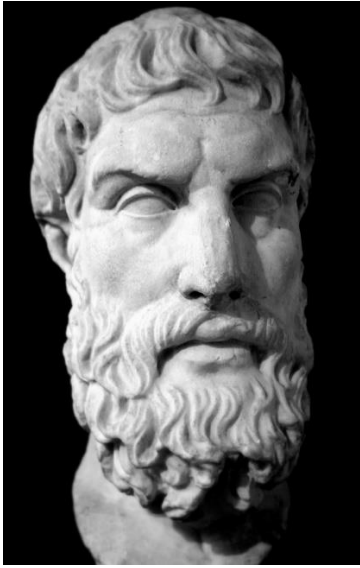
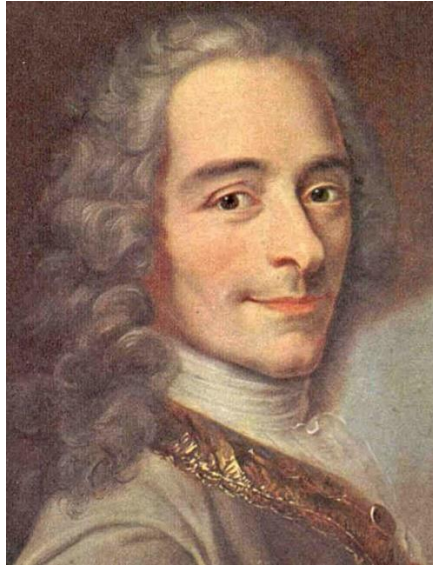


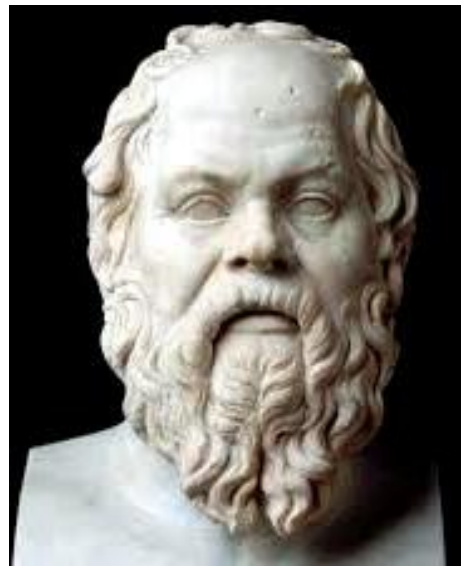
The Origins of Humanism



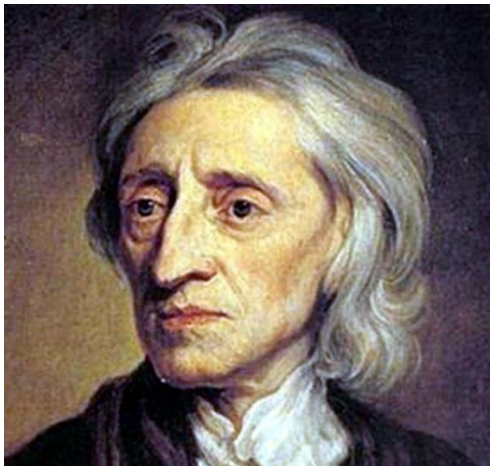
Epicurus



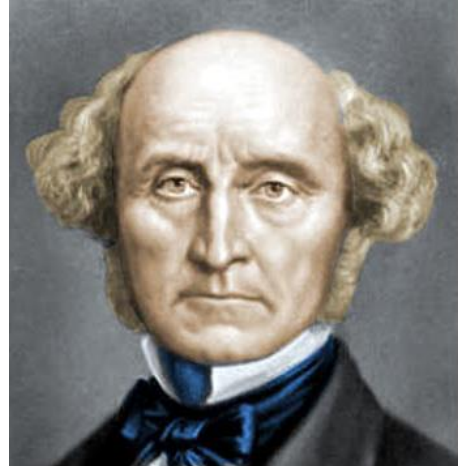
Voltaire



Socrates



John Locke



John Stuart Mill

Roy W Brown

International Humanist Publications

The Origins of Humanism

Roy W Brown

© 2018 International Humanist Publications

Dear Reader

If you have recently come to know about Humanism and would like to know more about its origins, this book is intended for you.

The origins of Humanism are lost in the mists of time and pre-date all of the world's great religions. We certainly know of rationalist philosophers espousing Humanist and rationalist ideas more than 3,000 years ago.

Modern Humanism is a worldview whose foundations were laid by these early thinkers but was brought to full fruition from the 17th century by the philosophers of the Enlightenment and the Scientific revolution, as a philosophy of life based on reason and concern for others. It owes nothing to belief in gods or the supernatural and aspires to offer an ethical alternative to traditional religion.

Humanists believe that Humanism can be a way of life for everyone, everywhere.

Roy W Brown

London, May 2018

The Origins of Humanism

- Chapter 1: In the Beginning
- Chapter 2: New Ideas
- Chapter 3: The Scientific Revolution
- Chapter 4: The Enlightenment and its Legacy

Chapter 1

In the Beginning

Humanism, a philosophy of life based on reason and concern for others, is nothing new. Its origins are lost in the mists of time.

Ideas that can be considered the precursors of modern Humanist thought have been traced back more than 3,000 years. But much that was written by the early Humanists has been lost: primarily because of opposition from those in power who, with the support of the leaders of the then-dominant religions, sought to extirpate Humanist thought and ideas.

Early freethinkers faced persecution and death for their failure to conform to the religious doctrines of the age.

There was little or no cross-fertilisation between one civilisation and another until well into the first millennium CE, so much early Humanist thought simply reached a dead end.

South Asia

A human-centred philosophy that rejected the supernatural arose in India around 1500 BCE ¹in the Lokayata system². Also known as Chavarka after one of the founders, little of its original writing survives, while later chroniclers, keen to denigrate its materialism, equated it with hedonism and sophistry. It seems highly likely however that this philosophical system based on the pursuit of happiness would have included some form of the Golden Rule.

