of the Nazi dictatorship of 1933–45, the rise of Josef Stalin (1878–1953) in the Soviet Union, and of

Mao Zedong (1893–1976) in China, the historical roots of totalitarianism came under closer scrutiny. The first comprehensive treatment of the subject was by Hannah Arendt (1906–75) in *The Origins of Totalitarianism* (1951).

Of the five types of government Plato recognized, democracy ranked fourth, just ahead of tyranny. In front of these were aristocracy (rule of the 'best'), timocracy (rule by the 'honourable'), and oligarchy (rule by the wealthy). Plato viewed democracy as rule by the masses, whom he considered unfit for the task. He defined tyranny as the rule of a single man who may begin with the people's interests in mind, but soon puts his own interests before theirs.

Plato's republic contained three classes of person: the philosopher-kings; the guardians; and the workers and merchants. The philosopher-kings are a very small group who have reached the highest level of philosophical training. The guardians are the management class, who comprise both soldiers and administrators; they are, in effect, the government. The workers and merchants, in Plato's ideal world, are marked by the virtue of temperance.

Education is central to Plato's ideal state, and a guardian would receive a thorough education in philosophy, along with physical training. After a period of practical employment a guardian would receive further philosophical instruction. Plato believed that the

age of philosophical maturity was fifty, after which a person achieved their full value to themselves and the state.

The social organization of the guardians was also crucial to Plato's republic. It was essentially communist in nature, in that there was very limited private property. Plato went further than most communists in requiring that children be held in common; they were not to know who their parents were. Children would be conceived as the result of breeding festivals in which lots were drawn to pair men and women for breeding on eugenic grounds (that is to say, matches that a committee thought would be most likely to produce *well-born* children). The unions would last only for the duration of the festival. As well as supporting a eugenic programme designed to encourage breeding from the fit, Plato advocated infanticide for 'unfit' children, and for those born to women over the age of forty.

... marriage, the having of wives, and the procreation of children must be governed as far as possible by the old proverb: friends possess everything in common.

Plato, *Republic* (c.380 BC)

(trans. G. M. A. Grube, 1992)

But Plato, like the leaders of the Soviet Union, believed that women should play an important role in government. (Western

democracies would come late to this idea; from the founding of the Soviet Union women were leaders in science and technology.) He described the absurdity of excluding women from government as being akin to preferring long-haired persons over short-haired ones for the task. Some have argued that Plato was a feminist because he separated desire and reproduction from the business of governance. So, along with 'proto-totalitarian' some would add 'proto-feminist' to the new labels that Plato's commentators have applied to him 2,500 years after his death!

The dominant theme of the *Republic* is the role that an understanding of the Forms, of Good, and of mathematics plays in the formation of political leaders. If we bracket out the social blueprint aspect of the *Republic*, it emerges as a text on the importance of education. The most famous scene in the *Republic*, known as 'the allegory of the cave', likens the situation of most people to that of being chained against a wall in a cave. Their only experience of the world is the shadows thrown against the cave walls by things passing in front of a fire; they never directly perceive the world. The philosopher is the person who manages to escape his chains, leave the cave and discover the Forms.

Aristotle: Plato's most famous pupil

As Socrates passed his knowledge to Plato, who acknowledged his master and moved beyond him, so Aristotle, who spent twenty years as Plato's student, surpassed his master, and went on to become tutor to the young Alexander the Great (356–323 bc). Aristotle created the first total system of philosophy, his work setting the example (and the bar) for other great builders of philosophical systems of the future, like Kant and Hegel.

Aristotle's system is built on the idea that philosophy falls into distinct disciplines, each having a different method and requirements for proof. For him these included logic, natural philosophy, metaphysics, philosophy of mind, ethics, political philosophy and aesthetics.

Aristotle created the first system of deductive logic in his *Prior Analytics* with the invention of the *syllogism*. This is a logical argument in which a conclusion is inferred from two premises. A basic example of a syllogism would contain a major premise such as 'All men are mortal'. The minor premise would be 'Socrates is a man'. Therefore, we can deduce the conclusion that 'Socrates is mortal'. Syllogistic logic can be a tricky business, as syllogisms can be valid without being true. For instance, the syllogism 'all men are immortal, Socrates is a man, therefore Socrates is immortal' is just as valid, because it follows syllogistic form; but

it is untrue since the first premise is untrue. In another example, 'all men are mortal, Socrates is a philosopher, therefore Socrates is mortal' is a true conclusion, but it is built on an invalid syllogistic form. Aristotle's understanding of logic also includes the philosophy of language, a forerunner of much of contemporary analytic philosophy. Aristotle's teaching of logic would prevail until the early part of the twentieth century, when Gottlob Frege (1848–1925) would create a new system and describe its relation to language. Frege's work would be recognized by Bertrand Russell (1872–1970), giving rise to analytic philosophy.

Aristotle's natural philosophy includes studies in physics, cosmology and, especially, biology. In his *Physics* he explores the nature of form and matter, and cause and effect. He posits the idea of the *unmoved mover*: that which is behind all movement in our universe. This became the argument of *first cause*, used by the medieval Scholastic philosophers to describe God as creator of the universe.

Aristotle's biological works are doubly important because they (a) outline a method, and (b) constitute a programme of research that bears results. His method was to categorize things according to substance, species and genus. This not only provided the means to catalogue plants and animals in a coherent way, it also implied a teleological character in nature, along with a hierarchy that linked man with some notion of the absolute (or God) above him, and

lesser beings beneath him. This was the idea of the Great Chain of Being, which placed God at the top, followed (in the later Christian tradition) by various ranks of angels, then man, woman, animals, plants, inorganic matter and, finally, chaos.

Metaphysics: the study of being

Aristotle established metaphysics as ‘the study of being *qua* being’. That apparently simple declaration – *Aristotle established metaphysics as ‘the study of being qua being’* – is one which most historians would agree to be true. But if one asks philosophers to say what it means, disagreement immediately breaks out, leading to many different explanations. What is meant by *metaphysics* would be the first point of contention, irrespective of what Aristotle said; the other term in the sentence to cause broad disagreement is *being*.

Aristotle never used the term metaphysics. Throughout the history of thought, metaphysics has been regarded as the most highfalutin branch of philosophy. One thinks of the extremely difficult technical language employed by Hegel, as opposed to the self-consciously clear presentation of an analytic philosopher like A. J. Ayer, who did not believe in metaphysics. But the origin of the term metaphysics is quite modest. It came about when Andronicus, the first-century BC cataloguer of Aristotle’s work, had to place the great

philosopher’s writings in what he thought to be the correct chronological order. The book we know as the *Metaphysics* is the one that Andronicus placed *after* the *Physics*. Since the prefix *meta* signifies ‘after’ in Greek, the *Metaphysics* got its name by coming after the *Physics*. (Perhaps there is a warning here for philosophers who want to make things more difficult than they are.)

As for *being*, we might think it an easily definable term; but if this were so, philosophers would be out of a job. In the twentieth century questions of being tended to fall within the scope of such continental philosophers as Martin Heidegger and the Frenchman Jean-Paul Sartre, the former’s *Being and Time* (1927) and the latter’s *Being and Nothingness* (1943) setting the agenda for existentialism. Analytic philosophers like A. J. Ayer would argue that the work of Heidegger and Sartre consists of little more than abuses of the verb ‘to be’, and has nothing to do with what Aristotle meant by being. Ayer argued that metaphysics – particularly the metaphysics of Heidegger – was, literally, nonsense. It simply had no meaning.

All men by nature desire to know.

Aristotle, *Metaphysics* (trans. Richard McKeon, 1941)

The whole question of what is meant by being could be viewed as the first question of philosophy. “Why are there beings at all

instead of nothing?" – this is obviously the first of all questions.' So declared Heidegger in his *Introduction to Metaphysics* (1935, published 1953). If being is defined as what *is*, as opposed to what *is not*, it is still a difficult concept to grasp. For Aristotle, to inquire into being was to explore the concept of *substance*. It was a search for the irreducible.

After Plato's death, Aristotle rejected the notion of Forms and focused instead on substance, which contains *essence* or that which does not change. He described substance as a unity of matter and form; and *divine substance* as substance without matter. Rejecting the anthropomorphic gods of Olympus, Aristotle believed that divinity was to be found in the ordered workings of the universe. Even today – perhaps especially today – it is difficult to find a generally agreed upon definition of metaphysics among contemporary philosophers. (Professional philosophers tend to be very cautious people.)

Greek philosophy after Aristotle

Both Plato and Aristotle would undergo numerous interpretations and reinterpretations over the centuries, as thinkers in each succeeding era found new relevance in their ideas (or attempted to make them conform to their own). However, while Plato and Aristotle dominate Western thought, other ancient Greek thinkers

developed modes of thought that would endure and influence Roman philosophy.

Cynicism, founded by Socrates' friend Antisthenes (c.445–c.365 BC), holds that true happiness lies in right and intelligent living. Its followers mastered their desires and wants, paring life down to its essentials (as would the nineteenth-century American Transcendentalist Ralph Waldo Emerson).

Scepticism was another major philosophical stance in ancient Greece. While the sceptical attitude may be said to describe philosophers in general, it originally refers to two very different schools of thought. *Pyrrhonian scepticism* originates with Pyrrho (c.360–c.270 BC). It is a radical approach to thinking that refuses assent to any non-evident proposition; even the 'truths' elicited by sensory perception or the use of reason were judged to be unreliable. This led to a philosophical position in which all judgement was suspended. This state of affairs is referred to by the Greek term *epoché*. (In the early twentieth century Edmund Husserl, the founder of phenomenology, would resurrect the notion of the *epoché* as the goal of his method, known as the transcendental reduction.) *Academic scepticism* was developed by Arcesilaus (316/15–241/0 BC) who was the sixth successor to Plato as head of the Academy. Like Pyrrho, Arcesilaus thought that knowledge of things was impossible; however, he did think that there were degrees of probability, and this difference from Pyrrhonian

scepticism allowed the thinker to *act*. Academic scepticism was further developed by the Roman thinker Cicero (106–43 BC).

