

# **Brendan's Outline History of Western Thought**

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**This text is designed to be used together with Brendan's Glossary.**

To download the current edition of the Glossary as well as this Outline: please visit the author's web site: <http://brendanmyers.net>

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- Prof. Jeff Mitscherling, who gave his students at the University of Guelph (myself among them) his own Outline History of Western Philosophy, which I carried around with me for twenty-two years.
- Prof. Giorgio Baruchello, also a former Guelph student, who made valuable comments on an early draft of this outline,
- Rabbi Dr. Andrea Lobel, for helping me with the Judaism sections.

## A note about the assembly of this outline.

Around the year 2001, professor Jeff Mitscherling gave his students, myself among them, his home-made outline history of western philosophy. I carried my copy around with me everywhere I went, for many years afterward. In the days before online encyclopaedias, his outline was the first thing I looked up when I needed to contextualize whatever new branch of philosophy I was studying. But after twenty-two years, it was in terrible need of an update. Of course I could have written to my old teacher to ask if he had a new edition he could share with me. And I could have looked up other outline histories on the internet. But it is much more satisfying to create my own.

At any rate, creating this outline helped me to identify gaps in my own knowledge that need filling, and to identify possible directions for my own future research.

But who to include? The question is as much political as it is pedagogical. I studied philosophy at a time when European and American men got priority over most others. Plenty of those men were great philosophers. But they cannot be the *only* ones. An argument can be made for why my education was incomplete because of its insufficient diversity. It was time for me to learn more big names from other parts of the world, and other experiences of human life. The crafting of a new outline history seemed a good way to start.

I also considered whether to add names to the outline who weren't philosophers in the *narrow* sense that they didn't study philosophy at a university, but could count as philosophers in the *broad* sense that they were doing philosophical work: addressing fundamental questions by means of systematic reason. So, journalists, scientists, poets, theologians, mathematicians, and activists, could be included here. But this, too, invites the question: who to include?

Thus, every page of this outline is the product of difficult decisions about who to include, who not to include, how much emphasis to give each figure in the history, how to classify them, and how to trace the lines of influence from one figure to another. I plan to produce a new edition of this outline every year or two. Drop me a line if there's something you think I really, *really* need to include. Or if there's something you think I got really, *really* wrong.

Final note: Some words and names in this Outline are printed in **boldface**. Most of those are cross-references to other entries in this Outline, or in the Glossary. Have fun!

# 1. Everything begins in Africa.

- 2-3 million years ago, in the Rift Valley of east Africa: our earliest ancestors walk upright and use simple tools.
- 1 million years ago: *Homo erectus* appears in Africa, Europe, and China; lived in small communities in rock shelters or caves.
- 100,000 to 35,000 years ago: *Homo neanderthalensis* manufactures tools, creates art, controls fire, creates burial sites for their dead.
- 35,000 years ago: Upper Paleolithic Period: appearance of *Homo sapiens* (anatomically modern humans).
- 20,000 years ago: creation of the Ishango Bone, in Congo: the oldest known mathematical instrument.
- 8000 to 3000 BCE: Neolithic Period: agriculture and metallurgy, cultivation of crops and domestic animals, widespread worship of earth goddesses.
- 3200 to 1200 BCE: Bronze Age: the first cities. Writing, long distance trade, codified laws, multi-city empires, widespread worship of sky gods and priest-kings.
- 1200 BCE: beginning of the Iron Age.

## The first writings.

Philosophy is a long conversation, and the most usual way of carrying on this conversation is by means of *writing*. A simple version of the origin of writing goes like this:

- First, there were paintings on cliff sides and the interior of caves.
- Then these pictures became conventionalized references to definite objects.
- Then they became symbols for abstract concepts.
- These symbols for objects and concepts were next associated with spoken words.
- Finally, symbols came to represent only the word-sounds; they became letters.
- By 3000 BCE the Egyptians had 24 hieroglyphs signs to represent sounds, but they also had thousands of hieroglyphs for syllables and for whole words, so it isn't a true alphabet (yet).
- Around 1900 BCE, some people in Israel and the Sinai Peninsula invented an alphabetic cuneiform script in a Semitic dialect. It had 22 letters, all consonants.
- The Greeks expanded this alphabet by creating symbols for vowel sounds.
- At around the same time in Sumeria, the first cuneiform tablets appeared: thin blocks of clay with marks pressed into them using a stylus, then baked in an oven to make the marks permanent.
- Tablets are heavy and easy to break, so they get replaced by rolls, made of cloth.
- Rolls are also big and unwieldy, it's hard to catalogue them, and you can only write on one side. So they get replaced by codexes, usually made of parchment or vellum.
- Ts'ai Lun, a Chinese court official (~1st century CE), invented paper.
- Codexes are eventually replaced by books.
- Today: are books being replaced by e-readers, smartphones, other digital devices?

Latin	Ugaritic	Phoenicia n	Hebrew	Arabic	Greek	Cyrillic
A	𐤀	𐤁 <i>ʾālep</i>	א <i>ʾālef</i>	ا <i>ʾalif</i>	Α alpha	А azŭ
B	𐤂	𐤃 <i>bēt</i>	ב <i>bēṭ</i>	ب <i>bāʾ</i>	Β bēta	В vědě Б buky
C, G	𐤄	𐤅 <i>gīmel</i>	ג <i>gīmel</i>	ج <i>jīm</i>	Γ gamma	Г glagoli
D	𐤆	𐤇 <i>dālet</i>	ד <i>dālet</i>	د <i>dāl</i> ذ <i>dāl</i>	Δ delta	Д dobro
E	𐤈	𐤉 <i>hē</i>	ה <i>hē</i>	ه <i>hāʾ</i>	Ε epsilon	Е ye Є estī
F, U, V, W, Y	𐤊	𐤋 <i>wāw</i>	ו <i>vāv</i>	و <i>wāw</i>	Ϝ digamma, Υ upsilon	Ѥ ukŭ
Z	𐤌	𐤍 <i>zayin</i>	ז <i>zayin</i>	ز <i>zayn, zāy</i>	Ζ zēta	З, 3 zemlya
H	𐤎	𐤏 <i>hēt</i>	ח <i>hēt</i>	ح <i>hāʾ</i> ħ <i>hāʾ</i>	Η ēta	И iže
	𐤐	𐤑 <i>tēt</i>	ט <i>tēt</i>	ط <i>tāʾ</i> ظ <i>zāʾ</i>	Θ thēta	Θ fita
I, J	𐤒	𐤓 <i>yōd</i>	י <i>yōd</i>	ي <i>yāʾ</i>	Ι iota	І ižei
K	𐤔	𐤕 <i>kap</i>	כ <i>kāf</i>	ك <i>kāf</i>	Κ kappa	К kako
L	𐤖	𐤗 <i>lāmed</i>	ל <i>lāmed</i>	ل <i>lām</i>	Λ lambda	Л lyudiye
M	𐤙	𐤚 <i>mēm</i>	מ <i>mēm</i>	م <i>mīm</i>	Μ mu	М myslite
N	𐤛	𐤜 <i>nun</i>	נ <i>nun</i>	ن <i>nūn</i>	Ν nu	Н naši
X	𐤞	𐤟 <i>sāmek</i>	ס <i>sāmek</i>		Ξ ksi X ch)	Ѧ ksi X xērŭ
O	𐤠	𐤡 <i>ʾayin</i>	ע <i>ʾayin</i>	ع <i>ʾayn</i> غ <i>gayn</i>	Ο omikron	О onŭ
P	𐤢	𐤣 <i>pē</i>	פ <i>pē</i>	ف <i>fāʾ</i>	Π pi	П pokoi

		𐤔 šādē	𐤕 𐤔 šāḏi	ص <i>šād</i> ض <i>ḏād</i>	𐤌 san 𐤎 sampi	𐤇 tsi 𐤈 črvī
Q	𐤒	𐤒 qōp	𐤒 qōf	ق qāf	𐤒 koppa	𐤒 koppa
R	𐤓	𐤓 rēš	𐤓 rēš	ر rāʾ	𐤓 rho	𐤓 rītsi
S	𐤔	𐤔 šin	𐤕 šin/šin	س <i>sīn</i> ش <i>šīn</i>	Σ sigma ζ stigma	С slovo III ša III šta ž , S dzělo
T	𐤔	𐤔 tāw	𐤕 tāv	ت <i>tāʾ</i> ث <i>tāʾ</i>	𐤕 tau	𐤕 tvrdo

## Mytho-Poetic Period (?-600 BCE)

From the origin stories of various European mythologies, we get the following impression of things:

- History, religion, cosmology, and so on, presented in the form of myth and legend. Questions about the nature of things are like: Who (which god) did it? And why?
- Humankind sees itself as part of nature, one animal among many, although we are the animal whom the gods are particularly interested in.
- The world is full of gods, spirits, supernatural beings, and the remnants of previous peoples.
- The world is also mostly dangerous and unpredictable.
- The gods are at times benevolent, at other times vindictive and jealous; their dispositions are very human. But in general they favour good people, they reward justice, and they punish injustice.
- Events and destinies are governed by a universal ordering force called *fate*: inescapable, non-negotiable, inevitable, and (usually) unknowable.
- Following a massive battle between the gods and a race of predecessors (the Titans, the Giants, the Fomorians, etc) fate is whatever the chief god says it is.
- It's also possible that the gods fear humanity. We might replace them, the same way the gods replaced the Titans. Events: Battle of Maigh Tuireadh; victory of the Milesians (a tribe of mortal humans) over the Tuatha de Danann (the gods). Hesiod's *Theogony* predicts that the men of Iron (mortal humans) shall some day usurp the Olympians.

## The Origins of Philosophy

Philosophy did not arise out of nowhere: ideas do not emerge from nothing. Rather, ideas emerge as a response to *problems* in the world, especially the kind of problems which cannot be solved by one's normal or usual ways of thinking. New ideas do appear all the time, of course, but it's during times of social or cultural crisis that people tend to pay attention to those new

ideas. Some new idea surges up that speaks to a person's or a culture's new problems, enabling a better grasp of the new reality, a means of overcoming a crisis, a path towards a new and hopefully better human reality. Or, this new idea can do those things better than older or more popular ideas.

We usually say it began in ancient Greece. Yet Greek (and Roman) philosophers themselves often acknowledged that their intellectual inspiration came from many faraway places. Diogenes Laertius, a Roman historian of the third century, said that philosophy began with 'barbarians', ie. peoples outside the urban Mediterranean world who spoke neither Greek nor Latin:

Some say that the study of philosophy was of barbarian origin. For the Persians had their *Magi*, the Babylonians or the Assyrians their *Chaldeans*, the Indians their *Gymnosophists*, while the Kelts and the Galatae had seers called *Druids* and *Semnotheoi*, or so Aristotle says in the 'Magic', and Sotion says in the twenty-third book of his 'Succession of the Philosophers'... Those who think that philosophy is an invention of the barbarians explain the systems prevailing among each people. They say that the Gymnosophists and Druids make their pronouncements by means of riddles and dark sayings, teaching that the gods must be worshipped, and no evil done, and manly [virtuous] behaviour maintained.<sup>1</sup>

The oldest surviving texts with any philosophical substance come from India and from Egypt, not from Greece. Most of them are religious in nature: religion is, among other things, a way of thinking about the meaning of life. And among these texts there are some real treasures. For example:

**The Egyptian Book of the Dead** (~1800 BCE), includes a code of ethics with eerie similarity to the Ten Commandments.

**The Ahmes Papyrus** (also known as the **Rhind Papyrus**, 1550 BCE, Egyptian), a mathematics textbook with more than eighty exercises for students to do as they prepare for careers as tax collectors, surveyors, engineers, and bureaucrats.

**Enuma Elish** (9th century BCE, Mesopotamian), describes the creation of the world, a battle between good and evil gods, and the creation of humanity.

**Epic of Gilgamesh** (~2100 BCE, Mesopotamian), the world's oldest extant adventure novel. It tells the story of the hero Gilgamesh and his quest for immortality.

**Code of Hammurabi** (~1750 BCE, Mesopotamian), the world's oldest extant law code. Now local enforcers and judges can't make things up as they go; they have to follow a standard code which applies equally to everyone in the kingdom (except, perhaps, the king himself). Its preamble says the purpose of the law is "to bring about the rule of righteousness in the land, to destroy the wicked and the evil-doers; so that the strong should not harm the weak."<sup>2</sup>

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<sup>1</sup> T.D. Kendrick (trans.) Diogenes Laertius, *Vitae*, I.5.

<sup>2</sup> L. W. King (trans.) *Code of Hammurabi* (Kessinger Publishing, 2004) pg. 1



**The Avesta** (Date unknown; Persian). A central holy book of Zoroastrianism, which is possibly the world's first monotheist religion. It treats history as the story of a conflict between good and evil, represented by a god of goodness, Ahura Mazda, and a god of evil, Angra Mainyu. Zoroastrianism affirms human free will, and encourages people to show their good will through words and deeds.

**The Delphic Maxims** (5th century BCE, Greek), 147 moral proverbs given to humanity from the god Apollo, and carved on to the temple of the Oracle of Delphi. Among them: one of philosophy's most important mottos:  $\Sigma\alpha\upsilon\tau\acute{o}\nu\ \acute{\iota}\sigma\theta\iota$ , "Know Yourself."

**The Seven Wisdom Texts of Ireland** (compiled from the 5th to 9th centuries CE). Collections of oral folklore, committed to writing during the early Celtic Christian period. Fergus Kelly, the great scholar of early Irish language, wrote that they "...contain precepts, proverbs, and gnomic statements bearing on human behaviour, society, nature, and other topics."<sup>3</sup> Most take the form of short paragraphs of advice or moral teachings given by a community elder, on the occasion of a younger person's coming-of-age. I consider them a starting-place for philosophy that's at least as good as the fragments of the Greek pre-socratics. They are:

- the *Audacht Morainn*, 'The Testament of Morann' (this one is the longest);
- the *Tecosca Cormaic*, 'The Instructions of Cormac';
- the *Trecheng Breth Féne*, 'A triad of judgments of the Irish', also known as the Irish Triads;
- the *Briatharthesc Con Culainn*, 'The precepts of Cú Chulainn';
- the *Tecosc Cuscraid*, 'The Instructions of Cuscraid';
- the *Senbriathra Fíthail*, 'The ancient sayings of Fíthal';
- and the *Aibidil Luigne maic Éremóin*, 'the alphabet of Luigne mac Éremóin'.

Western philosophy as we have it today arose in three parts of the world more or less simultaneously: in Zhou Dynasty China (1046-256 BCE), in northern India, and in the classical period of Greece, all in or near the 6th century BCE. So intellectually productive was that century—the century of Socrates, Confucius, and The Buddha—that some scholars have called it the Axial Age.<sup>4</sup>

We can also generalize to say: Philosophy begins any place where there are enough people who (1) have enough free time to speculate on abstract questions, and (2) have a community of other intellectuals around them with whom they can engage in conversation, with the caveat that (3) the conversation is carried on primarily by *writing*. And, as mentioned above, (4) these people have a *problem* of sufficient seriousness to lead them to wonder about the fundamental questions of life. Questions like:

- What is real? —the problems of *metaphysics*.
- What is true? —the problems of *epistemology*.
- What is good? —the problems of *ethics*, and
- What is beautiful? —the problems of *aesthetics*.

<sup>3</sup> Kelly, *A Guide to Early Irish Law*, (Dublin: Institute for Advanced Studies, 1988) pg. 284

<sup>4</sup> For example, see: George Woodcock, *The Marvellous Century* (Markham, ON, Canada: Fitzhenry & Whiteside, 1989)

## 2. Early Greek Thought

Ancient Greece was one such place. It was a collection of around 150 independent city-states and their trading colonies around the Aegean and Mediterranean Seas, ruled by various kings, nobles, republics, assemblies, oligarchs, dictators, and tyrants.

What was their problem? Broadly, that in the 6th century BCE the Greek world became more consolidated and cosmopolitan. Inter-city institutions like the Olympic Games and the Oracle of Delphi were well established by then. Trade routes to the eastern Mediterranean, down to Egypt and Africa, and up into the Black Sea, brought not only commercial goods but also people, with their different ways of doing things, different cultural practices, different religions, different ideas. So the Greeks found their ideas and values challenged and sometimes transformed by their contact with different people. The archetypal example of this is Herodotus' statement that "culture is king".

### Events

- 820 BCE: Lycurgus, following instructions given by the Oracle of Delphi, establishes the constitution of Sparta.
- 650 BCE: Earliest lyric poets, including Sappho of Lesbos (b. 63 BCE)
- 594 BCE: Solon reforms the Draconian laws of Athens; standardized the system of coins, weights, and measures; declares no one is above the law. Beginnings of democracy.
- 547 BCE: Persians led by Cyrus the Great conquer Ionia (a Greek-speaking area of Anatolia, today central Turkey). Persian wars begin.
- 508 BCE: following a peasant revolt in which most aristocrats are exiled or killed, Cleisthenes establishes democracy in Athens. From *demos kratia*, people-power.
- Defeat of Persians at Battle of Marathon, 490 BCE.
- 480 BCE: Battle of Thermopylae. King Leonidas of Sparta leads 300 soldiers (mostly Spartans) and defeats a massively larger force of invading Persians.
- That same year: Pericles of Athens defeats a larger Persian navy around the island of Salamis. Persian Wars end with Greek defenders victorious.
- Pericles rules Athens for the next 24 years. He creates the Delian League, a military alliance to protect against the Persians should they attack again; Pericles soon reorganizes it into an empire with Athens at the head. In 454 BCE, he moves the treasury from the island of Delos to Athens, so there's no doubt who is in charge. Construction of Acropolis monuments, including the famous Parthenon, happens during his reign.
- Peloponnesian War: Sparta lays siege to Athens; plague; expedition to Sicily; death of Pericles (~430 BCE).
- 404 BCE: End of Peloponnesian war, with Sparta victorious. Democracy in Athens is replaced by the rule of the Thirty Tyrants for about six months.

## The Presocratics

Perhaps somewhere amid all of this cultural and political change, a few people wondered whether all this change could somehow be accounted for. Not only cultural changes: but also natural changes too, like birth, growth, transformation, death, decay. The usual mythological explanations didn't suffice for them: they wanted causal, natural accounts, as opposed to magical or supernatural accounts. Aristotle said that philosophy begins in that kind of wonder; that's a feeling which includes awe and amazement yet also curiosity and skepticism. It's as if somewhere in history people opened their eyes and noticed how beautiful yet also how strange the world is. And then they reasoned about its nature, its origin, its destiny, and its relation to us. Well, that's an exaggerated point: people have surely experienced wonder since before the rise of the first urban civilizations. But Aristotle's idea gives us a way to identify the central themes that string through nearly all of classical Greek philosophy:

- (1) Being, Coming To Be, and Passing Away: ie. which is more primordial, Being or Becoming?
- (2) The One And The Many: ie. is the world made of one substance, or several?
- (3) Unity and Diversity: ie. what explains how the different elements of the world relate to each other, and how they behave?
- (4) Death and the afterlife
- (5) Reason, as a method for approaching those themes, and as something deserving attention in its own right.

Another thing to note about the Presocratics is that none of their works survive complete. The only things we know of them come to us from fragments: quotations in other people's books. Everything else has been lost. Knowledge is fragile.

**Thales of Miletus** (c.600 BCE). First philosopher in the Classical Greek tradition whose name is recorded. Made several mathematical theorems; claimed that all things are water. While out walking one night he was so wrapped up in contemplation of a star that he fell into a well.

**Anaximander of Miletus** (c. 611-547 BCE). All things are **apeiron**, 'boundless'.

**Anaximenes of Miletus** (c. 550 BCE). All things are aer, 'mist' or 'fog', which condenses or rarifies to produce solids, liquids, and gases.

**Pythagoras of Samos** (570?-495? BCE): mathematics. Founded the first "school" (more like a kind of monastery) for philosophy, at Croton, southern Italy. Coined the word '**philosophy**' itself, to distinguish from *philotimo*, love of honour (ie. fame and glory), and *philarguria*, love of money and wealth. Believed in reincarnation, and in the mystical properties of numbers. Invented the famous Pythagorean Theorem concerning triangles that you learned about in primary school, although he may have learned it from the Mesopotamians who invented it 1,000 years before him. The Chinese invented it independently, too.

**Philolaus of Tarentum** (470-385 BCE), student of Pythagoras; heliocentrism.

**Hippasus**, mathematician, Pythagorean, killed for discovering that the number  $\sqrt{2}$  is irrational.

**Xenophanes of Colophon** (570-475 BCE) The first (documented) Greek monotheist, or the first pantheist, or the first atheist, depending on how you read him. He believed that at some time

in the past all the earth must have been covered in water, possibly in a cycle of periodic world-destruction, and he pointed to fossils as evidence: this requirement for *evidence* is a major step to distinguish truth from opinion. But his main interest is in the criticism of religion: for instance by pointing out how different cultures see their gods in familiar terms: “Ethiopians say their gods are flat-nosed and dark, Thracians say theirs are blue-eyed and red haired... No man knows, or ever will know, the truth [*aletheia*] about the gods and about everything I speak of; for even if one chanced to say the complete truth, yet oneself knows it not; but *seeming* [*doxa*; subjective understanding, opinion] is wrought over all things.”

**Heraclitus of Ephesos** (c. 500 BCE) Around 120 fragments of his book, *On Nature*, have survived, most of which are paradoxical aphorisms. Four major themes emerge:

(1) Relativism. Heraclitus believes that our understanding of the cosmos is always influenced by things like geography, time, your state of mind, what species you belong to, etc. “A man is found foolish by a god, as a child by a man.”

(2) Time, change, and impermanence. “One cannot step twice into the same river, nor can one grasp any mortal substance in a stable condition, but it scatters and again gathers; it forms and dissolves, and approaches and departs.”

(3) Fire. Not as an element (like Thales’ water) but rather as a process, an activity, possibly also a metaphor for change. Imagine the importance of fire to a preindustrial people: cooking food, keeping warm at night, blacksmithing and industry. You create fire through friction: flintstone strikes, rubbing sticks together. “The ordering [*kosmos*], the same for all, no god or man has made, but it was and is and every will be: fire everliving, kindled in measures and in measures going out.”

(4) Language and *Logos*. The word λόγος [*Logos*; from the verb λέγω, ‘I say’] has a dozen or more English translations: a saying, a speech, an account, a report, an explanation, reason, rationality, language, a word. For Heraclitus, *logos* is the name he uses for the organizing principle of the universe. It’s like a way to make sense and order out of all this fire and impermanence. “It is wise, listening not to me but to the report [*Logos*] to agree that all things are one.”<sup>5</sup>

**Parmenides of Elea** (515-450 BCE) The first recorded idealist (in the sense of not being an empiricist or materialist). He believed that Being cannot come from Non-Being, nor can things that exist pass into non-existence: “What is, is; what is not, is not”. Since this is contrary to what our senses tell us, he argued that our senses deceive us: the world is ultimately ‘one’. It is by thinking, and not by sense-experience, that we discover it so: “for to think is the same as to be”. I think of Parmenides as the natural counterpart to Heraclitus; where one says everything is in motion and nothing is still, the other says that everything is one and nothing is what it seems.