¹ BCE (Before the Common Era) is the internationally recognised alternative to BC (Before Christ)

² <http://www.iep.utm.edu/indmat/>

According to early Pali texts³, in the 6th-century BCE the Buddha expressed a sceptical attitude toward the supernatural. Since neither the soul nor any of its attributes can really exist independently of the body, he argued, then the idea of an eternal soul that will live forever was clearly foolish.

Before 600 BCE Zarathustra proposed a form of deistic Humanism in which each individual was responsible for his actions before a non-intervening Mazda, the god of pure wisdom. The importance placed upon thought, action and personal responsibility, and the concept of a non-intervening creator, inspired many Humanist thinkers of the Enlightenment, such as Voltaire and Montesquieu.

Ancient China

King Wu of Zhou in the 11th century BCE is regarded as a precursor of Confucianism. He is credited with several sayings including:

“What the people desire, Heaven certainly complies”

“Heaven is not believable” and

“Our Tao (our way, the way of nature) includes morality”.

Confucianism, which has been described variously as a way of life, a philosophy and a naturalistic religion, developed from the teachings of Confucius (551–479 BCE). Confucianism, with its emphasis on moral conduct and its rejection of the supernatural, served to propagate the values of the Golden Age of the Zhou dynasty. It became the official imperial Chinese philosophy until the time of the militaristic Qin dynasty (221 – 207 BCE). By the second century CE Buddhism and neo-Daoism, which added a spiritual dimension lacking in Confucianism, had become dominant.

A Confucian revival began during the Tang Dynasty (618 – 907) and remained the imperial philosophy and the basis of the imperial examinations by which the mandarins, the administrators of the Empire were chosen until the examinations were abolished in 1905. Confucianism can be regarded to some extent as a humanistic philosophy although lacking any sense of social equality. It rests on the

³ Pali is a dead South Indian language retained only in Buddhist liturgy in Sri Lanka and Indo-China.

belief that human beings are fundamentally good, teachable and perfectible, and focuses on the cultivation of virtue. Rén or benevolence, is the essence of the human that manifests itself in our feelings of compassion.

In the Bible

Perhaps the strangest book of the Old Testament, Ecclesiastes, is essentially Humanist in tone, overlaid with references to God that were clearly added later. Sceptical about the goodness of God and the idea of divine justice, it is a mystery how it ever found its way into a book about the deeply authoritarian, avenging God of the Hebrews.

Jesus is credited with the most important statement in the Bible regarding the separation of religion and state in: "Render unto Caesar the things that are Caesar's, and unto God the things that are God's"⁴ – which, perhaps not surprisingly, is more often quoted by secularists than believers.

Classical Greece

Western Civilisation is widely regarded as having originated in Classical Greece, but the continuity would almost certainly have been lost had the Church of the first millennium had its way and succeeded in completely suppressing religiously sceptical writing from the classical period. It is largely thanks to the Arab world that much that is now known about Greek philosophy was preserved – although the role played by the curators and librarians of many European monasteries in preserving early manuscripts should also be recognised.

Thales of Miletus⁵ (c.620 – c.546 BCE) was the first Greek philosopher and mathematician to abandon mythology as the basis of knowledge and to attempt to explain the world by rational means. Most of the other pre-Socratic philosophers followed his idea of the unity of the

⁴ Matthew 22,21

⁵ <http://www.iep.utm.edu/thales/>

world, a precursor of the modern scientific view that the laws of nature apply everywhere, for all time, and are available for discovery.

As a mathematician Thales has at least two geometrical theorems to his name.⁶ He is known for having measured the height of a pyramid by comparing the length of its shadow with that of a man.

Thales has been described as one of the first Humanists, but we know little or nothing of his social views. It would perhaps be more accurate to describe him as the first western rationalist.

Xenophanes of Colophon⁷ (570 – 480 BCE) was a Greek philosopher, poet, and social and religious critic. His poetry criticized and satirized the Greeks' belief in the anthropomorphic gods. He can be considered a Pantheist, believing in one impersonal, non-interfering god that was the essence of the universe. He argued against arrogance in our beliefs, and was the first to suggest that whilst there is an underlying reality, we mortals can only approximate to an understanding of it - which resonates today with our understanding that we can only approach the reality that underpins our observations by way of mathematical models.

As a social critic Xenophanes derided the Greek propensity to idolise athletes and athletic prowess, something that surely mirrors today's popular idolisation of millionaire footballers.

The home towns of Thales and Xenophanes, Miletus and Colophon, are in Ionia on the west coast of what is now Turkey. Their philosophical ideas and the possibility of rational inquiry were brought from Ionia to Athens by Anaxagoras⁸ (500 – 428 BCE) a man dedicated to the pursuit of knowledge. He offered this wonderful thought: "The opportunity to study the Universe is the fundamental reason why it is better to be born than to not exist."

⁶ <http://www.mathopenref.com/thalestheorem.html>

⁷ <http://www.iep.utm.edu/xenoph/>

⁸ <http://www.iep.utm.edu/anaxagor/>

Greatly admired by Pericles he suffered guilt by association, was tried for impiety and sentenced to death, but he escaped to Lampsacus on the southern shore of the Dardanelles where he established a school and taught for 20 years until his death. Nevertheless, the seeds of rational inquiry had begun to sprout in Athens.

One of the followers of Anaxagoras was Protagoras, famed in his lifetime as a teacher of rhetoric. He is now remembered primarily for his statement: "Man is the measure of all things". Another was Democritus, an itinerant teacher who realised that all matter must consist at base of indivisible particles he called atoms. Few of the writings of these early philosophers have been preserved and they are mostly known only through later writers, most notably Plato (c.427 – c.347 BCE) and Aristotle (384 – 322 BCE).

