

The Age of Reason and Enlightenment

The 17th and 18th centuries



Sapere Aude!
Sapere Aude!

What is Enlightenment?

“It is man’s emergence from his self-incurred immaturity.
This immaturity...lies not in lack of understanding,
but in lack of resolve to use it without guidance from another.

Sapere Aude! Dare to Know!

‘Have the courage to use your own understanding!’

That is the motto of Enlightenment.”

Immanuel Kant September 30th 1784

THE ENLIGHTENMENT ERA

The 17th and especially the 18th century

Europe, Britain, and the American Colonies

“There is a mighty light which spreads itself over the world...”

~ Lord Shaftesbury, 1706

L'age des lumieres, die Aufklarung, illuminismo, enlightenment! In this era a ‘mighty light’ spread over the world as humans reflected on the changes that were happening. Reacting against religious strife and responding to the discoveries about nature, thinkers now attempted a splendid new synthesis: an intellectually coherent paradigm that could provide a map of ‘what could be known.’ Humans could now forge ahead *without restraint* to understand and control nature (even ‘human nature’) and thus improve the ‘moral fibre of society’ and promote human happiness...*with liberty and justice for all*. Quite extravagant aspirations and radiant optimism, but such was the spirit of the times. Our own nation’s founders imbibed Enlightenment ideals of a free, liberal, democratic society. ☞

This was one of the only eras in history that consciously *named* itself and waxed eloquent on what enlightenment meant! This era was the dawn of *modernity*. It’s as though everything since the Late Middle Ages had been transitional and now the Modern World began in earnest. It ‘dawned’ when thinkers awakened and ‘broke from the past’ and ‘charted a bold new course’ for all mankind.

Whether or not this ‘Enlightenment Project’ *succeeded* is a question that arises when *postmodern* academics and philosophers of science critique and appraise *modern* assumptions and paradigms. There will be an abundance of Worldview Connections to discuss, but for now we just want to appreciate the self-glorious *zeitgeist*...the lofty ‘Spirit of the Enlightenment.’

This era is also dubbed the “Age of Reason” because the ‘reasoning process’ began to supersede religion as authoritative in human affairs. We will notice the progression *from* — ‘Reason serving Faith’— *to* ‘Faith in Reason’ *to* Reason becoming autonomous and being enthroned. Then, ironically, by the end of the era we will see Reason *dethroned*:

“Reason was used to the limits to expose the limits of reason.”

One characteristic of the era was the application of scientific methodologies to the humanities: politics, law, government, economics, ethics, history, sociology, education, *etc.* If the whole universe is so well-ordered by inherent physical laws, then human society should be as well. In other words...the discovery of *Natural Laws* was applied to *Natural Rights*. From what source does political power and authority derive? Not from the ‘divinely appointed rights of kings’ but from the consent of the governed and our inalienable rights! There was also a natural, reasonable *source* for the Moral Law. Such a Universal Law should insure brotherhood and tolerance, and make religious pretensions and abuses obsolete. Religion itself must be moral and practical, not dogmatic and fanatical. The same astounding progress that science makes should be achieved in *all* human institutions. As Claude Helvetius said:

“Morals should be treated like all other sciences, and one should arrive at a moral principle as one proceeds with an experiment in physics.”

We can see the Enlightenment as an age of science, experimentation, political revolution, and the supreme intellectualization of religion. It was also a time of tremendous literary dissemination. Philosophy is said to have come out of the universities and monasteries and into the cafes and parlors. A new breed of thinker was born — the “*Philosophe*.” Defined variously as: men-of-letters, leisure-time philosophers, erudite spokesmen for freedom of speech, champions of liberty, influential intellectuals...the *philosophes* were not professional philosophers but they did reflect and shine forth that ‘mighty light’...and they were often best-selling authors! ☞

As Kant wrote: ‘Enlightenment is our emergence from our self-imposed immaturity.’ (‘Immaturity’ is dependency on intellectual “parental guidance” from the likes of the Pope, Church, State, Bible, Traditions of Bygone Ages or any external authority!) We must dare to think for ourselves. But Kant also said that while his age was the age of enlightenment, it was not an enlightened age.

The mottos: **Knowledge is Power!** and **Dare to Know!** may sound good. But, what exactly are we able to KNOW? How do we know what we know? Can unaided Reason ever attain certainty? What exactly are the objects of knowledge? What IS knowing?!

The professional philosophers of this era, men of colossal intellects, were obsessed with **EPISTEMOLOGY**. The overview will attempt to explain the dilemma, and see how it was dealt with by the two main approaches: The **Rationalists vs.** The **Empiricists**.

(Descartes, Spinoza & Leibniz ☞ vs. Locke, Berkeley & Hume ☞ ... and *did* Immanuel Kant finally solve the debate?)

📖 Sections:

Epistemology Problems and Terms Used (pp. 3 - 5)

Overview of the Rationalists, Empiricists & Kant (pp. 8 - 17)

Influential Publications -Annotated List (pp. 19 - 22)

Quiz (pp. 25 & 26)

Sir Francis Bacon (pp. 6 & 7)

L'Encyclopedie (p. 18)

The Wit of Voltaire (pp. 23 & 24)

‘Just Say Know’ (*Just for fun*) (p. 27)

EPISTEMOLOGY PROBLEMS AND TERMS USED

Francis Bacon had inspired this era's quest for Knowledge by advocating the rejection of blind authority in favor of keen **observation** of the immediate world of **sense experience**. Diderot's *Encyclopedie* vividly described a *Philosophe* as: "one who trampling on prejudice, tradition, authority — all that enslaves most minds — dares to think for himself, to go back and search for the **clearest** genuine **principles**, to admit nothing except on the testimony of his **experience and reason**."

You can appreciate the idol-toppling, prejudice-trampling mood of the Enlightenment. Face it, the ancient 'authorities' (religious *and* scientific) had been wrong! Only new methods, in unfettered pursuit of Knowledge, could hope to find truth *and* improve life. Therefore, the very process of Knowing was scrutinized like never before. **Epistemology** was now pre-eminent in philosophy. But is the 'immediate world' that we sense TRUE reality? Can we ever agree on the 'clearest principles'? Will 'experience and reason' offer accurate 'testimony'?

This era's greatest philosophers were accomplished polymaths and fluorescent geniuses. They were engaged in culture, they had integrity, and they took their tasks very seriously, sometimes at great personal risk.

We should admire them tremendously for their assiduous efforts to redirect the human quest for knowledge and truth. Some even attempted to reconcile science, reason and faith during turbulent times. **Bravo to them.**

But, did they solve their own systemic problems and achieve their own goals? Before we have an overview of:

▶ **Descartes, Spinoza & Leibniz** ✎ vs. ▶ **Locke, Berkeley & Hume** ✎ ... and... ▶ *did Kant* finally solve the debate?

it may be helpful to appreciate the **dilemmas** and to define *some* of the **terminology** used in their discourse.

Epistemological Questions:

When we ask what **Knowledge** IS, (as opposed to mere opinion, or fantasy, or wild claims, or unexamined beliefs!) we are inquiring as deeply as possible into the nature, source, warrant, and extent of Knowledge.

We ask: by what *means* is it acquired; by what *criteria* is it best judged for reliability; what is the *limit* of it; and can *certainty* ever be attained?? (One thing you will notice is how any epistemological theory given comes along with some metaphysical assumptions. In our simple worldview set-up (the 7 BQs) there should be a plausible relationship between Q1 and Q5.)

Epistemological Dilemmas:

Remember the age-old problem of "**Appearance vs. Reality**"? If you understand this sentence, you grasp the dilemma: **Reality** is vastly different than it **appears** to be. Just think about the chair you're seated on being mostly made up of empty space, and you get the idea. How can we get *from* reality as it appears to us *to* reality as it most truly really is-in-itself? Do we perceive reality? What are perceptions? Our perceptions consist of mental phenomena, so they are **not** a *direct* apprehension of external reality ('what's *out there*') but something happening *inside* the observer. How do we connect the **perceiver** with what is being **perceived**?

Pre-Socratic and Epicurean philosophers believed that material objects emit "*effluxes*" or patterns of themselves which can enter our bodies through pores! This is not too much less plausible than some of what you are going to study. Sophists and Sceptics would leave us with only *appearances* and never get to *reality*. Plato said true knowledge of reality is attained by 'climbing out of the cave' of appearances and reaching, via an arduous dialectic of pure reason, the changeless eternal Forms. Truth really comes from *within* our soul because we've beheld the Forms prior to being born into a body...thus the idea that knowledge is recollection. See how metaphysics and epistemology are related? These *are* time-honored pursuits!

Epistemological problems left unsolved by Enlightenment thinkers *still* have their place in contemporary philosophy. Not everyone still thinks belief systems must have a **foundation**. *How can we demonstrate that reason and/or sense data are true foundations for knowledge when they are part of the demonstration?!*

"The harmony between our thoughts and the world, the sense of what the physical world contains and how our minds fit into it, are topics on which the finest thinkers have hurled themselves, only to be frustrated." p.298

"Any confidence in a harmony between the way we 'take things to be' and the way they are, will seem to be a pure act of faith." p.48

"It would be possible to be cynical about this...[but]...I believe the process of understanding the problems is itself a good." p.298

~ Professor Simon Blackburn [*Think*, Oxford University Press, 1999]

Be Sure You Can Define These Terms:

“Analytic and Synthetic” — These terms are used to distinguish propositions:

An **analytic** proposition is true-by-definition, necessary, would be known ‘*a priori*’ and its negation would be a self-contradiction, because the predicate is defined in the subject:

“A rainy day is a wet day.” ☔ (Rain IS wet.) “All bachelors are men.” ♂ (A bachelor IS an unmarried MAN.)

A **synthetic** proposition might be true or false, it is contingent, it would be known ‘*a posteriori*’ (by observation) and its negation would not involve a *self*-contradiction. “Today is a rainy day.” “That bachelor has no umbrella.”

a priori and a posteriori — An 18th c. contrast based on the belief that the *a priori* is established by chains of intuitive comparisons of ideas.

An *a priori* proposition is knowable **prior** to (or independently of) sense-experience; its certain truth can be known by pure thought, by the immediate insights of unaided reason. They have even been called “truths of reason.” Examples usually come from Logic and Mathematics. [$A \neq \text{non}A$] [A triangle has 3 interior angles.]

An *a posteriori* proposition cannot be known *a priori*. Its truth or falsity can only be known **posteriorly**, using input from the senses, or **post-looking!** (Use the familiar prior and post as your memory aids!)

An *a priori* concept is one that cannot be ‘derived’ from experience, but is assumed about the world to ‘allow’ thinking about the world! (Substance, Causation, Time, even the concept of a Self may be such concepts.)

The distinction is also similar to the Analytic/Synthetic distinction...where the *a priori/a posteriori* distinction is concerned with how we know a proposition is true, and the A/S distinction is concerned with what makes it true.

⇒↔ “Hume’s Fork” is another version of this distinction, but he uses the terms “relations of ideas” and “matters of fact.”

Axiom —

A proposition *without empirical evidence* but accepted as true because it is grasped so clearly and distinctly that it seems beyond doubt that it is the case. A proposition used as a starting place; an assertion that is taken as basic for enquiry to proceed.

Materialism vs. Idealism — Monistic worldviews which are deemed to be better options than Dualism.

Materialism holds that reality is entirely composed of MATTER! One of the first materialists was Democritus the atomist. You have also noted many materialists in this era, such as LaMettrie and d’Holbach. Some philosophical materialists today prefer the name ‘**physicalism**’ since physics deals with an awful lot more than nitty-gritty material bits...(things like energy, photons, fields and forces.) Our worldview discussion uses the term Naturalism to include all the philosophies that see the Cosmos itself as the all-in-all. (Nature, *whatever* it’s made of, as the whole show.)

Idealism holds that reality is fundamentally MENTAL! (easier to remember if you take the “L” out...like an *IDEA-ism*...only ideas exist!) The view is sometimes called *immaterialism* (like Berkeley’s idealism.) As we proceed, we will find more idealisms...such as Kant’s Transcendental Idealism, Hegel’s Absolute Idealism, and contemporary Linguistic Idealism.