In contrast to Scepticism was Stoicism, a school of thought associated with Zeno of Citium (c.334–c.262 BC). Rather than rejecting the evidence upon which knowledge could be based, Stoics erected criteria by which a perception could be treated as knowledge. Is it clear? Can a number of persons agree that it is so? Is it probable? Is it amenable to being incorporated in a system of knowledge? Stoicism remained an influential approach in Roman philosophy, and its proponents included Seneca the Younger (c.4 BC–AD 65) and the emperor Marcus Aurelius (AD 121–80).

Epicurus (341–270 BC) further developed the atomistic thought of Democritus in founding his eponymous school of Epicureanism. The goal of Epicureanism was to overcome superstition and belief in gods and divine intervention. Epicureans thought that a scientific understanding of nature, combined with control of bodily desires, would lead to tranquillity, freedom from fear and relief from bodily pain.

Eclecticism is also an important part of the Greek legacy. By its very nature – the idea of building a philosophy taking parts from various schools of thought – it cannot be ascribed to one founder. Prominent eclectics included Panaetius of Rhodes (c.185–c.110/09 BC), Posidonius of Apameia (c.135–51 BC), Philo of Larissa (154/3–84/3 BC) and the Roman Cicero.

Philosophy and religion in the Graeco-Roman world

Greece succumbed to the growing power of the Roman republic following the defeat of the Achaean League at the Battle of Corinth in 146 BC. Sixty years later, in 86 BC, the Athenian Academy itself was destroyed by the troops of the Roman general Lucius Cornelius Sulla. (According to the Romanized Greek historian Plutarch [first century BC], ‘he laid hands upon the sacred groves and ravaged the academy’.) But long before these indignities were visited on philosophy’s birthplace, the geographical reach of ancient Greek thought had been broadened by the conquests of Alexander the Great in the Near East, North Africa and Asia in the late fourth century BC. Thus the many schools of thought that subsequently flourished in the Mediterranean and Hellenistic worlds continued to bear the philosophical imprint of their classical Greek forebears.

For the educated elites of the increasingly Roman-dominated Mediterranean and Near East of the first century BC and after, Greek-born philosophies such as Stoicism and Epicureanism offered an attractive alternative to traditional polytheistic religion. At the same time, an emerging group of religious cults of a new and very different character were making their presence felt across the Graeco-Roman world. Typified by the mystery cults of Isis,

Cybele and Atargatis, these religions were open to initiates only, and offered their devotees more in the way of private consolation than the traditional gods.

Over the centuries of late Antiquity, however, the old pagan gods, the new mystery cults and the claimed divinity of successive Roman emperors (from 27 BC the first Roman emperor Augustus [63 BC–AD 14] promoted a cult of emperor-worship as a means of moulding his multinational subjects into loyal Roman citizens) would slowly but surely yield to a religion centred on a first-century AD Jewish teacher and miracle-worker from Galilee in Roman-ruled Palestine. That religion would not only conquer the Roman Empire by the fourth century AD, it would also hold sway over Western thought for more than a millennium.

The various modes of worship, which prevailed in the Roman world, were all considered by the people, as equally true; by the philosopher, as equally false; and by the magistrate, as equally useful.

Edward Gibbon, *The History of the Decline and Fall of the Roman Empire* (1776–88)

PART TWO

Christianity Triumphant

1st century to 16th century

Judaism was the first monotheistic belief system, and it traces its history back to the early part of the second millennium BC, some 1,500 years before the rise of philosophy in ancient Greece. In common with Christianity and Islam, Judaism is an Abrahamic religion – that is to say, it derives from Abraham, patriarch of the Israelites. Islam regards Abraham as a prophet. Muhammad (c.570/1–632) is a descendant of Abraham via his son Ishmael.

Judaism is a unified tradition of religious belief, social custom and law. It is codified in written texts, the first of which is the Torah (or Pentateuch). These are the five books of Moses which correspond to the first five books of the Old Testament of the Christian Bible: Genesis, Exodus, Leviticus, Numbers and Deuteronomy. These texts are important because theology – a cornerstone of Western thought – begins with their study.

Interpretation of Talmudic texts also leads to the first practice of *hermeneutics* from around 515 BC. Hermeneutics is the interpretation of written texts that began with Talmudic and biblical scholarship and was developed by nineteenth-century German philosophers to include critical strategies for understanding texts (not only written ones, but ‘texts’ such as social practice).

A new kind of God

The Jewish God differs from the ancient Greek and Roman gods in that He cares about humankind. (Greek deities could show concern for humans, but not as much as they had for themselves.) In a time and a place that could be harsh and unrelenting, the God of the Jews offered something unique: He anointed the Jews as His chosen people, and rescued them from slavery in Egypt through the leadership of His prophet, Moses.

While the Jewish God cares about His people, their relationship with Him is fearful. They dare not speak His name. When Moses asks God what His name is, God replies ‘I am that I am’ (Yahweh, variously translated as ‘I am who I am’, ‘I am what I am’). Even today, many Jews write his name as ‘G-d’, following the ancient rule against using his name. By contrast, the Christian God is more approachable, and Christian ritual urges the faithful to praise his name in song and prayer.

The core beliefs of Judaism were codified by the medieval Jewish scholar and physician Maimonides (1135–1204), known as RaMBaM in Hebrew literature. His thirteen articles of faith were:

1. God exists
2. God is one and unique
3. God is incorporeal
4. God is eternal
5. Prayer is to God only
6. The prophets spoke truth
7. Moses was the greatest of the prophets
8. The Written and Oral Torah were given to Moses
9. There will be no other Torah
10. God knows the thoughts and deeds of men
11. God will reward the good and punish the wicked
12. The Messiah will come
13. The dead will be resurrected

The Jewish God not only gave people hope during their natural lifetimes, but he also offered the opportunity of eternal life in the resurrection of the dead. He guided ethical thinking and behaviour by rewarding the good and punishing the wicked. Of course, the definition of good had been one of the key problems in Platonic thought; and Maimonides’ first four articles of faith raise a series

of new philosophical issues for which an Aristotelian training would prove useful. God exists; what *is* God? God is one and unique; what is *divine substance*? God is incorporeal; what is the nature of a non-embodied being? God is eternal; what is eternity? What is time?

Christianity: God becomes man

Christianity took the personal God of Judaism and made him incarnate as a man, Jesus Christ (c.5 BC–c.AD 30), living among ordinary people in Palestine. Christ's life, teachings and crucifixion are described in the four Gospels in the New Testament of the Christian Bible (written c.AD 70–100). His followers believed that he was the son of God, the redeemer or Messiah foretold in prophecy. His reputation as a charismatic teacher and as a healer and miracle-worker was widespread. He attracted crowds numbering in the thousands (which translates as hundreds of thousands by today's standards, when measured as a percentage of the population).

Jesus was seen as a threat to the authority of the Sanhedrin or Jewish Council, which condemned him for refusing to deny that he was the son of God. The Jewish elders brought Jesus to Pontius Pilate, prefect of the Roman province of Judaea, and demanded his execution. Pilate did not consider Jesus to be a

threat, but agreed to his crucifixion when Jewish leaders reminded him that Jesus' claim to be king of the Jews was a challenge to Roman authority. Pilate famously washed his hands of the matter, thereby sealing the fate of Jesus as a martyr. The followers of Jesus, who witnessed his healing and teaching, thought that they were seeing God Himself in action – a belief confirmed when, three days after the Crucifixion, Jesus was reported to have risen from the dead, appearing to several of his disciples before ascending into heaven.

The Jews do not recognize Jesus as God, or even as a prophet. Islam regards Jesus as a messenger of God sent to lead the Israelites. But for Christians Jesus is the only God. According to Catholic dogma, Jesus anointed his disciple Peter to lead one holy, catholic and apostolic church, whose beliefs were codified at the Council of Nicaea in 325. Christ's post-resurrection command to found a new church led to a great missionary movement that would spread Christian teaching beyond the boundaries of the Roman Empire. By the end of the fourth century, Christianity had become the state religion of the Roman Empire. The appeal of Christian teaching – redemption of sins and eternal life after death – overturned pagan beliefs and created a new worldview that placed man at the centre of religious belief and practice.

The spread of Christianity

Probably the most influential of the early Christian missionaries was Paul of Tarsus (c.AD 5–c.67). Having experienced a famous conversion on the road to Damascus, he became a prominent apostle of Christianity, helping to spread its gospel across the Roman Empire and making a critical contribution to the development of Christian belief. It was largely down to the influence of Paul (whose writings constitute a significant portion of the New Testament) that the cult of Jesus was transformed into a universal religion.

There is neither Jew nor Greek, there is neither bond nor free, there is neither male nor female: for ye are all one in Christ Jesus.

The Epistle of Paul to the Galatians (3:28)

Christianity's rise from an underground movement to state religion of the Roman Empire is a story of bloody persecution. Of Jesus' eleven remaining apostles after his crucifixion (Judas Iscariot committed suicide after betraying Jesus), ten were killed for their beliefs; only John the Apostle (c.AD 6–c.100) died a natural death, after being banished to the island of Patmos. What began as sporadic persecution of Christians became official state policy under the emperor Nero (c.AD 37–68). In AD 64 a fire that burned for five and

a half days and destroyed a sizable portion of Rome was blamed on the Christians (Nero himself was suspected of starting the blaze).