Socrates⁹ (469 – 399 BCE) is widely considered the father of western philosophy yet he left nothing in writing. What we know of his teaching has come down to us primarily through his student Plato's *Dialogues*. Socrates frequently claimed to have no wisdom himself but used questioning to attack the received wisdom of his age. In a society that offered as little religious freedom as modern-day Saudi Arabia it was almost inevitable that he would be accused of impiety and of corrupting the youth, found guilty and sentenced to death. However unjust that may seem we should perhaps temper our judgement by noting that by failing to defend himself in court Socrates actually seems to have been courting martyrdom.

While the earlier Greek philosophers were mainly concerned with what observation and reason could tell us about the world, Socrates' primary concern was how we should live and as such he is justifiably considered the father of moral philosophy.

Although Plato has been the most influential of the classical Greek philosophers, his image of a man chained in a cave watching shadows on the wall and unable to see the external reality has misled European

⁹ <http://www.iep.utm.edu/socrates/>

thinkers for over 2,000 years by equating the unknowable with the spiritual and the supernatural.

It was the natural philosophy of Plato's student Aristotle that became the received wisdom of the Church and so totally dominated European thought that for hundreds of years any challenge to Aristotle's ideas was considered blasphemy.

Classical Greek philosophy addressed both the natural world and questions of morality, the latter frequently being defined in terms of one's duty towards the gods. Socrates gift to humanity was not so much an alternative worldview but the idea of questioning everything as a method of inquiry. For Socrates, "The unexamined life is not worth living."

It was a hundred years later that the philosopher Epicurus (341 – 270 BCE) brought moral philosophy back down to earth, so to speak, by questioning the nature of good and evil, the existence of an afterlife, and by proposing a human-oriented approach to achieving happiness. Men were neither intrinsically good nor evil but all were capable of good and evil actions. For these ideas, we see Epicurus as the father of modern Humanism.

Only a few fragments of Epicurus' 300 books have survived, but in the first century BCE his follower, the Roman poet-philosopher Lucretius (70 – 29 BCE) committed Epicurus' philosophy to writing in an epic poem of six books: *De Rerum Natura* "On the Nature of Things".¹⁰ This work is remarkable for its many insights derived simply from observation and reason, ideas that had to wait almost 2,000 years until the dawn of the scientific revolution to find confirmation. *De Rerum* provides a comprehensive, naturalistic explanation of the origin, structure, and destiny of the universe, from the atomic structure of matter to the evolution of life forms. Of all of the writings that have come down to us from the classical world it is this work that recommends itself most strongly to the modern rationalist and Humanist.

¹⁰ <http://www.perseus.tufts.edu/hopper/text?doc=Lucr.>

Yet it was only in 1417 that a copy of *De Rerum* was discovered in the monastery library at Fulda, Germany, and brought to wide public attention by one of the most important historical explorers of the Renaissance, Poggio Bracciolini (1380 – 1459), a man responsible for the rediscovery of many lost manuscripts from the classical period.

De Rerum Natura

It is impossible to do justice in a few paragraphs to the 73,000 hexameters that make up this work, but we can nevertheless summarise many of the key thoughts in *De Rerum* and in Epicurus' philosophy.

The purpose of Lucretius' masterpiece was to bring together the philosophy of Epicurus in a readily understandable form, in order to suggest that everything in nature can be explained by natural laws without the need for the intervention of divine beings. In this he clearly succeeded – and time has most certainly proved him right.

He showed that the material world was made up at base of the smallest possible particles: atoms, and that it was the random movements of these particles that created everything that exists, needing no divine creator. However, if the movement of these particles could be predicted it implied that the future was itself predictable, so where was free will? He overcame this objection by inventing the notion of the "swerve": the idea that particles might change direction randomly from time to time, guided by chance rather than divine intervention. We now know that atoms and molecules are in continuous movement, vibrating and colliding and thereby making all movement at the atomic level totally unpredictable. At the macro level the sheer complexity of interactions creates chaos and unpredictability.

Just as limbs, hands and heads have no separate existence from the rest of the body, neither do our minds or our consciousness. When our bodies die so do our minds (and our souls if they are considered distinct from our minds). This means that life after death is impossible, and the fear of death and of judgement in the afterlife is irrational. We

will simply not be there to experience them when we die. In a memorable phrase Epicurus wrote as his epitaph:

“I was not; I have been; I am not; I care not.”

Lucretius’ ideas regarding the movement of the heavens have been regarded as unscientific since they were so wide of the mark. Like everyone of this period he believed it was the heavens rather than the Earth that moved. But where he cannot be faulted is in his belief that all heavenly movement is the result of natural laws rather than divine intervention or by the will of the heavenly bodies themselves.

Perhaps Lucretius’ most contentious claim at the time was that life itself evolved without divine intervention: a claim that had to wait for Darwin’s *Origin of Species* 1900 years later to find formal scientific support, and until Crick and Watson’s discovery of DNA and the genetic code for an understanding of the mechanism by which evolution actually occurs.

But just as in the case of the movement of the heavenly bodies Lucretius’ claim was purely speculative with, at the time, no real evidence to support it. As a claim it was therefore on a par with the alternative claim that “God did it”. With no clear evidence either way believers were able to take their pick. What Lucretius did achieve however was to show that an alternative to divine intervention could be imagined; divine intervention was not the only possible explanation.

De Rerum Natura went on to inspire many writers of the Enlightenment. Among the many more modern enthusiasts were Thomas Jefferson (who had three copies of the book in Latin as well as English and French translations), Antoine de Saint-Exupery, George Santayana and many others.

Medieval Islam

Early Islam, now popularly known as the Islamic Golden Age, was a period of intense philosophical development beginning in the 9th century [CE](#) with Al-Kindi (800 – 870) and lasting until the late 12th century. Arab writers were heavily influenced by the philosophy of ancient Greece and were responsible for the rediscovery in the West

of much of early Greek and Roman philosophy and writing at the beginning of the European Renaissance. Perhaps the best-known of the medieval Islamic humanists, at least in the West today, was Omar Khayyam (1048 – 1131), although his devotion to Islam is seriously open to question. Openness to reason and inquiry was finally extinguished in Sunni Islam in the late 12th Century CE with the death of Averroes, Ibn Rushd (1126 – 1198). Sadly, even today, that openness to reason and inquiry remains actively discouraged throughout much of the Islamic world.