Mind – Body Dualism — A ‘split-screen’ way of dealing with the issue of how ‘**consciousness**’ fits in a physical world!

The problem left by Descartes’ division of finite substance into Mind (the mental/spiritual realm of thought) and Body (the physical/material world of extension-in-space). The problem is how to demonstrate that these two definitively different or ‘mutually exclusive’ substances interact. Hobbes ‘solved’ the problem by rejecting the spiritual side, opting for Materialism wherein ‘thought’ is merely an epiphenomenon of brain mechanisms.

Spinoza ‘solved’ the problem of dualism by opting for pantheistic Monism!

The fact that today’s philosophers still have trouble ‘locating’ and defining **mind** (consciousness) might suggest that the problem hasn’t quite been solved!

Primary and Secondary Qualities — A distinction that goes back to Galileo, the 17th c. scientific revolution, and the recognition that the **basic explanatory properties** of things are **not** the qualities most immediately perceived.

⇒ This differentiates between the ‘scientific description’ of an object and our ‘ordinary experience’ of it.

First we have the scientifically tractable features essential to any Matter. This would be the very ‘state-of-being’...the shape, size, solidity, number, location, mobility (moving or resting) and ‘structure’ (perhaps its molecular constitution)...of a material thing. These ‘**objective**’ qualities *belong to* the ‘**object**.’ So —

Primary qualities inhere **IN** material things *independently of* (apart from) our sensing/perceiving those things.

“The particular bulk, number, figure, and motion of the parts of fire or snow are really in them whether anyone’s senses perceive them or not.” – Locke

Presumably, things must be there and have essential properties for us to have sensations of them. Fine. But, what **we** directly and immediately sense are **NOT IN** the Objects but in our Subjective experience. Thus they are secondary—

Secondary qualities are what **we** see, smell, hear and touch, *etc.* (colors, odors, sounds and textures, *etc.*)

Problems: How do cold, colorless primary qualities *in things* excite *in us* the warm, fuzzy sensations of secondary qualities? Philosophers continue to wrestle with the difficulties of thinking of color, taste and warmth as real objective properties of things independent of our experiences.

Rationalism and Empiricism — The two main rival approaches to Enlightenment Epistemology! \mathcal{R} \mathcal{R}

Rationalism [‘Rational’ comes from *ratio*, Latin for reason or reckon.] \mathcal{R}

The approach that emphasizes the importance of **reason** and **intuition**. Any philosophy that magnifies the use of unaided **reason** as the source or justification of our knowledge. Held in contrast to *unreliable* ‘sensory experience.’

➔ **Features of Rationalism:**

Belief in the rationality of the universe and our inborn capacity to grasp it. Distrust of the senses.

Use of the **DEDUCTIVE Method**. (“general to particulars” — Reason from a general law to a specific instance... start with a strong premise and argue to a *certain* conclusion.)

Begin with *a priori* truths... “necessary truths”...like axiomatic, mathematical, self-evident truths.

Innate ideas. (Concepts already in our minds, *not* gained from sensory experience.)

Famous “Rationalists” you already know: Parmenides & Zeno, Plato & many ‘Platonists.’

The great Rationalists of the Enlightenment Era: **Descartes, Spinoza and Leibniz**.

Empiricism [‘Empirical’ comes from *empeiria*, Greek for experience.] \mathcal{E}

The approach that emphasizes the importance of observation and experiment. Any philosophy that bases knowledge on, and tests all statements by, **experience**. Held in contrast to *alleged* ‘intuitive knowledge.’

➔ **Features of Empiricism:**

Belief in the reliability of the **senses**. Distrust of speculative reasoning. The Empiricist’s motto was:

“*Nihil in intellectu nisi prius in sensu*” - Nothing in the intellect unless first in the senses.

(To which the Rationalist Leibniz added: *nisi intellectus ipse*...except the intellect itself!!)

Use of the **INDUCTIVE Method**. (“particulars to general” — From specific instances, infer a general law or a *probable* conclusion.)

Rejection of *a priori* truths and innate ideas. (Even concepts depend upon the senses.) “*A posteriori*” propositions cannot be known ‘a priori’, must be known by observation.

Famous “Empiricists” you already know: Democritus, William of Ockham and many other ‘nominalists,’ and Sir Francis Bacon.

The great Empiricists of the Enlightenment Era: **Locke, Berkeley and Hume**.

“Substance” — The ultimate substratum of reality that must be there supporting (giving rise to) all our perceptions!

Traditionally, this term is supposed to name whatever is the **‘most basic independent reality.’** “*That which exists by itself in need of no other.*” It is the “basic stuff” *not* qualities of stuff, *not* our perceptions of stuff. The problem is — “this term is ‘supposed’ to ‘name’ underlying reality.” So some philosophers conclude that all we ever have is ideas and names!

Do we merely ‘suppose’ real substance is there...really there....**independent of** our perceptions?

Qualities don’t just float about...they have to be OF something, right? But *what* exactly...and how do we know... and once we have an ‘idea’ of it, even a clear and seemingly irresistible innate idea of it...what would we test/check the idea against?

You might say: I have a very strong idea that substance is there. But what you have is an idea. **That’s the catch.**

Even the great empiricist Locke said: “...not imaging how these simple ideas can subsist by themselves, we accustom ourselves to suppose some substratum wherein they do subsist, and from which they do result, which we therefore call substance.” [Essay, II: xxiii] He just said: we ‘accustom’ ourselves to ‘suppose’ and we ‘call’ it (name it) substance!

Willing to be more consistent, David Hume said that we have no impression or idea of this thing called substance!

Skepticism — [From Gk. *skepsis* — enquiry, questioning]

In this context, skepticism can serve as a positive posture that sustains serious epistemological **doubts**, questioning the epistemic status of belief claims and the methods of justifying those claims. It may also be a technique for countering such claims, or provide positive arguments for the suspension of judgment on particular matters.

Skepticism isn’t merely ‘nay-saying’ or denial. However, it *can* lead to the utter denial of the possibility of knowledge.

Sir Francis Bacon

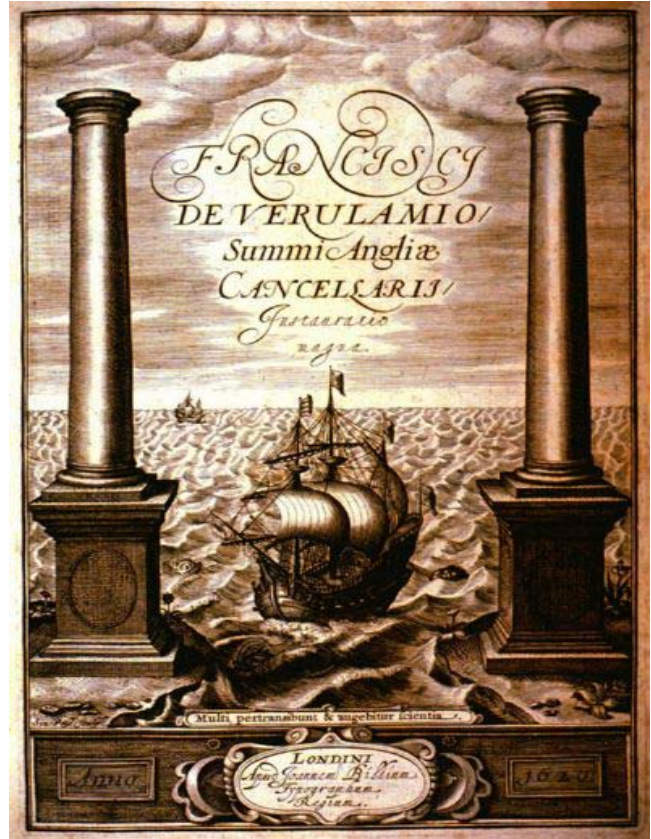
“KNOWLEDGE IS POWER”

Francis Bacon has been hailed as the Father of Modern Experimental Science, yet he was not a scientist. He is included in our voyage, yet he was not an academic philosopher. He was a lawyer, statesman, essayist and historian. A precocious son from a prominent London family, he rose as high as Lord Chancellor of England and was knighted by King James I in 1603. His political career was tainted by hardship and scandal and he left the courtier's life in 1620, embarking on his real 'life mission.' He died deeply in debt in 1626.

We give him a pedestal in our Hall of Fame because he was a philosopher of science...the first articulator of the scientific-inductive method. He prophetically heralded the powerful potential of science, not just to understand nature, but to improve our quality of life.



(1561–1626)



From the frontispiece of one of his works. Highly symbolic! Come tell me how the imagery expresses the Enlightenment

Fascinating Facts About Sir Francis: And some name-dropping!

He studied at **Cambridge** but said of his teachers: “They are men of sharp wits but are shut up in cells with **Aristotle** as Dictator”!

He had **William Harvey**, who discovered the circulation of blood, as his personal physician. He had **Thomas Hobbes** as his last secretary-amanuensis. **Immanuel Kant** put a quote from Bacon at the front of his masterpiece *Critique of Pure Reason*. The **Royal Society** (for the Improvement of Natural Knowledge) wasn't formed until 1662, but Bacon had tried to persuade **King James** to establish just such an institution several decades before! Many members of the Royal Society considered Bacon their intellectual godfather. Bacon had a childless marriage to Alice Barnham, but is widely rumored to have been a homosexual.

There are a few Elizabethan Era scholars who believe that it was actually Bacon who wrote the plays attributed to **William Shakespeare!**

He died from a cold he caught while stuffing a fowl with snow. He was experimenting with the effects of freezing for the purpose of preserving food! Think of him the next time you buy Stouffers. But there's more on this great writer....

You can appreciate this ‘good sir knight’ as an extraordinary transition figure in the shift from MEDIEVAL to MODERN. Bacon ‘christened the ship’ that launched the Enlightenment Scientific Enterprise, and was a ‘patron saint’ to 17th and 18th c. scholars. But he is also highly esteemed by more recent thinkers:

The Pragmatist John Dewey named Sir Francis Bacon as the *real* founder of modern thought! (Most people say Descartes.) Science writer Loren Eiseley credits Bacon ‘more than any man of his time, with **seeing the universe as a problem to be examined and solved** rather than as an eternally fixed stage upon which man walked.’ [*The Man Who Saw Through Time*]



(Remember how the Medieval Minds viewed the world?)

Richard Rorty describes as ‘Baconian’ the: “turn *away from* science as contemplation of eternal truth *to...*

science as instrument of social progress.” [*From Modernism to Postmodernism*]

So you can see the paradigm shift being attributed to him, and rightly so. Epistemological Method is crucial!

Bacon was the first influential writer to passionately promote the new ways of knowing the world. This of course would mean that we must cast off the old ways. His writings were like a declaration of war on ignorant stagnant traditions.

No wonder he has been so often hailed as the ‘prophet’ who led humanity into the ‘promised land’ of scientific knowledge.

Keeping with that biblical imagery, it is interesting that Bacon identified the wrong ways of thinking as **idols**.

Idols are false things we wrongly adore thereby missing the truth...so the metaphor is apt. And Bacon’s descriptions of these idolatrous ‘hindrances to knowledge’ are quite interesting:

1. Idols of the **Tribe** – Tendencies in human nature such as imagining that the senses give a direct picture of objects...
2. Idols of the **Cave** – People’s inclination to interpret experiences according to their own private theories...
3. Idols of the **Marketplace** – Assuming that words name something when they do not...
4. Idols of the **Theatre** – Adhering to dogmatic traditions which do *not* accurately convey the Cosmos any more than stage-plays portray true life...!

These idols must be torn down and replaced with careful, methodical investigation of nature.

Bacon also had something to say that applies to the Rationalist vs. Empiricist Debate! Investigators are like **Ants** running around collecting bits to use but without any pattern. Traditional philosophers are like **Spiders** spinning out webs of intricate conceptions from their own inner being. But the true scientist should be a good **Bee**! A bee gathers its materials from the flowers of the garden and the field, but transforms and digests it by a power of its own.

True scientists cooperate in gathering data, experimenting, interpreting, and offering careful conclusions.