**Empedocles of Acragas** (494-434 BCE) Troubled by Parmenides’ argument that we cannot trust our senses, Empedocles invented the famous theory of four elements: earth, air, fire, and water. He argued that all things are either hot or cold, and either wet or dry: this produces four

<sup>5</sup> The very best collection of Heraclitus fragments is Charles H. Kahn, *The Art And Thought Of Heraclitus* (Cambridge University Press, 1979)

possible elements, also corresponding to four gods (two married couples from mythology), as follows:

- Hot and dry – Fire (Hades)
- Dry and cold – Earth (Hera)
- Cold and wet – Water (Persephone)
- Hot and wet – Air. (Zeus)

All matter, and all change in matter, he says, arises from the combinations of these four indestructible elements. Motion, which gives rise to change, arises from the interplay of two even more fundamental forces, Love and Strife. (Think of the love and strife in the marriage of Zeus and Hera). So we actually have six fundamental elements, four of which are material, and we can see them. So, contrary to Parmenides, we *can* trust our senses. (Well, mostly.) Also: a legend about his death says he leapt into a volcano in order to transform himself into a god. It didn't work.

**Anaxagoras of Clazomenae** (500-428). There are an unlimited number of elements, all of them guided by *Nous*, 'mind', 'consciousness', 'intelligence': "Mind is unlimited and self-ruled and is mixed with no thing, but is alone and by itself... And Mind knew all the things that are being mixed together and separated off and separated apart. And Mind set in order all things—whatever were and all that are now and whatever will be—and also this rotation in which are now rotating the stars and the sun and the moon..." Anaxagoras also claimed that the sun was a burning rock, and not a god; the kind of hot glowing stone you might find in a fireplace. For these and other wild ideas, in 450 BCE the Athenians put him on trial, convicted him of impiety, and exiled him. They might have executed him (as they would do to Socrates a few years later) but Pericles, who had been his student, came to his defense. He died in Lampascus, near Troy.

**Zeno of Elea** (c. 475) Zeno is best known for a group of **paradoxes** (see the Glossary) that seem to show that there's no movement, no change, no plurality in the world. It seems he figured that if he could prove that nothing in the world truly moves, then the world could not be a plurality of elements, and therefore there could only exist The One, and therefore Parmenides was right about everything.

**Leucippus of Miletus** (c.5<sup>th</sup> century), originator [with Democritus] of the theory that all the world is made of tiny indivisible particles called atoms.

**Democritus of Abdera** (460-370) originator [with Leucippus] of the theory of atomism.

**Diotima of Mantinea** (c. 440BCE), teacher of Socrates; possibly a pseudonym for Aspasia, the wife of Pericles, ruler of Athens. Her big theory is the 'ladder of love': the idea that the enjoyment of beautiful things in the world can lead us to seek the essence of Beauty itself, and thereby elevate our souls: "mortal nature seeks so far as possible to live forever and be immortal."

**Archytas of Tarentum** (410-350 BCE): ruler of Tarentum; student of Philolaus of the Pythagorean school; inventor of children's toys and flying machines (probably kites); rescued Plato from slavery.

**Diogenes of Sinope "The Cynic"** (412-323 BCE). A philosopher whose influence lay in the example of his life, rather than in his writings. Lived in a wine barrel, in order to have as few possessions as possible. When the philosophers of Plato's Academy defined 'man' as 'a

featherless biped', Diogenes stripped a chicken of its feathers and said 'Behold, a man!' Famous for walking about the agora in Athens with a lamp, in broad daylight, searching for 'an honest man' (the implication is that there is no such man); also for ordering Alexander the Great to 'get out of my sunlight'.

## The Sophists

The Sophists were, in effect, the Western world's first lawyers. They're described in the source texts as career intellectuals who taught rhetoric, public speaking, and argumentation, and who represented clients in the law-courts, business dealings, and in the democratic assemblies. In that respect they're similar to the philosophers. But the sophists wanted to be paid for their work. And they didn't much care about whether their statements were true or false: they also wanted to win. At least, that's how the philosophers described them. Philosophers liked to claim the moral high ground: they claimed that they did philosophy for its own sake, not for a price, and that they engaged in argumentation because they wanted to find the truth, not merely to win.

**Diagoras The Atheist** (c. 5th century). Banished from Athens for impiety.

**Georgias of Leontini** (485-380 BCE).

**Protagoras of Abdera** (490-420 BCE): "Man is the measure of all things."

## A Few Other Greek Writers

**Various playwrights and poets:** Sophocles, Euripides, Aristophanes.

**Herodotus** (484-425 BCE), the father of history.

**Xenophon** (d.354 BCE), military leader, philosopher, historian. One of our sources of information about the life of Socrates.

**Hippocrates** (460-370 BCE), the father of medicine. Established a medical school on the island of Kos, some time around 400 BCE

**Thucydides** (460-400 BCE), military general and historian, and our main source of info about the Peloponnesian War. Quote: "What made war inevitable was the growth of Athenian power and the fear which this caused in Sparta." In 2017, American political scientist Graeme Allison applied the lessons of Thucydides to contemporary international relations, esp. between USA and China: coining the concept of 'The Thucydides Trap')

**Plutarch** (46-119 CE), Platonist, priest at Delphi, historian and biographer. Became Roman citizen in mid-life. Major source of information about the lives of Greek and Roman philosophers, generals, statesmen, etc., including Alexander the Great, and Julius Caesar. Oldest source for the famous 'Ship of Theseus' thought experiment. Works: *Moralia*, *Parallel Lives*, *On The Malice of Herodotus*.

## Socrates of Athens (469-399)

Socrates is the first Greek philosopher whose life-story and whose logical methods have survived history mostly complete. He's noteworthy for claiming to be agnostic, or uncommitted, to any of the big world-building theories that came from the philosophers before him. Instead of saying he knew the answers to the big questions, he'd say he knew that he did not know the answers. This position is now called **Socratic Wisdom**. Unlike his predecessors who mostly asked about nature, Socrates usually asked questions about ethics and human affairs, using a question-and-answer method we now call **Socratic Dialogue**.

It happened that in his debates with people using this method, Socrates eventually came to believe that nobody really knew what they thought they knew, that only he knew (or, only he admitted) that he didn't know anything. He then decided it was his duty to publicly point out that most people didn't know what they claimed to know. This, as you can imagine, tended to really anger people. From their point of view, the humility of Socratic Wisdom looked more like a sophisticated kind of hubris. Socrates was eventually arrested, charged with "corrupting the youth" among other charges, found guilty, imprisoned, and executed. There you have it: philosophy's first documented martyr.

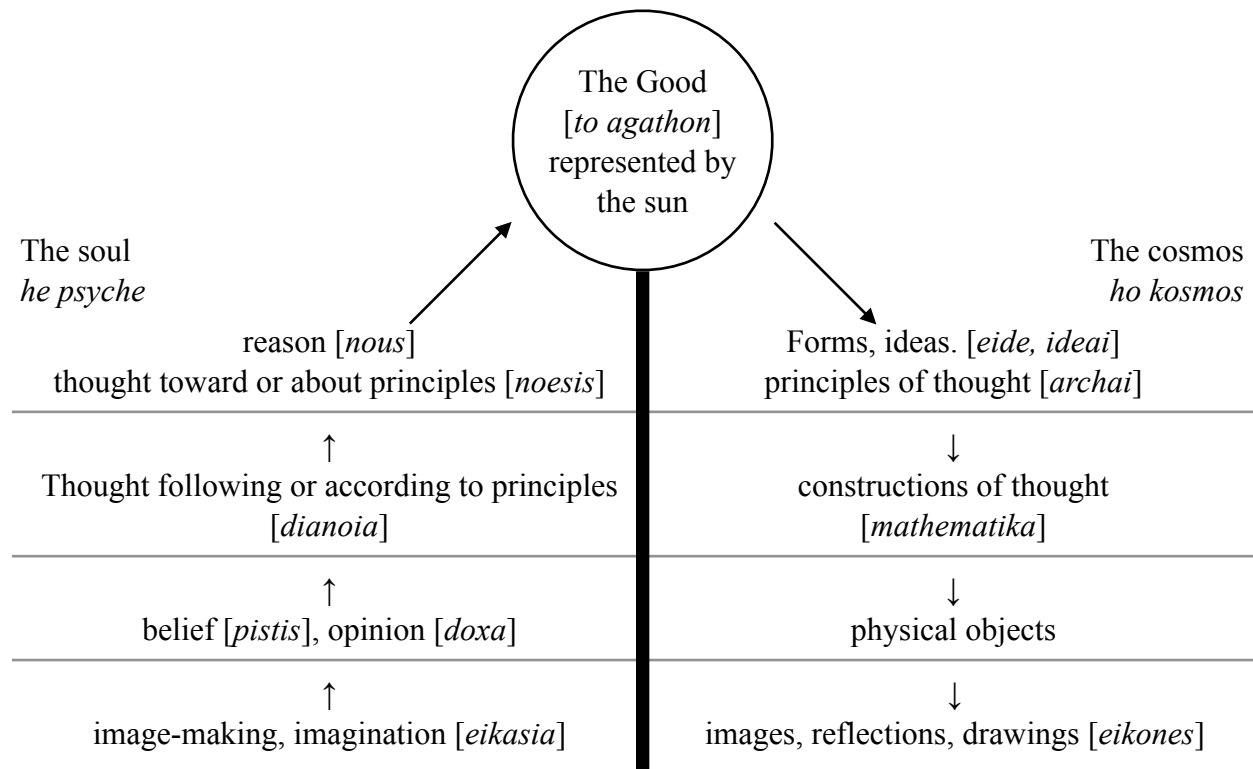
## Plato of Athens (428-348 BCE)

Socrates' best follower, Plato, became the most influential philosopher in the entire history of Western civilization. There is no underestimating his influence. Thirty-six of his books and thirteen private letters have survived history. The Republic is probably the masterwork among them, and has proven to be more influential in European and North American history than any other book ever written, with the exception of the Bible. His work remains influential not only for the originality of his ideas in their time, but also for the beauty of his prose. Having said that, Plato also wrote *esoterically* - that is, with some of his meanings deliberately hidden in parables, irony, and even jokes, so that they would be clear only to those who were smart enough to figure him out. It's likely he did this because he had seen his mentor, Socrates, executed by the state for doing philosophy, and he wanted to protect himself from the same fate.

After Socrates' death, Plato travelled about the eastern Mediterranean, visiting Egypt and Italy. When in Syracuse, in Sicily, he befriended a man named Dion, brother-in-law to the local king Dionysus the Elder. They persuaded the king to hire Plato as tutor to Dionysus the Younger. Plato attempted to make the boy into a philosopher-king. But the student did not take to his lessons: in a fit of anger he sold Plato into slavery. Plato's freedom was bought back by a man named Anniceris. He returned to Syracuse and tried to teach philosophy to Dion's son, the newly installed King Dionysus II. That went almost as badly: the new king threw Plato in jail to shut him up. He was rescued by Archytas of Tarentum, who was a philosopher in the tradition of Pythagoras. Plato returned to Athens and founded a school of his own, The Academy, so named because it was headquartered in a garden where a warrior named Academus was buried. Perhaps Plato thought that instead of going to the kings, he would invite the kings (and those who wanted

to be kings) to come to him. Plato remained in Athens, teaching at his Academy, until his death at the age of 82; he died on his birthday, while a Thracian girl played the flute for him.

In his metaphysics, Plato was an idealist in the style of Pythagoras and Parmenides. **Plato's Cave** is probably the most famous of his parables; but the parables of the Divided Line and the Sun are much more instructive. Here's a little diagram:<sup>6</sup>



Reality, Plato says, can be schematized from 'most real' to 'least real' (from top to bottom on the right-hand column of the diagram). The **Form** [eide] of the Good, which is the highest reality, *in-forms* all the stages of reality that come below and after it, and is somehow responsible for their existence. We mere mortals come to know about the highest reality by following a kind of process. We start from the bottom with opinions [doxa] which are then refined, corrected, and improved by reasoning [nous] so that we may gain knowledge [episteme], eventually leading to knowledge of the highest of the forms, which we might call wisdom [sophia].

For Plato, logic and reason was something divine; it was a way to make the shapes and movements of our thoughts follow the shapes and movements of the universe as a whole. There are many passages in his books which attest to this view of the purpose of reason; here's one which appears in *The Timaeus*, Plato's dialogue on cosmology:

The motions which are naturally akin to the divine principle within us are the thoughts and revolutions of the universe. These each man should follow, and correct the courses of the head which were corrupted at our birth, and by learning

<sup>6</sup> Based on Mitscherling and Lavery, *An Outline History of Western Thought* (unpublished, 2001) pg.14.



the harmonies and revolutions of the universe, should assimilate the thinking being to the thought, renewing his original nature, and having assimilated them should attain to that perfect life which the gods have set before mankind, both for the present and the future. (*Timaeus*, 90d)

This is an essentially *mystical* view of the reason why we reason(!). We do it so we can govern our lives in a similar way to how the Divine Reason governs the cosmos. This view had its critics in the next few decades following Plato's time, notably the Epicureans. Nonetheless, this mystical idea of the purpose of reason remained at the centre of western philosophy for more than a thousand years.

Plato thought that what most people ultimately want in life is *eudaimonia*, [εὐδαιμονία, 'good spirit', 'a favourable destiny', 'flourishing']. To achieve it, you need to cultivate the virtues (*arete*, excellences): self-rewarding qualities of character. The absence of the virtues, Plato says, leads to misery or suffering (or just pathetic failure). Each virtue was associated with one of three parts of the soul, and also with one of three classes in his *kallipolis*, the 'beautiful city', his model of an ideal utopian community ruled by philosopher-kings.

Virtue	Function of the virtue	Part of the Soul	Class in Society
Prudence <i>phronesis</i>	Reasoning	The Rational Soul	The Guardians (lawmakers, judges, teachers, etc)
Courage <i>tharseó</i>	Regulation of fear	The Spirited Soul	The Auxiliaries (soldiers and police)
Temperance <i>sophrosyne</i>	Regulation of bodily pleasure	The Appetitive Soul	Merchants, craftspeople, farmers

**Justice** [*dikaiosune*], by the way, is the virtue of all three of those other virtues working in proper cooperation and harmony with each other. Taken together: courage, prudence, temperance, and justice constitute the Four Classical Virtues.

## Aristotle of Stagira (384-322 BCE)

Born in Macedonia: his father was court physician to the king, and his mother a Greek aristocrat. But both died by the time young Aristotle was 13, so he was raised thereafter by his older sister and her husband. At 17 he went to Athens and became Plato's student at the Academy; he remained there for twenty years. When Plato died, he named his nephew Speusippus as the next head of the Academy; that slight, as well as a turn in the political winds that made Athens unfriendly to foreigners, caused him to leave the city. First he went to the island of Lesbos, where a fellow student, Hermias, who had become a local king, invited him to start up his own philosophy school there. While on Lesbos he also met his first wife, Pythias, Hermias' niece. He also studied the local animals and plants, and wrote several books on what we today would call biology. After several years, Aristotle returned to Macedonia to take up a new job as tutor to the son of King Philip of Macedon; that boy would grow up to become

Alexander the Great. Paid very generously, Aristotle used the money to hire hundreds of research assistants to tour the world and bring back information: samples of animals, plants, and minerals, copies of poems, books, legal rulings, histories, and the like. Effectively, Aristotle wanted to build the world's first general encyclopedia.

When Alexander conquered Athens, Aristotle was able to return. He was still unsatisfied with the kind of philosophy taught at the Academy. So he started his own school, in a former wrestling gym called The Lyceum. He taught paying students in the morning, and anyone at all in the afternoon for free. And he kept all his student essays in the library, for future students to study. From his habit of walking around the gardens while teaching or thinking, he and his students came to be called The Peripatetics [from περιπατητικός, “of walking” or “given to wandering around”.] He helped arrange an alliance between Athens and Macedonia during another period of Persian military belligerency; in retaliation, the Persian king sent a spy to murder his wife, Pythias. He never remarried, although a few months later he took a lover, Herphyllis, with whom he had several children, and they remained together for the rest of his life. Among those children was a son named Nicomachus, who would go on to become his father's main literary editor and executor.

After Alexander The Great died, anti-Macedonian sentiment flared up in Athens again. Aristotle was charged with impiety: the same charges once laid on Socrates. Aristotle decided to leave the city, so that Athens “would not sin against philosophy twice”. He went to the island of Euboea, where his mother's family held estates; he died there at the age of 62.

### *Invention of category logic.*

Aristotle thought that we could reason more precisely and more efficiently by using our words in a more systematic way. His method involved identifying classes of things and then discussing statements about the relations between the members of those classes. If “all cats are mammals” is true, for instance, it does not logically follow that therefore “all mammals are cats”. But if “some tables have four legs”, it *must* follow that “some tables do not have four legs.” (Consult the logic book, *Clear And Present Thinking 2nd Edition*, for more details.

### *The Doctrine of the Four Causes*

Aristotle also developed a theory of scientific explanation. In his theory, a scientific explanation is a movement from knowledge of the facts to knowledge of the reasons for the facts. If you had complete knowledge of what something is and why that's what it is, then you would know its essence. An essence, for Aristotle, is that which something ultimately *is*; or to be more precise, it is the *formal proposition* which expresses that which something ultimately is. So it becomes extremely important to use your words with wisdom-loving care.

The best way to know the essence of something is to look at how to describe it. A description must always be of some definite thing, and we call that thing the *ousia*, ‘substance’. This is the first of ten categories of understanding the essence of something. In a description, the substance functions as the subject of a proposition. The remaining nine categories are predicates, each of which answers a question about the subject.

Suppose, for instance, you're describing a car. You could say that the car is:

- Quantity: Four meters long
- Quality: Red
- Relation: Bigger than me
- Place: In the parking lot
- Time: Now
- Position: Upright, on its four wheels
- Condition: A little messy from the muddy roads
- Action: Idling its engine
- Affection: The sun is shining on it.

So, now that we have these facts, we can move next to the *reasons* for those facts. Aristotle maintained that the best way to investigate those reasons is to consider the various explanations we can give of what was necessary in order for something to be what it now is. There are, basically, only four ways of doing so:

1. *The Efficient Cause*: the agent chiefly responsible for moving, shaping, or forming the thing. This sort of account relies on our usual understanding of cause-and-effect.
2. *The Material Cause*: the matter, the stuff, of which the thing is composed.
3. *The Formal Cause*: the form 'supplied by' the species to which the thing belongs.
4. And *The Final Cause*: the *reason* for the thing's having come into being. This is usually the thing's purpose, goal, or function.

This system of logic became the dominant model of scientific method in Europe for the next thousand years.

*The Doctrine of the Mean*

Like Plato before him, Aristotle believed the foundation of ethics is the pursuit of *eudaimonia* by means of the virtues. Aristotle's innovation was to show how each virtue is a kind of mid-point, a 'mean', standing between a vice of too-much, and a vice of not-enough.<sup>7</sup>

Action or feeling	Excess	The Mean	Deficiency
Fear and Confidence	Rashness	Courage	Cowardice
Pleasure and Pain	Licentiousness, Self-indulgence	Temperance	Insensibility
Giving and getting small sums of money	Prodigality	Liberality	Illiberality, Meanness
Giving and getting large sums of money	Vulgarity, Tastelessness	Magnificence	Pettiness, Paltriness
Large honours and dishonours	Vanity	Magnanimity, "The Great Soul"	Pusillanimity
Small honours and dishonours	Improper ambition, Empty vanity	Proper ambition, Proper pride	Unambitiousness, undue humility
Anger	Irascibility	Patience, Good temper	Meekness, Lack of spirit
Self-expression	Boastfulness	Truthfulness	False modesty
Social graces	Buffoonery	Wittiness	Boorishness
Social Conduct	Obsequiousness	Friendliness	Cantankerousness
Shame	Bashfulness	Modesty	Shamelessness
On witnessing the misfortunes of others	Envy	Righteous indignation	Malicious enjoyment, Spitefulness

<sup>7</sup> This chart of Aristotle's virtues is based on the Harris Rackham translation of the *Nicomachean Ethics* (Wordsworth, 1996), pg. 32.

### 3. Major movements in Greek philosophy after Aristotle

Alexander the Great's empire ends with his death in 323 BCE. His generals fought with each other over which of them should take his place. Social stability broke down, and then public confidence in the religions and worldviews of the day also broke down. Skepticism and cultural relativism returned. One could almost call it a Hellenistic-Roman version of postmodernism! Philosophy starts to turn away from its trademark concern with science and justice, and toward practical ethics and religion. That is to say, philosophy turns toward helping people struggle for meaning amidst the turbulence and uncertainty of a rapidly-disintegrating social world.

#### Stoicism

Major principles:

- (1) Suffering and unhappiness tends to come from people trying to control things that are fundamentally not within their power to control: things like bad luck.
- (2) Your happiness should come from things you can control. And the only things you can reliably control are your own feelings about what's happening around you. So, your happiness comes from within you; and you are responsible for your own happiness.
- (3) The world is an inter-related, organic whole, where everything (including you) is in some kind of relationship to everything else, and all events turn out in the end for the benefit of the whole.
- (4) The nature of this organic whole is governed by *Logos*, treated here as a principle of divine rationality.

**Zeno of Citium** (c. 335-264 BCE, Greek). Founder of Stoicism. Kicked out of Plato's Academy for being a pain in the ass. Moved to the Stoa, a kind of public rain shelter in the agora, where he taught his own philosophy to passer-bys. Stoicism takes its name from that building.

**Cleanthes of Assos** (331-232 BCE, Greek). developed Stoic metaphysics as both materialist and pantheist. The goal of life is "to live consistently with nature".

**Chrysippus of Soli** (c. 280-206 BCE, Greek). Invented a system of propositional logic to compete with the categorical logic of the Aristotelian tradition.

**Panaetius of Rhodes** (185-109 BCE, Greek), held that a wise person has the duty to help those less fortunate, but must remain in a state of *apatheia* concerning the goodness and evil in the world around him.

We will see more Stoics when we get to Rome. But first:

#### Epicureanism

Like almost everybody in the tradition since Plato, the main concern of Epicureanism is the nature of *eudaimonia*, the good and worthwhile life. But it starts with a few slightly different premises. For instance: most Epicureans of ancient times were materialists. Their metaphysics

followed the theory of a pre-Socratic philosopher named Democritus who claimed that everything in the universe is composed of tiny, indivisible pieces called atoms. (That's where modern scientists got the word.) Thoughts, feelings, and even souls, are made of atoms, according to this theory: and when we die these atoms simply disperse in the world. So there is no such thing as immortality, according to this way of thinking; and therefore, no point in hanging one's hopes for happiness on the afterlife. Thus, Epicureans were more likely to be atheists, or agnostics, while the Stoics tended to be more like deists and pantheists. Epicurus himself seems to have believed that the gods existed, but his deism made almost no contribution to his tradition. So you could be an Epicurean without it.