Chapter 2

New Ideas

Humanist ideas, suppressed for more than a thousand years, found new life in the Renaissance

The Middle Ages

The term 'Middle Ages' is generally taken to cover the period in European history between the fall of Rome at the end of the 5th century CE, and the slow reawakening of interest in classical art and culture at the beginning of the 13th century. It was a period of wars and mass migrations, of the Great Schism between the Eastern and Western churches, and of plague and declining population. The brief reign of Charlemagne (742 – 814) saw an increase in stability brought about by his conquests and reforms, but Europe returned to near anarchy again after his death. Added to the stagnation in intellectual life, whose flickering flame was kept alive in Western Europe only in monasteries, it is hardly surprising that the 13th century poet Plutarch coined the name 'Dark Ages' for this period.

For centuries, life in the West had been dominated by the Catholic Church. Education consisted of teaching the received wisdom of the ancients: Saint Paul¹¹, Aristotle¹², Galen¹³ and others - while the works of those who had thought differently, such as Epicurus¹⁴ and Lucretius¹⁵, were condemned and forgotten.

The Church gained an important advocate in the 13th century in St Thomas Aquinas (1225 – 1274), now regarded as the greatest Catholic theologian of all time.¹⁶ He revived theology by attempting to

¹¹ Saint Paul's Epistle to the Romans is generally regarded as the primary exposition of Christian Theology.

<http://jesus-passion.com/ROMANS.htm>

¹² <http://www.iep.utm.edu/aristotl/>

¹³ <http://www.iep.utm.edu/galen/>

¹⁴ <http://www.iep.utm.edu/epicur/>

¹⁵ <http://www.iep.utm.edu/lucretiu/>

¹⁶ See Pope Benedict XVI's tribute to Aquinas: http://w2.vatican.va/content/benedict-xvi/en/audiences/2010/documents/hf_ben-xvi_aud_20100602.html

reconcile the philosophy of Aristotle and of Averroes (Ibn Rushd)¹⁷ with Christian dogma. But as Bertrand Russell explained, Aquinas does not, like Socrates, set out to follow wherever the argument may lead. He is not engaged in inquiry because for him “the truth” was already known – it was the Catholic faith. If he could find rational arguments for some aspects of his faith so much the better, but if he could not he fell back on revelation. “The finding of arguments for a conclusion given in advance” wrote Russell, “is not philosophy, but special pleading.”¹⁸

The Renaissance

The Renaissance, “Rebirth”, was a period of innovation based on a reawakening of interest in the classical world, in its art and culture, the pursuit of knowledge through observation and reason, and in the possibility of human progress independent of the teaching of the Church. Beginning in Florence in the 15th century, it had by the end of the century spread across Europe not so much as a movement but as a series of innovations in medicine, the arts, architecture, music, astronomy and philosophy.

It was the renewed interest in the human rather than the divine that gave this essentially cultural and artistic movement the name “Humanism”. Renaissance Humanism did not however reject belief in God or the supernatural, but saw observation and reason as tools in the quest to understand God’s work and purpose.

The rediscovery of manuscripts from the classical period had a seminal influence on European thought, and from the 15th century began to reawaken interest in secular ideas including natural explanations for natural phenomena. It was this emphasis on observation and reason that was to have the greatest and most enduring influence.

Despite the corruption, infighting and authoritarianism of the medieval Church there were few voices raised against it, either through fear or because for centuries the Church was seen as God’s office on Earth. The problem for everyone was that the Church

¹⁷ <http://www.iep.utm.edu/ibnrushd/>

¹⁸ (Russell 1967, p. 463) *A History of Western Philosophy*, Ch. 34, “St. Thomas Aquinas”..

claimed to know God's will, fixed for all time. It was both the custodian and only source of real knowledge. Questioning that wisdom or worse, setting out to answer questions for oneself, was anathema.

The invention of movable type by Johannes Guttenberg (1398 – 1468) has been described as the most important invention of the second millennium. Following the publication of the first printed Bible in 1455, printing spread rapidly throughout Europe and was instrumental in spreading the ideas of the Renaissance and in breaking the virtual monopoly of the Church over education. Perhaps more importantly, it helped spread both the new scientific ideas and criticism of the Church and its practices, which led eventually to the Reformation.

The classical philosophers had suggested that there could be natural explanations for natural phenomena, but it was not until Nicolai Copernicus (1473 – 1543) showed that a solar-centred model of the heavens provided a simpler explanation of the movement of the heavens than the cycles and epicycles of the Ptolemaic system that religious orthodoxy saw the first serious cracks in its Aristotelian world-view. News of Copernicus' theory spread quickly around northern Europe even before the publication in 1543 of his *De Revolutionibus Orbium Coelestium* (On the Revolution of Heavenly Bodies). The Protestant churches had few problems with what was after all just a simpler explanation of the movement of the heavens - although the idea that the Earth was not at the centre of the Universe did raise many eyebrows – and even some scientific opposition. But the Catholic Church, slow to react at first, eventually became very unhappy when the heliocentric model was championed by Galileo Galilei (1564 – 1642).

Galileo added to his 'crimes' with further astronomical observations of the moons of Jupiter and the phases of Venus, which showed that both Aristotle's model of perfect spheres and several statements in the Bible were in error. Heresy indeed!

Whether deliberately or not, Galileo actually encouraged his condemnation by the Church by insulting his one-time supporter Pope

Urban VIII and by continuing to promote the helio-centric model and his own observations against specific instructions by the Inquisition to desist. In 1632 he was finally condemned for “suspicion of heresy”, and was sentenced to house arrest for the remainder of his life.

Even before Galileo’s condemnation by the Inquisition, another free-thinker, Giordano Bruno (1548 – 1600) had been burned at the stake in the Campo de Fiore in Rome by order of the Church. His crimes were to have challenged Church doctrine on several issues including eternal damnation, the Trinity, the divinity of Christ, the virginity of Mary, and transubstantiation. His pantheism was also condemned, as was his teaching of reincarnation.