Just a few of his quotable quotes:

“The true goal of the sciences is none other than this: that human life be endowed with new discoveries and power.”

“The research into final causes, like a virgin dedicated to God, is barren and produces nothing.”

“Words are but the images of matter, to fall in love with them is to fall in love with a picture.”

“A little philosophy inclineth man’s mind to atheism, but depth in philosophy bringeth men’s minds about to religion.”

His Important Publications: (He also wrote works on Law, History, and even verse translations of seven biblical Psalms...but alas, he is probably *not* the true author of Shakespeare’s plays! When would he have foundeth the time anon?)

1597 *The Essays* These brought Bacon literary fame and cover a range of topics such as ambition, love, revenge, duty and religion.

1605 *On the Advancement of Learning* Analyzes the shortcomings of human knowledge, proposes *inductive method*, argues for man’s power to control nature, and classifies the branches of learning as related to the faculties of the mind.

1620 *Novum Organum* Describes the false attitudes (“idols”) which lead us astray and impede our progress. Opposes argument from authority... the chief method of Medieval Scholastic learning and discourse! (Remember the Medieval Era?)

1623 *De Augmentis Scientiarum* An expansion of *Advancement of Learning*, in Latin.

1627 *New Atlantis* Describes an ideal state where true science would be encouraged by the government for the benefit of all.

THREE GREAT ENLIGHTENMENT RATIONALISTS

Rene DESCARTES 1596-1650

"I think therefore I am."



"Common sense is the best distributed commodity in the world, for every man is convinced that he is well supplied with it."

Le Discours De La Methode, pt. I 1637

"I could not possibly exist with the nature I have, that is, one endowed with the idea of God, unless there really is a God..."

Meditations, pt. 3 1642

Baruch SPINOZA 1632-1677

"God is the cause of all things,
which are in Him."



Gottfried Wilhelm LEIBNIZ 1646-1716

"God is the ultimate reason of things, and the knowledge of God is no less the beginning of science than his essence and will are the beginning of things."

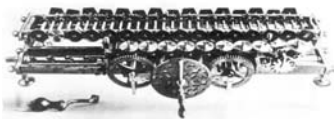
Letter on a General Principle Useful in Explaining the Laws of Nature, 1687

"Two things are identical if one can be substituted for the other without affecting the truth."

Table de definitions, 1704

"It is the knowledge of necessary and eternal truths which distinguishes us from mere animals, and gives us *Reason* and the sciences, raising us to knowledge of ourselves and of God. This in us is the rational soul, or *Mind*."

Monadology, section 29, 1714



"This is *my* calculating machine!" 1673
(He based his on an earlier model by Blaise Pascal)

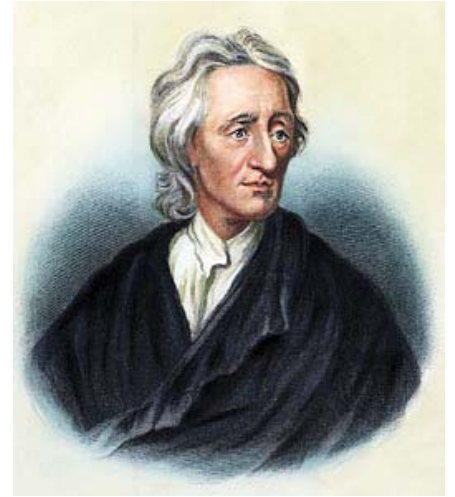


THREE GREAT ENLIGHTENMENT EMPIRICISTS

John LOCKE 1632-1704

“Reason is Natural Revelation, whereby the eternal Father of light and fountain of all knowledge communicates to mankind that portion of truth which he has laid within the reach of their natural faculties.”

An Essay Concerning Human Understanding, Bk. 4, ch.19. 1690



George BERKELEY 1685-1753



“The existence of God is more evident than that of man!”

“All the choir of heaven and furniture of earth—in a word, all those bodies which compose the mighty frame of the world—haven’t any subsistence without a mind.”

Treatise Concerning the Principles of Human Knowledge, pt. I 1710

“We have first raised a dust and then complain we cannot see.”

Treatise Concerning the Principles of Human Knowledge, pt. 3

David HUME 1711-1776

“The heart of man is made to reconcile the most glaring inconsistencies.”

Essays, Moral, Political and Literary, 1742

“The Christian religion not only was at first attended with miracles, but even today cannot be believed by anyone reasonable without one.”

An Enquiry Concerning Human Understanding, 1748

“Reason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them.”

A Treatise on Human Nature, bk. 2. 1739



THE RATIONALISTS

Rene Descartes (1596 – 1650)

Descartes' Dream: At the tender age of 23, Rene had a **glorious vision**. Not of God or Heaven or the Blessed Virgin...but of the Unification of all KNOWLEDGE. Remember the tumultuous times in which he lived.

(A good essay question: Was Descartes the Last Medieval Man...the Best Renaissance Man...or the First Modern Man?)

With old certainties shattered, and the new sciences adding astonishing amounts of information, and skepticism rising...("Tis all in pieces, all coherence gone...")...Descartes was profoundly aware of the need for new methods and a firm foundation. Was there a way to have God and Galileo?

In 1637, Descartes wrote: *Discourse on the Method of Properly Guiding the Reason in the Search of Truth in the Sciences* as a preface to his works on Optics, Meteorology and Geometry. In 1641 he published a philosophical masterpiece: *Meditations on the First Philosophy in which the Existence of God and the Real Distinction of Mind and Body are Demonstrated*. This marvelous work, written in the first person, eloquently expresses the need to sweep away all the accumulated errors and start afresh. It offers, not a scientific exposition, but a dramatic private voyage from insane doubt to serene certainty! What would you utilize to strip away all prejudice and opinion and establish an unshakable foundation for all knowledge? How about radical methodological hyperbolic **DOUBT!** Yes, beat the scoffers at their own game. Doubt everything that can be doubted and then somehow **prevent** that from leading to **skepticism**. (Descartes was NOT a skeptic!) That would be quite a journey!

[By the way, if you think Descartes was quaint or silly to imagine the deceiving malevolent genius (evil demon) as a 'spoiler' just look at the updated version in epistemology discussions: How *do we know* we aren't disembodied "brains in a vat" being stimulated by ingenious mad neuroscientists! There is no conceivable 'test' that could somehow be conducted by your brain from outside your brain! Is there a 'test' to prove this isn't all a dream...a test that you could distinguish from the dream? No, you could be dreaming the test! This is so "Matrix" isn't it?]

What can serve as a sure **foundation** for true knowledge? Logical axioms? Mathematics? Theological dogma? Sense Data? What is the ONE thing you can say for which no alternative explanation (no matter how wildly implausible) can be given...the one certainty that no possible doubt can shatter?

The Cogito "I AM THINKING!" Even if I'm deceived, even if I'm wrong, even if I doubt...even if I have no body, even if there is no world, even if there is no God...hey I'm still thinking! I cannot think that I am not thinking, can I?

And I have to exist to think, don't I? At the very *very* least—there is (a) thinking (being) occurring. Hmm...

So it came down to that: "The proposition 'I exist' is necessarily true every time I pronounce it or mentally consider it." Great. The problem is—how do you then proceed to build up an entire edifice of knowledge from that purely subjective and self-contained state? How do you even know there is a world external to your mind?

Remember that here we are concerning ourselves with the simplest epistemology problems. What is substance? Can we bridge the *appearance vs. reality* gap? How does an intangible mind connect with a tangible world?

Descartes finds his way out of his solipsistic mental prison, rather 'indirectly,' by first positing God's existence.

[To doubt is imperfect because a perfect being would be omniscient and thus doubt-free. I doubt, as I am imperfect. I only realize I'm imperfect because I have an idea of perfection. Where might such a concept come from? Not from an imperfect source. Must be from a perfect source. Only God is Perfect. God Exists!] So, 'thank God' we can trust mathematical physics and thus describe the external world. What all can be *known*? I am; that is certain. God exists; that's good. And Substance? Is it THERE? Do I **sense** it directly? No. Then how do I know? Because I have an INNATE IDEA of it. It's a handy thing that Descartes was a Rationalist because a LOT depends on these inborn God-given innate ideas. But have we truly emerged from the solipsistic prison cell?

Has Descartes "connected" the **subjective** realm to an **objective** world? Are we "cut off from the real"?

If in order to understand, describe and KNOW the real world we have to strip it of its sense-experienced qualities and depend on an idea of innate ideas...how FIRM a foundation is that? Exactly what and where IS substantial reality? **In** our minds or **out** there? (Say: '*out there*'...how do you know?...say: '*I have an idea of it.*' Hmm.)

The famous unsolved problem Descartes bequeathed to subsequent philosophers: **MIND – BODY DUALISM**.

He has defined mental substance and material substance in a way that seems impossible to reconcile, which made some say only **MIND** exists (“idealism”) and others say only **MATTER** exists (“materialism”).

Anyone that wants to posit the existence of *both* mind *and* matter has the burden of theorizing *how they relate*.

Baruch Spinoza (1634 – 1677)

Spinoza detected a glaring inconsistency in Descartes’ system having to do with the nature of **Substance**. If Substance is defined as ‘that which exists independently’ then Spinoza reasoned that there can only be *One* such reality. Only One substance is independent and infinite and that is God. Spinoza believed that Descartes erred by distinguishing between **Infinite (God) Substance** and **Finite Substances (Mind and Body)**. What actually exists in Spinoza’s system? Only God and his attributes of thought and extension. From our limited points of view we mistake the different modes (modifications) these attributes can take as having their own distinct essence. That’s why we fall into the trap of materialism or idealism. Both of those human perspectives are wrong, but even worse is confusing the perspectives and creating a dualistic picture! What we need, says Spinoza, is to see reality from **reality’s own perspective**. So Spinoza solves the problem of dualism with a kind of **MONISM!** And by equating God (‘infinite substance’ which is ALL that exists and appears in different modes) with Nature and Everything...it is clear that Spinoza is a **Pantheist!** Here is a case of pure rationalism leading to pantheistic-monism and a completely immanent idea of ‘God.’ Where in all that does the human being find blessedness and joy? In a Stoical fatalism being touted as ‘liberating.’ You have to wonder where Rationalism will take us next. To the strangest thinker yet!



Gottfried Leibniz (1646 – 1716)



Leibniz was one of the greatest geniuses in the history of philosophy...a real polymath...and probably the one who deserves credit for inventing infinitesimal calculus. (Credit that went to Isaac Newton.) But, will he finally solve the epistemological dilemmas by spinning out one of the most brilliantly rationalized systems ever devised? Like Spinoza, whom he met, he wanted to correct the problem of Cartesian Dualism. But unlike Spinoza, he didn’t want to end up with pantheistic monism.

So, unlike Descartes who divided Substance into Infinite and finite and finite substance into Mind and Body...and unlike Spinoza who saw only One Substance (Infinite Substance)...Leibniz reasoned that there must be an infinity of substances created and maintained by God. **His entire system rests on a few rationalistic principles:**

Principle of Identity—Here he categorizes all propositions into either Analytic or Synthetic, and reasons that from God’s point of view, *all* true propositions are necessarily true. Everything that *is* could not have *been otherwise*. Even synthetic ‘facts’ that seem contingent are really analytic. If that logic applies to the world, then the world is as it must be.

Principle of Sufficient Reason—“There cannot be any true fact or proposition without there being a sufficient reason why it must be so and not otherwise.” For everything that exists, there is a reason why it exists and why it exists exactly as it does.

Principle of Internal Harmony—God, who is of course perfectly rational and good, created the maximum of existence. He entertained all possibilities and actualized only what would guarantee maximum existence and harmony (“metaphysical and moral perfections.”)

Okay fine, but WHAT exists? Mind or Matter? What are the ultimate constituents of reality?? What is Substance?

The amazing answer—**MONADS!** Imagine the conversation that ensues? *What are MONADS? Are they like atoms?* No, they aren’t ‘matter.’ *Does matter exist?* Well, not as some ‘basic stuff’ but like a ‘quality’ that emerges from the relations between monads. Monads are ‘units/unities of mental force.’