Thus arises the famous association between Epicureanism and hedonism, the love of physical pleasure. But this did not mean indulgence and debauchery, as it is sometimes thought to mean today. Epicurus believed that some desires are good for us, and some are bad for us, and some painful things may be useful or necessary. The happy life involves intelligently discerning which is which, pursuing what does in fact bring you pleasure, and avoiding what doesn't. Epicurus himself defined pleasure as follows:

By pleasure we mean the absence of pain in the body and of trouble in the soul. It is not by an unbroken succession of drinking bouts and of revelry, not by sexual lust, nor the enjoyment of fish and other delicacies of a luxurious table, which produce a pleasant life; it is sober reasoning, searching out the grounds of every choice and avoidance, and banishing those beliefs through which the greatest tumults take possession of the soul.

(As cited in Diogenes Laertius, *Lives of the Eminent Philosophers*, Book X.)

**Epicurus** (341-270 BCE, Greek) Founder of the movement. With his followers he constructed a walled garden community, effectively an early form of monastery, where he and his friends could contemplate philosophy and live lives of ease unburdened by the troubles of the outside world. Works: *Letter To Menoeceus*.

**Lucretius** (99?-55? BCE, Roman). Works: *De Rerum Natura / On the Nature of Things* (~50 BCE). The re-discovery of this text in 1417 by Poggio Bracciolini, after it had been lost for more than a millenium, helped initiate the Italian Renaissance.

**Apollodorus The Epicurean** (2nd century BCE, Greek). Accounts of his life say that he was something of a bully in Epicurus' walled-garden community.

**Zeno of Sidon** (150-75 BCE, Greek). Student of Apollodorus. No works by this Zeno survive; everything we know about him comes from fragments in the work of his student Philodemus.

**Philodemus** (110 BCE - 40? BCE, Greek-Arabic), student of Zeno of Sidon, possibly the owner of the 'Villa of the Papyri', a house containing hundreds of books, preserved beneath volcanic ash after the eruption of Herculaneum, and discovered in 1750.

## Neoplatonism

It's difficult to say exactly what the Neoplatonists stand for, largely because the term 'neoplatonism' was applied to the tradition by others, long after its heyday in Alexandria and in the Fifth Academy. Neoplatonism is more like a kind of attempted synthesis of ideas, largely inspired by or derived from the works of Plato and his immediate successors (this includes Aristotle, although he also spawned a tradition of his own, the Peripatetics). So there really is no 'typical' Neoplatonist thinker. But there are a small handful of core ideas which appear, in one way or another, in the writings of most Neoplatonists:

(1) *Idealism over Empiricism*. As a kind of starting axiom, Neoplatonists tend to regard reason [*nous*; perhaps better translated here as something like 'mindful consciousness'] as more metaphysically fundamental than the material and empirically-observable world. To be simple about it: the real world is the one you contemplate; the material and visible world is but an imperfect reflection of the real world. So, this makes Neoplatonism incompatible with Stoicism and Epicureanism.

(2) *Ontological Monism*. Reality depends upon, grows from, is sustained by, etc., a kind of singular and unitary principle of reality, called by various names: "The One", "The Good", "The Absolute", etc.; based on Plato and his Form of the Good. So, despite the remark above, there's still some overlap with Stoicism here, especially on the principle of *Logos*.

(3) Seeing as Neoplatonism holds idealism over empiricism, "The One" is necessarily a mind, a principle of consciousness. You could call it "God", but it is more like a force than a deity; and anyway the Neoplatonists did not worship it in a way we today would recognise.

(4) We human beings have a soul, which in some way participates in the being of The One, as does everything else. The human soul is in some way a microcosm of the One.

(5) The ethical path favoured by the Neoplatonists involves pursuing *eudaimonia*, and studying philosophy (surprise, surprise). The goal is to fully grasp or realise your participation in the being of the One; with the ultimate goal of becoming a god.

## Skepticism

From: *σκέψις*, *skepsis*, an examination, an investigation.

The Stoics, the Epicureans, and the Neoplatonists believed that knowledge was necessary for the good life. That is, in order to live a good life, you needed to know which (if any) moral and scientific principles were true. And for that, you needed a criterion (*kritein* = to judge) for truth. For the Epicureans, that criterion was the evidence of the senses, and only the senses. For the Stoics, it's the senses in combination with reason. But the Sceptics thought all such criteria were arbitrary: it is always possible that we are wrong about something. Here's Sextus Empiricus on that point:

Let us imagine that some people are looking for gold in a dark room full of treasures. It will happen that each will grasp one of the things lying in the room and think he has got hold of the gold. But none of them will be persuaded that he

has hit upon the gold even if he *has* in fact hit upon it. In the same way, the crowd of philosophers has come into the world, as into a vast house, in search of truth. But it is reasonable that the man who grasps the truth should doubt whether he has been successful.

(Sextus Empiricus, *Against the Professors*, 7.52)

So, instead of looking for a criteria for truth, the Skeptics said we need a criteria for *action*: foreshadowing the American Pragmatists by about two millennia. They also thought it best to suspend judgment about objective truth-claims, and assert that something was “no more this than that” (*ou mallon*).

In general there were two kinds of skeptics in ancient Greek and Roman thought:

(1) *Pyrrhonic*, who were followers of Pyrrho of Elis. They were not organized into any kind of school, nor did Pyrrho himself teach any doctrines. Mostly, his students followed the example of his life.

(2) *Academic*, who were institutionally organized, mostly in Plato’s Academy from 262 BCE when Arcesilaus became its leader. Or, at any rate, the Second and Third Academies came to be associated with Skepticism through their attacks on the Stoics.

**Pyrrho of Elis** (c.365-275). Founder of the movement. Like Socrates, Pyrrho’s influence is mostly through the example of his life and the effect he had on his students, rather than from his writings. He travelled to India as part of Alexander the Great’s entourage, where he may have been influenced by the Persian magi, and the Indian gymnosophists (yogis, forest hermits).

**Timon of Phlius** (c. 320-c.230) student of Pyrrho, and a satirical poet who took special delight in making fun of Stoics, Epicureans, Platonists, Aristotelians, and Academic Skeptics.

**Nausiphanes** (4<sup>th</sup> c. BCE) student of Pyrrho, and possibly a teacher of Epicurus.

**Aenesidemus** (1<sup>st</sup> c.BCE) Formed ten modes for the suspension of judgment. For instance, the tenth is called the *mode of comparison*: a stone appears heavy to Socrates, but light to Hercules; it might be large compared to a pebble, but small compared to a mountain. So the stone’s absolute size is unknowable: the most we can say is that it’s *ou mallon*, no more this (heavy or large) than that (light or small). These ten modes appear in a work by Aenesidemus called *Pyrrhonian Arguments*, which is no longer extant.

**Agrippa** (dates unknown). Added five more modes to the Skeptic’s bag of tricks.

**Sextus Empiricus** (c.175?-c.240?), philosopher and medical doctor. Main source of info about the Skeptic texts. Originator of the **problem of evil**: the presence of evil in the world means that the gods are either unwilling to intervene, unable to intervene, or perhaps do not exist at all. Works: *Outline of Pyrrhonism*, *Against The Professors*.



## The Academy

A legend about the Academy says that Plato, its founder, inscribed on the entryway the words ‘No one enters here who has not studied geometry’. This, I think, speaks not only about the kind of student he wanted to attract, but also the kind of philosophy he wanted to teach: a philosophy that overlapped with science and mathematics, and perhaps other fields that we today keep separate.

*Old (First) Academy (385-268):* Platonic philosophy.

- **Speusippus**. (c.407-339 BCE; the *diadochoi* [headmaster; literally ‘successor’ of Plato] of the Academy starting in 347.) Plato’s nephew; he takes over the academy after Plato’s death.
- **Eudoxus of Knidos** (408-355 BCE) student of Plato, and possibly another teacher of Aristotle. Invented the ‘method of exhaustion’ for finding the value of pi.
- **Xenocrates** (396-314; heads Academy starting 339.)
- **Polemon** (d.276; heads Academy starting 314.)
- **Crates of Athens** (d.268; heads Academy starting 270.)

*Second (Middle) Academy:* Academic Skepticism

- **Archesilaus** (315-241), critic of the Stoics.
- **Lacydes of Cypere**
- **Evander** and **Telechus** (jointly)
- **Hegesimus**

*Third Academy:* More skepticism, and now relativism too.

- **Carneades** (214-129), claimed that it is impossible to have any certain knowledge of God.
- **Clitomachus** (157-110)

*New (Fourth) Academy (110 BCE-380 CE),* the rejection of Skepticism

That Hellenistic-Roman postmodernism from two centuries before was still going strong. Philosophers make another turn: this time away from the personal and practical ethics of Stoicism and Epicureanism, and toward the otherworldliness of Neoplatonism and Christianity. Part of the reason for this turn is that philosophy found itself competing with new religious movements, many of them imported from the east. Christianity would later import Greek philosophical ideas so that it, too, can compete with those new religious movements (and, indeed, compete with philosophy).

In 86 BCE, emperor Sulla of Rome destroyed the Academy buildings and cut down the forest that surrounded it to build siege engines, as part of his campaign to conquer Greece. Antiochus, head of the academy at the time, was visiting Egypt when it happened. He returned and found the buildings too badly damaged to repair. He resumed teaching at a separate gymnasium.

- **Philo of Larissa** (d.88) Student of Clitomachus and Carneades. Shifted the emphasis of the Academy away from Skepticism and toward Neoplatonism and ethics.
- **Antiochus of Ascalon** (d.68), student of Philo’s, brings Stoicism into the Academy; rejects Skepticism; teaches his own version of Platonism.

- **Eudorus of Alexandria** (1st c.BCE) attempted to unite Platonism, Pythagoreanism, and Stoicism.
- **Philo Judaeus of Alexandria** (30 BCE-50 CE, Jewish) Combined Hebrew thought with Platonism and Stoicism; heavy emphasis on the concept of Logos. Against the Christians, he argued we can find salvation through our own effort and exercises. Today this position is also known as the **Pelegian Heresy**. Very important source for philosophical Judaism in the 1st century CE. Wrote commentaries on the Hebrew Bible, and interpretations of Plato, Aristotle, and others. Works: *That Every Good Man Is Free* (a commentary on Stoicism).
- **Plutarch of Chaeronea** (45-125 CE) an initiate in the mystery religion of Pythian Apollo.
- **Theon of Smyrna** (2nd c.) mathematical knowledge can ascend the soul to God.
- **Gaius** (2nd c.) interpreted Plato in a religious and mystical sense
- **Albinus** (2nd c.)
- **Atticus** (2nd c.)
- **Celcus** (2nd c.)
- **Maximus of Tyre** (2nd c.)
- **Severus** (2nd c.)
- **Lucian of Samosata** (c. 125-180), who should also be listed here as a Cynic. (Note: Cynicism as a philosophical school begins with Diogenes, and runs more or less parallel to the Pyrrhonic Skeptics.)

#### *Fifth Academy: The School of Athens*

By this point, Greece has been part of the Roman empire for two centuries, and Christianity has just been named its official religion. So the Academy is one of the last institutions preserving pre-Christian Hellenic arts and culture. This certainly included philosophy, and may also have included poetry, playwriting, and jurisprudence. And it's fighting for its life against the growing hegemony of Christianity.

- **Plutarch of Athens** (c.350-433), rebranded the Academy as 'The School of Athens'; teaches a philosophy that combines Neoplatonism with Pythagoreanism (which he learned from Iamblichus).
- **Syrianus** (5<sup>th</sup> c.), combines Plato and Aristotle with Orpheism.
- **Proclus** (410-485) Neoplatonist. Student of Iamblichus. Works: *Elements of Theology*.
- **Marinus of Neapolis** (b.440) Neoplatonist, student of Proclus; wrote a biography of Proclus, too.
- **Damascius** (c.470-530?), student of Marinus, and the last head of the School of Athens. Works: *Life of Isidore*.
- **Simplicius of Cilicia** (490-560), Neoplatonist, student of Damascius, the last pagan philosopher in the Roman period whose name is recorded. All his surviving books are commentaries on Aristotle, but it's through them that we know about the tradition of philosophy after Aristotle: its commentators, critics, and contributors.

## 4. Roman Republic And Empire

According to legend, the city of Rome was founded by two brothers, Romulus and Remus, sons of the god Mars and a mortal woman named Rhea Sylvia, daughter of a local king and herself a descendent of Aeneus of Troy. The two brothers were abandoned to the wilderness by their parents because that king thought them a threat to his rule. But they survived: a wolf suckled them, then a shepherd adopted them, and somehow after that they became leaders of the local community. They moved to establish a new settlement near a bend in the river Tiber, at the same spot where the wolf found them. This particular spot was surrounded by seven hills. Romulus wanted the new city on the Palatine Hill (better for defence), Remus wanted it on the Aventine hill (closer to the river, better for commerce). So this is also two different ideas about what the new city should be like: militaristic, or commercial. Romulus builds the first Pomerium wall, and threatened to kill Remus if he crossed it. Remus crossed it anyway, and laughed at it for being too short and too easy to jump over. So Romulus killed him. Romulus built the settlement on the Palatine Hill, and named it after himself. *Roma*. This warrior-city soon realized it was a sausage fest, so they raided a nearby town called Sabine, and abducted all the women to take as their wives.

These early events, it seems to me, establish a kind character, a kind of *dasein*, and indeed a kind of original sin, which is recognizably Roman. It's not only militaristic, but also confident, ambitious, action-loving, a little xenophobic, more than a little misogynist, and definitely self-assured: a city for jocks and not for nerds. This would lead to the formation of a worldview in which Rome had a divinely-ordained 'mission', of a sort, to fulfill: a mission to spread universal (Roman) civilization to the world. As the god Father Jupiter said of them:

"I set no limits to their fortunes, and  
no time; I give them empire without end."<sup>8</sup>

Today we would probably call this mission an example of **colonialism**.

Having said that, the Roman period has a few interesting philosophical movements. The third century CE was especially productive, as various forms of Judaism, various forms of Christianity, as well as Neoplatonists, Gnostics, Zoroastrians, Stoics, Epicureans, and others, competed for the attention and the souls of their audiences, and indeed competed for money and for state power. By the 4th century, that competition is won by Christianity; a fact which tends to make us overlook how fraught and tense that competition was for most of Roman history. It also tends to make us overlook the fact that Gnosticism, Stoicism, Neoplatonism, and so on, also made decisive contributions to Roman thought, and that they still have thriving communities of practitioners even to this day.

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<sup>8</sup> Virgil, *The Aeneid*, 1.389-390. Trans. Allen Mandelbaum. Toronto: Bantam Books, 1971, pp. 10-11.

## Events

- In 509 BCE the last king of Rome, Tarquin the Proud, is overthrown. Rome becomes a republic.
- 264-126 BCE: Punic Wars: Rome conquers Carthage. Beginnings of empire.
- Rome conquers Macedonia in 146 BCE; and rest of Greece (including Sparta) in 30 BCE. The centre of influence of the ancient classical world shifts to Rome. Greece does not regain political independence until 1830.
- 46 BCE: Following a long and very successful career as a general, Julius Caesar assumes power as dictator. Note how royal titles like *Kaiser* (German), *Tsar* (Russian), and *Qaysar* (Arabic) all derive from the family name Caesar.
- 44 BCE: Julius Caesar assassinated, in the middle of the Senate chamber. He is succeeded by the triumvirate of Mark Antony (who would later run off with the Queen of Egypt, Cleopatra, and get involved in a war against her brother), Lepidus, and Octavian (the latter is Julius Caesar's nephew). Within months, Octavian goes to war against the other two.
- 31 BCE: Octavian wins the battle of Actium, and is crowned Emperor Augustus Caesar. Rome officially becomes an empire and remains so to its fall. Beginning of the 'Pax Romana' period, which would continue until the end of the reign of Marcus Aurelius in 180 CE.

## More Stoicism

**Seneca The Younger** (4BCE-65CE, Roman). Falsely accused of conspiracy to murder Emperor Nero, he was ordered to take his own life, which he did. Wrote a dozen plays (all tragedies), dozens of essays and poems, and over a hundred letters, mostly covering Stoic ethics and the problem of evil. Works: *On the Brevity of Life*.

**Cicero** (106 – 43 BCE, Roman) Student of Antiochus of Ascalon. Stoic and politician.

Assassinated along with other political opponents of Mark Antony. Works: *Discussions At Tusculum*.

**Epictetus** (60-138).

**Favorinus of Arelate** (80-160 CE, Roman)

**Marcus Aurelius** (121-180, Roman), philosopher and emperor of Rome. Works: *Meditations* (his private journal, discovered by his family after he died.)

**Ulpian** (170-228, Roman) originator of the twin concepts of *ius naturale* (natural law) and *ius gentium* (law of nations.)

## Alexandria, Egypt; and The Great Library

After finishing his studies at the Academy and travelling around for a while, Aristotle went back to Macedonia to take up a job as tutor to the son of King Phillip of Macedon. That boy would grow up to become Alexander The Great, and to conquer nearly everything between Greece and what's now Pakistan. Along the way he also conquered Egypt, and on an island near the mouth of the Nile he established a city that bears his name to this day: Alexandria. Perhaps

remembering his teacher's influence, or the accounts of the many educated Greeks visited Egypt to study their books (including Herodotus the historian, Theophrastus, Eudoxus, as well as Plato), Alexander wished to establish a library in this city, to collect as much knowledge as possible in a single place. Alexander died before the library was properly begun. But his successor as ruler of Egypt, Ptolemy I Soter, with the assistance of a Greek philosopher named Demetrius of Phaleron (who had just lost political favour in Athens and was looking for a new job), established the Library on or about the year 295 BCE. The project was ambitious: as one contemporary account put it: "Demetrius...had at his disposal a large budget in order to collect, if possible, all the books in the world...to the best of his ability, he carried out the king's objective."<sup>9</sup>

The scholars collected works mostly in Greek, Egyptian, and various mid-east languages. They purchased all the books and documents in Aristotle's old Lyceum - this included all the essays written by all the students who had ever studied there. They searched every ship that came to the city, buying or borrowing to copy all the books they found on board. The library eventually came to be housed in two main buildings: the Great Library, which was somewhere on the island of Alexandria near the dockyards, and an expansion building on the mainland attached to a temple called the Serapium. Some accounts say the library collected around 200,000 books by the end of the reign of Ptolemy I. There are other accounts, however, which say that the library housed only half that number by the time of his successor, Ptolemy II.

**Demetrius of Phaleron** (mid 4th century) hired by Ptolemy I of Egypt to get the Library started.

**Euclid of Alexandria** (mid 4<sup>th</sup> to mid 3<sup>rd</sup> century BCE), mathematician, author of *The Elements*, the most influential math textbook of all time. Provided a geometric (not arithmetic) proof of the Pythagorean Theorem. Also found a proof that there are an infinite number of prime numbers.

**Archimedes of Syracuse** (287-212 BCE), mathematician and engineer. Numerous discoveries in geometry and arithmetic; one of them, concerning how to find the volume of irregular solids, got him so excited he shouted out "Eureka!" (*I have found it!*), jumped out of his bath and ran naked through the town. He also invented various military machines including, so the story goes, a solar-powered death-ray weapon.

**Eratosthenes of Alexandria** [of Cyrene] (276-194 BCE), calculated the circumference of the Earth by measuring the angle of a shadow on Midsummer's Day: a day when he knew the sun cast no shadows in the town of Syene, many leagues to the south. By knowing that angle, and knowing the distance between Alexandria and Syene, he calculated what fraction of the circumference of the earth that distance covered. He also created 'Eratosthenes Sieve', a method for finding large prime numbers.

**Ammonius Saccas** (175-242 CE) some circumstantial evidence suggests he may have inherited a secret doctrine of Aristotle's concerning the immortality of the soul, and how to unify the philosophies of Plato and Aristotle. Taught this doctrine to Plotinus, Origen The Christian, Cassius Longinus, and Porphyry.

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<sup>9</sup> Letters of Aristeas 9-10.

**Cassius Longinus** (213-273, Syrian). Taught rhetoric, grammar, and logic to Porphyry. Involved in helping Zenobia, queen of Palmyra, to rebel against Roman rule; the rebellion was a failure, and he was executed by Emperor Aurelian.

**Plotinus** (205-270, Egyptian) The founder and chief teacher of **Neoplatonism**. Though born in Egypt he spent much of his teaching career in Rome, where he became a major influence in the rich intellectual atmosphere of the 3rd Century. He was an outspoken opponent of Gnosticism: he regarded it as anti-worldly, overly complicated, and that it drove its practitioners to hubris. But he could be just as anti-worldly as the Gnostics he attacked: for instance he once told his friends he felt ashamed that he possessed a physical body. According to his biographer Porphyry, Plotinus achieved a state of perfect spiritual ecstasy no less than four times in his life, prompted by his study of philosophy. Works: *The Enneads*.

**Porphyry of Tyr** (234-305) studied in Syria and then in Athens, where he was a student of Longinus, then went to Rome to study under Plotinus. Became depressed; Plotinus advised him that the best antidote to depression was travel. So he went to Sicily, where he published Plotinus' *Enneads*, and wrote a general textbook on logic called the *Isagogue*. It became the standard textbook in the field up to the end of the middle ages. He also wrote *Against The Christians*, an important source of historical info about Rome's transition from indigenous polytheism to institutional Christianity.

**Iamblichus** 'The Divine' (c.270-330, Syrian-Greek), Neoplatonist, student of Porphyry. Reintroduced Pythagorean thought into Neoplatonism again, which in turn influenced Plutarch of Athens to reorganize the Academy. Works: *On the Egyptian Mysteries*.

**Origen The Pagan** (early 3rd c.), may also have received a secret teaching of Aristotle's, from Ammonias Saccas, but the evidence here is even more circumstantial.

**Pandrosion of Alexandria** (4th c.) possibly the first woman to work at the Great Library.

**Theon of Alexandria** (335-405). Neoplatonist. His work on optics had been attributed to Euclid for centuries. He was also Hypatia's dad.

**Hypatia of Alexandria** (350?-415), Major figure; see below.

By the year 47 BCE, it's said that some 700,000 books in the library were destroyed in a fire when Julius Caesar got involved in a civil war between Queen Cleopatra and her brother Ptolemy XIII.<sup>10</sup> But there is some evidence that the books of the Serapium survived. By the 4th century CE, when Alexandria was a province of the Roman empire, Theon was head of the library. He was also the father of Hypatia, one of the most famous names associated with the library in all its history. By this time, however, the Roman empire was internally divided along religious lines. Christians in the city came to believe, quite wrongly, that she was a heretic; one particular fanatic named Peter The Reader incited a riot in which the library was damaged, and Hypatia herself was murdered.