The Reformation

It was Martin Luther (1483 -1546) who had posed the first real challenge to the absolute power and authority of the Church.¹⁹ In 1517 he published his criticism of Church practices including the selling of indulgencies, his 95 theses. (It is unlikely that he actually nailed them to the door of the church in Wittemburg). His excommunication by the Church and condemnation as an outlaw by the Emperor led directly to the formation of the Lutheran, Protestant church.

But Luther, Calvin in Geneva and the other leaders of the Protestant Reformation were hardly more tolerant of dissent than the Catholic hierarchy. While every believer could now have direct access to God without the intercession of the priests, God’s word as interpreted by the Protestant leadership was still sacrosanct, and woe betide anyone who disagreed. Michael Servetus, a Renaissance polymath and renowned biblical scholar was burned at the Stake in Geneva in 1553 for his rejection of the Trinity.²⁰

¹⁹ Luther, Martin. *Concerning the Ministry* (1523), tr. Conrad Bergendoff, in Bergendoff, Conrad (ed.) *Luther's Works*. Philadelphia: Fortress Press, 1958.

²⁰ *Hunted Heretic: The Life and Death of Michael Servetus 1511–1553* by Roland H. Bainton. Revised Edition edited by Peter Hughes with an introduction by Ángel Alcalá. Blackstone Editions. ISBN 0-9725017-3-8.

But far worse was to come. The reaction of the Catholic princes to the Reformation and the determination of the Protestant leadership to resist led inevitably to war. The 30-Years War (1618 – 1648) was the most devastating conflict Europe had ever seen, leaving millions dead including a third of the entire population of the German States, with some states losing more than 60% of their people.²¹ In May 1631 the city of Magdeburg was entirely destroyed by the Catholic forces and only 5,000 of the population of 30,000 men, women and children survived, many to perish later of disease and starvation;²² an echo of the Albigensian Crusade when the city of Bezier fell to the crusaders in July 1209.²³

The 30-Years War created strange bed-fellows, with Catholic France allied to the northern Protestant states not for religious but for political reasons: to oppose the ambitions of the Hapsburg Empire. France paid Sweden millions of livres to support its conquest of the northern German states.

Nothing could have better underlined the futility of the war than the proposal by the Vatican – after 30 years of fighting – that the peace settlement should return all territory to the status quo ante. Neither the Catholics nor the Protestants could claim victory but there was, nevertheless, one clear winner: freedom of conscience, at least for the rulers.

The Peace of Westphalia, a series of treaties concluded in 1648, brought an end to the war, established the concept of the nation state and confirmed an earlier agreement that the religion of the ruler would henceforth be deemed the religion of the state.²⁴ An individual might perhaps have freedom of conscience and might even in some circumstances be able to follow his religion, albeit in secret. But to

²¹ https://en.wikipedia.org/wiki/Thirty_Years%27_War

²² https://ipfs.io/ipfs/QmXoyvizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/Sack_of_Magdeburg.html

²³ The religious leader of the Crusade, Arnaud Amalric was asked “How will we know the heretics?” He replied “Kill them all, God will know his own”. In his report to the pope, Amalric claimed that all of the 20,000 inhabitants of Beziers had been killed and the town utterly destroyed.

²⁴ <https://www.britannica.com/event/Peace-of-Westphalia>

express your opinions publicly was still to take enormous risks with your freedom or even your life. Dissenters resorted to writing anonymously and publishing in the only state sufficiently liberal to permit such freedom, the Netherlands.

The English Civil War²⁵ and the execution of the intransigent Charles I in 1649²⁶ established the principle that rulers must be subject to the consent of the people; a principle which 130 years later was followed by the French with, as the world knows, a similar outcome.

The Act of Toleration of 1688/89²⁷ granted freedom of worship to Protestant dissenters from the Church of England but it would be almost 200 years before Catholics, Jews and atheists would be permitted to participate fully in public life.

²⁵ <https://www.britannica.com/event/English-Civil-Wars>

²⁶ http://www.newworldencyclopedia.org/entry/Charles_I_of_England

²⁷ <https://www.britannica.com/event/Toleration-Act-Great-Britain-1689>

Chapter 3

The Scientific Revolution

*“Nature and Nature's laws lay hid in night:
God said, Let Newton be! and all was light.”*

Alexander Pope (1688 – 1744)

The idea that the workings of nature were amenable to investigation and discovery has changed the world for ever.

The so-called Scientific Revolution marks the period between the publication of Copernicus's *De Revolutionibus* (On the Revolution of Heavenly Bodies) in 1543 and the end of the 18th century, by which time science and what Francis Bacon (1561 – 1626) called the 'Scientific Method' - of experimentation, observation and inductive reasoning – had become firmly established as the most fruitful means of gaining knowledge of the world and ourselves. By the end of the 17th century new discoveries in astronomy, biology, anatomy and mathematics including Newton's laws of motion, the circulation of the blood, the laws of planetary motion and the calculus, had added to the ascendancy of science.

Many of the new scientific discoveries posed a direct challenge to the authority of the Church, as scientific discoveries continue to challenge religion and vested economic and political interests to this day.

The 17th century saw the first stirrings of the truly modern age as superstition and dogma gradually gave way to observation, experimental evidence and inductive reasoning, opening new doors in physics, chemistry and medicine.

Francis Bacon, “the father of the scientific method” found himself fighting a battle on two fronts: against the traditional, hegemonic hostility of the Church to the acquisition of new knowledge, and against occultism, that other child of the Renaissance that had risen in popularity throughout the 16th century. Bacon's importance cannot be overstated. As the champion of observation, experiment and the need for evidence, he was also the first to see science as necessarily a

collaborative undertaking, to allow each to build on the experience of others. His ideas led directly to the creation of the world's first scientific institution, the Royal Society, which was granted a royal charter by Charles II in 1660. Thomas Jefferson described Bacon as one of the three greatest men who had ever lived, the other two being John Locke and Isaac Newton.