Why call them ‘substance’? Because they are the simplest, ‘realist’ things that **exist independently** of one another...hence they are the only real substances. *Are some monads ‘psychic’ and some merely physical?* No, then we’d still have our mind-body dualism problem, which Monadology solves. Unless the ultimate bits of reality are mental, there would be no minds at all. All monads are mental entities but some have a higher degree of psychic life-force. *Don’t they ‘cause effects’ on one another?* No, they do not influence each other. *Well then how can we have an intelligible world if all that exists is an infinite array of separate doodads.....* Calm down, first, they are Monads, not doodads, and they ARE related. *Do they ‘see’ each other?* Well, no, they are self-sufficient and windowless. *Then how can you say that they are ‘related’?* It’s O.K., each monad is so created by God that it exists in perfect relationship with every other monad. Monads, each one a mirror of the entire world, cluster around and comprise the world according to the wonderful harmony pre-established by God in this...

“The best of all possible metaphysical systems!” Hmmm, All-Righty Then.

If the foregoing Rationalistic speculations have left you scratching your head and aching for some hard data, common sense and a real world to test your hypotheses against...we will now turn to the great Empiricists. Surely they will provide something **solid**. *Won't they?*

THE EMPIRICISTS

John Locke (1632 — 1704)



Locke was a physician who once said that if he practiced medicine like theologians practice theology...his patients would die. He was a member of the Royal Society and friends with Newton and Boyle, so he was well aware of the newly emerging sciences. When he read Descartes' *Meditations*, his interest in philosophy was kindled. In 1690 he published *Essay Concerning Human Understanding*, the first thorough-going modern attempt to offer an **Empiricist** account of how we know. Rejecting **Rationalism**, Locke 'wiped the slate clean' and eliminated innate ideas.

We have **no innate ideas**...not of Platonic Forms, Necessary Being, First Cause, nor God. The mind, at birth, is a blank slate. Everything you now have 'in there' came via your **senses**. Everything you know comes from experience and introspection upon that experience. [Sensations and Reflections] The mind perceives or 'reacts to' something out there and then reacts to that perception. Locke makes some other important distinctions. [Simple Ideas and Complex Ideas] Simple ideas come through one sense and can not be reduced to anything simpler. Combinations of simple ideas are complex ideas, where we compare, relate things, make generalizations, *etc.* [Primary and Secondary Qualities] Primary qualities are *in* the external objects. Secondary qualities are *in* our minds, having been somehow caused by the objects out there, and that triggers our complex ideas. So there *is* a real world of substance, and our mind RE-Presents it. External reality is not duplicated, but represented by our minds.

This is Locke's "**Representative Realism**." A good scientific improvement on silly naïve realism that supposes perception is a straightforward affair of 'what you see is what you get.' And of course a correction of Cartesian Realism, which was convoluted and had to have innate ideas to make it work. Problem solved. Or not.

The *Essay* has been hailed as one of the all-time classics of philosophy, but it did incur heavy criticism. (Leibniz even wrote *New Essays on Human Understanding* to defend innate ideas but chose not to publish it!)

Has Locke really bridged the Appearance vs. Reality gap? Has he provided a firm foundation for knowledge? Has he shown us the real world? Our senses just don't 'render unto us' a fully, perfectly accurate 'picture' of the world. Has Locke's epistemology been able to say which of our ideas conform to reality and which are fanciful? Scientific empiricism can only ever give us probable assertions, never certainty. It can offer particulars but not general truths. As a basis for knowing, can empiricism really be free of non-empirical aspects?

For all the insistence on sense data and no innate ideas...can empiricism reach out and touch **SUBSTANCE**? Substance, you recall, is defined as independent reality (*reality-in-itself*, not just *in our heads*.)

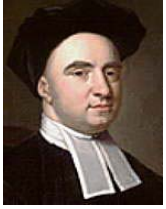
What makes something real and not just a dream? What makes an object a real object and not just a floating collection of perceived qualities? The fact that qualities have to be OF something. You can't just have ethereal qualities. Well, substance is what qualities are qualities OF.

How did poor ole Descartes, who did not trust the senses, 'know' that substance is really there outside the mind? It was an *innate idea*. But Locke has vehemently rejected innate ideas as so much 'metaphysical rubbish.' So how will this clear-headed empiricist account for **substance** actually being there? How do we get our ideas of objects?

Locke said when we observe that several simple ideas constantly appear together, we presume they belong to one thing. We cannot conceive of them as existing without belonging to some thing. We suppose a *substratum* there, 'holding the qualities' or giving rise to them. **Wait a minute!** How is 'we suppose a substratum' any more solid than 'we have an inborn idea of substance'? Could it be that **Mr. Empiricist himself HAS NO IDEA?** *Hmmm.*

Locke's account of this key ontological category is amusing and picturesque, but I think you'll agree, a tad vague: "...if anyone will examine himself concerning his notion of pure substance, he will find that he has no other idea of it at all, but only a supposition of he knows not what support of such qualities which are capable of producing simple ideas in us...If anyone should be asked, 'What is the subject wherein colour or weight inheres?' he would have nothing to say but, 'The solid extended parts.' And if he were demanded, 'What is it that solidity and extension inhere in?' he would not be in much better case than the Indian..., who in saying that the world was supported by a great elephant, was asked what the elephant rested on, to which his answer was, 'A great tortoise'; but being pressed again to know what gave support to the broad-backed tortoise, replied— something he knew not what." [Essay, Book II, ch. 23, section 2]

Locke shied away from the rather shattering conclusions of his own program! But do you see the problem with saying **all knowledge comes via the senses** yet being unable to offer a 'direct **connection to**' or even a coherent account of **substance**? This would either be the end of Empiricism or the end of coherent metaphysical systems that account for **external reality**. Guess which one it was? A more radically consistent empiricist is up next. You have to like him!



George Berkeley (1685 — 1753)

Berkeley excelled in mathematics, optics, and physics. He read the works of Francis Bacon, Descartes, Leibniz, Kepler, Newton, and of course, John Locke. When he was still in his twenties, he published important treatises on perception and epistemology. They were not best sellers, and Berkeley was not roundly admired by all his peers. But for us he is a lot of fun.

It might surprise you when you realize that his philosophy makes 'more sense' than Locke's.

If the only way we ever 'get to' primary qualities is through secondary qualities, and the only things we can directly know reside in our minds...then maybe the primary qualities are *also* in our minds. If everything we know is what we perceive, then we should not claim to have contact with unperceived substance. It is more economical and consistent to declare that

ALL reality is idea and perception, and there is no material 'substance out there.'

Thus Berkeley's famous motto: **ESSE EST PERCIPI: TO BE IS TO BE PERCEIVED**

Things **exist** only insofar as they are **perceived**. If a tree falls in the forest and no-one is around to hear it fall, does it make a sound? **NO!** Sound is experienced noise. Where is that? In a mind, not in an unconscious tree or a theoretical forest. **There is no 'thereness'...only 'awareness.'** What makes us mistakenly suppose that objects are 'out there' apart from our minds? (Berkeley would say that our minds translate secondary qualities into primary qualities and we do it so naturally, so easily, that we confound ourselves into thinking in terms of an external material world!!)

His critics got annoyed at his denial of matter. But he doesn't think he's denied anything. All he has 'denied' (shown to be false) is *non-existent* anyway! All he's 'gotten rid of' is illegitimate, incoherent, ungrounded rationalisms that try to theorize a reality that exists *apart from* our perceptions. Good riddance to that mysterious substratum! No-one could prove it or account for it, could they? It was an abstract notion, an 'innate idea,' a confusion, an artificial distinction between qualities, a chimera...so who needs it! Be gone with it. **No matter!**

If you think about this long enough, you might agree with Berkeley! It really does make more sense to say that nothing exists *apart from* (independently of) our perceptions, than to '*suppose*' some mysterious unintelligible substance...or to 'abstract' an external reality that is supposed to be more real than images.

Try to refute him. Like Samuel Johnson who kicked the stone and said: "There, I have thus refuted him." Berkeley could say, poor fellow, you haven't even proven that you have a foot. Where was the **pain** you just felt...in the rock? **No.** It was *in your sense experience*. But critics want to say: "I am really thinking of something that exists *outside* my mind!"

And Berkeley can say: "**There's a thought!**" And where is that? You get the point.

Now what keeps Idealism/Immaterialism from becoming sheer subjectivism? What assures us that our perceptions are dependable? How can finite perceivers guarantee that perceptions will continue? **Will everything suddenly vanish?** Don't worry. The very orderliness of our perceptions implies an Infinite Mind! And this is the God who has created everything. (All the minds and ideas, that is.) Things won't disappear when we don't happen to be perceiving them.

God is always there as the Omnipresent Perceiver! This metaphysical reassurance was put in a limerick by Ronald Knox:

**There was a young man who cried: "God,
I find it exceedingly odd
that this tree I see
should continue to be,
when there's no-one around in the Quad."
"Young man, your astonishment's odd.
I am always around in the Quad.
And that's why the tree
will continue to be,
since perceived by... Yours Faithfully, God!"**

What might we end up with if we carry forth the Empiricist program with relentless rigor and don't happen to posit a 'god' to guarantee that our ideas and perceptions are reliable? We end up with Hume's unique brand of skepticism. Hume was honest and consistent enough to take empiricism to a devastating conclusion. He would not be content with naïve common sense. Nor had he any patience for bloated & contrived metaphysical systems. Nor would he bow to a God that others believed in *via* circular reasoning. Yet, he was also jolly and earthy enough not to succumb to a nihilistic skepticism but to "mitigate" it with nature itself! He bravely exposed the severe limits of our knowledge, but did so with such modesty, humaneness and disarming wit that he was and still is considered one of the most lovable philosophers in history.

David Hume (1711 – 1776)

Remember Leibniz' distinction: "There are two kinds of truths— Truths of reasoning and truths of fact." This distinction between "**Analytic**" propositions and "**Synthetic**" propositions divides knowledge into:

Statements we can know to be true by virtue of the words used, without looking at anything —
[True by definition such that their negation would be a self-contradiction...thus: **Necessarily** true.]

Statements we can know to be true or false by looking at the facts about the way things are —
[True or false **not necessarily** but contingent upon observable facts.]

If Mom wants to hang clothes out and asks you if it is raining, and she expects you to tell her the truth...how might she appreciate being told that: "A rainy day is a wet day." Or: "It cannot be the case that rain exists and rain does not exist." Have you told her the '**truth**'? How is it that you haven't lied, and yet, you've told her *nothing helpful at all*?

In other words: What is the epistemological status of Analytic Propositions? Can they *help* inform us about the world? According to Hume, Analytic Statements are mere "**Relations of Ideas**"...verbal truths, tautologies, redundant statements that are *uninformative*. As an empiricist, naturally he would disparage these alleged *a priori* foundations of knowledge. So, what kinds of statements *can* tell us helpful truths about reality?

Those would have to be "**Matters of Fact**." Things known *a posteriori*, 'after' making observations. Fine. But how confident can we be that all our sensory re-presentations of reality, imprecise and indirect as they are, connect us to true reality? And can we ever build a harmonious system out of a vast but unconnected series of sense impressions? Alas, no! Picture a two-pronged fork foraging around for knowledge. **Y** One prong is Analytic and the other is Synthetic. Anything that doesn't 'stick' to either tine simply falls through...it is *utterly meaningless*. The 'knowledge claims' that stick to the Analytic tine may be uncontroversially true, but they are trivial, uninteresting, and actually have no 'external referent.' They *don't help us at all*. Ah, it's a good thing that the Synthetic tine will gather a lot of solid empirical facts and chunks of truth. Right? Wrong. If we are radically consistent, we will have to admit that our beliefs *about* these matters always *reach beyond* the empirical evidence. (Our beliefs *about* these "matters of fact" are not themselves "factual" as they are not based upon sense data. Our beliefs derive from custom, habit, wishful thinking, tradition, expectation, all kinds of notions...but none of that is empirical fact!) To change from the fork picture a moment, think of it this way: We can only observe dots. Lots and lots and lots of dots. But when we try and "**connect the dots**" to create grand explanatory systems or even to devise a satisfying epistemological theory...we have gone and *over-reached* empirical limits.