Yet the library, or at least the Serapium, may still have survived a little longer. In the year 640 CE the city was taken by Arabs, during the expansion of the Muslim empire. The general who conquered the city, Amrou Ibn el-Ass, wrote to his Caliph, back in Baghdad, to ask what to do with the books. The Caliph, Omar, ordered him to burn them. And so,

<sup>10</sup> F.G. Kenyon, ed. *Books and Readers in Ancient Greece and Rome*, 2nd edition (Oxford: Clarendon Press, 1951) pg. 27

...The books were distributed to the public baths of Alexandria, where they were used to feed the stoves which kept the baths so comfortably warm. Ibn al-Kifti writes that ‘the number of baths was well known, but I have forgotten it’ (we have Eutychius’s word that there were in fact four thousand). ‘They say’, continues Ibn al-Kifti, ‘that it took six months to burn all that mass of material.

Aristotle’s books were the only ones spared.<sup>11</sup>

But by this time the Library was probably a mere shadow of its former glory anyway. The city had been sacked and damaged several times in the previous centuries, most notably in 391 CE when Emperor Theophrastus of Rome ordered the destruction of the pagan temples—which included the Serapium. Furthermore, the Greek texts, the language in which most of the books were written, was likely “crawling with errors, for Greek was increasingly a forgotten language”. (*ibid*, pg. 87)

By the way: In the year 2002, the government of Egypt established a new library in the city, the *Bibliotheca Alexandrina*. In addition to books, the new library also houses thousands of films and television programs, and millions of web sites, all in English, French, and Arabic. But that’s getting far ahead of ourselves.

## Hypatia of Alexandria (350?-415)

Hypatia of Alexandria became one of the most famous names associated with the library, as well as the last philosopher to work at the Library whose name is recorded by history. She wrote commentaries on Appolonius and Diophantus, and worked on mathematical instruments like astrolabes and calendars. Most of the evidence shows that she was well respected as a public intellectual, possibly the world’s leading mathematician at the time. One account of her life says:

Hypatia was born and educated in Alexandria. Since she had greater intelligence than her father, she was not satisfied with his instruction in mathematical subjects and she devoted herself diligently to philosophical studies. This woman used to put on her philosopher’s cloak and walk through the middle of town. She publicly interpreted Plato, Aristotle, or the works of any other philosopher for everybody who wished to hear her. In addition to her expertise in teaching she rose to the pinnacle of civic virtue.<sup>12</sup>

By this time, however, the Roman empire was internally divided along religious lines. Christians in Alexandria disapproved of women as public intellectuals. Here’s how one of the bishops described her:

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<sup>11</sup> Martin Ryle, trans. Luciano Canfora, *The Vanished Library: A Wonder of the Ancient World* (Berkeley: University of California Press, 1990) pg. 99

<sup>12</sup> *The Suda* (Byzantine encyclopedia) cited in Jennifer Hecht, *Doubt: A History* pg. 207

And in those days, there appeared in Alexandria a female philosopher, a pagan named Hypatia, and she was devoted at all times to magic, astrolabes and instruments of music, and she beguiled many people through satanic wiles.<sup>13</sup>

Most accounts of her life say that a religious fanatic named Peter the Reader incited the riot in which Hypatia was murdered. But there's another story, which says she may have been murdered because of a math problem. The Roman and Alexandrian churches disagreed about how to calculate the correct date for Easter. This disagreement was more serious than it may appear to us today, because the study of astronomy and mathematics was still associated with paganism. Yet it was also needed to calculate the equinox and hence the correct date for the Christian celebration of Easter. It's also possible that the Roman calculation was too similar to the Jewish calculation for the Alexandrian church's liking. What's more, if one church was wrong about when to celebrate Easter then it might be wrong about other things too, including matters of doctrine and salvation. As a top-tier mathematician, Hypatia may have called in to settle the matter. Perhaps she concluded that the Roman calculation was correct, so (perhaps) the Alexandrians murdered her for it.<sup>14</sup> The evidence for this version of events is circumstantial, but nonetheless intriguing.

What's interesting about Hypatia is not only her ideas and contributions, but also how later historians and philosophers treated her memory. Was she a pioneering feminist in a male-dominated world? Given her commitment to sexual abstinence, was she a paragon of Christian virtue (notwithstanding she was a Neoplatonist and not a Christian)? Was she a heroine of integrity and intellectual perseverance in the face of religious fanaticism and ignorance? Hypatia's legacy can be read in all of these different ways.

## Judaism

I'm going to skip the history of early biblical Judaism here and focus on the emergence of Rabbinic Judaism, which is the direct predecessor of present-day Judaism, and which is the place where Jewish philosophy begins. The big events are:

- 322 BCE: Israel is conquered by Alexander the Great. Difficult questions arise concerning the preservation of Jewish identity and culture while under foreign political masters, versus whether there are benefits to being part of a large multicultural empire. Out of these questions (among others) grow the beginnings of Jewish philosophical thought.
- 166 BCE: The Jews kick out the Greeks, and establish the reign of the Syrian-Greek Hasmonean kings.
- 1st century CE(?): **Canonization of the Hebrew Bible** (the 'Old' Testament): its major parts are The Torah (the Pentateuch), *Nevi'im* (prophets), *Ketuvim* (poetic works and other

<sup>13</sup> John of Nikiu (fl. 696), *Chronicle*, 84.87-103.

<sup>14</sup> Ari Belenkiy, 'An Astronomical Murder?' *Astronomy & Geophysics*, Volume 51, Issue 2, 1 April 2010, pp. 2.9–2.13.



writings). There are many theories to explain the origins and various textual contradictions in the Hebrew Bible; the three most influential are:

- A. *the Documentary Hypothesis*: Four main original texts, all based on older oral/folk traditions, and stitched together by editors.
  - B. *The Supplementary Hypothesis*: one core text to which various editors have attached extra commentary, or filled in missing information.
  - C. *The Fragmentary Hypothesis*: a very large number of short texts, with a connecting narrative imposed on it by editors.
- 63 BCE: General Pompey of Rome occupies Judea, replacing the Seleucids.
  - 66-70 CE: First Jewish War: the Romans put down a rebellion, and destroy the Temple. With the Temple gone, the Jews struggle to find a new centre of cultural and spiritual identity for themselves. After a century or two, that centre shifts to the home, the family, and the local synagogue.
  - 132-135 CE: The Bar Kokhba revolt. In its aftermath the Romans expel the Jews from Israel, although many manage to remain. Israel is re-named Syria Palaestina (Palestine), and Jerusalem is renamed Aelia Capitolina. The Jewish Diaspora begins.
  - By around 200 CE, numerous academies (*yeshivot*) established. A member of one of these academies was called a Rabbi ('great one', a teacher or a leader.) These academies softened some of the Biblical legal decrees (for example, the 'eye for an eye' justice in Exodus 21), re-wrote the purity laws (Kosher food, marital relations, etc), as well as the rules for how to interpret the Torah. By around this time, the "Parting Of The Ways" begins: over the next four or five centuries Christians and Jews gradually evolve into separate communities.
  - 200 CE: Writing of the Mishnah, the first major collection of Jewish legal traditions, much of which is claimed to have originated with Moses' revelation on Mount Sinai, and preserved in oral traditions. Important source of Jewish theology.
  - 200-500 CE: Composition of the Jerusalem Talmud and Babylonian Talmud. These books include commentary on the Torah (and commentary on the commentary, etc), and commentary on the Mishnah. Judaism thus creates an independent tradition of biblical interpretation, ethical problem-solving, and legal precedents, which continues to the present day.

People:

**Hillel The Elder** (110 BCE-10 CE). When challenged by a student to explain the Torah while standing on one foot, he replied "What is hateful to you, do not do to others. Everything else is interpretation. Go study." Also made a famous statement of the importance of *tikkun olam* (the duty 'to mend the world'; to pursue social justice) and of advocating for oneself and one's needs: "If I am not for myself, then who will be for me? And being only for me, who am I? And if not now, when?"

**Philo Judaeus** (30 BCE-50 CE), Became head of the 4th Academy (see above).

## Early Christianity

The Christian religion begins as one new religious movement among many, especially in the context of the Roman military occupation of Israel. Through much of its first and second centuries, Jews and Christians worshipped alongside each other, often in the same building: the distinction was not of two different religions, but rather of Jew-who-accepted-Jesus-was-Messiah, and Jew-who-didn't. Christianity's first philosophical moves are also remarkably experimental: absorbing an eclectic diversity of Jewish, Greek, and Essene ideas. Consider, for instance, the appearance of the Greek concept of *Logos* in the first line of the Gospel of John:

- Ἐν ἀρχῇ ἦν ὁ Λόγος, καὶ ὁ Λόγος ἦν πρὸς τὸν Θεόν, καὶ Θεὸς ἦν ὁ Λόγος. [**Logos**]
- In principium erat **Verbum**, et Verbum erat apud Deum, et Deus erat Verbum.
- In the beginning was **the Word**, and the word was with God, and the word was God.

**Paul The Apostle**, born Saul of Tarsus (5-65 CE, Jewish). Author of fourteen of the books and letters in the New Testament; originator of the idea that Jesus was the Son of God.

- **Assembly of the 'New' Testament:** The Gospels (at first more than two dozen of them, later narrowed down to four 'canonical' gospels), The Acts of the Apostles, The Letters of St Paul: between the years 50 and 120 CE.

**Flavius Josephus** (37-100 CE), historian, eyewitness to first century Judaism; a source of information about the lives of people mentioned in the Gospels (apart from the Gospels themselves).

- **The Dead Sea Scrolls:** written c.100 BCE – 50?CE, discovered in Qumran in 1947. Note that several Greek philosophical texts, including whole chapters of Plato's *Republic*, are found among them.
- **The Gnostic Gospels:** written somewhere between 50 CE and the 3rd century CE, discovered in Nag Hammadi in 1945. Among them: *The Gospel Of Thomas*, *The Thunder Perfect Mind*.

**John Philoponus** (490-570 CE), argued against an eternal universe and for a universe with a definite beginning. A precursor to modern Big Bang theory?

## The Fathers of the Church: The Patristics

These are the philosophers and theologians writing on the Christian faith from the end of the New Testament period and up to the beginning of Scholasticism. (Not to be confused with *Doctors of the Church*: a small number of writers selected by the Roman Catholic Church for contributions to theology of such high importance that only the Bible itself is considered above them.)

*1st Period: The Apostolic Fathers*

- **Clement of Alexandria** (c.150-215)
- **St Ignatius of Antioch** (martyred c.107)
- **St Polycarp** (martyred as an old man, c.155)

*2<sup>nd</sup> Period: The Apologists*

- **Aristides** (2<sup>nd</sup> c.)
- **Athenagoras** (2<sup>nd</sup> c.)
- **Justin Martyr** (c.105-c.165)
- **Tatian** (2<sup>nd</sup> c.)
- **Irenaeus** (c.125-202)
- **Hippolytus** (c.160-236)
- **Origen The Christian** [of Alexandria] (c.185-253) student of Ammonias Saccas.

*3<sup>rd</sup> Period: Development of Christian Doctrine*

- **St Augustine** (354-430), invented the doctrine of original sin. (See ‘End of Classical Europe’ below).
- **St Cyril of Alexandria** (376-444)
- **St Ephriam The Syrian** (d.373)
- **John Philoponus** (490-570) a.k.a. John The Grammarian. Christian Neoplatonist. Lived and worked in Alexandria though not associated with the Library.
- **St Jerome** (347-420) translated the Bible from Hebrew and Greek into Latin.
- **St Gregory the Great** (540-604) elected Pope in 590. Made reforms to the Mass and to church music (hence ‘Gregorian’ chant).
- **St John Damascene** (c.675-754)

**Boethius (480-525)**

Christian Neoplatonist, Senator of Rome. Translated Aristotle’s logical works into Latin, as well as Porphyry’s *Isagoge*, thus laying the foundation for Scholasticism, the main style of Christian philosophy during the medieval period. Introduced the idea of the *individual* into Roman law: a concept he gave the name *person*.<sup>15</sup> (But note that there isn’t a strong notion of individual-*ism* in Western thought yet, and there wouldn’t be for many centuries.)

Later in life, Boethius was accused of conspiracy to overthrow Emperor Theodoric The Great of the Ostrogoths [the Eastern Empire]. He wrote his best book, *The Consolation Of Philosophy*, while in jail awaiting execution: it turned out to be among the most influential texts of the next five centuries. Though you would expect him as a Christian to write a Christian text, in fact he turned to Sophia, a goddess of wisdom, for consolation: and She spoke to him in ordinary prose interspersed with poetry, just as the muses had done to Greek philosophers for many centuries. So, the philosophy he turned to was not the dry and technical stuff of his contemporaries, but the ancient philosophy of the heart.

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<sup>15</sup> *Person* : from the Latin *per*, ‘through’, and *sonare*, ‘sound’, itself a rough translation of the Greek *prosopon*, the mask that theatre performers wear (and through which the sound of their voices comes through). Note that Epictetus had used the term *prosopon* in the sense that God had assigned to each of us a role to play in life.

## The End of Classical Europe, and the Rise of Christian Europe

- 306: Beginning of the reign of Constantine the Great, the first emperor to convert to Christianity. In 312 CE, he has a vision of a cross appearing over the sun along with the words ‘By this sign, you shall conquer’. Days later, he wins the Battle of Milvian Bridge. Soon after that he delivers the Edict of Milan, which calls for tolerance and acceptance of Christianity within the Empire.
- 325: Council of Nicea: Constantine orders an ecumenical council of Christian bishops from across the Empire, to settle their various differences and schisms. This council establishes the Nicene Creed; establishes that Jesus is one and the same substance as God the Father.
- 330: Constantine establishes the city of Byzantium (today’s Istanbul), and moves the capital of the empire there. Converts to Christianity on his deathbed.
- 361: Emperor Julian The Philosopher (a.k.a. Julian the Apostate) attempts to restore Roman polytheism. He commissioned his friend and fellow consul, Sallustius, to write a handbook on ritual: *On the Gods and the Cosmos*. But Julian’s reign lasted only three years, and Christianity was restored as the Empire’s official religion by his successor, Jovian.
- Mid 2nd century CE: economic turmoil, graft and corruption in politics, and various related forces, were already leading the Empire into terminal decline. We get another resurgence of Hellenistic-Roman postmodernism: confidence in Rome’s world-civilizing mission declines. Saint Cyprian, a 2nd century bishop, described the situation as follows:

The world today speaks for itself: by the evidence of its decay it announces its dissolution. The farmers are vanishing from the countryside, commerce from the sea, soldiers from the camps, all honesty in business, all justice from the courts, all solidarity in friendship, all skill in the arts, all standards in morals — all are disappearing.<sup>16</sup>

No Aristotelian, Stoic, Epicurean, nor even neo-Platonist, would ever condemn the human world in such terms. But Greek confidence in the goodness of the world, and Roman confidence in the perfection of their political system, seemed empty and incongruous in the midst of the Empire’s instability (even allowing the possibility that Cyprian exaggerated a little— after all, the Empire would hang on for at least two more centuries). Thus it is perhaps unsurprising that philosophy, and indeed Roman society, turns toward otherworldliness: seeking meaning and the good life in the afterlife, as taught by the Christianity of the day, instead of in the embodied world.

- 395: The Empire is divided into Eastern and Western provinces, with separate capitals: Byzantium in the east, Ravenna in the west (starting in 402).
- 410: Rome is sacked by the Visigoths. As the bishop of a town on the north African coast, Augustine wrote *The City of God* in part to help refugees from Rome to make sense of what happened to them. He argues that the Romans had earned God’s wrath by worshipping pagan gods. He also argued that there is a fault in human nature: ‘Original Sin’. In the place of the

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<sup>16</sup> Dodds, E.R. *Pagan and Christian in an Age of Anxiety*, (Cambridge University Press, 1968), pg. 12.

swiftly falling City of Men (ie. Rome), he offers citizenship in a universal, intangible, cosmopolitan, otherworldly, and unconquerable Kingdom of Heaven, ie. the City of God.

- 455: Rome is sacked again, this time by the Vandals.
- 476: Odoacer, a Germanic warlord, sacks Rome, deposes the last emperor and dissolves the Senate. **Thus the Western Roman Empire ends.** The Eastern Empire survives as a Greek-speaking Christian nation until 1453, and is known today as the Byzantine Empire.
- 500 - 565: life of Belisarius, the last strong Roman [Byzantine] general. Recaptured Rome from the Vandals, and conquered the Vandal kingdom of north Africa, and the Ostragothic kingdom of Italy, thus restoring much of the territory of the old Roman empire. Recalled from the field by emperor Justinian I, as the emperor believed Belisarius was powerful enough to threaten his rule. An apocryphal story says that Justinian had Belisarius' eyes cut out, and the general spent the last years of his life as a beggar.
- In 529 CE, Emperor Justinian I orders the closure of all the philosophy schools, the expulsion of the pagans from all state offices, the confiscation of their money, etc., in order to erase all remaining traces of Greek and Roman paganism. In addition, all non-Christians were given three months to either convert to Christianity or else leave the Empire. Damascius, the last head of the School of Athens, along with Simplicius, Eulamius, Priscian, and other teachers, went to Harran [also known as Carrhae; at the time it was part of Mesopotamia; today it's in southwest Turkey, close to the border with Syria] and from there applied to King Chosroes of Persia as refugees.<sup>17</sup> They remained there for a while, perhaps working at a Hellenistic philosophy school that didn't get shuttered by Justinian because it was outside of his jurisdiction. But in 533, Chosroes made a peace treaty with Byzantium, allowing the philosophers to return to the Empire. We don't know what happened to most of them after that. Some (largely circumstantial) evidence suggests that some of them went to Arabia, and that their tradition found its way into the Baghdad House of Wisdom. But nobody knows for sure.

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<sup>17</sup> Richard Sorabji, (2005), *The Philosophy of the Commentators, 200–600 AD: Psychology* (with Ethics and Religion), p 11.

## 5. Medieval Philosophy

### Events

- circa 850: Kaldi, an Arabian goatherd in Ethiopia, discovered how to make coffee.
- circa 10th century: Compilation of *The Suda*, an early encyclopedia, in Byzantium.
- 1054: Pope Leo IX in Rome excommunicates Michael Cerularius, the Patriarch of Byzantium. Thus begins the ‘Great Schism’: the parting of Western (Catholic) Christianity and Eastern (Orthodox) Christianity. In retaliation, Cerularius excommunicated the Pope. This mutual excommunication was lifted in 1954.
- 1085: Toledo taken from the Arabs by Alphonso VI: Greek texts (re)discovered.
- 1088: founding of Europe’s first modern university, in the sense of an institution of higher learning that grants degrees, in Bologna, Italy. More would soon follow, including Oxford (1096), Salamanca (1134), Paris (1160), Cambridge (1209), and Padua (1222). Honourable mention: Al-Azhar Madrasa, in Cairo, was founded in 970 CE and became a degree-granting institution in 1961.
- 1229: The Inquisition in Toulouse forbids all laypersons from reading the Bible.
- 1215: enactment in England of the Magna Carta, an early attempt at a charter of rights and freedoms for England’s barons, and a limitation on the powers of the crown. Annulled by Pope Innocent III at the request of King John; this led to the outbreak of the First Barons War.
- 1250: Aristotle’s writings now form the basis of all philosophical teaching in most universities.
- circa 1280: Moses de León (140-1305, Spanish-Jewish) publishes the *Zohar* (Hebrew: “Radiance”, or “Splendour”), a book of mystical religious philosophy. Its importance to Judaism became so great that many believe, even today, that only the Talmud and the Torah surpass it. But it is not known who wrote it, and it is possible that de León wrote it himself and passed it off as the work of more prestigious rabbis of an earlier time, in order to get attention.
- The Condemnation of 1277. On 7th March of that year, Bishop Tempier of Paris made it forbidden to teach, or even discuss, more than two hundred propositions. Many had to do with witchcraft and fortune-telling. But 179 of them were philosophical: having to do with the nature and knowability of God, human free will, the problem of evil, etc. Forty of them were theological: having to do with angels, Christian morality, the sacraments, and so on.
- 1347: The first year of The Black Death.
- 1377: Over in Korea, a buddhist monk named Baegun invents the first moveable-type printing press. It was only used to make religious texts, and circulated only in monasteries.
- 1440-1450: Johannes Gutenberg independently invents another moveable-type printing press. Publishes a German-language Bible, for mass public circulation. Within a decade, books and pamphlets on every kind of topic are mass-produced all over Europe.
- 1450: founding of the Vatican Library.
- 1453: The Ottoman Turks take Byzantium; end of the Roman-Byzantine Empire. The city is renamed Istanbul.
- 1458: Greece captured by the Ottoman Turks.
- 1492: the Spanish take Grenada; end of the Muslim kingdom in Spain.

## Scholasticism

The majority of European philosophy in the medieval period is done in a style called Scholasticism. It attempts to bring Christian theology together with Greek and Roman philosophy, especially Aristotelian logic. By about the year 1250, Aristotle's works were re-established as the basis of philosophical teaching in almost all European universities and monasteries. Scholasticism insists upon on a strictly deductive kind of logic, avoiding inductions and avoiding contradictions, in order to reach certainty.

**John Scottus Eriugena** (810?-877, Irish-Scottish), Christian Neoplatonist, and poet. Founder of Scholasticism. Used Boethius' terminology for its system. Argued that all beings depend on God for their existence; but God also depends on His creation, God "creates himself in the creature... and therefore even that matter from which it is read that He made the world is from Him and in Him, and He is in it so far as it is understood to have being." This is a very NeoPlatonic move. It's almost, but not quite, **pantheism**: rather, it's more like **panentheism**, the idea that God is present in nature and reveals himself in the embodied world but that God is also more than the embodied world. Works: *The Periphyseon*.

**Sa'adia Gaon ben Joseph** (882-942, Jewish). A president of a Babylonian Talmud academy (a *Geonim*).

**Adelard of Bath** (1075-1160, English) translated Al-Khwarizmi and Euclid into Latin.

**Peter Abelard** (1079-1142, French) claimed to be "the only undefeated philosopher in the world". Had a secret marriage with **Héloïse d'Argenteuil**. Abelard wrote what is probably the first general textbook on Scholasticism, *Logic For Beginners*, as well as a compilation of the works of Aristotle, called the *Organon* ("the Instrument") and several texts on theology.

**Héloïse d'Argenteuil** (?-1163, French), philosopher, writer, and abbess. Rose to the Church rank of *prelate nullius* (like a bishop, but having no territory).

**Leonardo Bonacci**, better known as **Fibonacci** (1175-1250), whom you know from the series of numbers that bear his name. He also translated several more of Al-Khwarizmi's books into Latin and so popularized the Hindu-Arabic number system, which we still use today.

**William of Ockham** (1287-1348, English) wanted to make theology and metaphysics more efficient. He is best known today for the logical rule-of-thumb which bears his name:

**Ockham's Razor**, the idea that there should be "no unnecessary repetition of identicals", or as it is often phrased today, "the simplest explanation tends to be the truth".