Rene Descartes,²⁸ a gifted French philosopher, scientist and mathematician, was driven by the desire to understand what can be known with certainty. He was the founder of analytical geometry; we still work with his system of orthogonal 'Cartesian' coordinates. His famous dictum *Cogito, ergo sum* (I think therefore I am) was the bedrock on which he sought to build an indestructible edifice of certain knowledge, one secure step after another. Nevertheless, many of his speculations in Physics and Cosmology were easily refuted by Isaac Newton. In philosophy, Descartes' most lasting achievement was his promotion of mind-body duality, separating the temporal, the realm of science, from the spiritual, the realm of religion. Whilst this helped free scientific activity from the heavy hand of Church constraint, it led to the widespread acceptance, even today, of the impossible notion that the mind or the soul can have a separate existence from the brain.

Newton's formulation of the laws of motion was both outstanding and revolutionary. Revolutionary because it swept away the classical idea that the application of force needed physical contact between the pusher and the pushed, a view shared by the ancients and treated as sacrosanct by the Church. Newton's laws did not require an ether, the material substance thought to permeate all of space, the nonexistence of which was finally confirmed experimentally by Michaelson and Morley only at the end of the 19th century.

In medicine, Galen, a second century Greek physician, had promoted the idea of the four humours: black bile, yellow bile, blood and phlegm.²⁹ Under his influence, bleeding and "rebalancing the

²⁸ <http://www.iep.utm.edu/descarte/>

²⁹ <http://www.iep.utm.edu/galen/>

humours” became the mainstay of Western medicine for 1300 years. His theories concerning the liver, heart and blood were finally shown to be flawed in 1628, when William Harvey demonstrated the circulation of the blood, with the heart as its pump. Yet the universities of Paris, Oxford and Cambridge remained bastions of orthodoxy, still teaching Aristotle and Galen well into the 18th century. It was around 1640 that a group of Oxford experimentalists calling themselves the “Virtuosi” took up Francis Bacon’s challenge.³⁰ So when the Virtuosi gathered in Oxford to carry out dissections of cadavers it was necessarily outside the orbit of the university.

Led by John Wilkins, the group included Thomas Willis, a brilliant anatomist who amid the chaos of the Civil War and the siege of Oxford began to explain the workings of the nervous system; Christopher Wren, who before his successes as an architect was both an innovative astronomer and an immensely skilled anatomist; Robert Hooke, a brilliant mathematician and technician; and later Robert Boyle. All lived at some risk of being labelled atheists although all were devout Anglicans who saw the soul, or some intangible spirit, as animating the various organs of the body, and were convinced that their experiments would reveal the majesty of God’s plan.

When Robert Boyle joined the Oxford Circle, his experiments on the composition of matter moved alchemy on the path to chemistry. Following Torricelli in Italy and with apparatus built by Thomas Hooke, they disproved Aristotle’s contention that nature abhors a vacuum by demonstrating that water rises in an evacuated vessel not by spiritual means but as a result of air pressure.

The scientific discoveries of the Oxford Circle gave new impetus to the Scientific Revolution, surely the greatest and the most influential revolution of the second millennium.

In 1780 Luigi Galvani discovered animal electricity. He showed that the muscles of dead frogs’ legs twitched when struck by an electrical

³⁰ The story of the Virtuosi is brilliantly told in “The Swerve”, by Stephen Greenblatt. Harvard University Press, 2011

spark. The intangible “spirit” that animated the organs of the body had been found: it was electricity.

By the mid-19th century, Charles Darwin had explained the origin of species as a process of evolution and natural selection; a discovery that undermined the creation myths of almost every religion on Earth.³¹ Then in the 20th century, astronomy revealed the unimaginable scale of the Universe and the billions of years of its history.³² Together, these two discoveries have completely undermined belief in religious accounts of the creation and have changed our view of ourselves and our place in the Universe for ever.

³¹ https://www.amazon.co.uk/Origin-Species-Modern-Library/dp/0679600701?ie=UTF8&qid=&ref_=tmm_hrd_swatch_0&sr=

³² See for example: http://www.capjournal.org/issues/01/11_17.pdf

Chapter 4

The Enlightenment and its Legacy

By the 17th Century, the idea that freedom of inquiry could be extended to human affairs gave rise to the Enlightenment – and to the values that underpin both Humanism and Western civilisation today.

The Enlightenment was an 18th century philosophical movement centred in France that encompassed the new discoveries of science and freedom of thought and inquiry, combined with new political ideas that directly confronted the established religious and political order: ideas that can be said to have given rise to the modern world.

The most influential publication of the Enlightenment was the *Encyclopédie*, compiled by Denis Diderot and Jean d'Alembert with contributions from some 150 scientists and philosophers. Published between 1751 and 1772 in thirty-five volumes, it helped spread scientific ideas and the values of the Enlightenment throughout Europe and beyond.

The new political thinking was led by Thomas Hobbes and John Locke, both Englishmen, but it was in France where these new ideas first gained traction among an increasingly literate populace, spurred on by the ideas of the *Philosophes* and their hatred of the excesses of the Church, the king and the aristocracy.

Thomas Hobbes (1588 – 1679)³³ had seen the need for society as an escape from the state of nature in which life was “solitary, poor, nasty, brutish and short”.³⁴ To avoid this life people accept a “social contract” under which the individual cedes some rights to a sovereign authority in exchange for protection. All civil, military, judicial and ecclesiastical power is then vested in the Sovereign. It seems hardly necessary to describe this view as somewhat idealistic. The peasant living under a feudal lord, or the subject of a dictator, has little say in how he is treated by the regime. Nevertheless, Hobbes’ insistence that the

³³ <http://www.iep.utm.edu/hobmoral/>

³⁴ https://www.gutenberg.org/files/3207/3207-h/3207-h.htm#link2H_4_0123

absolute power of the Sovereign must be tempered by his duties to the citizen was unwelcome and he was obliged to flee England for the Continent.