[The so-called **Problem of Induction** is that no matter how many 'particulars' are observed...if you state a 'universal' about them, you have *had* to pre-suppose the uniformity of nature. You have tried to grab for rational certainty that is simply not available.]



Back to Hume's fork: Appallingly, a lot of what we *think* we can be so sure of...slips off the fork and isn't knowledge of *any* kind. What we can 'know' through pure reason is nothing important and what we can 'know' through empirical investigation is nothing satisfying. What we are left with **very little knowledge** (but an awful lot of *nonsense*.)

Hume has done away with Theism *and* Deism, as God's existence cannot be proven by 'necessary existence or First Cause.' He has also dealt serious challenges to Science and Philosophy. Think what Hume's Fork would do with Plato's Form's, Aristotle's Prime Mover, Anselm's & Aquinas' proofs of God, Descartes' cogitating Self, Locke's mechanistic cosmos, Newton's Laws, Berkeley's Master-Perceiver, and so on...good grief, *what is left*? Heraclitus' *flux*, perhaps, but are we left in skeptical despair? The scope of human reason and knowledge is quite pitifully narrow, and everything we care about lies beyond those limits! So, after all, we do **not** live by reason, but by instinct and sentiment and passion.

Picture Hume in his study, writing his treatises and being enshrouded by philosophical melancholy. He admits that reason *cannot* dispel the gloomy clouds, but, "most fortunately it happens that...nature herself suffices for that purpose." A good dinner, conversation with friends, a game of backgammon...and radical skepticism seems ridiculous. Hume was skeptical about the over-blown pretensions of reason *and* religion, but allowed for human nature and its natural processes of belief formation. We may modestly pursue knowledge without pretending we have independent justification *or* higher truth.

Hume died on August 25th, 1776 and has been a catalyst for philosophers from Kant until today; and something of a *secular saint* as well!

"I have always considered him, both in his lifetime and since his death, as approaching as nearly to the idea of a perfectly wise and virtuous man as perhaps the nature of human frailty will permit." Adam Smith

If you think that philosophy must end here because Hume so relentlessly wielded Ockham's razor that there doesn't seem to be much chance for the problems of metaphysics and epistemology to be solved, think again! (What would we do for the rest of the course?) Seriously, what did happen is that Hume helped awaken a giant. Could someone come along with a titanic intellect and challenge the prevailing senses-based **empiricism** *without* falling back on insupportable **rationalism**? Could someone take the best of both approaches, eliminate the weaknesses, give us an unassailable account of how we know the world, and still leave a *reasonable* place for belief in God? A tall order. But the diminutive Kant (he was 5'2" & 100 lbs.) stands tall as one of the Pillars of Western Philosophy.

☞ Immanuel Kant (1724 –1804) ☞

Being from a strict pietistic family, Kant did consider becoming a Lutheran clergyman. But at university he soon discovered that he enjoyed science and philosophy much better. (Will one of you follow his lead, and go on to contribute a more Biblical understanding of philosophical/worldview issues?!) Kant eventually became a highly esteemed professor who wrote and lectured on Physics, Geography, and Astronomy as well 'all things philosophical' (metaphysics, logic, epistemology, ethics *and* aesthetics...he could do it all!) He had studied under a systematizer of Leibniz' philosophy, but was already 'critical' of this rather complacent God-guaranteed **a priori** metaphysics. (He compared such metaphysical speculations as '*spun out of nothing*' like the mystical pantheistic spiritualism of Emanuel Swedenborg!)

Later he credits HUME with 'awakening him from dogmatic slumbers.' This probably means that he took the conclusions of Hume's skeptical whittling as a catalyst for his mature "critical" works. Hume had left Religion *and* Reason in shreds, and Kant fully grasped his role as a philosophical restorer. He would serve as a reappraiser of the entire edifice of human knowledge. He would rework the interface between perception and reality, between epistemology and metaphysics. If possible, he would make "metaphysics" scientific, *not* speculative. His "Copernican Revolution" was to demonstrate that our view *of* the world is shaped by the conceptual scheme we impose *on* the world. Our minds do not passively conform to the objective world; the world conforms to our active mental faculties. We 'know' the world as it 'appears to' our built-in perceptual structures.

Kant's revolutionary insight was that there *are* **synthetic a priori**s! (Hume had said that all *a posteriori* judgments are synthetic **and** all synthetic judgments are *a posteriori*. Kant disagreed with the 'vice versa'!) There *can* be valid synthetic *a priori*s because we actively process reality.

Kant also 'settled' the issues between the Rationalists and Empiricists. Both approaches held that the knower has to somehow conform to the world, but disagreed on what was the most trustworthy mode of conformity! And both approaches had generated serious unresolved problems in their attempts to show *how* the knower knows what he knows!

Let's picture little Professor Kant resolving the big dispute:

☞ **R** — Sense data alone cannot be the basis for knowledge...we must have inborn, **innate ideas** and **a priori** truths about the nature of reality.

☞ **E** — No! There are no innate ideas...the mind at birth is a **blank slate** waiting to receive sense data. We know everything we know through the **senses**.

☞ **K** — I reject 'innate ideas' *and* I reject the 'blank slate' theory! (He turns to the disputants and proclaims):

My dear R, **THOUGHTS WITHOUT CONTENT ARE EMPTY!** Mental ideas without sensory input are vacuous. And worse, rational concepts without the constraints of experience aren't just empty; they're dangerous because they spawn metaphysical illusions. If these fictions become dogma we will never be enlightened.

The **E** is delighted at this scientific approach...but then Kant turns and says:

My dear E, **PERCEPTIONS WITHOUT CONCEPTS ARE BLIND!** You would sense, you would see, but you would not know what to make of it. Sense data alone is superficial and disconnected. The human naturally craves concepts that have to '*go beyond*' or '*be had apart from*' empirical limitations.

We want more understanding than mere perceptions give us.

The **R** is pleased at this dismissal of sense data as the basis for knowledge...but Kant continues:

But we should not look to other worlds for true comprehension of reality. Metaphysical speculation must cease! To forsake the world of sense data as too limiting to the understanding of reality is as foolish as the Platonic dove who thought she could fly more easily without wind resistance! She would get nowhere on the wings of empty thoughts!

Now the disputants are wondering where the needed '**concepts-apart-from-percepts**' will come from. Kant says: ☞☞

They're right here! We ourselves wear the "irremovable goggles" of existence, space/time, cause-effect, orderliness, *etc.* The judgments we make about reality are thus *a priori* (necessary and universal) and synthetic (informed by experience.) Thus we can have knowledge via our own built-in conceptual apparatus and sense perception.

THE UNDERSTANDING ITSELF IS THE LAW-GIVER OF NATURE.

So this would seem to settle the dispute and account for *how* we know everything we *can* know. But what about what Kant says we *can't* know? What are the LIMITS of knowledge? Are there any pure concepts, *untainted* by the senses, *not* stemming from our own faculties? What about those beautiful ultimate realities and Higher truths???

Aren't there some truths we can know because they *are* God-given...such as, say, GOD?! How about Absolute Reality

(reality-as-it-is-in-itself, unmediated by a finite mind?) ❖❖ Can we look through those world-organizing goggles of ours and know any “**higher truths**”? In other words, since these goggles *enhance* the value of sense-data by rendering it ‘universal and necessary,’ can't they also *extend* the domain of knowledge *past* the narrow limits of sense experience?? Kant says they Kant!

We do **not** ‘know’ things *as they are in themselves* but only *as they appear to us*. In fact, it is because of us and our cognitive faculties that things *appear* to be in space and time and have causal connections. **THIS is the world we can know:**

The **phenomenal** world. (Things knowable by the senses & mental faculties are ‘**PHENOMENA.**’)

The **NOUMENON** lies forever beyond the mind-imposed forms of space-time, causation, *etc.* The noumenal world is **unknowable**. Naturally we *suppose* there is **Noumenal** reality (or what would be giving rise to the phenomena?) but we cannot know **WHAT** it is. **THAT** it is, yes...we must postulate that. **WHAT** it is, no...we can not know. Kant said that all attempts to reason about the true nature of reality *beyond* the phenomena (surpassing our experiential/conceptual capacities) will end in contradictions.

We do not have the capacity to resolve such ‘antinomies’ and all such ‘over-reaching’ speculations are doomed to fail. *Hmm...*

If something unknowable is the theoretical foundation for the rest of reality...if we can say *that* it is but not *what* it is...if this hopelessly divides reality into two **non-interacting** domains...if it may even be ultimately unintelligible to “postulate” a negative idea like the unknowable

Noumenon...then what will happen to any future efforts to hold coherent metaphysics and epistemology? (**Hold that thought!**)

What about morality and theology? Surely in those areas we want more than appearances. Will Kant deliver? Some ‘critics of the Critiques’ say that Kant demolished speculative metaphysics so he could rebuild something better. Some say that what he denied in the first Critique, he restored in the second. Others say he ‘shut God out of the picture only to slip him back in when needed.’

This is not easy to grasp, but basically, Kant held **ideas** of noumenal reality, the existence of God, the afterlife of our soul, and the universality of moral law. What he said of these obviously vital ideas, is that while they do not extend our knowledge and experience...they can still inspire and guide us. We do not “know” those truths *via* purely speculative reasoning, for that would be to exceed our critical epistemic limits. But by *practical* reasoning, we must believe in them. We must believe, but not claim to KNOW.

As for morality, what could be more certain than the voice of conscience reflecting the moral law within and saying: “I OUGHT”! This is more certain than Descartes “I THINK,” and on this bedrock rest all those ‘higher truths.’ “**I OUGHT, therefore, I can**” implies freedom. (A freedom of will that would not exist if everything came from scientific phenomena!) Moral Law must be universal...and the ‘must’ in the sentence already implies necessity! The moral law implies an afterlife (so we can attain its perfection.) The moral law is authoritative, unconditional and imperative. As such, it *implies* the existence of a ‘lawgiver.’ If there is ‘good’ there is ultimate good (holiness, moral perfection) and this would be a supreme being. Isn't that **God**? Doesn't all that moralizing constitute **knowing**?!

Can we know God exists? Is God an object of sensory experience or the conclusion of a purely rational inference? Kant says No.

“It is thoroughly necessary to be convinced of God’s existence; it is not quite so necessary that one should demonstrate it.”

But haven't theologians and many philosophers ‘proven’ God exists, using profoundly compelling arguments about ‘necessary existence,’ ‘first cause,’ and ‘design’? [Ontological, Cosmological, Teleological] (You may want to review these from the Medieval Era.) Kant rejects the arguments for the existence of God as illegitimate, unsound, or inconclusive. Because all metaphysical attempts to build a bridge to the unknowable Noumenal world from the phenomenal world must fall short! We can't get there from here! (He even called arguments that try to derive the existence of God from facts about the world “Physico --Theological”)

We do, of course, have an *idea* of God. But to Kant, such an *idea* would be **empty**! Remember, “Thoughts without content are empty.” Where would the ‘content’ come from? Sensory experience. ***But we have no such experience.***

Kant pulls the thread out of the celebrated **Ontological Argument** (Anselm's and Descartes') by denying that existence can be a predicate in a definition. Think: Is there any appreciable difference in **1.** conceiving of something that is green, gigantic and jolly...and **2.** conceiving of something green, gigantic, jolly **and existing**? No. The concept hasn't changed. It has not been actualized by adding ‘existing.’ Likewise with ‘that than which nothing greater can be conceived.’ To Kant, ‘existence’ isn't even a knowable feature of reality, it is a category of the mind! There is no way to ‘build a bridge’ (make an epistemological link) from an *idea* of God to the actual independent existence of such a being in reality. The ontological formula is a mere tautology. To proclaim that “a necessary being exists necessarily” doesn't prove anything at all. It may be verbally true of the concept, and it may be a superlative concept, but the concept is empty and cannot show us a God in reality. Also, to work as an *a priori* argument, its negation must involve a self-contradiction. But all an atheist would have to do is reject the concept, and Kant said: “then nothing would be left to contradict”! The Ontological Argument is thus demolished.