**Judah HaLevi** (1075-1141, Jewish)

**Gerard of Cremona** (1114-1187); translated Ptolemy's *Almagest*, and also the Koran, into Latin.

**Henry of Ghent** (c.1217-1293) addressed questions about the possibility, scope, and nature of revelation (ie of mystical experiences).

**Bonaventure** (1221-1274, Italian)

**Robert Grosseteste** (1175-1253, English)

**Roger Bacon** (1219-1292, English) Major figure; see below.

**Siger of Brabant** (1240-1280, Dutch)

**Moses Maimonides** (1135-1204, Sephardic-Jewish) Medical doctor, astronomer, and neo-Aristotelian philosopher. Codified the thirteen principles of the Jewish religion: a mostly-successful effort to introduce articles of faith into Judaism. Maimonides also argued that literal interpretations of miraculous events in the Bible are usually **idolatry**, though later in life he accepted that miracles can happen. Major influence on the Haskalah (see below) as well as on Spinoza, Aquinas, Leibniz, and even Newton. Works: *The Guide For The Perplexed* (1190) which began as a letter addressed to a student who was trying to decide whether to study philosophy or to study Judaism. The text also argues for a de-mythologized religion and closes the space between religious and secular knowledge.

**St Thomas Aquinas** (1225-1274) Major figure; see below.

**John Duns Scotus** (1266-1308)

**Nicolas of Autrecourt** (c.1300?)

**Marsilius of Padua** (1275?-1342)

**John Buridan** (1300-1358)

**Nicole Oresme** (1325-1382, French) scientist, mathematician, philosopher, economist, Catholic bishop. Forerunner of the Copernican revolution: he regarded certain Biblical passages concerning the immobility of the Earth as “customary use of popular speech... not to be taken literally.” But he also held that all arguments for and against the immobility of the Earth are inconclusive.

## Christian Philosophers

**Hrotsvitha von Gandersheim** (935-973), historian, dramatist.

**St Anselm of Canterbury** (1033-1109) Anselm’s *Proslogion* includes the most influential version of the Ontological Argument for God in the history of Western thought. Note that Anselm himself didn’t give this argument its name; it was applied afterward, probably first by Immanuel Kant. Here’s how it goes:

1. God is that than which nothing greater can be conceived.
2. In affirming or denying its existence in extra-mental reality, that than which nothing greater can be conceived exists in the understanding.
3. That which exists both in the understanding and in reality is greater than that which exists in the understanding alone.
4. Therefore, if that than which nothing greater can be conceived exists only in the understanding, it is not that than which nothing greater can be conceived.
5. Therefore, that than which nothing greater can be conceived exists (also) in reality - *ergo*, *Deus est, QED*.

**Hildegard of Bingen** (1098-1179, German) Benedictine abbess, musical composer, philosopher, and the founder of scientific natural history (a precursor to the science of ecology).

**John of Salisbury** (1120-1180, English)



**His Holiness, Pope Innocent III** (Lothario dei Segni, 1161-1216, Italian). Works: *On the Misery of the Human Condition*. A companion essay with a less misanthropic thesis was planned, but never written.

## Christian Mystics

**Bernard of Clairvaux** (1090-1153, French) Led a reformation of the Benedictine Order.

**St Bonaventure** (1217-1274, Italian)

**Meister Eckhardt** (1260-1327, German) Charged with heresy.

**Julian of Norwich** (1343-1416?, English) One of only two women counted as 'Doctors of the Church'. Works: *Revelations of Divine Love* (this is the oldest book in English known to have been written by a woman.)

## Islam, and Early Islamic Philosophy

The name of the religion itself - Islam - is based on old Arabic and Semetic words for wholeness, safety, and especially peace. It's also based on ancient words for submission: and in context it refers to submission to God and to peace. Arabic society in pre-Muslim Arabia was not unified: much like Greece in the 6th century BCE, Arabia was a patchwork of various warlords and tribal kingdoms. *Allāh* (the Arabic for 'the God') was seen as a God of creation, but one god among many.<sup>18</sup> Muhammed's reception of the Qur'an (from 610-635 CE) serves as a unifying force: eliminating polytheism, and encouraging all those squabbling warlords to submit to God instead of to other warlords, or to their own human pride. A Muslim empire spreads from Mecca and Madinah within a few short years of his death. Within two centuries it spanned from the Middle East to southern France and Spain, North Africa, Persia, and parts of India.

**Constitution of Madinah** (~622 CE). This is likely the world's oldest formal written political constitution. It was established in the city of Madinah by the prophet Muhammed (though not as part of his divine inspiration; it is not a religious text). It grants basic human rights to various non-Arab tribes and religious groups, including Jews. It also provides equality under the law to all residents of Madinah, protection from arbitrary punishment, freedom of association, security of life and property, and a right to the basic necessities of life.

**The Baghdad House of Wisdom:** an important public library and centre of learning in philosophy, theology, medicine, mathematics, astronomy, and science, equally if not more influential than the more famous Library of Alexandria. Its scholars produced original research, and also translated texts into Arabic from dozens of other languages including Greek, Hindi, Hebrew, and Persian. Established during the reign of Harun al-Rashid of the Abbasid dynasty (8th century), it lasted until destroyed by the Mongols in 1258.

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<sup>18</sup> Other deities included goddesses *al-Uzzah*, *Manat* (possibly a love goddess), and *Al-Lat*, and the god *Hubal* (means 'vapour', therefore a possible rain god); the three goddesses seen as Allah's daughters (*Qur'ān* 39:3) though the *Qur'ān* also dismisses these deities as nothing but names (53:20:3).

**Muhammad ibn Musa al-Khwarizmi** (c. 780-850, Uzbek-Persian, possibly Zoroastrian). Major figure; see below.

**Alfarabi** (d.c.950)

**Ibn al-Haytham** (965-1040), the “father of optics”.

**Avicenna** (980-1037)

**Omar Khayyam** (1040-1123), sufi, gnostic, poet, and mathematician; worked on cubic equations, calendar reform, and astronomical tables. Works: *The Rubayyat*.

**Al-Ghazzali** (1058-1111) More responsible than any other for freeing up Islamic thought from the influence of early Greeks, thus allowing Islamic philosophy to go its own way.

**Averroes** (1126-1198)

**Ibn Khaldun** (1332-1406, Tunisian-Arabic) forerunner to modern economics, sociology, historiography; a general polymath.

## Al-Khwarizmi (780-850?)

The mathematician Al-Khwarizmi deserves a special mention here. While working at the Baghdad House of Wisdom he created the most accurate world atlas up to that date, *The Face Of The Earth*, which including latitude and longitude data for more than 2,000 towns, cities, rivers, and landmarks. He also invented a form of mathematics called *al-jabr*, ‘completion’, which you probably know by the name of algebra. (It’s also possible that he codified it from a variety of separate sources). He wrote the most accurate tables for predicting the motion of the planets in his time, and wrote the first general-purpose math textbook. Most importantly, he wrote *On the Calculation of Hindu Numerals*, the book which introduced the decimal system and the Arabic numerals that we use today— though those numerals were probably Hindu in origin and Al-Khwarizmi himself was Persian and not Arabic. It’s this system of numbers that the young Fibonacci would discover, as he and his father visit north Africa on business trips; Fibonacci would spread the system into Europe.

Eventually Al-Khwarizmi’s ideas would influence twentieth century computer scientists. In 1936 Alan Turing published *On Computable Numbers*, a paper which describes a procedure to automate certain kinds of problem-solving and decision-making tasks. Soon after, his associates named the procedure the *algorithm*, after the Greek word for numbers, *arithmos*, and the Latin version of Al-Khwarizmi’s name: *algoritmi*.

## Roger Bacon (1220-1292)

Roger Bacon (no relation to Francis Bacon) was a Franciscan monk and philosopher who anticipated later movements toward empiricism, experimental methods, and the creation of encyclopaedias. In the year 1267 he sent a proposal for reforming the university education curriculum to Pope Clement IV. He called it his *Opus Majus*, ‘The Greater Work’, perhaps because it was over 800 pages long. (He also included a summary of it, called *Opus Minor*, ‘The Lesser Work’.) It covered topics including language, mathematics, and the design of experiments; a section on optics and the structure of the human eye that shows the influence of

Arabic scholarship; and a section on alchemy that included the earliest European recipe for gunpowder. Bacon may thus seem like a modern scholar. Yet his text also discusses occultism and magic, and it places theology as the ultimate foundation of all knowledge; these moves place him securely within the Scholastic tradition of his own time. Even so, Bacon and people like him, such as, Ockham, Maimonides, and Abelard, show that the ‘dark’ ages were not so dark at all.

## Thomas Aquinas (1225-1274)

Much like Anselm before him, Aquinas believed that Christian Faith was all the evidence he needed to assure himself that God existed. But faith might need occasional help from our God-given rationality. So he came up with five more arguments, whose purpose is not to convert non-believers, but to help out believers who have occasional doubts. The five ways are:

1. The argument from motion
2. The argument from efficient causality (ie. the ‘first cause’ argument)
3. The argument from contingency
4. The argument from degrees of perfection
5. The argument from design

The fifth of the Five Ways, the argument from design, would be updated by **William Paley** into the famous ‘Watchmaker’ analogy. In the 20th century it gets updated again by **John Leslie** and some 20<sup>th</sup> century physicists and philosophers into the **‘Fine-Tuning’ argument**.

Aquinas would also have a big influence on the concepts of law and justice: “A law is nothing else but a dictate of practical reason emanating from the ruler who governs a perfect community.” (*Summa Theologica*, 91.1) He describes four kinds of laws:

- (1) *Eternal Law*: God’s rational organization of the universe, from Creation onward.
- (2) *Divine Law*: revealed in scripture, revelation, Jesus’ teachings, prophetic proclamations, etc. “The whole community of the universe is governed by Divine Reason. Wherefore the very Idea of the government of things in God the Ruler of the universe, has the nature of a law.” (91.1)
- (3) *Natural law*: The eternal and divine laws, as written upon the hearts and minds of rational beings: “the rational creature’s participation in the divine law.” (91.2)
- (4) *Human law*: our interpretations of the above laws; particular, situation-bound, and fallible. “Just as, in the speculative reason... we draw the conclusions of the various sciences... so too it is from the precepts of the natural law, as from general and indemonstrable principles, that the human reason needs to proceed to the more particular determination of certain matters. These particular determinations, devised by human reason, are called human laws...” (91.3)

Note that Aquinas is clarifying and improving upon a tradition of jurisprudence and legal philosophy that was already hundreds of years old in his time. This way of thinking about law, as having its root in divine revelation (and also in custom; see Ulpian, above) is more or less how European jurisprudence would carry on, until the Renaissance.

## 6. The Renaissance

The word *Renaissance* means ‘renewal’, or ‘rebirth’. It first appears in print in Giorgio Vasari’s book *The Lives of the Most Excellent Painters, Sculptors, and Architects* (1550):

For having seen in what way [art], from a small beginning, climbed to the greatest height, and how from a state so noble she fell into utter ruin, and that, in consequence, the nature of this art is similar to that of the others, which, like human bodies, have their birth, their growth, their growing old, and their death; they will now be able to recognize more easily the progress of her second birth [*rinascità*; renaissance] and of that very perfection whereto she has risen again in our times.<sup>19</sup>

Note that Vasari’s purpose in coining this word was at least partly a matter of national pride: a Renaissance had already begun in northern Europe, and Vasari wanted the Italians to lead it.

But what was it?

Throughout the time we tend to call the Dark and Middle Ages, European cultural life was dominated by Christianity. Most music and art was Christian devotional art, and almost all philosophical enquiry was Christian theology. Technological progress was driven by warfare, and by the desire to build bigger and better cathedrals. All over Europe, but especially in Italy, the physical remnants of the old Roman Empire remained on the landscape. Some of them—the pantheon, the aqueducts, the colosseum, etc—were truly monumental. Wealthy Italians wanted to build big monuments of their own, but the knowledge of how to do so had been lost.

Also, rather a lot of Europe, especially Italy, was a war zone. In Italy alone there were more than a dozen independent political powers: the largest and most influential were Florence, Venice, Naples, Milan, and the Papal States. In 1494, King Charles VIII of France invaded and claimed the throne of Naples. Twenty years later Spain held Milan, Naples, Sicily, and Florence. Italians fought the Spaniards and the French, as well as each other, for glory, pride, territory, resources, religious fervour, all the usual stupidities.

And then there was the Black Death. Starting in 1347 and continuing for fifty years, around one-quarter of Europe’s people died of plague. The disease attacked whole towns, and attacked rich and poor alike, playing no favourites. Symptoms might appear on your body in the morning; and you could be dead by nightfall. Politically: as the plague thinned out the ranks of the nobility, peasants and serfs demanded more rights. And theologically: people lived in terrible fear of dying without having their sins forgiven, thus spending their afterlife in hell.

Against this backdrop of war-fighting, competitive monument-building, plague, and (a particularly misanthropic version of) Original Sin, some scholars and intellectuals began to wonder if there was a better way for people to live. Many of them thought they found that better way in the newly re-discovered writings of the ancient Greeks and Romans: the long-gone society that built all those enormous old monuments. For in those writings, newly rediscovered

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<sup>19</sup> Vasari, *Lives*, (London: McMillan, 1912) pg. lviii

in the libraries of Ireland and the Islamic world, they found not only engineering and technical information; they also found storytelling, poetry, art theory, political theory, satirical novels, history, mythology, and of course philosophy: the literary legacy of at least two whole civilizations. It was a world that never knew Original Sin: and thus could inspire **humanist** aspirations.<sup>20</sup> The Renaissance, it is thus often said, was a re-birth of Greek and Roman humanist culture. Artists and sculptors made works based on Greek and Roman myths. Poets and philosophers quoted Plato and other ancients. And the invention of printing press made it possible for these new ideas to reach more people than ever before.

Now, that version of the story of the Renaissance is close to the one that appeared in most of my textbooks when I was a student. How true is it? It's not entirely false; but it's probably overstated. Lots of Renaissance art was religiously Christian, and exuberantly so. Lots of it was also not serenely 'classical': think of the hellscapes of Heironymus Bosch, or Arcimboldo's surreal and silly portrait of Emperor Rudolph II as a collection of vegetables. The Renaissance also had its opponents. A Dominican monk named Girolamo Savonarola (1452-1498) persuaded the city of Florence, the very capital of Renaissance humanism, to destroy its Greco-Roman-inspired artworks and books, as well as luxury goods like fine clothing and musical instruments: an event which today we call The Bonfire Of The Vanities.

It might thus be better to characterize the Renaissance as the Polish-British art critic Waldemar Januszczak did: an attempt to "imagine the unimaginable" in various fields of culture.<sup>21</sup> Sure, humanist ideas gained more of a hearing than had happened since the end of the Classical period. But there was plenty of intense Christian religiosity happening, too. It might be better to describe the Renaissance as a widely-distributed, multi-disciplinary, and perhaps slightly desperate *struggle for meaning*, in a world undergoing rapid transformation.

## Events

- 1410: Prague installs its astronomical clock: the oldest such clock in Europe which, as of this writing, still works.
- 1429: Cosimo de Medici inherits the Medici Bank. He uses his newfound wealth to pay for artists, musicians, philosophers, poets, and so on; effectively financing most of the Italian Renaissance. Circumstantial evidence suggests he attended lectures by Gemistos Plethon, and was inspired to re-create a new Platonic Academy.
- 1440: founding of the Platonic Academy in Florence, with Marsilio Ficino as its first headmaster, and Cosimo de Medici paying the bills.
- 1440: Lorenzo Valla discovers that the "Donation of Constantine", a text used by the Catholic Church to justify its political power, was a forgery.
- 1454: publication of Gutenberg's Bible: a German-language edition that ordinary people could read. The effect of the printing press on the European mind cannot be underestimated. Churches and governments no longer held a monopoly on knowledge and information. News

<sup>20</sup> See, for instance, Joscelyn Godwin, *The Pagan Dream of the Renaissance* (Weiser, 2002), pg.2.

<sup>21</sup> Waldemar Januszczak, *The Renaissance Unchained* (Four-part television series, BBC 4, 2016)

and ideas (alas, including fake news and fear-mongering), could spread more freely, and get people thinking more for themselves than ever before.

- 1469: Lorenzo de Medici, “The Magnificent”, becomes ruler of Florence.
- 1492: Columbus expedition to the Bahamas, “Discovery” of the “New World”.
- 1492: Rodrigo Borgia becomes Pope Alexander VI. His Papal Bull of 1493 establishes the ‘Doctrine of Discovery’: that the Americas are *terra nullius*, ‘nobody’s land’, and thus open to whoever claims them. The doctrine becomes a major justification for the **colonial** exploitation of the Americas and the cultural genocide of indigenous people. This doctrine has since been abrogated, so that it no longer has any force in Canon law, but it has not (yet?) been formally rescinded.
- 1497: Savonarola instigates the Bonfire of the Vanities, in Florence.
- 1503: Julius II becomes Pope; the centre of influence begins to shift from Florence to Rome.
- 1504: Michelangelo completes his sculpture of David. It stands before the town hall in Florence, facing south, ie. toward Rome: the message is that Florence thinks of itself like the young Biblical hero David facing down the mighty goliath of Rome.
- 1510: Nuremberg Germany: Peter Henlein invents the spring-driven pocketwatch.
- 1555: The Peace of Augsburg: member-states of the Holy Roman Empire could choose for themselves whether to follow Catholicism or Protestantism. The collapse of this agreement in the early 17<sup>th</sup> century helped precipitate the Thirty Years War: Catholic vs Protestant across almost all of Europe.
- 1558: Elizabeth I crowned Queen of England: “Golden Age” for England as a global naval power begins. It ends in 1956 when the UK loses control of (really, when Egypt reclaims) the Suez Canal.
- 1578: creation of the Gregorian Calendar.

## Forerunners

**Dante** (1265-1321, Italian) Epic poet. Chooses the ancient Roman poet Virgil, instead of Jesus or any Catholic saint, as his guide to the Otherworld in *The Divine Comedy*.

**Gemistos Plethon** (1355–1452, Byzantine-Greek), theologian, Neoplatonist. Rejected Christianity and advocated a universalist religion based on stoicism, Zoroastrianism, and the worship of the Greek gods. Works: *The Book of Laws* (circulated only among friends, probably because of the Hellenic paganism in it.)

**Bessarion** (1403–1472, Byzantine-Greek)

## Humanist thinkers

**Francisco Petrarch** (1304-1372, Italian), the “father of the [Italian] Renaissance”, cites pagan authorities such as Cicero, Seneca, various Stoics, instead of Church fathers and patristics.

**Christine de Pisan** (1364-1430, Italian), proto-feminist. Works: *The Book of the City of Ladies* (1405)

**Poggio Bracchiolini** (1380-1459, Italian), scholar and book hunter who explored monastic libraries across Europe in search of old Roman books. In this manner he re-discovered lost works by Lucretius, Vitruvius, Cicero, and others.

**Giannozzo Mannetti** (1396-1459, Italian). Works: *On the Dignity and Excellence of Man in Four Books*, a point-for-point rebuttal to Pope Innocent III's rather more misanthropic treatise, *On the Misery of Human Nature*.

**Marsilio Ficino** (1433-1499, Italian) Catholic priest, physician, astrologer, Neoplatonist; argued for the immortality of the soul and the supremacy of Platonic love, and attempted to reconcile Platonism with Christianity. With funding from Cosimo de Medici, he established the Platonic Academy of Florence, the first dedicated philosophy school in Europe since Emperor Justinian ordered them closed in 529 CE. This academy seems to have been more like a semi-formal circle of students and friends, and not a formal institution.

**Pico della Mirandola** (1463-1494, Italian) The 'father of humanism'. Offered to debate 900 questions as part of his doctoral defense. The defense was cancelled by Pope Innocent VIII (his uncle) who declared many of the questions heretical. He attempted a synthesis of Greek, Christian, Islamic, and Jewish specifically Qabbalist philosophy; but he died before completing it. Works: *Oration on the Dignity of Man* (1486). Here's a selection from it, in which he imagines God's true message to humanity:

The nature of all other creatures is defined and restricted within laws which We have laid down; you, by contrast, impeded by no such restrictions, may, by your own free will, to whose custody We have assigned you, trace for yourself the linaments of your own nature. We have made you a creature neither of heaven nor of earth, neither mortal nor immortal, in order that you may, as the free and proud shaper of your own being, fashion yourself in the form you may prefer. It will be in your power to descend to the lower, brutish forms of life; you will be able, through your own decision, to rise again to the superior orders whose life is divine.<sup>22</sup>

**Niccolo Machiavelli** (1469-1527, Italian), political philosopher. Advisor to the Medici family, until the family was ousted from Florence; worked for their successors; when the Medici returned he was ousted again for disloyalty. Wrote *The Prince* (first published 1532) while under house arrest, as an application to get his old job back. He didn't get it. But the book became one of the world's most influential works on **realpolitik**.

**Thomas More** (1478-1535, English), lawyer, judge, statesman, religious humanist, Chancellor of England under Henry VIII. Works: *Utopia* (1516), an allegorical novel about the workings of an ideal society. The word 'utopia', by the way, literally means 'nowhere': More uses the word to signal that his ideal society does not exist and shall probably never come to exist.

**Castiglione** (1478-1529, Italian)

**Michelangelo** (1474-1564, Italian), artist.

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<sup>22</sup> trans. A. Robert Capongiri (Chicago, IL USA: Regenery Gateway, 1956) pp. 7-8

**Michel de Montaigne** (1533-1592, French) Soldier, administrator, and diplomat. Invented the essay (from *Essais*, ‘attempt’) as a literary form. Note that his essays were often composed in a didactic, stream-of-consciousness style: commenting and free-associating on various events or customs, without necessarily a thesis statement or much on the way of argumentation. His work is also characterized by a classical-skeptical spirit: his inferences and conclusions were often hedged with the remark *Que sais-je?* (‘What do I know?’), in the spirit of classical Pyrrhonic skepticism. Works: *Essays* (1580).

## Religious thinkers

**Jan Hus** (1369-1415, Czech), theologian, religious reformer, important forerunner of Protestantism.

**Desiderius Erasmus of Rotterdam** (1467-1536, Dutch), “the crowning glory of the Christian humanists”, published *Moriae Encomium*, “In Praise Of Folly” (1515), a satirical essay which draws attention to corruption and stupidity in practically every mediaeval institution, religious and secular.