. . . an immense multitude was convicted, not so much of the crime of firing the city, as of hatred against mankind. Mockery of every sort was added to their deaths. Covered with the skins of beasts, they were torn by dogs and perished, or were nailed to crosses, or were doomed to the flames and burnt, to serve as a nightly illumination, when daylight had expired.

Tacitus (c.AD 56–c.120), *Annals* XV.44 (trans. Alfred John Church and William Jackson Brodribb, 1942)

After this, mob persecution of Christians became a regular event; when they refused to recant their beliefs and worship the gods of Rome, they were put to death. This led to widespread martyrdom, which had the effect of increasing Christianity's popularity. While it may seem odd from a modern perspective, their belief in an after-life that promised heaven led many early Christians to welcome an early death as preferable to their miserable existence on earth (what today we would call their low socio-economic status). It was not uncommon for groups of Christians to goad the Roman authorities into killing them. The Roman consul Arrius Antonius (c.AD 37–119) obliged several Christians when they demanded to

be executed, but sent the rest of the crowd away, suggesting there was plenty of rope and an abundance of cliffs available for those who wished to commit suicide. Arrius sensed the danger in being used as an instrument by Christians seeking martyrdom, forcing the state into public killings which, eventually, would undermine its rule.

Christian belief

The key idea in Christianity is that Christ was made incarnate by God and placed on earth to redeem humankind's sins through his crucifixion. Christians believe that Jesus died for our sins. (Christ is often portrayed as the lamb of God going to the slaughter, and Protestant sects talk of being 'washed in the blood' of Christ when one's sins are forgiven.) By believing in Christ and through the sacrament of confession, man can repent for his sins and gain eternal life. The Church instituted seven sacraments which establish rituals that bear upon every aspect of life from birth (baptism) to death (extreme unction). The other sacraments are confirmation, the Eucharist (Holy Communion), penance (confession), holy orders (ordination to the priesthood) and matrimony (marriage). The Eucharist is at the centre of the Catholic rite. In a ritual which echoes that of the Last Supper (when Christ ate a meal with his apostles prior to his arrest) the priest offers, as a sacrifice to God, bread and wine. Catholics believe that the bread and wine are the

actual flesh and blood of Christ, of which they partake. The phenomenon that occurs during the course of the Mass which transforms bread and wine into flesh and blood is known as *transubstantiation*.

Christianity promises eternal life to those who follow it (and eternal damnation to those who violate its laws). The sins that could lead to damnation are more or less the same as those codified in the Ten Commandments, which God handed to Moses. They establish God as having dominion over everything, and proscribe the use of his name in vain, as well as murder, adultery, theft, false witness and covetousness (of a neighbour's wife or possessions). The faithful are exhorted to honour the Sabbath and their parents. Crimes such as murder and theft had been proscribed by civil law for millennia, and had punishments attached to them, ranging from imprisonment to banishment to execution. The Church made punishment for the gravest sins eternal. The commission of a *mortal* sin (as opposed to a minor, venial one) without confession meant burning in hell for eternity.

But the fearful, and unbelieving, and the abominable, and murderers, and whoremongers, and sorcerers, and idolaters, and all liars, shall have their part in the lake which burneth with fire and brimstone: which is the second death.

Book of the Revelation of Saint John the Divine (21:8)

Greek philosophy's last gasp

During the period of Roman persecution of Christians two schools of philosophy that began in ancient Greece continued to flourish: Stoicism and Scepticism. Stoicism, which began around 300 BC with Zeno of Citium, enjoyed currency through the reign of the emperor Marcus Aurelius. Scepticism started with the work of Pyrrho of Elis in the fourth century BC and was developed by Sextus Empiricus (c.AD 200).

The endurance of the terms 'stoical' and 'sceptical' in the twenty-first-century English lexicon are a testimony to how influential these schools were during the Roman period. Today, if someone is stoical we mean they face the slings and arrows of misfortune with a calm demeanour. If we say someone is sceptical we mean they are not likely to believe an explanation that is being offered them vis-à-vis anything from the existence of God to the condition of a used car. While these lingering traces of the ancient concepts are partially accurate, they do not do justice to the sophisticated and systematic thought that lies behind them.

For the Stoics this world is the best of all possible worlds. It is divinely ordered and the job of persons with free will is to find their place in it. The concept of the best of all possible worlds would be elaborated by the German Gottfried Wilhelm Leibniz (1646–1716). The Stoics focus on the concept of *free will* versus

determinism. Free will is a state of affairs in which a person chooses his actions freely; that is to say, his choice is not determined by some outside force. Determinism is the doctrine that every event has a cause. This view is at odds with the notion of free will, but is of enormous use in science, where events need to have causes in order to be understood. The concept of free will would be central to the thought of the Church Fathers in the medieval period, because it is necessary to the concepts of sin and grace. One must freely choose right or good to achieve grace. Sin, on the other hand, represents the choice to do wrong or evil.

The Sceptics were, well, sceptical of Stoicism. A sceptical tendency had always existed in Greek philosophy, and it was continued by Pyrrho who, though he left no writings, was responsible for a legacy that, at its extreme, advocated the total distrust of the senses, and in a more moderate form counselled against unnecessary speculation.

[Zeno] simply considered a real scientific knowledge of things to be altogether impossible. His fundamental principle was, that there is nothing true or false, right or wrong, honest or dishonest, just or unjust; that there is no standard in anything, but that all things depend upon law and custom, and that uncertainty and doubt belong to everything.

John McClintock and James Strong, *Cyclopaedia of Biblical, Theological and Ecclesiastical Literature* (1885)

An original development in Hellenistic philosophy arose in the third century in the form of Neoplatonism. Developed by Plotinus (c.AD 204/5–70), Neoplatonism takes a mystical view of Plato and in most cases tries to combine his ideas with the new ideas of Christianity. One of the most prominent Neoplatonists was Julian the Apostate (AD 331/2–63), who was the last non-Christian emperor of Rome. Julian was truly, in the Platonic sense, a philosopher-king. He resisted the influence of Christianity, fearing it would cause the dissolution of the empire. Julian's view is vindicated by the eighteenth-century British historian Edward Gibbon (1737–94), whose *The History of the Decline and Fall of the Roman Empire* (1776–88) argued that Christianity's focus on a world to come distracted citizens from their duty of active participation in the social present, and that the 'weakness' of Christianity helped bring about the decline of Roman culture by eroding its martial virtue. Julian thought that the way to avoid the dissolution of the Roman Empire was a return to ancient values. As a philosopher he emphasized the importance of the ancient gods for their allegorical teachings, while adopting aspects of Platonic thought.

Julian, the Stoics and the Sceptics represent the last gasps of pre-Christian philosophy. Now, for more than a millennium, Christianity would maintain strict control over the development of thought in the West.

The dominance of Christian thought

After his victory at the Battle of the Milvian Bridge (312), Constantine the Great (c. 272–337) became the sole ruler of the Roman Empire. Constantine is said to have converted to Christianity after experiencing a vision in which God assured his troops of victory if they marked their shields with the Christian cross. Despite Constantine's triumph, the decline of the Western Roman Empire was already under way. Christianity would continue, however. Odoacer, the *foederatus* (or tribal ally of Rome) who ousted the last Western emperor Romulus Augustus (c.461/3–before 488) to become king of Italy in 476, was of Germanic descent and, most importantly, a Christian. As the Roman Empire in the West fragmented, powerful tribal groups such as the Franks and the Visigoths continued the practice of Christianity in the successor states they established in Western Europe. The survival of the Eastern Roman (or Byzantine) Empire after the fall of the Western Empire assured the vigorous transmission of Christian thought and practice in the East, though the Muslim Arab conquest of Syria, Palestine and North Africa would dim the flame of Near Eastern Christianity in the seventh century. The early eighth century brought further Islamic penetration of Christendom as the armies of the Umayyad caliphate crossed the

Strait of Gibraltar (711) and conquered the Visigothic kingdom of Hispania (modern Spain).

The next Christian emperor to rule in Western Europe was the Frankish king Charlemagne (c.742–814), who expanded his territories into an empire that covered much of Western and Central Europe. Charlemagne was crowned Imperator Romanum by Pope Leo I on Christmas Day 800, and presided over the so-called Carolingian Renaissance, the first renewal of learning in the West during the medieval period.

Christianity was prone to internal division from the outset. The church councils of Nicaea (325) and Constantinople (381) repudiated the Arian form of Christianity, which differed from mainstream Christological doctrine in its teachings concerning the relationship of the three entities of the Trinity (that is, the three coexisting divine persons – Father, Son and Holy Spirit – which Christians consider to be a fundamental attribute of God). Further significant splits in the Church followed the councils of Ephesus (431) and Chalcedon (451). But Christianity's principal fault line was the gradual souring of the relationship between the Western and Eastern churches over the centuries due to ecclesiastical and theological differences, culminating in a formal schism in 1054 between the Roman Catholic and Orthodox churches.

The flourishing of Christianity was good news for Latin as a *lingua franca* because it became not only the official language of

the Roman Empire, but also of the Western Church. This, however, was bad news for philosophy in the sense that the Romans eventually lost their facility for the Greek language; as a consequence, knowledge of Greek thought declined to the point where it, too, was almost entirely lost to the West. (Some knowledge of Greek *was* preserved in the work of early medieval Irish scholars. Johannes Scotus Eriugena [c.810–c.877], for instance, who worked at the Frankish court of Charles the Bald [823–877], was a master of Greek, translating the writings of the Neoplatonist theologian Pseudo-Dionysius [late fifth–early sixth century] from that language into Latin.)

Another factor that initially worked against Greek philosophy was Church teaching. The Church now became the most powerful force for the expression of ideas. It had teachers (priests) and students (congregations) in enormous numbers. Churches effectively replaced the Academy as places of learning. Compared to the deep inquiries of Democritus, Plato and Aristotle, what the Church had to offer was dogma rather than unfettered philosophical inquiry. God was the source of all things: that was to be the beginning and end of all thought. This necessarily limited the scope of a philosopher's work. Faith, not knowledge, became the ruling paradigm. The challenge for Christian philosophers would be how to introduce philosophical inquiry inside a worldview that presupposed certain conclusions and was quick to punish those who departed from them.