You might think that the **Cosmological Arguments** fare better in Kant's Critique, but he sees the ‘ontological phantom’ lurking beneath these lines of reasoning! (The presumed ‘Necessary Existence’ of a First Cause or Mover.) Kant would remind us of our epistemological limits and tell us that it would be illegitimate to apply the **principle of causality** beyond our sense experience.

There simply is no epistemological basis for making any connection, causal or otherwise, between the phenomenal world and the noumenal. That leap is the stuff of metaphysical speculation and illusion...not KNOWLEDGE. And haven't we learned by now: **Knowledge to be knowledge must acknowledge its limits! "It is precisely in knowing its limits that philosophy exists."** Kant had a bit more regard for the **Design Argument** but deemed it inconclusive and limited. He allowed that it might point to a designer-architect, but not to the Divine Creator. Kant, a serene believer, was *not* advocating atheism or agnosticism:

He did not deny the existence of God, just **knowledge of** the existence of God. But now what will happen?

What will Kant's Noumenal—Phenomenal distinction, and his demolition of traditional metaphysics bequeath to philosophy?

What will his human-centered religious and moral pronouncements bequeath to theology?

What impact will his separation of Knowledge and Faith have on Christianity?



Even his ethical arguments were postulates of *practical* reason, argued from *moral* necessity but not *metaphysical* necessity. His belief in the Moral Law was based on the *inner* conscience, which he considered more trustworthy than Scriptural laws 'imposed from *without*.' To Kant, moral actions are in accord with the '**Categorical Imperative**' and are performed out of a sense of *duty*.

How tragic that he seems to have **missed** the beauty of the genuine Judeo-Christian Biblical Theistic view of revealed ethics: **Torah** is a gift of grace from a Holy, Loving God to a redeemed people to show them how to walk in communion with Him. Righteousness is joyous participation in God's redemptive purposes. (The Biblical worldview is so much more than doing your duty and obeying commandments!)

Was Kant a Christian? His "Christianity" was little more than a pedagogic-ethical system, in other words, a way to teach good morality to people who couldn't philosophize it for themselves.

His "Christ" was an enlightened moral teacher whose life on earth set an example.

Kant seems to have missed the Gospel assurance that we can know what Christ has done *and* understand what that means for us! Kant supposed that the 'bridge between the phenomenal world and the noumenal' (which of course *cannot* be built by human sense-experience and cognition) must be constructed by our *need* to believe in morality and freedom.

Did he ever consider that God Himself offers the bridge? Humble acceptance of revelation is a good place to start, and God's self-disclosure truly is a firm basis for metaphysics and epistemology. This acceptance of revelation does not bypass the cognitive faculties and fall into mere fideism. In the Biblical worldview, one doesn't need to "make room for faith by denying the possibility of knowledge." The Living God, who is the source of knowledge and the object of faith, has come to tabernacle among us!

In the end, the saddest thing we can say about this brilliant philosopher is that he never seems to have contemplated the *meaning* of his given name: *Immanuel*.

Immanuel Kant almost single-handedly set the agenda for all 'post-Kantian' philosophy. Some textbooks even begin their chapter on 19th century philosophy with Kant, rather than have him as the Enlightenment exemplar. His impact is inestimable. No important thinker could ignore him. Many used him as their 'point of departure' and some departed more than others! His dissection critiques and unsatisfactory attempts to restore unity left philosophers either searching for wholeness another way, or forsaking the attempt altogether.

As we continue through the course, you will detect a variety of *reactions against* or *concessions to* the '**split-screen picture**' left by Kant. His legacy haunts such diverse positions as:

Idealism, Romanticism, Pragmatism, Logical Positivism, Existentialism, Neo-Orthodoxy.

His severing of faith from objective knowledge helped pave the way to today's:

Religious Pluralism, and Radical Perspectivism.

Where Kant had at least assumed that our mind's categorical scheme imposed upon reality was the same for all of us. But now with *that* assumption discarded, we will end up with multiple competing conceptual schemes and **no epistemological basis for choosing** one over another.

(Today, anything goes, and lives are lived as though every act is a *private* law.



Thus we finish the overview of the Rationalists, Empiricists, and Kant.

Now, to gain a richer appreciation for what an exciting era the Enlightenment was...

the following sections are dedicated to the momentous ideas being published and disseminated.



Immanuel Kant
Zeichnung im Schattenschnitt von Putzsch um 1799
Archiv für Kunst und Geschichte

❧ The Encyclopedia ❧

Full title: *Encyclopedie, ou Dictionnaire Raisonne des Sciences, des Artes et des Metiers.*

Edited by:

Jean le Rond D'Alembert (1717–1783) ~ A mathematician and philosopher.

Denis Diderot (1713–1784) ~ A novelist, dramatist, and leading Enlightenment spokesman.

Not to be confused with those 'venerable' monks who salvaged the remnants of classical wisdom during the Dark Ages, Diderot's ENCYCLOPEDISTS were radical intellectuals who collaborated and compiled a massive showcase of 18th century wisdom. Over 30 volumes full of Enlightenment learning and ideology, including arts and craftsmanship...amassed to educate *and thus to improve* society. Diderot sincerely wanted this work to change the way people thought. Despite its critics, subsequent volumes continued for more than twenty years, until it eventually consisted of over 72,000 entries and 2,500 engravings. Among the impressive contributors to this emblematic Enlightenment enterprise were such luminaries as Voltaire, Montesquieu, Rousseau and Baron d'Holbach.

It was the most enormous publishing venture ever seen, and it embodied the new 'shackle-breaking' attitudes toward knowledge. These progressive attitudes were decidedly anti-authority and anti-clerical. They extolled Baconian science, philosophical empiricism, and the religious tolerance that should result from '*reason over faith.*' It was like a Bible to Enlightenment 'free-thinkers.' Seen as dangerously humanistic, the project was suppressed *by royal decree* in 1752 & 1759.

Interesting Facts:

Diderot dedicated the Encyclopedia to Francis Bacon, whose work he believed had provided the 'map' of what mankind had to learn.

D'Alembert considered the greatest men of history to be philosophers & scholars, not kings & conquerors. His 'Hall of Fame' included:

Francis **Bacon**, Isaac **Newton**, Rene **Descartes** and John **Locke**. The 'hall's foyer' also included Galileo, Harvey, Huygens, Pascal, Voltaire, Montesquieu and Rousseau! 📖 Benjamin Franklin and Thomas Jefferson were subscribers to the Encyclopedia!

D'Alembert, in his article 'Dimension' may be the first thinker to suggest that *time* be regarded as a fourth dimension!

When the publication was banned, Diderot and his contributors continued to work "underground." There was also an order to seize all yet unpublished texts. Luckily, Diderot was invited by the man in charge of censorship, Guillaume Malesherbes, to hide the manuscripts in a very safe place—Malesherbes' own home! This liberal enlightened government appointee believed passionately in the freedom of the press!

Characteristic Diderot: [See: *On Man* and *A Philosophical Conversation*]

"The first step toward philosophy is incredulity."

"A **Deist** is someone who has not lived long enough to become an **Atheist**."

(Indeed, there is evidence that his partner D'Alembert *did* move from a tentative and impersonal **theism** to materialistic **atheism**.)

"The priest, whose philosophical system is a tissue of absurdities, secretly tends to maintain ignorance.

Reason is the enemy of **faith**. Faith is the foundation of the priest's position, fortune and prestige..."

"The philosopher speaks very ill of the priest; the priest speaks very ill of the philosopher. But the philosopher has never killed any priests whereas the priest has killed a great number of philosophers."

"Fools have been and always will be the majority of mankind."

"Men do not fear God...but they are afraid of Him."

"...and with the guts of the last priest, let us strangle the last king."

"When God, from whom I have my reason, demands me to sacrifice it, he becomes a juggler that snatches away what he pretended to give."

"**Descartes** said: '*I think therefore I am.*' **Helvetius** wants to say: '*I feel, therefore I want to feel pleasantly.*' I prefer **Hobbes** who claims that in order to draw a conclusion which takes us somewhere, we must say: '*I think, I judge; therefore, a part of organized matter like me is capable of thinking, and judging.*'"

"If **reason** be a gift of Heaven, and we can say as much of **faith**, Heaven has certainly made us two gifts not only incompatible, but in direct contradiction to each other. To solve the difficulty, we are compelled to say that faith is a chimera or that reason is useless."

"Supposing a man-hater had desired to render the human race as unhappy as possible, what could he have invented for the purpose better than: belief in *an incomprehensible being* about whom men could never be able to agree?!"



The Most Influential Publications of the 17th & 18th centuries

∞ Or, Treatises establishing and expressing the Spirit of the Enlightenment ∞

- 1620 – ***Novum Organum*** by **Francis Bacon** (1561–1626) who inspired Enlightenment thinkers by articulating a scientific method for gaining knowledge, *as opposed to* ‘arguing from authority’ and merely perpetuating outmoded traditions and outright falsehoods. [See separate ‘info page’ on Sir Francis Bacon.]
- 1637 – ***Discourse on Method*** by **Rene DESCARTES** (1596–1650) who launched “modern philosophy” with his search for an indubitable foundation for knowledge. Without such a foundation...without knowing how we know...could our sciences and philosophy advance?
- 1651 – ***Leviathan*** by the pessimistic political philosopher **Thomas Hobbes** (1588–1679). A thorough materialist, Hobbes tried to utilize natural law to end political strife. His views of human nature were extreme, but he raised issues with which all subsequent political scientists would have to deal. Other works: *Elements of Law; Elements of Philosophy; Human Nature*.
- 1657 – ***The Laws of Chance*** by the great physicist **Christiaan Huygens** (1629–1693) showing the value of mathematical reasoning to yield knowledge. (Amazing: we still seek math equations for the grand **T. of E.**) Ask me.
- 1662 – ***Logic, or the Art of Thinking*** by the theologian and controversialist **Antoine Arnauld** (1612–1694). Arnauld was one of the most distinguished and influential thinkers of the 17th century. He dismantled Descartes’ arguments for the distinction of Mind and Body. He refuted Malebranche’s theory of perception (the view that “we see all things in God.”) He also wrote to Leibniz, accusing his theory of ‘Monads’ of leading to universal fatalism!
- 1670 – ***Tractatus Theologico-Politicus*** published anonymously by the unorthodox Jewish philosopher and humble lens-grinder **Baruch SPINOZA** (1632–1677). The goal was to endorse tolerance and freedom of religious thought and practice. But as virtually the first work of what became “Higher Biblical Criticism” it brought Spinoza harsh censure (once it was known that he wrote it.) It questioned the historicity of Scripture and denied the miraculous in favor of the “moral message.” Jesus was merely the last of the great Jewish prophets. Spinoza’s treatise called ***Ethics***, published posthumously, is one of the most influential works in the history of philosophy. It is presented as a rigorously geometric deductive system (building from definition to axiom to theorem to proof) but it contains confusing elements of idealism, determinism, and a Stoic-like pantheism. Thus, Spinoza is one of the most ‘variously’ interpreted thinkers in history. He is also one of the first moderns to create a *personal* philosophy of life—which he seems to have lived with gracious serenity. You can disagree and still love him!
- 1675 – ***The Search for Truth*** by theologian and philosopher **Nicolas de Malebranche** (1638–1715). His doctrine is that knowledge of objects requires other ‘ideas’ that are somehow surrogates (stand-ins) for external objects. These are archetypes or ‘ideas of objects in the mind of God’...thus “we see all things in God.”
- 1687 – ***Principia Mathematica*** by **Isaac Newton** (1642–1727). This provided the underlying paradigm for all subsequent scientists and philosophers. In popularized versions, it also had powerful impact on society at large...there was even a translation called “Newton for Ladies.” The Newtonian Synthesis was the general Enlightenment Worldview and the basis for all attempts to transfer scientific methodology to the *Studios Humanitatis!* (i.e. - To study everything else, including history and religion, more scientifically!)
- 1690 – ***Essay Concerning Human Understanding*** by the medical student, political theorist, diplomat and ‘Enlightenment Hall-of-Famer’ **John LOCKE** (1632–1704). The *Essay* was the seminal work of **EMPIRICISM** (all knowledge is based on sense experience) and it has been hailed as being ‘as revolutionary for Epistemology as Newton’s *Principia* was for physics!’ Indeed, Locke saw his role as philosopher to be an ‘under-labourer’ to the advances in science. See how philosophical work is a meta-science!?
- His ***Two Treatises on Government*** had a tremendous impact on the American Revolution, so you could say that his political theories were rather **revolutionary!**