**Martin Luther** (1483-1546, German), initiated the Protestant Reformation.

**Vittoria Colonna** (1490-1547, Italian). Poet, lay religious philosopher, and Michaelangelo’s lover.

**Giordano Bruno** (1548-1600, Italian). Major figure; see below.

**Catherine de Parthenay** (1554-1631, French) Huguenot-Calvinist protestant philosopher.

## Giordano Bruno (1548-1600)

Bruno was a mathematician and theologian, best known for investigating the implications of the belief that God is an infinite being. His story invites us to ask whether he was an intellectual hero of courage and integrity, or a half-mad fantasist who should have known what would happen to him when he aggravated the authorities of his day. Here’s a short summary of his big idea:

- (1) The universe is infinite in extent and diversity, so that the centre is everywhere and nowhere, nothing is permanent, the condition of life is change. Among the implications: all the stars are suns, having their own planets, possibly their own civilizations, and their own Sons of God. In the 21st century, astronomers discovered that most stars do, indeed, have planets. So, Bruno was right, but alas, only accidentally right.
- (2) The souls of things are monads; and monads come in three kinds: God, souls, and atoms. All of them are immortal. This will later influence **Leibniz**.
- (3) God is both transcendent and immanent, the source of creation; the universe is one (note how this question has bothered people since the Presocratics). Being one, it is also one with God. This will later influence **Spinoza**.
- (4) In another sense the universe is a going-out-of and a return-to the divine nature: a going-forth into a display of infinite diversity and potential, and a return-to marked by the human mind



whose discovery of the ultimate unity of things is a return of God to himself. Note the influence of NeoPlatonism here.

- (5) Through the development of reason and inspired by love, humankind can, upon death, return to, and find eternal union with, God.

Ideas like these got Bruno kicked out of Italy. So he travelled about Europe, looking for work teaching mathematics and logic. Returning to Venice in 1592, the Inquisition caught up with him; he spent eight years in jail for refusing to recant. So, in the Campo Dei Fiori, in Rome, on 17th February 1600, he was burned alive at the stake.

## Scientific thinkers

**Leonardo Da Vinci** (1452-1519, Italian), military engineer, artist, and painter. Vasari described Leonardo da Vinci as: “an artist of outstanding physical beauty who displayed infinite grace in everything he did and who cultivated his genius so brilliantly that all problems he studied he solved with ease.” (*Lives*, pg. 255). This is his basic model of what we now call a *Renaissance Man*: a person who is highly educated, multi-talented, capable, ambitious, a polymath in a variety of arts and sciences; basically someone who is a lot like Da Vinci.<sup>23</sup>

**Nicolas Copernicus** (1473-1543, Polish-German) Works: *De Revolutionibus Orbium Coelestium*, which redraws the model of the solar system, putting the sun at the centre instead of the Earth. A story says that he received his copy on the day he died.

**Tarquinta Molze** (1542-1617, Italian), natural philosopher (ie early scientist), composer, musician, and contributor to a professional women’s choral group called *Concerto Delle Donne*; she also taught the girls in the concerto mathematics, philosophy, and history.

**Tycho Brahe** (1546-1601, Danish) produced the Rudolphine Tables, the most accurate star charts and tables to date. Calculated the orbit of a comet, and found that it crossed several planetary orbital distances, thus proving that the planets do not ride on crystal spheres.

**Johannes Kepler** (1571-1630) served as assistant to Brahe; defended Copernicus’ view openly, and at great risk to his life and livelihood. For instance, they arrested his mother for witchcraft. Proposed his Three Laws of planetary motion: (1) planets move in ellipses, not circles; (2) they speed up and slow down, and (3) the square of the periodic times is proportional to the cubes of the area covered in the period.

**Francis Bacon** (1561-1626). Major figure; see below.

**Galileo Galilei** (1564-1642) Musician, artist, poet, mathematician, scientist: a fine example of a Renaissance Man. By exploring the sky with a telescope of his own design, he provided empirical evidence that Copernicus was correct. While doing experiments on pendulums he proposed his law of gravity: that bodies fall at a constant velocity (this would be challenged by Newton). Convicted of heresy; he spent his last days under house arrest and in poor health. His daughters smuggled his last books out of the house by hiding them in their skirts.

**Isaac Newton** (1642-1727) Major figure; transitional to the Enlightenment. See below.

<sup>23</sup> But the concept of the Renaissance Man isn’t Vasari’s. The general idea first appears in Castiglione’s (1463-1494) *Book of the Courtier*; and the term itself was coined by the Swiss cultural historian Jakob Burckhardt (1818-1897).

## Francis Bacon (1561-1626)

The trouble with Scholasticism is that, while it's a powerful way to think about things you already know, it doesn't do much to help you learn things you don't already know— apart with what you can naturally observe. That was the problem which Francis Bacon set out to solve. Thus Bacon published *Novum Organon* ('New Instrument'), one of the first, and certainly the first popular, published books of the principles of science. His work also initiated a new tradition of philosophy, Empiricism, the theory that our most important knowledge comes from the experience of our physical senses, and particularly from the evidence of *experiments*, especially experiments with observable and mathematically quantifiable results. Such experiments can lead to new propositions that we can use to build deductive arguments and so find new knowledge. Bacon is also the first (documented) philosopher to suppose that we do not pursue knowledge only for enlightenment, as Plato had supposed. We also pursue it in order to do things. *Nam et ipsa scientia potestas est*— 'And thus knowledge itself is power'.

Thus we see the beginning of the relationship between science and technology, and the beginning of a shift in the view of what the study of logic and philosophy was supposed to be for. It became less about understanding the world and gaining enlightenment from contemplating it, and more about *controlling* the world. We reason in order to prevent disease, prolong life, build bigger and longer-lasting buildings, travel longer distances, and to bring about greater justice and fairness in politics and economics. Bacon stands at the beginning of a slow move away from reason-as-mysticism, and toward reason-as-instrument; this move would be mostly complete by the end of the 1700's.

By the way: in one of his private notes, Bacon described himself as having a disposition especially suited to philosophy; this moment of self-awareness is often treated as an early definition of critical thinking:

I found that I was fitted for nothing so well as for the study of Truth; as having a mind nimble and versatile enough to catch the resemblances of things (which is the chief point), and at the same time steady enough to fix and distinguish their subtler differences; as being gifted by nature with desire to seek, patience to doubt, fondness to meditate, slowness to assert, readiness to consider, carefulness to dispose and set in order; and as being a man that neither affects what is new nor admires what is old, and that hates every kind of imposture. So I thought my nature had a kind of familiarity and relationship with Truth.<sup>24</sup>

## Philosophical thinkers

Recall the ancient Greek transition from mytho-poetic thinking to philosophical thinking: social and cultural changes led to the old myths losing their effectiveness in their worldviews.

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<sup>24</sup> De interpretatione naturæ præmium, *Works*, III, pp. 518–520; cited in Ward & Trent, et al. *The Cambridge History of English and American Literature*. (New York: G.P. Putnam's Sons, 1907–21 / New York: Bartleby.com, 2000).

The same thing happens in the Renaissance. The place where this is most evident is in the fields of law, justice, and jurisprudence. So that brings us to:

**Huig de Groot**, a.k.a. **Hugo Grotius** (1583-1645, Dutch) claims that political laws are not the product of convention [as per Ulpian], nor humanity's attempt to apply God's divine laws in our practical affairs [as per Aquinas]. Rather, they're the product of a rationality that belongs to the essence of every human being. Human reason can discern natural laws that are binding on everyone, even on God. This is a big move in the secularization of law and justice.

**Thomas Hobbes** (1588-1679, English), building on Grotius' work, proposed the idea of a 'social contract' as the foundation of law and justice. Argued that we give up some natural rights, such as the right to seek revenge, in exchange for civil rights. Also argued that people need an all-powerful leader who can enforce the fulfillment of promises, and who can keep would-be criminals afraid of being punished for their crimes. Thus Hobbes introduces the concept of the **social contract**, one of philosophy's most successful ideas in social-political thought.

Different versions of it would be advanced by subsequent thinkers, notably **Locke** and **Rousseau**; the general idea is that the relationship between an individual and society is like a contract, with each owing various responsibilities to the other, and also benefitting from the fulfillment of those responsibilities. Works: *Leviathan* (1651)

## Renaissance Mathematicians

**Scipio del Ferro** (1435-1526) discovered/invented an equation that could serve as a general solution to all cubic equations. He kept the solution a secret for most his life: passing it on to his student Antonio Fior (c. 1506) only on his deathbed.

**Niccolo Tartaglia of Brescia** (1499-1557) challenged by Fior to solve thirty cubic equations, he came up with the solution on his own. Fior made him swear to keep it secret.

**Girolano Cardano of Milan** (1501-1576) pestered Tartaglia for the solution to the cubic equation. Tartaglia relented, on the condition that he keep the solution secret. But later Cardano discovered that Scipio del Ferro had, in fact, published it years before after all! So Cardano felt no longer bound by the oath. In 1545 he published *Ars Magna*, his great work on mathematics, which includes an even better version of the solution to the cubic equation. Cardano would also go on to accidentally invent the set of imaginary numbers: that is, numbers based on  $\sqrt{-1}$ .

**Rafael Bombelli of Bologna** (1526-1572) invented the plus and minus signs we use in mathematical notations today; also the practice of substituting the letter  $x$  in the place of an unknown quantity.

**Robert Recorde** (1510-1558, Welsh) invented the = sign.

**John Napier** (1550-1617, Scottish) inventor of the logarithm, and an early analogue calculator called Napier's Bones.

## 7. The Enlightenment

What we now call The Enlightenment was a period in European history, spanning roughly from 1650 to 1789, that is, from approximately the publication of Descartes' *Meditations* and Newton's *Principia*, and ending around the French Revolution. It's a period in which the last remaining features of Europe's mediaeval world are swept away (sometimes violently) and replaced with "modern" ideas about science, reason, individualism, equality, freedom, capitalism, human rights, and democratic government. My favourite definition of the movement comes from one its leading contributors, Immanuel Kant, in an essay called *What Is Enlightenment?*

Enlightenment is man's emergence from his self-incurred immaturity. Immaturity is the inability to use one's own understanding without the guidance of another. This immaturity is self-incurred if its cause is not lack of understanding, but lack of resolution and courage to use it without the guidance of another. The motto of enlightenment is therefore: *Sapere aude!* Have courage to use your own understanding!<sup>25</sup>

The Enlightenment could also be described as a kind of social experiment, in which Reason, and Reason alone, would solve all our problems. Reason would tell us what human nature is, what our true end and purpose is, what morality is, and how to run the economy and the state. Science and scientific method would explain the world for us. Religious superstition and faith would diminish, perhaps even vanish altogether. For religion, the philosophers believed, had given Europe nothing but war. There had been nine different Crusades against the Islamic world in the previous three centuries, and dozens of armed conflicts, big and small, between Catholics and Protestants, within Europe itself. Time to give philosophy a chance.

Thus it's in this period that Isaac Newton showed us how the world could be understood with mathematics. Composers like Mozart and painters like Jacques-Louis David and Thomas Gainsborough showed us how beauty could be an intellectual experience, defined in terms of symmetry, harmony, and perfection. Religion took on a more scientific character too: God was not a Saviour, but an Architect. Immanuel Kant showed how Reason alone could serve as the sole measure of human values. "Rational nature exists as an end in itself" was his proclamation in the *Groundwork to the Metaphysics of Morals*. Indeed Kant believed that history itself had the sole aim of producing a rationally ordered human society. "The history of mankind," he wrote, "can be seen, in the large, as the realisation of nature's secret plan to bring forth a perfectly constituted state as the only condition in which the capacities of mankind can be fully developed, and also bring forth that external relation among states which is perfectly adequate to this end." Politicians and leaders were taking notice of this project. There was a new interest in the old notion of the 'benevolent tyrant', an absolute ruler who governs a perfectly ordered society with serenely rational laws. Princes such as Friedrich Wilhelm II of Prussia, for example, attempted to govern as one: history has tended to judge his attempt only half-successful.

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<sup>25</sup> Ted Humphrey, trans. Kant, *An Answer To The Question, What Is Enlightenment?* (Hackett, 1992 [first published 1784])

Although the early Enlightenment included some left-over Scholastic thinking, most Enlightenment thought was split into two, possibly three, competing philosophical worldviews:

- **Empiricism:** in which all knowledge comes from the evidence available to our physical senses, and from conclusions drawn from that evidence. Thus, no knowledge is *a priori*. Philosophers in this branch often doubled as scientists; from them emerges the first versions of modern scientific method.

- **Rationalism:** in which at least *some* of our knowledge can be discovered *a priori*. Philosophers in this branch often doubled as mathematicians.

- **Romanticism:** an anti-Enlightenment reaction movement emerging near the end of the period (see below).

## Events:

- Establishment of the first coffee houses.
- The scientific revolution, and the ‘heroic century’ of mathematics
- In 1605, Johann Carolus creates *Relation aller Fürnemmen und gedenckwürdigen Historien*, “Relation of Distinguished and Memorable Stories”, the world’s first regularly-published newspaper. By the mid 1700s, almost all European and North American cities have a daily or weekly newspaper, most of them are sold, shared, and read in coffee houses.
- Publication of **L’Encyclopedie**, between 1751 and 1772. The idea was to collect in one place all the accumulated knowledge of humanity. That way, anyone who could read could give herself a basic education in anything that interested her. So, in addition to academic topics like philosophy, law, and theology, it also included information about farming, carpentry, pottery, and handicrafts; placing all arts and skills on an equal footing. The text became controversial as it questioned the historicity of events described in the Bible, and doubted the scientific veracity of miracles. So it was blacklisted by the Church for a few years for this, and its chief editor, Denis Diderot, spent three months in prison.
- Mid 1700s: Rise of **Deism**: a philosophical-religious worldview which rejected the rituals and mythologies of Christianity, but aimed to preserve the idea of God as the creator of an orderly and rational universe.
- Great Lisbon Earthquake of 1755. Some theologians and philosophers argued that the earthquake was sent by God to punish people for their sins. Enlightenment writers including Voltaire and Kant noted that plenty of perfectly moral and God-fearing people died in the fire too. They concluded that the earthquake was evidence for Deism, and evidence that God might not be ethically reliable.
- 1776: The American Revolution.
- October 1787 to May 1788: publication of The Federalist Papers (see **Alexander Hamilton**, below).
- The French Revolution, 1789; first universal declarations of **human rights**.
- 1833: Slavery was abolished in the British Empire.

## The Salon

A salon is a kind of semi-public conversation party that people hosted in their homes, and sometimes in semi-public places like guild halls and hotel ballrooms, beginning in the early 1700s. Much like the old Greek Symposium, but probably involving more coffee and tea than wine, it was an occasion for artists and intellectuals to display their work (or work-in-progress) to their peers, as well as to discuss scientific, philosophical, or political matters with each other. Music and art displays were often provided as well.

- Salons were among the few occasions where women were treated as intellectual leaders: most salons were hosted by women.
- The hostess (*la salonnière*) acted as both contributor and as moderator, selecting topics and speakers, and keeping order during debates.
- The aim of a salon was “either to please or to educate”, as per the Roman poet Horace’s statement about the aim of poetry, and guests were expected to follow the virtues of *politesse*, *civilité*, and *honnêteté* (politeness, good manners, honesty).
- A *salonnière* had to be good at *précieuse*: eloquent, learned, and witty speech. The opposite of *précieuse* was *poissarde*, ‘fish-talk’, vulgar yet clever speech associated with fish-wives in the markets, although effective use of *poissarde* could gain the speaker respect.
- Some salons were hotbeds of politically revolutionary ideas; many historians say they were a major force leading to the French Revolution.<sup>26</sup>

## Isaac Newton (1643-1727)

With the publication of his *Principia Mathematica*, Newton demonstrated that it is possible to understand the physical world entirely as a mechanism. Reduces the number of ‘forces’ at work in physical motion from five teleological forces (earth / air / water / fire / ether) down to only one impersonal and universal force (gravity). He also expressed the physics of gravitation in the form of simple laws and mathematical equations, thus making the science not only about description but also about *precise* description, and *precise prediction* too. Then, he did the same for mathematics: inventing calculus (but we have to talk to Leibniz about that), inventing a method for calculating squares and roots without doing all the tedious arithmetic by hand (the binomial theorem). Building on this, he invented a way to calculate the value of  $\pi$ , to an accuracy of within 0.000000014, that takes only days instead of years. Then he did it again for optics: showing that it was possible to split a beam of white light into component wavelengths (i.e. rainbow colours). All this scientific and mathematical work opened up a new and important side to scientific method, and made it possible for scientists to explore and explain the world without God. Not that he believed there is no God— Newton was, as it turns out, secretly an Arianist<sup>27</sup>—

<sup>26</sup> Carla Hesse, *The Other Enlightenment: How French Women Became Modern* (Princeton University Press, 2001) pg. 11-12.

<sup>27</sup> Arianism was the view that Jesus was only a man, and not the son of God. First attributed to a 2nd century Christian preacher, Arius, from Alexandria, Egypt. Not to be confused with Aryanism, the racist belief in white supremacy.

but that it was not necessary to postulate God or anything supernatural as part of the explanation for the workings of nature.

For these reasons, Newton is often credited with initiating the impersonal, mechanistic, and un-spiritual side of the modern world view. The Romantic poet William Blake attacked his ideas for their mechanistic soul-less-ness, even in Newton's own lifetime. But I think the criticism is misplaced: Newton also gave twenty years of his life to the study of alchemy, magic, and esoterica. He built an alchemical laboratory, made his own translation of the *Emerald Tablet* (a famous book on magic attributed to the Greek god *Hermes Trismegistus*) and published numerous books on the topic. Indeed his alchemical writings also reveal him to be a kind of iconoclast, no less than in physics and optics. For instance he conducted experiments which disproved popular theories from his time concerning how metals form in the earth. With this in mind, I think a better description of his philosophical work would be that he was a very careful, painstaking, and systematic thinker, who went in search for the truth in every place where he thought it could be found. And that he had a special preference for places where the problems are especially hard: such as in mathematics, physics, chemistry, esoterica, and theology. Perhaps he wanted to bring these different fields together. Unless his alchemical work is studied with greater seriousness, we may never know.

## French *philosophes*

**Blaise Pascal** (1623-1662, French). Invented a working mechanical calculator (while still a teenager!). Known for some clever experiments with mercury barometers, and for establishing one of the first public transit systems in the world. Most of all, he's known for inventing Pascal's Wager, an early form of game-theory which showed that it is better to believe in God because the consequences of not believing in a God who does exist, are worse than the consequences of believing in a God who doesn't exist. This argument appeared in a book called *Pensées* ('Thoughts') which he did not publish; it was found in a desk drawer after his death, still unfinished.

**Montesquieu** (1689-1755, French) Political philosophy, liberalism, early anthropology. Originator of the principle of 'separation of powers': governments have three jobs to do (executive, legislative, and judicial) and to prevent corruption these three jobs should be done by different people. Also originated the idea that history is guided by movements, not by 'great men'. Works: *The Spirit of Law* (1748, banned by the Catholic Church in 1751 but widely read anyway), *The Causes of the Greatness of the Romans And Their Decline* (1734).

**Francois-Marie Arouet, a.k.a. Voltaire** (1694-1778). Deist. Author of hundreds of books and essays, fiction and nonfiction (mostly theatre), all aimed at exposing corruption and ridiculousness among the upper classes and religious authorities of his time. This, of course, resulted in his spending much of his life in exile. His motto in life could be "Ecrasez l'Infame!" ("Let us crush the corrupt!"). Works: *Candide*, a satirical novel exposing the silliness of Leibniz' idea that 'we live in the best of all possible worlds.'

**Julien Offray de La Mettrie** (1709-1751) medical doctor, philosophical determinist, materialist, and hedonist. Works: *Man A Machine* (1748), which argued for a materialist world view, and

the idea that life should be lived for the sake of pleasure. Obviously, the authorities kicked him out of France for this.

**Denis Diderot** (1713-1784), atheist, freethinker. He was the main editor of the *Encyclopedie*, a general assembly of all human knowledge (see above).

**Jean le Rond d'Alembert** (1717-1783) Mathematician, physician, philosopher, musicologist, and (briefly) co-editor of the *Encyclopedie*.

**Madame de Pompadour** (1721-1764), mistress of King Louis XIV, major political and financial supporter of Enlightenment philosophers, including Diderot and Voltaire; for example, she arranged for Diderot's release from prison. Kept a secret copy of the *Encyclopedie* in her private chambers which she and the king often read to each other, even though it was banned.

**Baron d'Holback** (1723-1789). Hosted one of the more influential salons, where various contributors to the *Encyclopedie* often met. Smith, Hume, Gibbon, even Benjamin Franklin, were among his visitors.

**Sophie de Condorcet** (1764-1822), also known as **Sophie de Grouchy**, salon hostess.

Translated Smith and Payne into French, and wrote commentaries on them. Married Nicolas de Condorcet (note their age difference); they became an influential 'power couple' at the Paris salons, until the Revolution. Works: *The Letters on Sympathy* (1798)

**Nicolas de Condorcet** (1743-1794) philosopher and mathematician, the "last witness of the Enlightenment". Member of the National Convention [a parliament for the French Revolution] in which he supported equal rights for women and minorities, a capitalist economy, and various education reforms. Died in prison during the Terror, as the authorities in the aftermath of the Revolution got puritanical, and paranoid of counter-revolutionaries. Works: *Sketch for a Historical Picture of the Progress of the Human Spirit* (1796, published posthumously).

**Olympe de Gouges** (1748-1793), salon hostess, poet, playwright, advocate for anti-slavery and for women's suffrage. Executed by guillotine during the Terror, for demanding that the *Declaration of the Rights of Man And The Citizen* should include women's rights. Works: *Declaration of the Rights of Women And Of The Female Citizen* (1791).

## René Descartes (1596-1650)

Descartes' *Meditations on First Philosophy* (1641) is the work in which 'first philosophy' shifts away from metaphysics and toward epistemology: a major shift in Western thinking. The publication of this text (alongside Newton's *Principia*) is often taken as a milestone in history, the beginning of modern philosophy. He takes the individual thinking person as the starting place for his philosophy, instead of God; indeed he treats God as a being whose existence must be proven, rather than presupposed. Almost everyone can recite his famous statement 'I think, therefore I am'; here is the original context in which it first appeared:

I wanted to focus exclusively on the search for truth. I thought it was necessary to do the exact opposite, and to reject as false everything in which I could imagine the slightest doubt and to see, as a result, if anything remained among my beliefs that was completely indubitable... while I thus wished to think that everything



was false, it was necessarily the case that I, who was thinking this, was something. When I noticed that this truth ‘I think therefore I am’ [*Cogito, ergo sum*] was so firm and certain that all the most extravagant assumptions of the skeptics were unable to shake it, I judged that I could accept it without scruple as the first principle of the philosophy for which I was searching. Then, when I was examining what I was, I realized that I could pretend that I had no body, and that there was no world nor any place in which I was present, but I could not pretend in the same way that I did not exist. On the contrary, from the very fact that I was thinking of doubting the truth of other things, it followed very evidently and very certainly that I existed...<sup>28</sup>

## The Rationalists

**Margaret Cavendish** (1623-1677, English) poet, scientist, playwright, and novelist. Works: *The Blazing World* (1666). This was a fabulist novel; fabulist literature is a precursor to science fiction.