One of the means by which the Church assumed the mantle of teacher and disseminator of ideas was the development of monastic communities. The monks who lived in these communities were organized into orders created by spiritual leaders – the first Western order of monks was founded by St Benedict of Nursia (480–547), who laid down strict rules of work and prayer that govern most monastic orders. In one sense, monasteries were proto-universities. Prospective members of a religious order (novices) would be taught grammar, logic and rhetoric, to which would later be added mathematics, music and astronomy. Monasteries were not only centres of teaching and learning, they were also among the most important libraries in the history of Western thought. As literacy declined for nearly three centuries in Europe, beginning in the fourth century, monasteries gained importance as places where texts were both copied and stored.

Augustine of Hippo: theology and philosophy

The development of Christian theology as a philosophical practice begins with St Augustine of Hippo (354–430), who is to be credited with a number of firsts. While his place in the pantheon of philosophers is assured, he is no less significant for having published the first autobiography. Augustine's *Confessions* (397–8) is important not only because it contains a vital account of spiritual

and intellectual conversion to Christianity, but also because it is the first text in which the first-person singular voice, the *I*, comes into play in this form in Western thought. This is critical not only because of its place in the history of genre writing, but because it represents a new attempt to find a human rather than divine ground for knowledge. The *Confessions* laid the ground for Descartes' *Discourse on Method* (1637) more than a thousand years later, in which Descartes formulated his famous declaration *cogito ergo sum*: 'I think therefore I am', signalling the arrival of the human subject at the centre of the world, rather than occupying the peripheral, passive position of being acted upon.

I intend to remind myself of my past foulness and carnal corruptions, not because I love them but so that I may love you, my God. It is from love of your love that I make the act of recollection. The recalling of my wicked ways is bitter in my memory, but I do it so that you may be sweet to me, a sweetness touched by no deception, a sweetness serene and content.

St Augustine of Hippo, *Confessions* (397–8)
(trans. Henry Chadwick, 1991)

Augustine helped to define Church orthodoxy negatively by saying what it *wasn't*. The things it wasn't were defined by him

as errors, known as heresies or unauthorized modifications of belief. Augustine's identification of heresies has an importance far beyond its relevance for the Church. For instance, in defining the heresy of Pelagianism (named after its proponent, the – probably British-born – ascetic Pelagius [354–420/440]), Augustine prefigured an important ethical principle explored by Kant, that *ought* implies *can*. Pelagianism claims that human nature is not tainted by original sin and that man can freely choose between good and evil without God's help, thereby violating Church teaching that the sacrament of baptism is necessary to cleanse original sin. It was this promoting of the possibility of human perfectibility without God's help that made Pelagianism a heresy.

Augustine's *Confessions* prefigures the modern period not only with its first-person voice, but also with its subject matter. Augustine confesses the sinful ways of his youth, which involved not only fornication but also heresy. In this respect Augustine was well qualified to be the clarifier of Christian doctrine. As a young man he was a follower of the Manichaean heresy – the idea that there is a balance of good and evil in the world that elevates the Devil to parity with God.

Augustine's mature masterpiece is *The City of God* (413–27), which, like the *Confessions*, continues in print to this day. Written as a consolation for Christians after the Visigothic sack of Rome in 410, it elaborates the Christian life as one that is not focused

on the present, temporal world, but one which looks forward to eternal life in the city of God or heaven. *The City of God* shows that Augustine had some knowledge of Aristotle and Plato – the latter coming from his reading of the Neoplatonists.

For to this earthly city belong the enemies against whom I have to defend the city of God.

St Augustine of Hippo, *The City of God* (413–27)

(trans. Marcus Dodds, 1871)

The Neoplatonists represented a continuation of ancient Greek thought that could appeal to Christians and other believers in a monotheistic God. For Plotinus, the movement's founder, whose collected writings on the subject are found in the *Enneads*, the universe is predicated on the *One*, the notion of the transcendental Good borrowed from Plato. The One gives birth to ideas, which Plato called *nous*. Ideas inhabit souls, and some souls come to inhabit bodies, thereby providing humankind with its link to knowledge and the Good.

As Neoplatonism developed it incorporated some of Aristotle's ideas (particularly his logic), and this is evident in the work of Plotinus' pupil Porphyry (234–c.305). Neoplatonism wasn't always a comfortable fit with Christianity. Porphyry wrote a fifteen-book treatise *Against the Christians*, in which he derided Christianity as

stupid and as a ‘confused and vicious sect’, and called St Peter a liar. Yet it is probably from Porphyry that Augustine acquired his indirect knowledge of Aristotle.

And even if Christ's suffering was carried out according to God's plan, even if he was meant to suffer punishment – at least he might have faced his suffering nobly and spoken words of power and wisdom to Pilate, his judge, instead of being made fun of like a peasant boy in the big city.

Porphry (234–c. 305), *Against the Christians*
(trans. R. Joseph Hoffmann, 1994)

Augustine was a bold ethicist who insisted – against Plato and the Greek tradition (and much of the ethical philosophy of his day) – that knowing what one *ought* to do does not presuppose that one *actually* (or automatically or necessarily) does it. He argues that God created the world as good, and He did not create evil. Evil arises not from God, but from humankind electing to deviate from the path of righteousness.

Augustine has been the stimulus for much important twentieth-century thinking on love and the concept of empathy, especially among the students of Edmund Husserl (1859–1938), the founder of phenomenology. Love was at the heart of Augustine's concept of the will, as is pithily demonstrated in his teaching: ‘Love, and

do what you will.’ The implication is that by loving one follows the path of righteousness, freely electing to do good and avoid evil. Hannah Arendt's doctoral thesis *Love and St Augustine* (1929) is evidence of the importance with which Augustine was regarded in German universities before 1933, when the Nazis came to power.

The rise of Islam

At the beginning of the seventh century, Christianity faced a challenge from a new monotheistic faith. Islam's adherents submitted themselves to Allah, whom they regarded as the one true God. Around 610 the Arabian Muhammad ibn 'Abdullah (c.570/1–632) received what he believed were revelations from God. Chased out of Mecca, he fled to Medina in 622 (an event known as the Hegira), where he founded an Islamic community. Thereafter Islam spread swiftly throughout the region. After Muhammad's death, Muslim Arabs fought a series of wars of conquest which would disseminate the Islamic faith from its Arabian heartland to Central Asia in the east and Spain in the west. Islam was founded at a time when doctrinal controversies were beginning to fracture the relationship between Greek Orthodox and Roman Christianity. These tensions between the Eastern and Western churches may well have hastened the rise of Islam as a dominant force in the medieval world.

Islam views Muhammad as the last in a line of prophets that began with Abraham and includes Jesus Christ. The holy book of Islam is the Quran, which contains accounts by Muhammad's followers of the word of God as spoken directly to him. In common with Judaism and Christianity, Islam is a monotheistic and Abrahamic religion. In common with Christianity, Islam believes in angels, resurrection of the body, and heaven and hell. By contrast, Islam holds that Jesus was a prophet, but not the son of God. In attesting the oneness of God, Muslims dismiss the Christian idea of the Holy Trinity as a form of polytheism. Muslims follow the Five Pillars of Islam, which involve a testament of belief (the *shahadah*), prayer five times a day (*salah*), fasting during the month of Ramadan (*sawm*), alms-giving (*zakat*) and the pilgrimage to Mecca (*hajj*), which Muslims must make at least once in their lifetime, if they can afford to do so.

Those who disbelieve among the People of the Book and the idolaters will have the Fire of Hell, there to remain. They are the worst of creation.

Those who believe and do good deeds are the best of creation. Their reward with their Lord is everlasting gardens graced with flowing streams, where they will stay forever.

Quran, Sura 98 (trans. M. A. A. Abdel Haleem, 2004)

The role of Islam in the transmission of Greek philosophy

During the period when understanding of the Greek language had largely disappeared from Western Europe, all that was known of Aristotle's work were translations of his *Categories*, *On Interpretation*, *Topics* and *Prior Analytics* by the Roman philosopher Anicius Manlius Severinus Boëthius (c.480–524/5), known simply as Boethius. The rest of ancient Greek philosophy is available to us today only because Islamic scholars preserved the texts by translating them into Arabic. Essential to the survival of these translations was the introduction of the codex, the direct ancestor of the modern book, around 360, which would gradually replace the scroll. The Islamic world started producing paper in Baghdad in 794/5 after learning the technique from Chinese prisoners of war. (The Chinese invented paper during the Han Dynasty in the first century AD.) Paper would not be introduced in Europe until around 1150 in Islamic Spain.

The transmission of Greek texts from the Arab to the Western world falls into two stages: the first occurred in Baghdad during the eighth and ninth centuries, when Greek works were translated into Arabic; the second stage took place during the crusading era of the twelfth and thirteenth centuries, as Europeans began the reconquest of territories lost to Islam during the Arab conquests. It was in this period that Western scholars discovered the Arabic

translations of the Greek classics and retranslated them into Latin. These Latin texts would eventually be translated into the vernacular languages of Europe.

The first translations of ancient Greek texts into Arabic by Islamic scholars were made under the Abbasid dynasty (750–1258), during which earlier religious objections to Greek thinking were dismissed. Abbasid philosophers argued that it was the duty of Islamic scholars to gather knowledge wherever it might be found. In Baghdad, Caliph Harun al-Rashid (763/6–809) created the House of Wisdom, a library and translation centre where the work of preserving ancient thought was carried out. Translations of Pythagoras, Plato, Aristotle, Hippocrates, Euclid (*fl.*300 BC), Plotinus, and Galen (AD 129–199/217) were made under the direction of his son, Caliph Abdallah-al-Mamun (786–833). The Nestorian* Christian scholar Hunayn ibn Ishaq (809–73) was in overall charge of translation, rendering many texts himself. The most renowned translator of the period was the Sabian† mathematician and astronomer Thabit ibn Qurra (826–901).