- 1695 – ***The Reasonableness of Christianity*** by famous Empiricist **John LOCKE**. Locke considered himself a true Theist. And, as an advocate of tolerance and opponent of fanatical dogmatism, Locke deemed Christianity to be the most *reasonable* religion if it is distilled to its core truths. At its core, the gospel is little more than an expression of “moral truth” that can be reasoned from nature. Locke denied the deistic implications of his own views and still believed in revelation. However, such use of reason did pave the way to Deism. The fact that this next work [Toland’s] was dedicated to Locke illustrates the ‘natural’ path from Theism to Deism to unbelief.
- 1696 – ***Christianity Not Mysterious*** by the church historian and popular author **John Toland** (1670–1722). A leading Deist, Toland subordinated revelation to reason. By ‘mysterious’ he meant unreasonable, so he’s saying that Christian beliefs need not be out of harmony with nature and rationality. The lengthy subtitle to this work is quite telling: *A Treatise Showing that there is Nothing in the Gospel Contrary (to nature) or Above It, and that no Christian Doctrine can Be Properly Called a Mystery*. This is classic Deism: ‘Christianity must be about morals, not miracles.’ In 1720, Toland published a parody of Church Liturgy called ***Pantheisticon***. Perhaps a path paved with the conceit of human reason, wanders from **Theism** to **Deism** and doesn’t go straight to unbelief but veers off into belief in...anything...even **Pantheism**??? Someone come tell me that they caught this point as a **WV** Connection.
- 1708 – ***A Letter Concerning Enthusiasm*** by the statesman and essayist **Anthony Ashley Cooper, 3rd Earl of Shaftesbury** (1671–1713). Influenced by Locke, the Earl was highly esteemed by Leibniz, Diderot, Lessing and even Voltaire! He denounced ‘spiritual extravagance’ as a ‘perversion of true religion.’ Of course, true religion for an Enlightenment intellectual meant being nice and ethical, not intolerant. And being reasonable, not ‘enthusiastic’ or zealous! Shaftesbury wrote that man possesses a natural moral sense that is in harmony with the Cosmic Order.
- 1710 – ***An Historical and Critical Dictionary*** by the skeptical philosopher and anti-Calvinist theologian **Pierre Bayle** (1647–1706). The Dictionary was used by Hume and Berkeley against Descartes’ view, and it was the most important skeptical work since Sextus Empiricus! A persecuted defender of religious tolerance, Bayle said: “I am most truly a Protestant, for I protest indifferently against all systems and all sects.”
- 1710 – ***A Treatise Concerning the Principles of Human Knowledge*** by the devout Anglican bishop, would-be missionary, tar-water fancier, and ‘Idealist-Immaterialist’ **George BERKELEY** (1685–1753). Berkeley ‘solved’ Descartes’ mind-matter dualism with mental monism! What we apprehend as an objective external world is really a subjective mental/perceptual event. Matter does not exist on its own. ‘To be is to be perceived.’ What exists? **Perceptions**. Berkeley’s subjective idealism-immaterialism is one of the most brilliantly argued yet plainly unbelievable systems in the history of philosophy! (But if you don’t believe it, just try to refute it.) Its importance for us is how it defies common sense and naïve views. And it shows how hard it is to demonstrate an intelligible, knowable connection between the mind and matter...between the subject that perceives and the object that ‘must be there’ whether we perceive it or not!!
- 1713 – ***Monadology*** by the ‘math genius’ and arch-rationalist **Gottfried Wilhelm von LEIBNIZ** (1646–1716). A strange metaphysical system conceiving of all reality as composed of an infinite number of units called ‘monads’ and operating by dynamic principles of ‘sufficient reason’ and ‘internal harmony.’ This ingenious system was intended to maintain God’s transcendence and human freedom while avoiding dualism and monism and mechanistic materialism. His idea that the ultimate constituents of matter were *not* material was amazingly modern! Leibniz wrote voluminously on mathematics and physics as well as philosophy. There is no complete edition of all his writings and one scholar estimated that it would take 20 years full-time work just to read the manuscripts! [Oxford Companion] Leibniz had also published ***Theodicy*** in 1710, partly in reply to Pierre Bayle’s skepticism. Leibniz’ harmonizing of faith and reason was more rationalistic than Biblical, but he certainly meant well!
- 1725 – ***Inquiry Concerning Moral Good and Evil*** by the professor of Moral Philosophy **Francis Hutcheson** (1694–1746). Applying mathematical reasoning to ethical questions, Hutcheson’s theory is that moral distinctions are directly intuited rather than arrived at by way of reason!
- 1729 – ***Discourses on the Miracles of our Savior*** by Cambridge Fellow **Thomas Woolston** (1669–1733). These discourses were blunt attacks on the ‘miracles’ of Jesus, which Woolston interpreted as ‘allegories.’ He called the resurrection a “notorious imposture.”

- 1730 – ***Christianity as old as the Creation, or the Gospel as Republication of the Religion of Nature*** by the minister’s son, churchman, lawyer and influential author **Matthew Tindal** (1656–1733). Tindal denied the inspiration of Scripture, accepted ‘general’ but *not* ‘special’ revelation, and reduced Christianity to a “natural religion that any rational person could believe.” This tractate sparked a flurry of responses...about 150 published replies! But it continued to pave the natural path to naturalism. It has been called the “Deist’s Bible” and it influenced the great Voltaire.
- 1739 – ***A Treatise on Human Nature***...simplified and republished in 1748 as ***Enquiry Concerning Human Understanding*** by the historian, essayist, and famous skeptic **David HUME** (1711–1776). Hume offered a rigorous investigation of human knowledge, belief and will. The Treatise’s subtitle was: *An attempt to introduce the experimental method of reasoning into moral subjects*. Indeed, Hume applied the Empiricist approach so acutely that he not only dispelled ‘miracles’ but he undercut accepted notions of substance, cause & effect, and personal identity...leaving the scope of what we can *know* by reason and experience very narrow. Such radical conclusions ‘awakened’ **Kant** from the ‘dogmatic slumbers’ of his rationalism. Hume’s controversial ***Dialogues Concerning Natural Religion***, written in 1750, were published posthumously in 1779 and express strong objections to the ontological and cosmological “proofs” of God’s existence.
- 1748 – ***L’Homme machine*** by the surgeon and controversial author **Julien de LaMettrie** (1709–1751). He was one of the first committed ‘physicalists’ as to human nature (the Mind is the Brain.)
- 1748 – ***Esprit des Lois*** (Spirit of the Laws) by **Charles-Louis de Secondat, Baron de Montesquieu** (1689–1755). This best-seller transformed the philosophy of politics by relating the uniformity of human nature to the diversity produced by culture and environment. Montesquieu was a vague Deist but his alleged deathbed conversion to Catholicism was much publicized by an opportunistic Jesuit priest!
- 1751 - “**THE ENCYCLOPEDIA**” ~ [See page 18.]
- 1756 – ***Philosophical Inquiry into the Origin of Our Ideas of the Sublime and the Beautiful*** by the politician **Edmund Burke** (1729–1797). This work on *aesthetics* marks an early shift *away from* the era’s clear and orderly ‘certainties’ *toward* imagination and the power of the ‘unbounded and unknown.’
- 1758 – ***De l’Esprit*** (On Mind) by **Claude-Adrien Helvetius** (1715–1771). Materialistic (‘behavioristic’) explanation of human conduct as determined by sensory-social experience. Helvetius was a friend of Diderot.
- 1762 – ***A Treatise on the Social Contract*** by the eccentric *philosophe* **Jean Jacques Rousseau** (1712–1778). Seeing human nature as ‘innately good’, Rousseau wrote that civilization corrupts us, yet individuals must surrender their rights to the general will and common good. His expression “Liberty, Equality, Fraternity” became the slogan of the French Revolution. His placement of ‘feeling’ over ‘reason’ makes him a forerunner of the Romantic Movement.
- 1764 – ***Enquiry into the Human Mind on the Principles of Common Sense*** by the Presbyterian minister and professor of Moral Philosophy **Thomas Reid** (1710–1796). This book and subsequent essays on perception and the intellect put forth the first serious philosophical attacks on the British Empiricists.
- 1764 – ***Dictionnaire Philosophique*** by the legendary ‘man-of-letters’ **Voltaire** (1694–1778). Voltaire was the satirical voice of the Enlightenment. He was the most famous French *Philosophe*, a humanist, Deist, champion of freedom, implacable opponent of organized religion and of metaphysical speculation (he was pro-Locke and anti-Leibniz), and an indefatigable correspondent. He wrote about 20,000 letters, to kings and poets and philosophers. He also wrote essays, plays, poems and novels, and he is still someone we love to quote. [See the separate page on The Wit of Voltaire]
- 1749-67 – ***Histoire Naturelle*** by **George Leclerck, Comte de Buffon** (1707–1788). This monumental multi-volume achievement inspired tremendous interest in natural history, suggested an **old earth** theory and prefigured **evolutionism**.

- 1774-76 – ***Declaration of Independence*** drafted by **Thomas Jefferson** (1743–1826). Jefferson, Governor of Virginia and 3rd President of the USA, was an “American *philosophe*.” He ordered for his library a composite portrait of Francis Bacon, Isaac Newton and John Locke. “They have laid the foundation for the physical and moral sciences of modernity and are the three greatest men that ever lived...without any exception.” That he believed in *this* ‘trinity’ but deleted the miracles from his Bible shows Jefferson as an exemplary Enlightenment figure.
- 1776 – ***Common Sense*** a pamphlet urging American independence by the political journalist **Thomas Paine** (1737–1809) who also wrote a scathing attack on religion: ***The Age of Reason*** (1794).
- 1776 – ***Inquiry into the Nature and Causes of the Wealth of Nations*** by the moral philosopher, social theorist, professor of Logic, and economist **Adam Smith** (1723–1790). This was a pioneering analysis of the structure of a functioning economy balancing the ‘common good’ with ‘pursuit of self-interest’.
- 1774-78 – ***Defense of the Rational Worshippers of God*** (and other ‘Anonymous Fragments’) privately written by the professor of Philosophy and Oriental Languages **Hermann Samuel Reimaris** (1694–1768). These works were published posthumously (by G. E. Lessing) and they are a clear link between the English Deists who influenced Reimaris, and the naturalistic ‘liberal’ theology of the next era. Reimaris saw Christ as a mystic who tried to proclaim the messianic age but who died disillusioned. The resurrection was but a fable invented by the humiliated disciples. To claim that Jesus is divine and that he rose from the dead and is coming again...makes Christianity an irrational and fraudulent religion. Reimaris’ writings helped launch the modern “quest for the historical Jesus,” which would come to mean *the merely human Jesus*.
- 1779 – ***Nathan der Weise*** by the librarian, literary critic and dramatist **Gotthold Ephraim Lessing** (1729–1781). This dramatic poem was influential as a plea for tolerance but can be used as a profound expression of religious relativism. [Note: At L’Abri we did a dramatic reading of *Nathan the Wise*, which sparked a *heated* discussion!]
- 1781 – ***Critique of Pure Reason*** by the professor of Logic and Metaphysics **IMMANUEL KANT** (1724–1804). Kant decisively settled the debate between the Rationalists and Empiricists and solved all of the problems of epistemology and is the single greatest philosopher since Plato & Aristotle. Or, he wrote excessively dense and dry works which merely took Hume’s problem and handed it back as if it were the answer. You can read them for yourself and decide what plaque to put on his pedestal. But we *can* say: he *is* the most difficult and the most important thinker of modern philosophy. He certainly did impact any future Metaphysic.
- The ***Critique*** caused a “Copernican Revolution” (so called because what we observe is not due to the nature of the objects observed but due to our nature as observers) in epistemology. This is a reversal *from* thinking that: knowledge comes from our mind’s somehow conforming to a realm of objects *to*: knowledge happens because objects ‘conform to’ or are structured by our mind’s capacities. We CAN know reality *as it appears to us*. We can NOT know reality *as it is in itself*.
- His other works: *Prolegomena to any Future Metaphysic* (1783), *Groundwork to the Metaphysic of Morals* (1785), *Critique of Pure Reason*, 2nd (1787), *Critique of Practical Reason* (1788), *Critique of Judgment* (1790), *Religion within the Boundaries of Mere Reason* (1793) and *Metaphysic of Morals* (1797) to name a few.
- 1793 – ***Sketch for a Historical Picture of the Progress of the Human Mind*** by the mathematician, political theorist and moderate revolutionary the **Marquis de Condorcet** (1743–1794). The Marquis ‘sketched’ society as having developed in stages from the primitive hunter-gatherers to the French Republic! He applied mathematical probability theory to socio-political problems. As other Enlightenment thinkers did, he argued that women should have equal political, civil, and educational rights and opportunities!
- 1795 – ***The System of Nature*** by the chemist **Baron Paul-Henri d’Holbach** (1723–1789). D’Holbach was a thorough materialist—atheist and contributor of over 400 articles to Diderot’s *Encyclopedia*. He was a lavish host and you might have seen Benjamin Franklin, Adam Smith or David Hume at one of his dinner parties in Paris!