**Baruch (Benedict) Spinoza** (1632-1677, Dutch-Jewish). Major figure; see below.

**Gottfried Wilhelm Leibniz** (1646-1716, German.) Philosopher, mathematician, diplomat.

Invented a mechanical calculator called the ‘Stepped Reckoner’. Created a version of calculus independent of Isaac Newton: although Newton published first, it is Leibniz’ notation that we use today. Creator of the (now much maligned) theory of **monads**. Proposed that God created our world as ‘the best of all possible worlds’: a solution to the ancient problem of evil. Voted ‘philosopher with the best hair’ twenty years in a row.

**Bernard Le Bovier de Fontenelle** (1657-1757, French), author, poet, defender of the rationalist Cartesian philosophy, member of three of the five academies in the *Institut de France*. Works: *Conversations on the Plurality of Worlds* (1686). Notice it’s precisely the stuff that Giordano Bruno was burned at the stake for professing, only a hundred years previously.

**Anthony Ashley Cooper, 3<sup>rd</sup> Earl of Shaftesbury** (1671-1713, English) Neo-Platonist, student of John Locke.

**Christian Wolff** (1679-1754, German), among the most popular philosophers in Europe in his lifetime, largely because he was among the first to write in vernacular German instead of academic Latin. Expelled from Prussia for blasphemy.

**Friedrich II “The Great”, King of Prussia** (1712-1786) styled himself a Philosopher-King and an Enlightened Despot in the manner encouraged by the French *philosophes*. Though not much of a philosopher himself, he was a generous financial and political supporter of philosophers and other intellectuals. Many French *philosophes* fleeing persecution in France, including Voltaire, Diderot, D’Holbach, and La Mettrie, found a home in his royal court.

**Alexander Gottlieb Baumgarten** (1714-1762, German) extends the meaning of the word *aesthetics* from ‘sensibility’ in general, to the philosophical study of art, beauty, feeling, and ‘good taste’. Philosophers had studied art for centuries, of course; but Baumgarten’s work is the effective beginning of the *modern* philosophical study of art, that is, the branch of

<sup>28</sup> René Descartes, *Discourse on Method and Other Writings* (London: Penguin, 2003) pp. 24-5. The boldface emphasis is mine.

philosophy that studies sensuous knowledge, separate from other more analytic branches of philosophy. Works: *Metaphysica* (1739), *Aesthetica* (1750)

**Immanuel Kant** (1724-1804, German-Prussian), major figure, see below.

**Alexander Hamilton** (1755-1804, American) Political theorist, lawyer, military leader. Author of most of The Federalist Papers: a collection of essays that encouraged Americans to accept the new federal constitution. They also explored philosophical themes such as the relation between government and human nature, what an ideal form of government could be like, the necessity of ‘checks and balances’ between different branches of government, etc. Hamilton wrote 51 of the 85 essays in the collection. This is the effective beginning of American political philosophy. Hamilton was killed in a duel with his former friend Aaron Burr. In 2015, a Broadway musical about his life received global popularity and acclaim.

**Thomas Taylor** (1758-1835, English). Neo-platonist and polytheist. Translated sixty-four volumes of ancient Greek philosophy and poetry into English for the first time, including the entirety of Plato and Aristotle. In his original work, he argued that the soul is asleep, and must be awakened by (you guessed it) studying philosophy. Called by his friends “Thomas the Pagan” because he claimed to live by the teachings of Plato, spoke only ancient Greek at home with his wife, and organized Orphic rituals in honour of Greek deities. Percy Shelley, the romantic poet, was among the attendees. Taylor may also have been Mary Shelley’s landlord. Works: *The Eleusinian and Bacchic Mysteries* (1790), *Vindication of the Rights of Brutes* (1792, a treatise on animal rights, but more likely a satire of women’s rights.)

## Baruch “Blessed” Spinoza (1632-1677)

Spinoza doesn’t get much attention these days, and I think that’s a shame. His central question, guiding everything he did, was, “what is the True Good?” To answer that, he found it necessary to unpack and revise almost everything people believed about nature, God, mathematics, society, politics, and our emotions. Bertrand Russell called him “the noblest and most lovable of the great philosophers”; Hegel would say of him that “you are either a Spinozist or you are not a philosopher at all.”

All things in the world, he argues, can be explained with three concepts: substance (the ‘stuff’ things are made of), attributes (the way we experience substances), and modes (the form or shape taken by the substance). A substance is “that which is in itself and is not conceived through itself; in other words, that, the conception of which does not need the conception of another thing from which it must be formed.” (*Ethics*, part 1, definition 3.) But nothing in the universe is truly ‘in itself’ like this: everything is dependent on and related to other things, in long chains of cause and effect. Think of Carl Sagan’s famous line: “if you want to make an apple pie from scratch, first you must invent the universe”. Thus there can be only one substance: Nature. Through Nature, everything is connected, and all things are one.

Spinoza also saw Nature as God. If God is omniscient, omnipotent, infinite, a law-maker, and all the usual things monotheists believe about God, then He cannot be apart from or outside of Nature. It follows that we can learn about God by studying the attributes and modes of things, as well as all the ways things are related to each other. We, ourselves included, also participate in the being of God: “the human mind is part of the infinite intellect of God” (part 2, prop.11). This,

he believed, makes it irrational to hate anybody: you'd only be hating God and hating some part of yourself. Yet he also says there is no point in loving this God, for this God neither loves nor hates anyone (part 5 prop.17), and so will never love you back (part 5, prop.19). But loving God is a way for God to love himself, and that might be just as good (part 5, prop.36).

Today this position on God is called *pantheism*. It got him excommunicated from his Jewish community, and condemned by secular authorities under pressure from the Dutch Reform Church. Most observant Jews in that situation would try to earn re-admission into the community. But not Spinoza—he decided to leave Amsterdam and carry on living his life, learning and teaching philosophy, and working his day-job of grinding lenses for telescopes, microscopes, and spectacles. And so Descartes' analytic and individualist rationalism won out over Spinoza's holistic and relationship-based rationalism. By the way, Spinoza's day-job killed him in the end: glass dust got into his lungs, giving him silicosis. He was 44 years old.

Works: *Principles of Philosophy* (1663), *Tractatus Theologico-Politicus* (1670, a case for democracy so radical for its time that he had to publish it anonymously, and the critics called it “a book forged in hell by the devil himself”), and *Ethics* (1677, published posthumously).

## Haskalah: The Jewish Enlightenment

Literary, scientific, and philosophical movement which helped to create a secular Jewish identity, including a revival of the Hebrew language for secular life.

**Raphael Levi Hannover** (1685-1779, German-Jewish). Student of Leibniz. Created new astronomical tables to update the Jewish calendar.

**Naphtali Hirz Wessely** (1725-1805), argued that the “Teachings of God” (ie. the Torah) cannot be properly nor completely understood unless accompanied by the “Teachings of Man” (ie. science, literature, philosophy).

**Moses Mendelssohn** (1729-1786, German-Jewish) publisher of *Qohelet Musar* “The Moralist”, the first Hebrew-language secular periodical. Works: *Jerusalem* (1783)

**Isaac Satanow** (1733-1805, Polish)

**Isaac Abraham Euchel** (1756-1804, Danish-Jewish). Student of Hannover (who was in his 90s at the time). Editor and publisher of its periodical, *Ha-Meassef*, which included a biography of Moses Mendelssohn: the point being not only to celebrate Mendelssohn, but also to make the point that Jewish philosophers deserved to be memorialized. Due to ongoing antisemitic persecution, he helped guide the Haskalah into being not only an intellectual movement but also a political one.

## The Empiricists

**John Locke** (1632-1704, English). Political and economic philosophy, **social contract** theory.

Best known for his ‘classical liberalism’: the idea that everyone can enjoy as much freedom as they wish so long as they do not interfere with anyone else’s freedom, and that the only reason government can interfere in anyone’s life is to prevent harm. Works: *Two Treatises of*

*Government* (1689) of which the second is among the foundational texts of classical political liberalism.

**George Berkeley** (1685-1753, Irish) Anglican bishop.

**David Hume** (1711-1776, Scottish). Major figure: see below.

**Adam Smith** (1723-1790, Scottish), the ‘father of **capitalism**’. Works: *The Theory of Moral Sentiments* (1759), *The Wealth of Nations* (1776).

**Edmund Burke** (1729-1777, Irish-British). Founder of classical political conservatism.

Supported the right of the American colonies to resist British rule, but opposed the French Revolution. Contributed the concept of ‘the sublime’ to the philosophy of art, which (ironically) would influence the Romantics.

**Jeremy Bentham** (1748-1832, English). Coined the name **Utilitarianism**, for the branch of ethics concerned with consequences and results instead of with moral duties; he also contributed its earliest concepts, such as **Utility**, and **Utilitarian Calculus**. Also designed a prison, called a Panopticon, in which all prisoners would be under constant surveillance. Following his death, and according to his wishes in his will, his body was preserved and put on public display at University College London.

**John Stuart Mill** (1806-1873, English) ‘Rule’ **Utilitarianism**, political liberalism, proto-feminism.

## Enlightenment Scientists

**Robert Hooke** (1635-1703), optics, microscopy. Coined the word ‘cell’.

**Isaac Newton**. Major figure; see above.

**Robert Boyle** (1627-1691, English), chemistry, microscopy.

**Joseph Priestly** (1733-1804, English), chemist, theologian, liberal political theorist. Isolated the element of oxygen in his laboratory independently from Lavoisier, though he might not have known he did it until after Lavoisier published about it.

**Antoine-Laurent Lavoisier** (1743-1794) and **Marie Lavoisier** (1758-1836) a husband-and-wife team of chemists and salon hosts who isolated and identified oxygen in our atmosphere.

Antoine was killed during the Terror because he also worked as a tax collector.

**John Dalton** (1766-1844), chemist, identified that matter is composed of elements and combinations of elements called *compounds*.

**Karl von Linné** [Linnaeus] (1744-1778, Swedish), developed the system of classification for life on earth: Kingdom / phylum / class / order / family / genus / species.

## Enlightenment Mathematicians

Note that lots of philosophers already mentioned above also belong here: especially Descartes, Pascal, Newton, and Leibniz.

**Pierre de Fermat** (1601-1665, French), created a system of analytic geometry independent of, possibly earlier than, Descartes. He had this terrible habit of publishing theorems but not their proofs; one of them, his famous ‘Last Theorem’, would not be solved until 1995.

**John Graunt** (1620-1674, English) a founder of statistics and demographics.

**The brothers Bernoulli:** Jacob (1654-1705) and Johann (1667-1748). Students of Leibniz.

Collaborated on the theorem that proves the divergence of the harmonic series.

**Jean-Baptist Delambre** (1749-1822) and **Pierre Méchain** (1744-1804). In the year 1792, the Académie des Sciences invented the *metre*, the international standard unit of measuring distances. They fixed it at one ten-millionth of the distance from the north pole to the equator. The Académie commissioned Delambre and Méchain to measure that distance and make the calculation. The metre is a unit of measure not based on something arbitrary and changeable, such as the arms and legs of kings (that’s where we get feet, yards, and inches). Instead, it’s based on something universal, something anyone in any culture can use; dare I say, something that’s a little closer to Plato’s world of Forms. Today the metre is defined by the distance light travels in 1/299,792,458th of a second.

## David Hume (1711-1776)

David Hume, an empiricist in the tradition of Bacon, is the next character you should meet in this tour: not only because he was an important figure of the Enlightenment, but also because he threw several wrenches into the Enlightenment’s gears. I’ll draw your attention to three of them.

One is called the naturalistic fallacy, also sometimes called “the is/ought problem”. This is a type of bad argument which appears to reason from premises about facts to premises about morality: something is the case, therefore something ought to be the case. Lots of people reason like this all the time, when they say things like “It’s natural for people to be compassionate, therefore you ought to be more compassionate”, or “God exists, therefore you should follow God’s laws.” Hume showed that there’s a missing premise in these arguments, and that without it, the conclusion is, perhaps not false, but definitely not *proven*.

Hume’s second wrench in the gears is called the problem of induction. The problem here occurs when we reason from the way things have been in the past, to conclusions about the way things will be in the future. “The sun has risen in the east every morning” therefore “The sun will rise in the east again tomorrow”. There’s a missing middle premise here too. That premise must be: “The course of nature continues always uniformly the same”,<sup>29</sup> or to put it another way, “The future will be like the past.” We could claim to know that the future will be like the past because in the past the future turned out to be like the past. But if we took *that* proposition as the support for the conclusion “The future will be like the past” then we have a case of circular fallacy. The problem of induction seemed to make scientific prediction impossible, and it was not solved until the early 20th century.

And the third was his skepticism concerning the existence of substances. This may not sound terribly controversial. So, imagine a cup of coffee. The coffee is brown, hot, tasty, weighs perhaps one-fifth of a kilogram, and occupies perhaps fifty cubic centimetres. Now imagine

<sup>29</sup> Hume, *Treatise on Human Nature*, § 89

another cup of coffee with none of those properties: neither brown nor any other colour, neither hot nor cold, having no taste, having no mass and occupying no space. You can't do it. There is simply no such thing, Hume argued, as an object without properties. It is the same for selfhood: there is no such thing as a person without height or weight, history, a birthday, or similar 'accidental' qualities. So, it's not so much that reality and selfhood don't exist, but rather there is no *substance* to things beyond their empirical, phenomenological properties. Hume called this idea 'bundle theory': everything is a bundle of properties, and there is no deeper substance beyond those properties holding them together. And therein lies the controversy. Substance, as a philosophical concept, goes all the way back to the Presocratics. Aristotle's way of using the concept had been more or less presupposed by everybody right up to Hume's own time. So by tossing it out, Hume forced generations of his successors to rethink everything from the bottom up.

By the way, if you know anything about Buddhism, that might sound familiar. There's some terribly speculative but at least plausible evidence that Hume might have encountered Buddhist ideas. In the 1700s, very few Europeans had visited Buddhist countries. However, one of them was a Jesuit missionary, Charles Francois Dolu, who had been part of a French embassy to Siam (today Thailand) and retired to the Royal College of La Flèche (a smallish town in France, just west of Paris) in 1723. Twelve years later, Hume visited the same town, and while there he wrote most of his book *A Treatise on Human Nature* (first published 1739). Dolu would have been 80 years old by then, and Hume was in his 20s, but it's possible the two men met each other and discussed Buddhist ideas. Hume may also have read works by other Jesuits who visited Buddhist countries and who passed through La Flèche on their way home.<sup>30</sup> As I said, this is terribly speculative, but it's also very intriguing.

## Immanuel Kant (1724-1804)

Over in Königsberg, Prussia (today the Russian exclave of Kaliningrad), Immanuel Kant read Hume's book, and then told his friends "Hume awoke me from my dogmatic slumbers". This is possibly the highest praise any philosopher can give to another—high praise indeed since Kant would eventually become one of the top-ten most influential philosophers of all time. Kant felt sure that Hume was wrong about certain important points of logic. These struggles resulted in the publication of *The Critique of Pure Reason* (1781), the aim of which was to find out whether pure reason alone, apart from the evidence of the senses, can produce any new knowledge. Here's a very short version of what he found.

Logical propositions can be of two types:

- *Analytic*, in which there's only one idea being expressed, and
- *Synthetic*, in which two or more ideas are being combined (synthesized) together.

The truth or falsehood of any proposition can come from two sources:

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<sup>30</sup> A. Gopnik, 'Could David Hume Have Known About Buddhism? Charles Francois Dolu, The Royal College of La Fleche, and the Global Jesuit Intellectual Network.' *Hume Studies* Vol. 35, No. 1&2, 2009, pp. 5-28.

- *a priori* ('before experience'): that is, from pure logic alone, and
- *a posteriori* ('after experience'); that is, from the evidence of our bodily senses.

It's easy to see how analytic propositions can be shown true or false *a priori*. A proposition like 'All bachelors are unmarried men' is true just because of the meanings of the words. It's also easy to see how a posteriori propositions tend to be synthetic in character. 'The apple is green' contains two ideas: apples, and the property of green-ness, put together by the copula verb 'is'. And you can find out whether that proposition is true or not just by looking at the apple. The big challenge is showing whether there can be such a thing as a *synthetic a priori*, a proposition that brings together two or more ideas and derives new knowledge from the logical relation between them and not from empirical observation. Kant decided that mathematical propositions, like  $5+7=12$  (his own example), are *synthetic a priori*. So, we really can discover new things which have nothing to do with what our senses tell us. Such is Kant's first minor victory over Hume's empiricism.

Next, recall Hume's problem of induction. Kant thought that it made scientific research impossible, for it made basic scientific principles like cause-and-effect look like mere habits of how we perceive things, instead of laws of nature. Kant found a novel way to make science possible again. Instead of arguing for the existence of things or the logical correctness of some belief or another, as had been done by everybody before him, he would look into *the conditions for the possibility* of something's existence, and the conditions for the possibility of beliefs about it. Today this method is called Kantian **Critique**, and it is explained in his three best (and longest) books: *Critique of Pure Reason* (already mentioned), *Critique of Practical Reason* (about ethics) and *Critique of Judgment* (about art and aesthetics).

The result he got from this method of critique was a kind of balance between Hume's empiricism and the rationalism of people like Descartes and Leibniz. As Kant put it: the *material* of our experience of the world comes from our physical senses (*a posteriori*), but the *form* of our experience comes from the structure of your mind (*a priori*)— particularly from what he called "the conditions of sensibility": *space* and *time*. So, unlike Hume and the empiricists, our concepts do not conform to our experiences of things in the world. Rather, in Kant's view, our experience of things in the world conforms to our concepts. (This makes his idea look simpler than it really is, but it gets the point across.) Kant called this move his "Copernican hypothesis", as it reversed the old view of knowledge, much as Copernicus had reversed our view of the relation between the sun and the earth:

Hitherto it has been assumed that all our cognition [*Erkenntnis*] must conform to objects. But all attempts to extend our cognition of objects by establishing something in regard to them a priori, by means of concepts, have, on this assumption, ended in failure. We must therefore make trial whether we may not have more success in the tasks of metaphysics if we suppose that objects must conform to our cognition. This would agree better with what is desired, namely, that it should be possible to have knowledge of objects a priori, determining

something in regard to them prior to their being given. We should then be proceeding precisely on the lines of Copernicus' primary hypothesis...<sup>31</sup>

But alas, Kant's hypothesis left a huge problem. It required a distinction between the phenomena of objects, ie. what they appear to be, and the things-in-themselves, ie. what they actually are, their essences distinguished from their properties, the substances that Hume's bundle theory had thrown out. Kant insisted that there had to be a substance to things; there had to be a world out there, beyond the senses. But we will never know anything about it: all we can know is how things *appear* to us, combined with the concepts (the conditions of sensibility) that we bring to the act of seeing. We will never know the world as it actually is; we will never know the thing-in-itself.

That unsolved aporia in Kant's work, the impossibility of knowing the thing-in-itself, would trouble all of philosophy right up to and including the rise of phenomenology in the early 20th century.

By the way, Kant's method of Critique would also influence pretty much all philosophy after him. For example, it would be deployed by:

- Hegel: looking into the *historical* conditions for the possibility of various ideas, beliefs, practices, etc.
- Marx: the *material* and *economic* conditions.
- Nietzsche and Freud: *psychological* and *physiological* conditions.
- Wittgenstein and Rorty: the *linguistic* or *language-based* conditions.
- the entire field of environmental ethics: the *biological* and *ecological* conditions.

## Against the Enlightenment: Romanticism (1750-1850)

The grand plan of the Enlightenment had its problems. Various people, especially artists, began to worry about what it might have excluded. As the Greek poet Euripides had noted more than a millennia before in *The Bacchae*, people cannot live without an avenue for the expression of their passions. Romanticism,<sup>32</sup> as a movement, opened that avenue. Furthermore, some Enlightenment thinkers realised that unfettered reason need not lead to utopia: it could just as easily lead to populist tyranny, which no Enlightenment thinker wanted. Kant's work, coming as it does at the tail end of the movement, is a response to this problem.

Enter Romanticism. It begins as a political movement of protest and rebellion: an assertion of the rights of individuals and of the working class against hereditary aristocrats and landlords. The storming of the Bastille prison in Paris in 1789, and the rescue of the political prisoners held there, is perhaps its most archetypal expression. As an artistic and intellectual movement, it was also a response to the loss of trust in the 'certainties' of universal Reason and divine providence;

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<sup>31</sup> Kant, *Critique of Pure Reason*, Bxxii, note (a).

<sup>32</sup> The word 'Romantic' had already been in regular use since the Italian Renaissance. It referred to styles of art and literature that resembled old tales of heroic quests, courtly love, chivalry, and adventure, written in a Romance language, that is, one of the languages that developed from Latin. Hence: Romantic once meant 'having to do with Rome', but a dreamy, fantastical, imaginary Rome: a Rome of magic and mystery and beauty, and not a Rome of poverty and slavery and brutality.



a loss of trust brought on by the observable fact that the grand project of the Enlightenment was agonizingly slow to deliver its on promises— especially its *political* promises.

But the immediate aftermath of the Revolution was not a republican utopia of *Liberté, égalité, fraternité*. Instead it was The Terror, and the Napoleonic Wars. Many Romantics became disillusioned with revolutionary politics. But they did not want to go back to the Old Regime either. Romantics therefore looked to what they thought were the best available alternatives:

- (1) Individualism, individual expression, originality, authenticity, and freedom.
- (2) Romantic love,
- (3) Passion over reason and rationality,<sup>33</sup>
- (4) The worship of nature (including its dangers; in fact, *especially* its dangers); for some, this also included a revival of pantheism and the worship of Greek pagan gods,
- (5) The privileging of childhood and innocence,
- (6) Imagination and infinity, creativity, artistic innovation; the pursuit of beauty (including both the sublime and the grotesque),
- (7) Death, sacrifice, legacy, and apotheosis.

What I think these things have in common is not only the epithet ‘Romantic’; they are also non-analytic avenues in which to struggle for meaning in a world that seemed to be crumbling to pieces around them. (Does this sound familiar?)

Romanticism’s best years ran from 1750 to 1850, which you’ll note has significant overlap with the Enlightenment. By the end of that period, the industrial revolution was well underway, and scientific progress seemed like an inevitable upward path from ignorance to knowledge and power. So it seemed clear that Enlightenment values were winning. But the spirit of political Romanticism surges up again whenever a culture gets too hide-bound, coldly calculating, and oppressive. For instance, the motto of the 1968 Paris Uprising was Romantic to the core: *L’imagination au pouvoir!*— “All power to the imagination!”, ie. the ability to imagine a different and better world, and then to create it, and if necessary to fight for it.

- **Poets and novelists:** William Blake, Percy Shelley, Lord Byron, Samuel Taylor Coleridge, Wordsworth, Giacomo Leopardi, Victor Hugo, Alexandre Pushkin, Emily Dickenson, Mary Shelley (author of *Frankenstein* (1818), the first science fiction novel.)
- **Composers:** Ludwig van Beethoven, Frederic Chopin, Antonin Dvořák, Edvard Grieg, Bedřich Smetana, Franz Liszt, Richard Wagner, Felix Mendelssohn, Robert Schumann.
- Juana Inés de la Cruz** (1648-1695, Mexican) philosopher, poet, composer in the Baroque style, proto-feminist, proto-environmentalist, Catholic nun. She sometimes used her quarters in the nunnery to host salons.