The scholars of the House of Wisdom did more than render faithful translations of ancient texts. They were also philosophers

* The Nestorian church was a schismatic Christian church condemned as heretical by the councils of Ephesus (431) and Chalcedon (451).

† The Sabians were a monotheistic religious group who followed the fourth book of Abrahamic tradition.

in their own right, combining their knowledge of ancient Greece with the medical and mathematical advances of India to create a locus of intellectual activity that was radical in its thinking and international in character. In addition to his work as a translator, ibn Qurra argued that the earth revolved around the sun, and not vice versa, six centuries before Nicolaus Copernicus (1473–1543). He also determined that the length of time it took the Earth to orbit the Sun is 365 days, six hours, nine minutes and twelve seconds. (Contemporary calculations using computers show he was off by only two seconds.) Work such as ibn Qurra's gave the House of Wisdom an importance in the Islamic world beyond its function as a translation factory. Not only was it a glorious library and philosophers' workshop, it was also a kind of proto-university, and the greatest repository of knowledge the world had ever seen.

In 1258 Mongol forces under the leadership of Hulagu Khan (c.1217–65) destroyed the House of Wisdom. It was a blow from which Islamic culture never fully recovered. After the destruction of the House of Wisdom, the Christian monasteries of Europe would gradually take the place of Islamic centres of learning.

The first universities

The most important development for the spread of ideas, the professionalization of theology (and by implication, philosophy), and

the creation of the modern idea of the student, was the university. The first European university was at Bologna and was founded in 1088 (or 1113, depending upon which account one credits). In quick succession universities were founded at Paris (1090) and Oxford (1096). Other European cities soon followed suit: Montpellier (1131), Salamanca (1134), Cambridge (1209) and Coimbra (1290). The universities were incorporated by kingdoms or communes, and staffed by theologians whose purpose was to teach Christian doctrine while at the same time educating pupils in the classical trivium of grammar, logic and rhetoric. After completing the trivium students would take the quadrivium, which included arithmetic, music, geometry and astronomy. This was the first prescription for a liberal arts education. The medieval university required liberal arts candidates to have a broader training in mathematics and the sciences than those of the twentieth and twenty-first centuries.

Clash of Christianity and Islam

Coincidental with the rise of the university was a clash between Christianity and Islam. Efforts to recover Iberia for Christendom had begun shortly after the Islamic conquest of the peninsula in the early eighth century, and in 1095 Pope Urban II (c.1042–99) called for a crusade to wrest the Holy Land from Muslim

control. The First Crusade resulted from a request to the papacy from the Byzantine emperor Alexius Comnenos (1048–1118) for help in defending his beleaguered empire against the Seljuk Turks, who had overrun Anatolia following their defeat of the Byzantines at the Battle of Manzikert (1071). Urban II invited all Christians to make war against the Turks. In exchange, crusaders would not only have an opportunity to participate in a great adventure, but they would also be granted immediate remission of their sins. In effect, they were being granted eternal life. It was a win-win situation for Christian warriors: survive and return home covered in glory; or die for Christ and enjoy eternal life. The effect of the Crusades was to create a powerful anti-Islamic (and ultimately anti-Semitic) feeling in Western Europe.

Medieval Islamic culture and Western thought

The return of Islamophobia in the present day colours our view of Islamic philosophy, the study of which had steadily grown in the West during the nineteenth and twentieth centuries prior to the escalation of terrorist acts culminating in the destruction of the Twin Towers in New York City on 11 September 2001. The problem is that ignoring Islamic philosophy gives a fatally imbalanced view of the history of Western thought. The Islamicization

of Spain had resulted in a renaissance of philosophical culture when, in the period after Augustine, Western thought was in the doldrums. The scope and majesty of the medieval Islamic worldview can be seen in the Alhambra, the great Moorish palace at Granada in Andalusia, constructed in the mid-fourteenth century. It is a building of remarkable delicacy, integrated into its environment in ways that demonstrate science in the service of architecture, which in turn serves the purposes of worship, rule and study.

The most important Arab thinker at the turn of the first millennium was Ab Al Sn, whose latinized name is Avicenna (c.980–1037). Avicenna was a physician who wrote extensively on medicine and health issues, as well as being a philosopher who interpreted Aristotle from an Islamic perspective. While he was born in Afshana in present-day Uzbekistan, Avicenna travelled widely in the Arab world, seeking patronage. Changing political fortunes caused him to flee for his life on more than one occasion. His ultimate employment was as physician and scientific adviser to Prince Abu Ja'far 'Ala Addaula (r. 1008–1042), ruler of Mesopotamia, Azerbaijan and Armenia, whom he accompanied as physician and general literary and scientific adviser during several military campaigns. One of Avicenna's major contributions to metaphysics was his distinction between *existence* and *essence*. Avicenna identified essence as that which endures

unchanged in perpetuity, while existence is contingent or governed by chance.

The Arabic influence on Western philosophy, once again through interpretation of Aristotle, continued with Ibn Rushd, Abu'l Walid Muhammad (1126–98), commonly referred to in the Arab world as Ibn Rushd and in the West as Averroes. Averroes was born in Spain in Córdoba, then the centre of Islamic learning in the West.

If movement were a change from the substance in which a thing occurs and a displacement of its essence to an opposite substance, then amazingly, the soul would change its substance by its own movement – that is, [it would] displace its actual existence by something opposite to it, thereby destroying itself.

Averroes (1126–98), *Middle Commentary on Aristotle's De Anima* (trans. Alfred L. Ivry, 2002)

In a world dominated by competing religious orthodoxies, Averroes fought the corner for secular inquiry. He held that there were two roads to knowledge: one through religion (revelation), the other through philosophical inquiry (reason). Averroes argued that philosophy and religion held equal places in their search for the same truth. His most enduring work is the provocatively titled

The Incoherence of the Incoherence, which was a response to an argument by the Muslim theologian Al-Ghazali (1058–1111), whose book *The Incoherence of the Philosophers* denounced the views of Avicenna and defended revelation over reason as the way to truth. Averroes' commentaries on Aristotle were inspired by his desire to overcome what he saw as the errors of Neoplatonism. Like Plato, however, he believed that philosophy was the best training for political leaders. He was sceptical of religious leaders.

The source of their unbelief is in their hearing high-sounding names such as 'Socrates', 'Hippocrates', 'Plato', 'Aristotle' and their likes and the exaggeration and misguideness of groups of their followers.

Al-Ghazali (1058–1111), *The Incoherence of the Philosophers*
(trans. Michael E. Marmura, 1997)

Coincidentally, the leading Jewish philosopher of the period (and perhaps of all time), Moses ben Maimon or Maimonides, was also born in Córdoba and was an exact contemporary of Averroes. Maimonides was a prolific writer across a number of disciplines, including medicine, theology and philosophy. He was a practising physician who wrote his medical texts in Arabic; but his most enduring legacy is his codification of Jewish law in his fourteen-

volume *Mishneh Torah*. However, the book for which Maimonides is best known (it is in print today!) is his wonderfully titled *Guide of the Perplexed*, in which he attempts to reconcile religious belief with philosophical thought. The work of Maimonides, along with that of Averroes, paved the way for further elaboration of Aristotelian thought in the work of the greatest of all Church philosophers, Thomas Aquinas (c.1225–74).

We are thus like a person whose surroundings are from time to time lit up by lightning, while in the intervals he is plunged into pitch-dark night. Some of us experience such flashes of illumination frequently, until they are in almost perpetual brightness, so that the night turns for them into daylight.

Maimonides (1135–1204), *The Guide of the Perplexed*
(trans. Chaim Rabin, 1995)

The Rise of Scholasticism

The growth of universities and the education of a new class of theologian-philosophers revivified the Church. These writers developed a system of thinking called Scholasticism – a rigorously logical method of defining and defending Christian belief. Ironically, Islamic scholars provided the Church with the means for its further advancement (and the persecution of Muslims) with

their translations of Aristotle and commentaries by Avicenna and Averroes. The road from Augustine would culminate in the work of the greatest of the Schoolmen (as they were called), the Italian Dominican theologian and philosopher Thomas Aquinas. His teaching was so complete and so revered that he was given the name *Doctor Angelicus*. But before the perfection of Thomism (as Aquinas's philosophy is called), the way was paved by Peter Abelard's (c.1079–1142) work in logic.

Now the more I was taken up with these pleasures, the less time I could give to philosophy and the less attention I paid to my school. It was utterly boring for me to have to go to the school, and equally wearisome to remain there and to spend my days on study when my nights were sleepless with love-making.

Peter Abelard (c. 1079–1142), *Letters of Abelard and Héloïse*
(trans. Helen Waddell, 1974)

Abelard was a French theologian-philosopher who as a young man produced a masterpiece in the form of his standard text *Logic for Beginners*, published before 1121. His philosophy is mainly devoted to the rational expression of Church teaching. He was also a pioneer in ethics, arguing that human actions should be judged according to the intentions of the subject. The concept of *intentionality*, first raised in Aristotle, would later be developed

by Aquinas and incorporated into Edmund Husserl's early twentieth-century phenomenology, and Maurice Merleau-Ponty's (1908–61) theories of perception.