Some 40 years after Hobbes, John Locke (1632 – 1704)³⁵ was one of the most influential thinkers of the 17th century and is widely regarded as a founding father of democracy. He argued that man's basic rights were inalienable and that the surrender of those rights must therefore be by consent.³⁶

Locke was also the first to recognise the necessity of the separation of religion and state. In his *Letters Concerning Toleration*³⁷ he argued that no earthly man was able to judge between the competing claims of religion and even if they could, enforcing the one true religion would not work because "belief cannot be compelled by violence" and it would lead to more disorder than permitting diversity.

The seminal political work in France was Montesquieu's (1689 – 1755) *De l'Esprit des Lois* (On the Spirit of Laws) in which he argued for the separation of powers, a work which strongly influenced James Maddison and the American Constitution. Catherine the Great in Russia, Joseph II of Austria and Frederick the Great of Prussia tried to apply the Enlightenment ideas of religious and political tolerance to their benign absolutism. Both Benjamin Franklin and Thomas Jefferson contributed to the debate in Europe, and the ideals of the Enlightenment found their way into the Declaration of Independence and the Constitution of the United States.

During the 19th century the Enlightenment was blamed by conservatives for the French Revolution and the Terror which followed. But the Terror disregarded the most basic humanitarian principles of the Enlightenment. It was testimony to the way in which absolute certainty of the justice of one's cause can lead idealists to rationalise barbarity.

³⁵ <http://www.iep.utm.edu/locke/>

³⁶ <http://www.iep.utm.edu/locke-po/>

³⁷ <http://www.constitution.org/jl/tolerati.htm>

Moral philosophy

The most influential philosopher of the Enlightenment, at least in Continental Europe, was Immanuel Kant (1704 – 1804)³⁸. In seeking a rational basis for morality, his Categorical Imperative³⁹ placed justification for moral judgement in the hands of the individual, a position somewhat at odds with the more modern view of the need for collective agreement within a culture or society based on shared values.

In contrast, David Hume (1711 – 1776)⁴⁰ argued in *A Treatise of Human Nature*⁴¹ that morals cannot have an external, rational basis, a view more widely accepted than Kant's in the Anglo-Saxon world. For Hume, we are creatures driven by emotion rather than reason; a view with which most would now agree, given our modern understanding of the human mind.⁴²

Democracy and Freedom of the Individual

The revolution in science opened the way to an equally important revolution in freedom of the individual: the freedom to think for oneself, to hold opinions and to express them freely without fear. There is however an important distinction to be made in terms of justification between the two different kinds of freedom: freedom of inquiry, which made possible the pursuit of scientific discovery on the one hand, and political freedom on the other.

The scientific revolution was bound eventually to succeed whatever opposition it might face because scientific discoveries are founded in reality, in how the world actually is rather than how some believe it ought to be. The political revolution – enshrining the principles of democracy, equality and the rule of law – has no such underpinning in

³⁸ <http://www.iep.utm.edu/kantview/>

³⁹ <http://www.britannica.com/topic/categorical-imperative>

⁴⁰ <http://www.iep.utm.edu/hume/>

⁴¹ https://www.gutenberg.org/files/4705/4705-h/4705-h.htm#link2H_4_0085

⁴² Peter Singer on Hume: Singer, Peter (4 March 2015). "The climax of moral sense theory: Hutcheson and Hume". Encyclopedia Britannica.

reality but is based on agreement regarding our 'natural' rights, which rights are inalienable (such as the right to life), and which we must surrender to government in exchange for its protection of those rights.

It was Socrates who in about 400 BCE first suggested the idea of a contract between government and the governed, and he did so in the most dramatic fashion, arguing that as a beneficiary of the state he had no right to protest when the state sentenced him to death.⁴³

The English Civil War and the execution of Charles I opened the way for the political changes that followed, culminating in the Glorious Revolution of 1688, a coup d'état that overthrew the Catholic King James II and replaced him with joint rulers, the Protestant William of Orange and Mary his wife, James' elder daughter. The revolution was greeted with deep hostility throughout Catholic Europe. Louis XIV, who had re-established absolute monarchy in France in 1653 following a failed revolt of the courts and nobility, *le Fronde*, championed James and his descendants' right to the English crown, leading to another two centuries of conflict between the two countries.

What was truly revolutionary about the accession of William and Mary was the terms imposed by parliament, consolidating its sovereignty and creating the world's first constitutional monarchy. A theoretical justification for the revolution was set out by John Locke in his *Second Treaties of Government*⁴⁴ which, although not widely influential at the time, found echoes in the American Declaration of Independence and the American Constitution, and is now seen as the seminal work of western, liberal democracy. It was published anonymously in 1689 after Locke had fled England.

Locke argued that the only legitimate governments are those that have the consent of the people. So any government that rules without that consent should, in theory at least, be overthrown. Locke saw the relationship between the state and the individual, much as Hobbes

⁴³ <http://www.iep.utm.edu/soc-cont/>

⁴⁴ <https://www.gutenberg.org/files/7370/7370-h/7370-h.htm>

had done, as a form of contract in which the individual surrenders some of his freedom in return for the protection of his life, liberty and property.

Locke's ideas were further developed in the 19th century by John Stuart Mill (1806 – 1873)⁴⁵, widely considered to be the founder of modern liberalism.

Whilst Locke had provided the justification for government by the consent of the governed, Mill cautioned against the “tyranny of the majority” and argued for a limit to the democratic power of the people in order to safeguard the rights of minorities and the weak. In his most influential work, *On Liberty*, Mill argues that “the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others” because “Over himself, his body and mind, the individual is sovereign.”⁴⁶

For Mill, the three basic liberties were freedom of thought and conscience, the freedom to pursue one's tastes, and freedom of assembly, provided these last two do no harm to others. We can see how these ideas found their way into the Universal Declaration of Human Rights.⁴⁷

In England the Reform Act of 1832⁴⁸ extended the franchise to all men having some property, at that time around 6% of the population. In France the franchise was limited to around 5% of the population – all men, of course – while in Germany some 17% of the population were eligible to vote. Suffrage has now gradually spread to all adult men and women throughout the West with minor exceptions, and to much of the rest of the world.