KANT *EMBODIED* THE ENLIGHTENMENT... BUT **VOLTAIRE** *EXPRESSED* IT...WITH WIT! ✍️

True greatness consists in the use of a powerful understanding to enlighten oneself and others.

Self-love never dies.

Common sense is not so common.

The superfluous is very necessary.

Think for yourself and let others enjoy the same privilege.

As long as there are fools and rascals, there will be religions.

Superstition sets the world in flames; philosophy quenches them.

If God created us in his image, we have more than reciprocated.

God is a circle whose center is everywhere and circumference is nowhere. (Stolen from Rabelais, I think!)

If God did not exist, it would be necessary to invent him.

God is a comedian playing to an audience too afraid to laugh.
(Or was that Woody Allen?)

England has forty-two religions and only two sauces.

The gloomy Englishman, even in his loves, always wants to reason. We are more reasonable in France.

Humanly speaking, let us define truth, while waiting for a better definition, as—a statement of the facts as they are.

It is forbidden to kill; therefore murderers are punished, unless they kill in large numbers to the sound of trumpets.

The art of government consists in taking as much money as possible from one class of citizens to give it to the other.

Doctors are men who prescribe medicines of which they know little to cure diseases of which they know less in human beings of whom they know nothing. ~ The art of medicine is to amuse the patient while nature cures the disease.

Ruthlessly trenchant fellow, wordy pedagogue, meddling theorist, you seek the limits of your mind? They are at the end of your nose.

To be absolutely certain about something, one must know everything, or nothing, about it.

Doubt is not a pleasant condition but certainty is an absurd one.

The institution of religion exists only to keep mankind in order and make man merit God's goodness by their virtue.

Everything in religion that does not tend toward this goal must be considered foreign and dangerous.

All sects are different because they come from men, morality is everywhere the same because it comes from God.

The Bible is an incoherent collection of implausible stories celebrating absurdity and crime.

One hundred years from my day there will not be a Bible in the earth, except one that is looked upon by an antiquarian.



It is dangerous to be right in matters on which established authorities are wrong.

Those who make you believe absurdities can make you commit atrocities.

I have never made but one prayer to God, a very short one:

O Lord, make my enemies ridiculous. God granted it.

The only things in Christianity that are valuable at all are identical with all the great philosophies, and everything else Christians believe is nonsense.

VOLTAIRE on What You Should Believe



Consider that the eternal wisdom of the most high has with his hand engraved natural religion in the bottom of your heart; **believe** that the simple candor of your mind will not be the object of his immortal hatred; **believe** that before his throne, always, everywhere, the heart of a just man is precious; **believe** that a modest bonze, a charitable dervish, find grace in his eyes rather than a merciless Jansenist or an ambitious pontiff.

Ah! But what matter indeed by what name he be implored? Every homage is received, but none does him honor. A god has no need of our assiduous attentions. If he can be offended, it is only by injustice; he judges by our virtues, and not by our sacrifices.

(**Bonze** — an archaic word for Buddhist. **Dervish**— Persian for Sufi-Muslim ascetic. **Jansenist** — ‘Calvinistic’ Catholic sect, condemned by the Church.)

The name **deist** is the only name to take. The **only gospel** to read is the great book of nature. The **only true religion** is worshiping god and being a good man.



Francois Marie Arouet
1694 — 1778

A witty saying proves nothing. ~ Voltaire

QUIZ ON THE AGE OF ENLIGHTENMENT

- T/F 1. The career of Rene Descartes coincided with the new helio-centric theories in astronomy and physics.
- T/F 2. Descartes formally recanted his Catholicism because it was too superstitious and reactionary.
- ___ 3. To establish a firm foundation of certainty upon which to build a new epistemology, Descartes used the *method* of: ___, which means: _____
- A. *E Pluribus Unum* C. *Errare Humanum Est*
B. *De Omnibus Dubitandum* D. *Sile Et Philosophus Esto*
4. To escape the solipsistic prison of subjectivity and 'know' the external world, Descartes depends on _____ ideas, not sense data. "Selfhood" (I am a self) was one such idea. List 3 more:
-
- ___ 5. According to the 'blessed' (Baruch or Benedictus!) Spinoza, the *true* philosopher transcends the human perspective and tries to view reality: _____, which means: _____
- A. *Nil est amore veritatis celsus* C. *Veritas vos liberabit*
B. *Fallaces sunt rerum species* D. *Sub specie aeternitatis*
- ___ 6. Leibniz surprisingly claimed that, although it doesn't *seem* to be the case from a human point of view, from God's point of view _____.
- A. There simply would not need to be a good 'reason' why anything at all exists.
B. The 'Harmony of the Spheres' sounds like Bach, not Rock.
C. All Synthetic statements are really Analytic.
D. Monad clusters are psychologically co-dependent.
7. John Locke claimed that 'the mind at birth' is a _____, which means _____.
- ___ 8. George Berkeley was an Anglican Bishop who believed in God as Creator and Guarantor of the world. But to him that only meant that: _____.
- A. ...God created sense data and minds but *not* unperceived, mysterious material substance.
B. ...God is an imaginary *ideal*.
C. ...God created the world but '*careth not to perceiveth*' it.
- ___ 9. David Hume was a famous atheist. Restricted by his radical Empiricism, he didn't just deny God, he also denied the existence of Self! He said the *so-called self* was merely a *rapid bundle of perceptions*. To which you should reply by asking:
- A. Well, isn't that better than being a bundle of nerves?
B. Tell me...WHO is the one having all those perceptions?
C. Aren't you afraid of going to hell, you infidel?
- T/F 10. Kant restored the possibility of knowledge by way of under-girding "Synthetic a priori" truths.
- T/F 11. In Kant's critique, "space and time" *are* actual External Realities, *not* mere features of the mind's own structures (as if we have irremovable goggles on!)
- ___ 12. Which 'faculty' was not one delineated by Kant as he analyzed the mind's capacity to know the world?
- A. Faculty of Intuition (perceptions) C. Faculty of Transcendence (meditation)
B. Faculty of Understanding (categories) D. Faculty of Reason (pure concepts)
- T/F 13. Kant, a firm believer, built the 'Edifice of Epistemology' and the 'Mansion of Metaphysics' crowned with a 'roof' of the sublime knowledge of God.

- ___ 14. What was Kant's little phrase implying freedom and moral duty?
 A. I think therefore I obey. C. I know, therefore I 'just say no.'
 B. I ought, therefore I can. D. I am therefore I moralize.

T/F 15. This statement, printed in this box, is patently false.

Bonus Question - Fill In

Remember that Francis Bacon gave us a picturesque comment that somewhat applies to the Rationalist vs. Empiricist Debate?
 "Investigators are like **Ants** running around *collecting bits* to use but *without any pattern*. Traditional philosophers are like **Spiders** *spinning out webs of intricate conceptions* from *their own inner being*. But the true scientist should be a good **Bee!**
 A bee gathers its materials from the flowers of the garden and the field, but *transforms and digests it by a power of its own.*"



Which kind of philosophers were like ants? _____

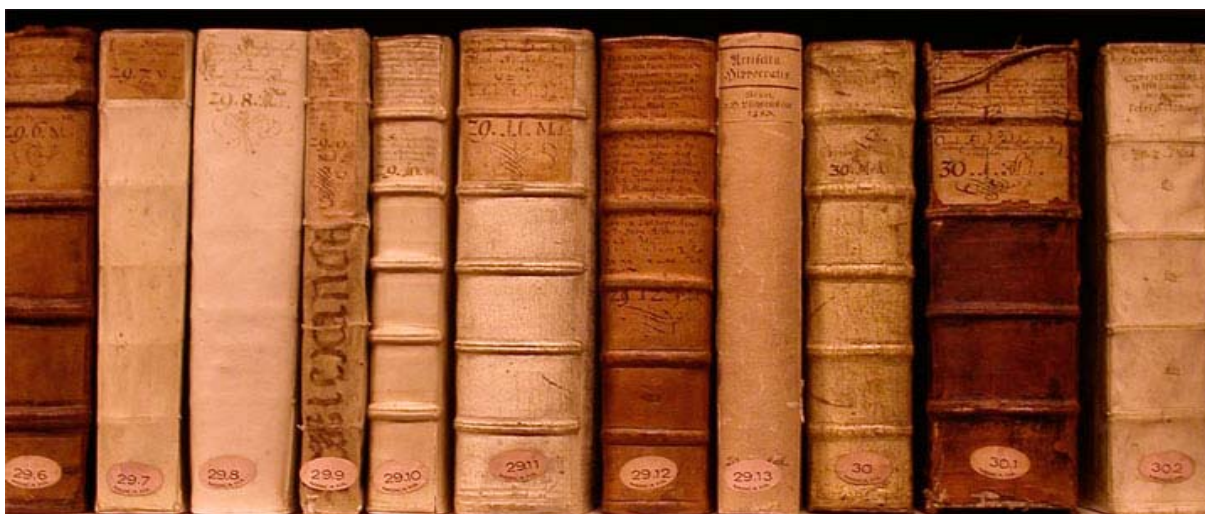


Which kind were like spiders? _____



Would anyone have qualified as "a good bee"? _____

Try not to weary of all the reading you have to do. It is good for you.



"The reading of good books is like a conversation with the best men of past centuries..."
 Rene Descartes *Le Discours de la Methode*, pt I. 1637

JUST SAY 'KNOW'

Say *I know* & think you've said a lot.
But, precisely *what* have you really got —
Veridical truth, falsidical rot,
or some vague notion 'twixt *'is'* and *'is not'* ?!

Is the heat on the stove or in *your* sense of hot?
(You seem able to tell the pain from the pot.)
Is this a straight line or a long stretch of dot?
While sailing at sea can you rebuild the yacht?
See the 'problematic' in this thickening plot?



*Fly off, if you dare, on a wing and a prayer
when supposing you're 'aware' of a substantial 'there'!*

Is **Certainty** Possible? Probable? Not?
Have we taken an epistemic shot?

How *is it possible* we humans can know?
Are there *limits* beyond which we *never* can go?
What criterion makes us declare Yes or No?

To insist 'I know P' won't insure P is so.
Assert P and *I'll* ask 'well how do ya know?
Your P is dubious...got some *proof* you can show?
Got some valid premises all in a row?'

Conclusions elicit a friend or a foe.
Person X may say 'Yes' whereas Y will say 'No'
And Z will ask 'Why' and on it will flow.
One does have to wonder where all this may go.
I'm *confounded* from head down to Cogito.

*Against what can I test, correct and refine
views that seem right to me 'cuz they're mine.
I want to speak truly and not just 'opine.'*

Is there a cure for this dizzying woe?

Can we ever Know how we Know that we Know?