The most enduring popular image of Abelard is as the lover of Héloïse d'Argenteuil (c.1098–1164). Records of Héloïse's origins have been lost, so little is known about her early life except that she came from a humble background. Héloïse had a remarkable intellect. She mastered Latin, Greek and Hebrew texts, and was adept at logic and rhetoric, making her exceptional among women of the day. She was living with her Uncle Fulbert, a canon of Notre Dame Cathedral in Paris, when Abelard became her tutor and they fell passionately in love. They conceived a son, whom she christened Astrolabe, after the scientific instrument for navigating by the stars. They secretly married, and Abelard sent Héloïse to the convent at Argenteuil to protect her from the vengeance of Fulbert, who was enraged by their liaison. Abelard himself was the victim of a revenge attack (by whose family it is uncertain): he was taken from his bed and castrated. After that he became a monk at the Abbey of St Denis.

Thomas Aquinas: *Doctor Angelicus*

Thomas Aquinas's early life was irregular, including a period of house arrest by his mother, who did not wish him to join the

and there must have been a time when there was nothing, but since nothing cannot cause anything, God is the eternal cause of everything. The fourth argument says that varying degrees of attributes such as goodness are established by comparison with God, the standard of goodness. The fifth and most famous argument is the teleological argument (sometimes called the argument from design): all movement is teleological or moves towards an end, so there must be a force that directs this motion, namely God.

The existence of the spiritual, non-corporeal beings that Sacred Scripture usually calls ‘angels’ is a truth of faith. The witness of Scripture is as clear as the unanimity of Tradition.

Catechism of the Catholic Church (second edition, 1994)

Duns Scotus and Ockham's razor

While Aquinas's work could be said to be Aristotelian in character, there was another Scholastic tradition, represented by John Duns Scotus (c.1266–1308) and William of Ockham (c.1285–c.1349), that challenged some essential components of Thomism. Scotus was a Scottish priest who made his reputation at Cambridge and Oxford universities before going to the University of Paris, where he was regent master of theology – a duty that required the holder to lecture undergraduates on biblical scripture. Scotus

was a metaphysician who developed a realist position that would influence twentieth-century thinkers such as Heidegger and C. S. Peirce. He was interested – as had been Plato and others before him – in transcendental categories, including not only *being* but ideas of the *one*, of *truth* and *good* – and the relations that might obtain among them, such as causality. What distinguishes Scotus from other Scholastic thinkers is his concern with the concept of *individuation*, the idea of the specificity of *this* thing rather than *that* thing – the *thisness* of things and persons that makes each one unique. Scotus used the term *haecceitas* to refer to his concept of *thisness*.

His preoccupation with uniqueness led Scotus to a realist position in which his focus on individual persons acknowledged their freedom, in contrast to the determinism that some inferred from God's foreknowledge of things to come. He believed that the urge of human freedom was to turn towards justice. Scotus was called *Doctor Subtilis* on account of his ability to make subtle distinctions among categories (though rather unfairly, his critics coined the term ‘dunce’ – from *dunsman* or follower of Duns – which later became a term of abuse, to refer to someone who is stupid, hence the dunce’s cap).

The other thinker of this period famous for razor-fine distinctions is the English Franciscan friar William of Ockham. Unlike Scotus, Ockham was not a realist but a nominalist – that is, a

proponent of the theory of knowledge that denies the existence of abstract concepts or universals. Ockham also rejected logical proofs of the existence of God, separating the concepts of faith and knowledge. He is most famous for the principle that bears his name, *Ockham's razor*, which generally recommends that in explaining a thing no more assumptions should be made than are absolutely necessary.

Death for heretics

Scholasticism wasn't just an exercise in logical thinking. Thomas's summation of Church views on all matters included positions regarding *just war* and the death penalty for heretics. Here, the perennial conflict between knowledge and belief reaches a defining moment. For Thomas, one must either subscribe to Christian belief or face death. The Inquisition required local authorities to establish tribunals to try cases of heresy. Those found guilty were executed by the secular authority. The belief that Thomas demands is very specifically the Church's *exact* belief. Simply declaring oneself a Christian who follows Christ's example does not meet the Thomist standard of faith.

While Thomas's logic is valid, its truth depends upon the acceptance of premises that a sceptic might reject as unproven: for instance, the existence of God. Ultimately, the truths of

religion rest upon revelation, not the rigour of logical construction. For those willing to subscribe to Thomas's clearly (but narrowly) defined system of belief, Scholastic thought is breathtaking in its achievements. For those unwilling to accept the premise of a belief in God and the narrow strictures of Thomism, Thomist doctrine must be seen as the enemy of philosophical inquiry. Thomas's unwillingness to accept philosophy as an equal path to truth reveals a schism far broader than any ecclesiastical ones: that between reason and belief. It is a stand-off that continues to this day.

Inherent in Thomist thought is a disregard for the views of others who do not share the same beliefs: not only Jews and Muslims, but a large number of people born into Christian society who only partially accept – or wholly reject – Church doctrine.

By contrast, Jewish law, as codified by Maimonides, places reason before belief in the matter of the death penalty. He wrote in the *Book of Commandments*: 'It is better and more satisfactory to acquit a thousand guilty persons than to put a single innocent one to death.' Maimonides certainly did not advocate putting someone to death because they disagreed with his religious views (indeed, one of the appealing features of Judaism is its tradition of Torah study and disputation, which allows for disagreement as an essential part of religious inquiry). Even in a civil context, Maimonides objected to the death penalty because absolute certainty of guilt

was an unattainable burden of proof, and he feared – just as opponents of the death penalty do today – that prosecutorial caprice and other extra-legal factors could come into play. Unlike Maimonides, the Church authorities were certain that heresy could reliably be identified and its perpetrators dealt with ‘justly’.

Albigensians and Hussites: the enemies within

On occasion the Church’s method of dealing with heresy went beyond repression and erupted into war. By the late twelfth century, the Cathar heresy was becoming a mass movement in southwestern France. (The Cathars were often referred to as Albigensians, because many of them lived in or near the city of Albi in Languedoc.) Catharism contained echoes of Manichaeism, its adherents holding that there were two gods: an evil one who ruled the physical world, and a good one who was incorporeal and represented spiritual perfection. At the heart of the movement a religious elite of *parfaits* ('perfects') lived lives of extreme asceticism, avoiding sexual contact and the eating of meat. Cathars renounced marriage, did not own private property and believed in reincarnation in a manner that has led some to compare them to Buddhists. In their view, they were faithfully following the example of Jesus Christ; in the view of the papacy, they represented a serious threat to the authority of the Church.

When peaceful attempts at conversion by Dominican monks failed to persuade the Cathars to renounce their heretical beliefs and rejoin the Church, Pope Innocent III (1160/1–1216) called for a Crusade against them, which would be prosecuted with enthusiastic brutality by mainly French armies. Their motives were far from pious: Innocent had decreed that the Cathars’ substantial landholdings in the south of France would become the property of any French nobleman willing to heed the call to arms.

It took the Church twenty years to root out Catharism, a heresy mentioned here largely because it gave rise to the Inquisition. The Inquisition was an ecclesiastical tribunal by means of which the Church rooted out and punished heresy. Punishments ranged from imprisonment and torture to the death penalty. The methods of execution could be extremely cruel – such as burning at the stake – so as to warn would-be heretics that the Church would not tolerate dissension in religious thought or practice. The Inquisition lasted for more than 600 years and is divided into four main phases. The *Medieval Inquisition* began just after the end of the Albigensian Crusade in 1231 and extended into the sixteenth century. The *Spanish Inquisition*, begun in 1478, extended all the way into the nineteenth century, ending in 1834; the *Portuguese Inquisition*, too, lasted from 1536 to 1821; and the Roman Inquisition began in 1542 and ended around 1860. The Spanish and Portuguese Inquisitions

were largely concerned with rooting out Judaism and Islam. The Roman Inquisition challenged the ideas of the Protestant Reformation, and of Renaissance humanism, which it viewed – correctly, as it turns out – as dangerous to the survival of the Church.

The Albigensian Crusade was an attack by the forces of Catholic orthodoxy on a heretical ‘enemy within’. Most of the Crusades initiated by the Church during the medieval period, however, were aimed at the extirpation or conversion of heathens: the nine Crusades despatched to Palestine between 1098 and 1271 had as their aim the reclaiming of the Christian holy places from the clutches of Islam; while the Northern Crusades of the twelfth and thirteenth centuries were undertaken by the Christian Danes, Swedes and German military orders against various pagan peoples of northeastern Europe.

Some two centuries after the suppression of the Cathars, a conflict broke out in Central Europe, the ecclesiastical and theological ramifications of which were rather more ominous for the Church than earlier events in Languedoc. The underlying causes of the Hussite Wars (1419–c.1434) – launched by papal forces against the supporters of the reforming Bohemian cleric Jan Hus (c.1369–1415) – prefigure the Protestant Reformation that would spell the end of the dominance of the Roman Church in Europe in the following century. Hus was burned at the stake

for believing – like his fellow reformer, the English theologian and philosopher John Wycliffe (c.1328–84), whose teachings exerted a strong influence on him – that the Church consisted not just in the clergy, but in its communicants as well. He was against the sale of indulgences (pardon of sins in return for money) and the Crusader movement. Hus was also an early advocate of the separation of church and state powers, and held that the Pope had no right to inflict violence on persons, irrespective of their religious beliefs.

The twelfth-century Renaissance

While the Inquisition and the Crusades were inimical to free thought, the medieval period has increasingly been seen to have offered some important antecedents to the Italian Renaissance, which began at the end of the thirteenth century and transformed the intellectual, cultural and commercial face of Europe. Historians have identified three such moments of cultural renewal during the medieval period: the Carolingian Renaissance of the eighth and ninth centuries; the tenth-century Ottonian Renaissance (which flourished under the rule of the Saxon Ottonian dynasty in Central and Southern Europe); and the much wider-ranging twelfth-century Renaissance. It is this last renaissance that prepared the way for the fully fledged Italian Renaissance, and

other renaissances that followed in England, France, Germany and, eventually, throughout Europe.