⁴⁵ <http://www.iep.utm.edu/milljs/>

⁴⁶ <https://www.gutenberg.org/files/34901/34901-h/34901-h.htm>

⁴⁷ An excellent introduction to modern political thought can be found at:

http://www.londoninternational.ac.uk/sites/default/files/programme_resources/lse/lse_pdf/subject_guides/ps1130_ch1-4.pdf

⁴⁸ [http://www.parliament.uk/about/living-](http://www.parliament.uk/about/living-heritage/evolutionofparliament/houseofcommons/reformacts/overview/reformact1832/)

[heritage/evolutionofparliament/houseofcommons/reformacts/overview/reformact1832/](http://www.parliament.uk/about/living-heritage/evolutionofparliament/houseofcommons/reformacts/overview/reformact1832/)

Winston Churchill has been quoted as saying that “Democracy is the worst form of government apart from all the others”, but he was actually quoting someone else, tongue in cheek. He spelled out his true thoughts on democracy in the House of Commons on 31st October 1944 when he said:

“At the bottom of all the tributes paid to democracy is the little man, walking into the little booth, with a little pencil, making a little cross on a little bit of paper—no amount of rhetoric or voluminous discussion can possibly diminish the overwhelming importance of that point.”

Yet there are few states with completely fair electoral systems. Most states, even the most progressive western liberal democracies, fall short of the ideal. There is however one state that adheres closely to the ideal of government of the people by the people.

The Swiss model

Switzerland is a confederation of semi-autonomous republics with only defence, communications, human rights, foreign affairs and international relations the responsibility of the federal government. The principle of subsidiarity ensures that matters are dealt with at the appropriate level: federal, cantonal or local. The question of whether the city of Lausanne should have a new sports arena was decided by the citizens of Lausanne themselves in a referendum. (The proposal was rejected). Health, police, education and all other local matters are the responsibility of the individual cantons, each of which is also responsible for its own finances without federal interference. Election expenses are strictly controlled and even election posters are of a standard size. But the crucial difference between the Swiss system and every other democracy on Earth is the right of any citizen to raise a petition, and with 100,000 signatures to demand a national referendum. To be adopted, a proposed measure must secure a majority of the popular vote, with a majority of the 26 cantons also in favour. There is a built-in safeguard however. The federal parliament has the right to overturn a referendum result on the grounds of

national security or because implementing the new measure would fall foul of Switzerland's obligations under international law, such as the European Convention on Human Rights and Fundamental Freedoms to which Switzerland is a signatory.

This system has occasionally led to embarrassing outcomes for the federal government – such as the referendum which rejected the government's decision to join the European Union, and the decision to ban the construction of minarets on Swiss soil.

The Social Contract is alive and kicking in Switzerland. It serves as a striking example of power in the hands of the people and shines a very bright light on the Byzantine workings and democratic deficit in many other European states, not to mention the European Union itself.

The Just Society

Other systems of government besides democracy can deliver stability and economic progress, albeit at the expense of a significant loss of personal freedom for the ordinary citizen. Chinese Communism and some Middle Eastern regimes come to mind. It is therefore important to ask by what criteria we judge western liberal democracy to be superior to the alternatives. For John Stuart Mill there was no doubt that the ultimate objective was to seek a “just society”.

Humanists believe that by continuing to follow Locke and Mill – but keeping a weather eye on the environment and the future – we can see our way forward to solving many of the problems that still confront us.

Today, in the West at least, the values of the Enlightenment are largely taken for granted. They are so deeply ingrained in our political subconscious that they are in danger of being overlooked amid the shrill cacophony of competing religious, economic and political voices. Attacks on our liberties even in Western liberal democracies are far from uncommon. Humanist organisations have a key role to play in defending our freedom and those values.

Human Rights

One of the greatest achievements of the international community in the years following the Second World War was the creation of the United Nations and the formulation of the Universal Declaration of Human Rights (UDHR).

The UDHR places the individual at the centre of the concept of human rights, as opposed to the group, the family, society or the State, and defines human rights in terms of the responsibilities of the State towards the individual. It is thus almost by definition a Humanist document. The UDHR is however non-binding on states. Two human rights treaties that do, however, bind states with the force of international law came into effect in the 1960s: the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR). Sadly however there is hardly a state on earth that fully respects its responsibilities under these covenants and IHEU along with many other NGOs has struggled for years at the Human Rights Council in Geneva to highlight abuses and, in the absence of any enforcement provisions in the covenants, to have perpetrators condemned by the Council.

In Conclusion

We have come a long way since the dawn of civilisation just a few thousand years ago. And most of that progress has been achieved in just the last few hundred years, as science and free inquiry have replaced superstition and the received wisdom of the ancients with knowledge based on evidence; and as the unchallenged power of the mighty has been largely defeated by the forces of egalitarianism and democracy, leading to systems of government based on equality, human rights, democracy and the rule of law.

Yet, these, the values of the Enlightenment, are still today under threat on every continent.

It is for Humanists everywhere, and indeed for all who cherish these values, to work together to defend them.

About the author

Roy Brown is a former president of the International Humanist and Ethical Union (IHEU). He also served for 12 years as head of the IHEU delegation to the United Nations in Geneva where he made more than a hundred oral and written contributions to debates in the Human Rights Council on issues from freedom of expression, women's rights, modern slavery, and the plight of the Dalits (Untouchables) in India, to the universality of human rights and against attempts to weaken international human rights law.

In 1987 with his wife Diana he founded the World Population Foundation based in in the Netherlands, and in 1999 co-founded the International Foundation for Population and Development in Lausanne, Switzerland.

International Humanist Publications Ltd
Witney, Oxfordshire, United Kingdom

Printed by Grapho12, 12200 Villefranche de Rouergue, France
ISBN 978-1-9164321-0-9