The most visible legacy of the twelfth-century Renaissance is the achievement of the architectural style then known as *Opus Francigenum* or the French style, which eventually became known as Gothic. Perhaps the best-known example of Gothic architecture is Notre Dame Cathedral in Paris, which includes paradigm examples of three defining characteristics of the style: flying buttresses, pointed arches and ribbed vaults. The Gothic style wasn't just reserved for cathedrals, but was used in castles and palaces throughout Europe. It was more than just a way of designing buildings. The Gothic style embodied the loftiest aspirations of man at the service of God: rooting them on a sound footing, while soaring to great heights with arches that defied space.

We learned from the ancient Greeks that ideas always travel with trade. As trade accelerated in the twelfth century, so did the spread of ideas, particularly via the Hanseatic League (a trading alliance of north German cities), and the opening of the Silk Road, the main trade route to China, by the Venetian explorer Marco Polo (c.1254–c.1324). The importance of the Silk Road did not lie solely in its connection to China. It linked Southern and Eastern Europe with the Near East and Southeast Asia as it passed through what are now Egypt, Iran, Pakistan, Vietnam and Indonesia.

Technological innovations that resulted from an understanding of scientific principles drove the wealth that could be created from the new trade alliances and distribution networks. The windmill, paper factories and the spinning wheel all contributed to this growth. Two navigation tools – the magnetic compass and the astrolabe – enabled human travel and the transportation of goods.

The Italian Renaissance

One of the key elements in the spread of new ideas during the Italian Renaissance was the development of literature written in the vernacular. By writing in the language of the people – for example, Italian – instead of Latin, authors contributed to the development of a sense of national identity and unity. While it was not until the nineteenth century that Italian city-states were joined into one national entity (1815–71), a sense of *being* Italian derived from reading such works as *The Divine Comedy* by Dante Alighieri (1265–1321), *The Decameron* by Giovanni Boccaccio (1313–75) or the vernacular sonnets of Petrarch (1304–74). These works of literature were not only written in the native tongue, they helped to define it. What Dante, Boccaccio and Petrarch were doing for Italian, Geoffrey Chaucer (c.1340–1400) did for English with *The Canterbury Tales* at the end of the fourteenth century. These works acknowledge the preoccupations of clerics,

but were focused on life as lived by people of all stations, which was often presented in an earthy manner.

The idea of reading for entertainment rather than purely for instruction rapidly gained in appeal. One could argue that the Black Death – an outbreak of bubonic plague that swept Europe between 1347 and 1351 – had a part to play in the demand for distracting literary entertainment. For more than a millennium the good news story of Christianity had promised relief from the misery of this world through eternal life in heaven. Since Christ walked the Earth, much had changed. Instead of looking forward to death and the end the world, as early Christians had done, the new Europeans of the Renaissance embraced life for its own sake, celebrating human existence for its joys and accomplishments, not solely as a conduit to God. One effect of the Black Death was to make people value life more, contributing to a ‘live for today’ attitude in a world in which, as Boccaccio is supposed to have famously remarked, people ‘ate lunch with their friends and dinner with their ancestors in paradise’.

The emergence of popular literature was made possible by a new industry: publishing. Until then, philosophy – or any kind of study involving reading – had been largely confined to an elite group. It was not only that the number of readers was in short supply, but also that there were few texts available. The ancient Greeks wrote on wax or clay tablets with a stylus, resulting in a

single, perishable original. The Chinese invented paper and their first moveable type press dates to around 1040, a good four centuries before the German goldsmith Johannes Gutenberg (c.1398–1468) ‘invented’ it. However, his invention quickened the spread of ideas because it allowed for multiple copies of books to be created quickly and at relatively low cost. It also removed control over the creation and distribution of books from the Church and the state, and introduced them to the free market. Boccaccio’s *Decameron*, first printed in 1470 (it had previously circulated in manuscript), was an early example of what would follow.

The enduring legacy of Greece and Rome

Ideas, like diseases, are spread by great movements of people. The fall of Constantinople to the Ottoman Turks in 1453 marked the end of the Byzantine (or Eastern Roman) Empire, which had ruled for more than a thousand years. In response to Muslim rule, many Greeks fled to Italy. This contributed further to a European interest in antiquity that had far-reaching consequences. For instance, the reintroduction of Greek ideas fuelled a philhellenism that would later inspire Europeans like the English Romantic poet Lord Byron (1788–1824) to support Greek independence from the Ottomans (Byron died of sepsis while fighting for that cause). In Britain, Hellenic ideas informed the culture of the nineteenth-century

public school, so helping to create the character of the English ruling class at home and in its overseas empire.

The enduring intellectual legacy of the study of Greek and Roman literary texts was humanism, a view that places the happiness and welfare of people above all else. A key figure in the spread of humanism was Marsilio Ficino (1433–99), who was the first to translate the complete works of Plato into Latin. Ficino was a truly ‘Renaissance man’ in that he was learned in the arts, sciences and theology. His most important work was *Theologica Platonica* (1482), a development of the idea of the Great Chain of Being, which placed man at the centre of the universe. Instead of a hierarchy with God at the top and chaos below, Ficino’s system focused on the central position of man, whose goal is the ascent of the soul towards God.

Philosophy, science and invention

During the Italian Renaissance secular ideas began to compete with religious teaching on equal grounds. A new breed of thinkers would arise, informed by the philosophy of the ancient Greeks, who could now construct better theories of the nature of the universe and its creation by conducting investigations based on observation and measurement. The thirteenth-century Englishman Roger Bacon (c.1214–c.1294) was a Franciscan friar and an early

advocate of scientific method, who laboured under the nickname of *Doctor Mirabilis* ('wonderful teacher'). In 1267 Bacon presented to Pope Clement IV (at the Pope's request) a manuscript of his *Opus Majus* ('great work'), which outlined his scientific method and put it in the context of theological and philosophical thought. It was not published in its entirety until 1897. Bacon's work would create a new standard for knowledge, in which hypotheses were formulated and proved or disproved by experimentation.

The great Renaissance polymath Nicholas of Cusa (1401–64) embodied the two competing strands of belief and knowledge that have marked philosophical inquiry from the beginning. Nicholas was a German cardinal who was both an original thinker in theology and a scientist whose predictions in astronomy predated discoveries that would later be confirmed by observation. He challenged the prevailing Aristotelian model of the cosmos and anticipated Johannes Kepler's (1571–1630) theory that the planets orbit the sun elliptically, and not in a circle. Nicholas worked out a mathematical proposition that since no perfect circle exists in the universe, the planets must therefore have elliptical orbits. He developed the theological concept of *learned ignorance*, which outlined his notion of a supra-rational understanding that goes beyond the rational powers of the human mind.

Leonardo da Vinci (1452–1519) is the Renaissance figure par excellence. Perhaps best known as an artist (painter and sculptor),

Leonardo also added science and mathematics to his arsenal of tools for understanding. It was the marriage of art and science in Leonardo's work that defined this new period in Western thought. Thinkers, increasingly freed from the constraints of Church dogma, were able to reconceptualize problems that had hitherto been misrepresented by the requirement that they conform to the demands of belief.

Leonardo's imagination as an artist and his observational discipline as a scientist gave him the ability to invent. And invent he did – his work includes the earliest designs for the helicopter and the tank. Inventions not only made life easier, they also generated large profits. And invention led to production, which in turn led to the creation of markets and a network of transportation to serve those markets. It led to the amassing of capital and the creation of secular power separate from that of the Church and nobility. Invention would give rise to the middle class, which would become a new source of ideas, as well as a receptive market for them. It would also transform thought. From now on, thinkers would not simply be philosophers: they would also be scientists who made theory and inventors who made technology. They would eventually be joined by social scientists: economists, psychologists and sociologists.

Invention also changed the nature of warfare, which was the inevitable result of a new European imperialism. Invention would

speed up transportation, and lead to the development of weapons that increased the distance between killer and killed. For example, the earliest warfare was hand-to-hand, in which one bludgeoned or cut one's opponent to death; killing by projecting missiles at one's enemy from a safe position was restricted to various permutations of the slingshot. The introduction of gunpowder in Western Europe in the thirteenth century meant that guns and canon increased the distance from which one could kill. From the late fifteenth century onwards, the pitting of Spanish conquistadors armed with guns against the traditionally armed indigenous peoples of the New World would set in motion an expansion of markets and ideas that now drives our global economy.

1492

The year 1492 was an *annus mirabilis* or an *annus horribilis*, depending upon your point of view. It was a 'year of wonders' for the ragtag band of adventurers under the command of Christopher Columbus (c.1451–1506), who sailed under the Spanish flag and was funded by Queen Isabella I of Castile. Before he set off for the New World, Columbus witnessed an event of real consequence for world history: the surrender of Muhammad XII of Granada (c.1460–c.1533), popularly known as Boabdil, the twenty-second (and last) ruler of the emirate of Granada. Boabdil's

surrender (the culmination of the Reconquista), which ended 800 years of Muslim rule in southern Spain, was a blow to Islamic ambitions in Europe. (Though from the seizure of Constantinople in 1453 until 1683, the Ottoman Turks remained an expansionist power in southeastern Europe.)

Columbus's journey to the New World would mean untold wealth for the conquistadors and a new market for Christian missionaries. Unfortunately, it meant death for the indigenous peoples of the Americas through military action and the new diseases the conquerors brought with them (chiefly smallpox). In the wake of Columbus, a steady stream of adventurers and explorers continued the process of Western European expropriation of the Americas, including the Spaniards Hernán Cortés (1485–1547) and Francisco Pizarro (c.1471–1541) in Mexico and Peru respectively, and the Frenchman Samuel de Champlain (c.1567–1635) in North America.

By contrast, 1492 was a horrible year for the Jews and Muslims of Spain. One of the first acts of the Spanish monarchs Ferdinand and Isabella was the Alhambra decree, which gave Spanish Jews the option of converting to Roman Catholicism or being expelled; 150,000 left Spain in July 1492. Many Muslims, given the same 'choice', elected to remain in Spain as nominal Catholics, but retaining Arabic language, dress and customs (they were known as Moriscos).

Rather better news for Jews in 1492 was the publication in Lisbon, in Portugal, of an edition of the Torah or the Pentateuch (the Five Books of Moses). Also, in an act of generosity guided by self-interest, the Ottoman sultan Bayezid II (1447–1512) rescued the expelled Jews and Muslims of Spain by sending his navy to bring them to safety, with most of the Jews settling in Greece and Turkey. He ordered that Jews be welcomed throughout his empire, and extended to them the rights of Ottoman citizenship. The self-interest of Bayezid's action was made plain when he praised the learning and skills of the Spanish Jews, while questioning the wisdom of the Spanish rulers in making their kingdom poorer and enriching his own. (The United States would similarly benefit from Jewish immigration resulting from the anti-Semitic actions of the German government between 1933 and 1945.)

Martin Luther and the Protestant Reformation

The Protestant Reformation came about because of disgust at abuses within the Church, which was increasingly regarded as corrupt and worldly. Criticisms first came from the followers of John Wycliffe in England in the late fourteenth century (known as Lollards), then from the Hussites of Bohemia in the early fifteenth, but the start of the Reformation is usually dated to 1517, when the Augustinian

monk Martin Luther (1483–1546) published his opposition to indulgences and other clerical abuses. Some priests who were similarly concerned about the Church's direction of travel – men like Erasmus (1466–1536), the Dutch humanist scholar and author of *In Praise of Folly* (1509), a satirical examination of Catholic doctrine and corrupt ecclesiastical practices – would never make common cause with the Reformers, and endeavoured to reform the Church from within. Luther, however, embarked on a rather more radical path.

His criticisms of the Church were not focused simply on its sale of indulgences, but extended to its teachings as a whole. Luther believed that Christ's teaching was better understood through individual study of the Bible, and not through the catechism of Church belief, an elaborate edifice that had been created by medieval scholars. Essentially, Luther believed that salvation came about through a direct relationship with God.

A Christian man is the most free lord of all, and subject to none; a Christian man is the most dutiful servant of all, and is subject to everyone.

Martin Luther, *Concerning Christian Liberty* (1520)
(trans. R. S. Grignon, 1885)

This marked one of the major turning-points in Western thought and history, much as Augustine's *Confessions* had done a thousand

years before. Luther emphasized, as did Augustine in his first-person writing, the growing power of the individual. Luther's translation of the Bible into German (New Testament, 1522; Old Testament, 1534) made the word of God available to people in their own language (and helped nudge the German language into a 'standard form'). Luther's translation also influenced other vernacular Bible translations, including William Tyndale's (c. 1492–1536) English Bible, which began to be published in parts from 1525 (copies were printed in Germany and the Netherlands, then smuggled into England), as well as the King James version (1611), both of which advanced the growth of the English language. These translations introduced the Bible into popular culture for the first time. As a result it became widely read as literature, as much as for its religious content, thereby creating the common ground of what we now call the Judaeo-Christian tradition in the West. Western thought owes an enormous debt to Tyndale. For his pains, the Church had him strangled at the stake, and his corpse was burned.

I defy the Pope, and all his laws; and if God spares my life, ere many years, I will cause the boy that driveth the plow to know more of the Scriptures than thou dost!

William Tyndale, in Foxe's *Book of Martyrs* (1563)

The word of God had been made available to the people in their own language – that was the essential difference between the Protestants and the Church of Rome. Much like the Talmudic tradition in Judaism, the Protestant movement encouraged a critical reading of scripture. If Talmudic study may be seen as the beginning of hermeneutics, the translation of the Bible into the vernacular is a further stage in its development. Vernacular translations of the Bible not only led to an increase in the study of theology as a crucial branch of knowledge, but to more widespread literacy and the growth of knowledge in general.

The Lutheran Church spread rapidly in Germany and Northern Europe, and influenced the emerging Anglican Church in England. Reform was also carried out in Switzerland by Ulrich Zwingli (1484–1531) and Jean Calvin (1509–64), who established the Calvinist Church. The challenge of Protestantism led the Catholic Church to conduct its own Reformation (often referred to as the Counter-Reformation), establishing the Council of Trent (1545–63) to reform the Church from within. The religious and political changes that followed the onset of the Reformation unleashed a series of wars that would destabilize Western Europe for more than a hundred years, from the mid-1520s to the mid-seventeenth century.

The liberation of the individual

The liberation of the individual that resulted from a combination of the Renaissance, the Reformation, and the scientific revolution was the precondition for the great economic growth of the seventeenth century, as well as political changes that would lead, ultimately, to republicanism: the rule of men by men who did not regard themselves as divinely appointed. All of these great changes were facilitated by the free flow of ideas that came from the printing press: books in great numbers in all the vernacular languages of Europe – Italian, French, German, Spanish, Portuguese and English.

These books included works of theology, science, mathematics and philosophy; epic romances by the Italian poets Ludovico Ariosto (1474–1533) and Torquato Tasso (1544–95); prose satires by the rumbustious Frenchman François Rabelais (c.1494–c.1553); Portugal's national epic, *The Lusiads* (1572), by Luís de Camões (1524–80); dramas and sonnets by England's national poet William Shakespeare (1564–1616); and the chivalric satire *Don Quixote* (1605 and 1615) by the Spaniard Miguel de Cervantes (1547–1616). Each of these writers helped to mould their respective national identities.

A Renaissance writer who seems to look forward to the next great intellectual movement, the Enlightenment, is the Frenchman Michel

de Montaigne (1533–92), best known for his *Essais* (1580). The title means ‘attempts’, and marks the birth of a new literary form in which ideas could be given concise expression and wide dissemination due to their brevity (and the cheapness of producing copies). Montaigne’s work is the culmination of important Renaissance and Reformation advances. It is a new and popular literary form, written in the vernacular and published widely. The subjects of Montaigne’s 107 essays are remarkably diverse and include rethinking of classical ideas along with the promulgation of new ones. His topics include idleness, procrastination, liars, sadness, constancy, fear, moderation, Cato the Younger, and thumbs. Montaigne addresses cannibalism, the affection of fathers for their children, and the disadvantages of high rank. Though a sceptic and a pessimist, Montaigne is highly entertaining. He is best remembered for his phrase *Que sais-je?* (‘What do I know?’). Montaigne’s focus on the first person advanced the tradition that started with Augustine’s *Confessions*, and influenced Descartes and his *cogito: I think, therefore I am*.

Not only does the wind of chance events shake me about as it lists, but I also shake and disturb myself by the instability of my stance: anyone who turns his prime attention on to himself will hardly ever find himself in the same state twice.

Michel de Montaigne, *Essais* (1580)
(trans. M. A. Screech, 1987)

Index Librorum Prohibitorum

As more ideas reached more people, the Catholic Church began to lose its power over them. In 1559 Pope Paul IV had ordered the creation of the *Index Librorum Prohibitorum*, a list of books that Catholics were forbidden to read; Montaigne’s *Essais* would be among them. The Church’s method of control now moved from the body to the mind. It replaced the murder of the Crusades and torture of the Inquisition with a form of mind control that lasted until 1966. A brief summary of the authors outlawed by the Church shows that it forbade Catholics to read a significant number of the core texts of Western thought, analytical philosophy excluded: Galileo Galilei (1564–1642), Francis Bacon (1561–1626), Johannes Kepler, René Descartes (1596–1650), Blaise Pascal (1623–62), John Locke (1632–1704), Voltaire (1694–1778), Jean-Jacques Rousseau (1712–78), Denis Diderot (1713–84), David Hume (1711–76), Immanuel Kant (1724–1804), Henri Bergson (1859–1941), Jean-Paul Sartre (1905–80), Simone de Beauvoir (1908–86). It can be seen that the Church was particularly punishing towards the French. The *Index*, oddly, omitted Friedrich Nietzsche (1844–1900), the great critic of Christian morals. Perhaps easier to understand is its omission of *Mein Kampf* by Adolf Hitler (1889–1945), given the Church’s long history of anti-Semitism; but the omission of the works of Karl Marx

(1818–83), the most influential anti-Christian in modern times, is puzzling.

As can readily be seen, the fact that every name listed above was widely read by contemporaries – and is still read today – shows that the Church's efforts to stifle independent thought were a failure. The Protestant Reformation and the various European renaissances opened the floodgates. Free thinking would lead to a demand for liberation from despots, be they kings or clerics. From now on, reason would play a greater role in governance of every stripe.

PART THREE

The Scientific Revolution

16th century to 18th century

In the year of his death Nicolaus Copernicus (1473–1543), a German born in what is now Poland, published *On the Revolutions of the Heavenly Spheres*, which demonstrated that the earth, like the other planets, revolved around the sun, and not vice versa. It was a truly revolutionary work, because it put paid once and for all to Ptolemy's (c.AD 90–c.168) geocentric model, which placed the earth at the centre of the universe. The other revolutionary book of 1543 was Andreas Vesalius's (1514–64) *On the Fabric of the Human Body*, the first modern study of human anatomy, which would eventually overturn the humoural pathology handed down from Aristotle to Galen. Both publications were revolutionary because they overturned existing doctrine, and both challenged the power of the Church, which strictly controlled the universities in which astronomy and medicine were taught. But leaving aside the conflicts

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A SHORT HISTORY OF WESTERN THOUGHT

Stephen Trombley



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