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<sup>33</sup> But did Romanticism prize passion over reason as much as most textbooks say? **Gadamer** observed that the Romantics themselves regarded Enlightenment reasoning as mere analytic understanding (*Verstand*), rather like the kind of understanding that a financial accountant might have. But there was a higher, more truly philosophical kind of Reason (*Vernunft*) which included intuition, genius, and transcendence. So, the Romantics were not abandoning Reason as such; rather, they were re-framing it.

**John Toland** (1670-1722, Irish): pantheist. Likely the first Enlightenment-era figure to be called a 'freethinker', ie. an atheist (by Burke; and while Burke intended it as an insult, Toland and many others took it on as a badge of honour).

**Jean-Jacques Rousseau** (1712-1778, Swiss) Major figure; see below.

**Thomas Paine** (1737-1809, English), deist, supporter of universal human rights, basic income, and the abolition of slavery. Participant in both the French and American revolutions. His philosophical attacks against Burke got him a conviction for seditious libel. Works: *Common Sense* (1776), *The Rights of Man* (1791), *The Age of Reason* (1793-4, written while in prison; the title became a synonym for the Enlightenment itself).

**John Frank Newton, Esq.** (1737-1837, British.) Campaigned for animal rights, and for a vegetarian diet. Works: *The Return to Nature: A Defence of the Vegetable Regimen* (1811)

**Joseph Johnson** (1738?-1809, British) religious dissenter, salon host, and publisher who printed and disseminated the works of numerous political and cultural radicals of his time.

**Johann Gottfried von Herder** (1744-1803, German) A figure who crosses the Enlightenment-Romantic divide. Argued that language was the primary creative power of humankind. With language people assert their identity and power without the need for supernatural assistance, that is, without the need for God. Note that this is also a case for the wisdom that can be found in the life of ordinary German people, at a time when the German aristocracy mostly spoke French and adopted French classical manners. Major influence on the Brothers Grimm, the folklorists who collected the famous fairy tales that still bear their names; also a large influence on Hegel, Schleiermacher, Dilthey, J.S. Mill, Schlegel, von Humboldt, and Goethe.

**Johan Wolfgang von Goethe** (1749-1832, German), writer, poet, scientist, and philosopher. Author of the romantic novel *The Sorrows of Young Werther* (1774) which people all across Europe treated as a perfect expression of Romantic love and life, though Goethe himself regarded it as a warning about the danger of that life. Other works: *Faust, Part One* (1808) and *Faust, Part Two* (1832), about a man who sells his soul to the devil for knowledge and power; *The Parliament of East and West* (1819)

**William Godwin** (1756-1836, English) Anarchy and anarchism; he believed that human nature is innately good, but it gets corrupted by society and its institutions (including marriage). He also argued that logic and truth and reason must be held higher than the law. Husband to Mary Wollstonecraft. Called 'The Philosopher' by his friends and readers around 18<sup>th</sup> century London, perhaps because he was a lone philosopher among a crowd of Romantic poets that included Shelley, Byron, and Coleridge (who wrote a sonnet for him), etc.

**Mary Wollstonecraft** (1759-1797, English), proto-feminist. Went to France in the hope that the liberal ideals of the Revolution would extend to women as well; she arrived just in time to witness the Terror. While hiding from it in a friend's apartment, she wrote *Vindication of the Rights of Women* (1792). A prevailing attitude at the time held that women were too sensitive and fragile to engage in deep philosophical reflection. Wollstonecraft argues that this is a product of women's (bad) education, not their natures.

**Thomas Clarkson** (1760, 1846, British) Anglican deacon, and campaigner for the abolition of slavery.

**John Oswald** (1730?-1793, British) Animal rights campaigner. Works: *The Cry of Nature* (1791)  
He died while fighting in the French Revolution.

**Madame de Staël** (1766-1817)

**Alexander von Humboldt** (1769-1859, German) naturalist, explorer, geographer, and mountaineer. Precursor to modern environmental ethics: he argued that life on earth is a complex inter-related and global system which does not exist for the sake of human exploitation. Works: *Kosmos* (five volumes published between 1846 and 1862).

**Friderich Hölderlin** (1770-1843, German), poet, philosopher, associate of Hegel, Fichte, Schelling, and the poet Novalis. Forerunner of environmental ethics. Major influence upon Heidegger.

**Friedrich Schlegel** (1772-1820, German) Publisher of the journal *Atheneum*, which made the best statement of the principles of Romanticism. Brief collaboration with the poet Novalis; briefly a roommate with Friedrich Schleiermacher; also once rented a house that had been owned by Baron D'Holbach. Later in life he turned to Catholicism and published a conservative philosophical journal, *Concordia*.

**Percy Bysshe Shelley** (1792-1822, English), poet; husband to Mary Shelley; author of an anonymous pamphlet on atheism that got him kicked out of Oxford; author of *A Defence of Poetry* (1821, published 1840) which argued that poetry could replace religious scriptures and poets themselves could take the place of priests.

**Thomas Carlyle** (1795-1881, English). Historian and mathematician: enormously popular writer in his own time. Introduced German romanticism to the English-speaking world. Unashamed and self-professed racist, Anglo-Saxon supremacist, pro-slavery theorist, and anti-Semite; his theories on hero worship and 'Great Man' history would be identified by Ernst Cassirer as a large (if indirect) influence upon 20th century fascist movements. The thing about Romanticism is that when it goes dark, it goes very, very dark.

**Pierre Joseph Proudhon** (1809-1865, French), anarchist; regarded violence, especially property damage, as a necessary means to transform society. Works: *What is Property?* (1842) in which he argued that "Property is theft!"

## Jean-Jacques Rousseau (1712-1778)

Rousseau is possibly the first philosopher since the ancient Greeks who came from the working class. As a boy he often wandered in the hills and forests outside of his hometown, Geneva; one day as a young man he decided to just keep on walking. So he went to Annecy, Savoy (now part of France) where he got a job as a music teacher to the children of a rich widow. He entered an essay-writing contest in which the question was: 'Has civilization been a benefit to humanity?' Rousseau's answer was No. A year later, he found out he won the contest; the essay was published under the title *Discourse on the Origin of Inequality* (1755). He stayed in England for a short while as a guest of David Hume, although the two men soon grew to resent each other; in fact Rousseau came to believe that Hume intended to do him some kind of harm. The animosity had to be sorted out by Diderot.

Although he contributed to Diderot's *Encyclopediae*, Rousseau was a critic of the Enlightenment program of universal rationality; he argued that reason can silence the voice of

conscience and empathy, and thus isn't a good guide for ethics. As a life-long lover of nature; Rousseau was the first to use the word 'nature' to refer to landscapes and countrysides; previously, the word was used in the sense of 'human nature'; a principle of order or necessity within things. With his *Reveries of a Solitary Walker* (1782) and *Confessions* (1770), he invented autobiography as a literary genre. He also pioneered education theory: in *Emile* (1762) he considered how to raise a child to adulthood without allowing the corrupting influence of civilization to overtake the child's natural goodness. His best book, *The Social Contract* (1762) made a large revision of Hobbes' concept of the **social contract**, and became a major influence on the French Revolution. Here's a selection from the book which describes the benefits he believed would follow from putting the concept into practice:

This passage from the state of nature to the civil state produces in man a very remarkable change, by substituting in his conduct justice for instinct, and by giving his actions the morality that they previously lacked... Although in this state, he is deprived of many advantages he holds from nature, he gains such great ones in return, that his faculties are exercised and developed; his ideas are expanded; his feelings are ennobled; his whole soul is exalted to such a degree that, if the abuses of this new condition did not often degrade him below that from which he emerged, he should ceaselessly bless the happy moment that removed him from it forever, and transformed him from a stupid and ignorant animal into an intelligent being and a man.

(*The Social Contract*, 1:8)

## 8. The Eighteenth and Nineteenth Centuries

### Early German Idealism

**Wilhelm von Humboldt** (1767-1835, German; Alexander von Humboldt's older brother.)

Philosopher, linguist, government official, diplomat, education reformer. Founder of Humboldt University Of Berlin. As linguist, he's a forerunner of the Sapir-Whorf Hypothesis: the argument that the structure of your language influences your cognition.

**Friedrich Schleiermacher** (1768-1834). Theologian; attempted to reconcile the rationalist project of the Enlightenment with Protestantism.

**Georg Friedrich Wilhelm Hegel** (1770-1804) major figure, see below.

**Johann Gottlieb Fichte** (1770-1831) originator of the logical method of *thesis* → *antithesis* → *synthesis*, which is often erroneously attributed to Hegel.

**Friedrich Wilhelm Joseph Schelling** (1775-1854)

**Ludwig Feuerbach** (1804-1872), argued the existence of God is only the existence of statements we use when we speak of God. God exists only in such statements, as well as in certain human practices following from those statements, such as love. Works: *The Essence of Christianity* (1841).

### Georg Wilhelm Friedrich Hegel (1770-1831)

Hegel didn't much like Kant's conclusion about the unknowability of the world. In his effort to show that we can know the thing-in-itself, he argued that rationality was like a force in the world, a kind of world-soul, which he called by various names, such as *Geist* (spirit), or *The Absolute*. Hegel can be read as a last gasp of the ancient Platonic idea of reason-as-mysticism; the idea that there's an eternal, timeless, and unchanging Truth out there, and it's the job of philosophy to find it.

Along with advances in science (notably by Tycho Brahe, who discovered a supernova, measured its parallax, and thereby proved that the realm of the fixed stars was not eternal and unchanging), as well as with the writers of the German Romantic period, people began to suspect that all human endeavour, including philosophy, was subject to the changing influence of history. Therefore, there might not be a timeless and eternal Truth out there for philosophy to find. One can read Kant and Hegel side by side as two different attempts to grapple with the relativist consequences of that historical view. Kant tries to limit its influence by establishing an *a priori* foundation for science; Hegel says that what looks like relativism is actually all part of Spirit's big rational plan, not yet fully revealed to us all.

The book in which this worldview appears is called *The Phenomenology of Spirit* (1807). By the way, at the same time and only a few miles away from the room where Hegel wrote its last pages, another kind of history was being made: Napoleon's army attacked the Prussians in the Battle of Jena, on 14 October 1806. The ongoing conversation of philosophy might have gone differently if the battle caused his manuscript to get lost in the mail.

History, Hegel argued, is really the story of how the Absolute becomes aware of itself. It does this through a process called *the dialectic of the absolute*. A popular simplification of Hegel's dialectic describes it as a pattern of '*being* → *nonbeing* → *becoming*', where 'being is the appearance of some idea, 'nonbeing is the appearance of that idea's contrary, and 'becoming is the reconciliation or the merging of the idea and its contrary into a single new idea – which then becomes the thesis for the next iteration of the cycle. That pattern isn't a completely wrong interpretation of Hegel's text, but a better one would look like this: '*Logic* → *Nature* → *Spirit*.' These are the stages that Hegel thinks the Absolute must progress through, in order to manifest itself with greater authenticity and self-awareness.

Here's how it works. In the first step of the dialectic, The Absolute is a system of logical principles and relations. It becomes aware of itself (or reveals itself) through concepts and the logical relations among them. When this step is complete, those concepts and principles become embodied in the material world. That is, the Absolute breaks out of the realm of logic and becomes aware of itself and/or reveals itself into the world of nature. So, if you are a scientist, Hegel might say you are not really studying nature: You are studying the spirit of the Absolute as embodied and revealed in the natural world. This second step culminates in emergence from

1. Logic, the idea *in* itself
  - a. Being
  - b. Essence
  - c. The Notion
2. Nature, the idea *for* itself
  - a. Mechanics
  - b. Physics
  - c. Organics (i.e., processes of life, biology)
3. Spirit, the idea *in and for* itself
  - a. Subjectivity
  - b. Objectivity
  - c. The Absolute
    1. Art
      - a. Beauty in general
      - b. Types of art
        - i. Symbolic
        - ii. Classical
        - iii. Romantic
      - c. Particular Arts
        - i. Architecture
        - ii. Sculpture
        - iii. Romantic Arts
          - (a) Painting
          - (b) Music
          - (c) Poetry
    2. Religion
      - a. Religion in general
      - b. Definite religion
        - i. religion of nature
        - ii. religion of spiritual individualism
          - (a) Judaism
          - (b) Greek religion
          - (c) Roman religion
      - c. The Absolute Religion, ie. Christianity.
    3. Philosophy

nature of the human being, ‘the crown of creation’; this is a being who is able to recognise nature as a mirror of the logical, and is therefore the highest form of embodied spirit. That recognition initiates the third step, in which logical potentiality and natural embodiment are united, and The Absolute is finally able to recognize itself as pure spirit. Yeah, I know it’s weird. You’ll get used to it.

Hegel thought he could map out all of history with this dialectic; on the previous page there’s a small sample of how he thought that schema worked itself out.

This schema has many more sub-steps (and sub-sub-steps) than I have sketched here. And some of them are shot full of observer bias. For instance, Christianity becomes the absolute religion, the Prussian state becomes the absolute political order, and the final move in this biography of Spirit is the development of Hegel’s own system! But this brief schematic should be enough to give you the general idea.

Philosophy, for the rest of the 19th century, would be all about how to challenge the dominance of Hegel. In the 20th century this idea would influence various forms of political-historical determinism, including Nazism, Soviet communism, and American exceptionalism and manifest destiny.

## Challenges to the Hegelian System

By the year of Hegel’s death, Hegelian philosophy was so influential that all philosophy in Europe was Hegel’s philosophy, and that of his successors, especially Fichte and Schelling. Illustrative anecdote: Schopenhauer once scheduled a public lecture of his own ideas, at the same time and place when Hegel had scheduled a public lecture of his own, just down the hall. Hegel lectured to a full house; Schopenhauer lectured to an empty room.

But within a generation, various challenges to Hegel’s system, some of them already well known in Hegel’s lifetime, gained a large following, resulting in the fracturing of Hegel’s influence. Notably:

1. Hegel’s philosophy of nature claimed to be systematically complete in itself (as did each ‘separate’ moment of his system as a whole.) But the appearance of progress in the natural sciences, such as the discovery of Darwinian natural selection, spoke against that completeness.
2. The preface of Hegel’s *Philosophy of Right* followed the system to the conclusion that the Prussian state and the Carlsbad Decrees of 1819 were the ‘absolute’ form of government. So Hegel’s system came to be criticized on political grounds.
3. History itself presented a problem to the Hegelian system. With the breakdown of the old mediaeval system and its replacement with the modern view (including its shift of attention to the world of nature), philosophers gave more attention to the temporal and transient nature of historical movements and events. Much as the pre-Socratic philosophers sought the enduring One underlying the changing Many, the philosophers of the Enlightenment sought for truths that were universal across time as well as space—truths which must somehow be

discoverable in an ever-changing, undeniably temporal, *historical* world. But some of Hegel's critics wondered that there might be no such truths.

Hegel's work was, in this sense, an attempt to account for all historical events and developments by treating them as moments in the biography (really the autobiography) of Spirit. But this gives the impression of an escape from history rather than a direct grasp it. As Alexandre Kojève (Russian-born French Marxist, student of Merleau-Ponty's) would later say: "the aim of philosophy is to account for the fact of history", and many of Hegel's successors felt that accounting was not done.

So, the general tendency in philosophy after Hegel was to reject his idealism and turn in one of the following directions:

(1) focus on the natural sciences: leading to naturalism, logical positivism, and even some loosely defined 'scientism' (as some 20<sup>th</sup> century postmodernists would call it).

(2) embrace all the messy transience of history: leading to historicism, skepticism, relativism, and *Weltanschauung* or 'world view' based philosophy: this is where Albert Schweitzer will fit in.

(3) embrace history as an unfolding of scientific progress. This is where Marx and the Young Hegelians will fit in. They reject the idea that the unfolding of history has anything to do with Spirit, but retain the idea that there is a logical system of some kind involved in the unfolding. They further believed that the system can be understood scientifically.

(4) accept the messiness of history, and to affirm some broad idea about 'life' or the will-to-life as a force in the world or in people's minds. This is where Kierkegaard, Nietzsche, Schopenhauer, and some of the existentialists will fit.

(5) rehabilitate earlier systems, such as neo-Kantianism, or neo-Thomism.

## 19th Century Social And Political Theorists

**Auguste Comte** (1789-1857, French); argued that it's impossible to be impartial observers of our mental processes, impossible to make any objective statements about human nature. But you can make objective statements about patterns in the behaviour of large masses of people.

Therefore psychology should be abandoned and replaced with sociology.

**Harriet Martineau** (1802-1876, English)

**Alexis de Tocqueville** (1805-1859, French) Works: *Democracy in America* (two volumes, 1835 & 1840)

**Princess Cristina Trivulzio di Belgiojoso** (1808-1871, Italian), an influential participant in the effort to liberate and unify Italy; an advocate for a United States of Europe.

**Karl Marx** (1818-1883, German) Major figure; see below.

**Max Weber** (1864-1920, German) social theorist. Argued that the state is the entity with a monopoly on the legitimate use of physical force in a certain territory; argued that capitalism,



industrialization, and secularism are forces of disenchantment. Together with Comte, Durkheim, and Marx, Weber is a founder of modern sociology. Works: *The Protestant Ethic and the Spirit of Capitalism* (1905).

## Karl Marx (1818-1883)

It's difficult to make a succinct summary of Marx's ideas because those ideas produce complicated emotions for so many people. From American conservatives, for example, the very mention of his name often produces violent hostility.

Born into a working-class family, but a fairly comfortable one, Marx studied philosophy at various universities, and got his PhD from the University of Jena: the same town where Hegel completed his *Phenomenology of Spirit*. He married an aristocrat, Jenny von Westphalen, with whom he had seven children. He worked much of his life as a journalist for various politically radical newspapers. He was also personally involved in creating numerous revolutionary organizations, and participated in several actual political revolutions, all of which were swiftly crushed by the authorities within a few years. Voted 'philosopher with the best beard', 100 years in a row.

Marx' most important book, *Das Kapital* (1867), was written mostly in the Reading Room of The British Library. But his most influential book is a short pamphlet co-authored with his friend Friedrich Engels: *The Communist Manifesto* (1848). From these works we get some big ideas that would go on to influence every social-political philosopher to come, either to embrace and develop them, reject and replace them, or in some way grapple with them.

Here are some of his big ideas:

- (1) *Alienated labour*: in a capitalist system, industrial workers are forcibly separated from their own labour, from the products of their labour, from the buyers of the products of their labour, and also from each other. This separation has various philosophical, political, and psychological consequences, almost all of them bad for workers.
- (2) *Commodity fetishism*: people might come to treat material products as if they have objective properties they don't actually possess, such as the properties of prestige and glamour, or the property of increasing or decreasing in market value over time. Marx's idea is that these properties emerge from social relations, not from natural facts, but we often (and wrongfully) treat them or talk about them as if they are natural facts.
- (3) *Fictitious Capital*: people in a capitalist market buy and sell the product of labour that has not yet been done: futures trading on the stock market, for example. People also buy and sell money itself, disconnected from material goods or productive labour, such as in currency speculating. Anyone for crypto?
- (4) *Class Consciousness*: the awareness that a working class person has of his or her own oppression; the awareness that he or she is indeed a member of the working class and, like it or not, is already and inescapably involved in political struggles with other classes. This consciousness is suppressed in a capitalist system, often (according to Marx) by force.

In terms of Marx's inheritance from Hegel, Marx believed that a transition from capitalism to socialism was in some way inevitable, as the various **contradictions of the capitalist system** (the catch-all term for most of the above-mentioned principles) would lead naturally to the end of capitalism and its transition to a system where workers owned and controlled the means of production themselves.

- Basic principle of justice during the transition to communism: "from each according to ability, to each according to contribution".
- Basic principle of justice after the transition is complete: "from each according to ability, to each according to need."

## Forerunners of Analytic Philosophy

**William Paley** (1743-1805, English) clergyman, Christian apologist, utilitarian; originator of the 'Watchmaker' version of Aquinas' Argument From Design (see above).

**George Boole** (1815-1864, English), codified the 'Boolean' logical operators 'and', 'or', 'not'; the basic operators of all computer programming.

**John Venn** (1834-1923, English) invented the Venn Diagram.

**Henry Sidgwick** (1838-1900, English). Economics and utilitarian ethics. Works: *The Method of Ethics*.

**Gottlob Frege** (1848-1925, German), originator of modern predicate logic, and the 'sense and reference' model of the meaning of words and propositions.

**Henri Bergson** (1859-1941, French), the most important voice in **German Lebensphilosophie**. Earned fame for a debate with Fichte on the nature of time. Also an advocate for a type of eugenics. Works: *Creative Evolution* (1907)

**G.F. Stout** (1860-1944, English), neo-Hegelian. Beliefs may be subjective and unobservable, but the objects of beliefs exist independently of the people who believe (in) them. This solves Comte's problem about the impossibility of psychology. But it opens a new one: the problem of 'verification', to be picked up by the members of the Vienna Circle.

**George Santayana** (1863-1952, Spanish-American) Political, religious, and moral philosophy; naturalism; pragmatism. A poet and novelist as well as a philosopher. Probably best known by his quotable aphorisms. Here's a famous one: "Those who cannot remember the past are condemned to repeat it."

**John Ellis McTaggart** (1866-1925, English), also neo-Hegelian; taught G.E. Moore and Bertrand Russell when they were undergraduates.

**Francis Herbert Bradley** (1864-1924, English), also neo-Hegelian; also taught Moore and Russell. Formulated what we might today call the **coherence theory of truth** (see the Glossary.)

## Forerunners of existentialism, phenomenology, and postmodernism

- **German Lebensphilosophie**. (19th century to early 20th century). A late innovation in German romanticism; it held that all legitimate philosophical questions are those which help us answer the question: ‘what is the meaning of life’? Lebensphilosophie rejects Enlightenment principles and rejects scientific reductionism. It held that life can only be understood within itself; ie., not from a hypothetical God’s eye view outside or above life, but rather from the point of view of a living being, a participant in life.

**Bernard Bolzano** (1781-1848, Czech) Catholic priest; mathematician, philosopher. He believed that thoughts are not ‘subjective’, but that they have objective content that can be logically analyzed. This would later influence Brentano’s creation of phenomenology.

**Arthur Schopenhauer** (1788-1860, German). Critic of the German idealists, especially Kant. Possibly among the first Western philosophers to make a serious study and endorsement of Hindu and Buddhist thought: he even learned Sanskrit so he could read the Upanisads in the original. Argued that the will-to-life is always beset with struggle and suffering, especially for things we cannot have (you see the influence of Hinduism here), and that therefore life is not worth living. But we may have a bit of a respite from it all when we listen to decent music. Works: *The World as Will and Representation* (volume 1 in 1818, vol.2 in 1844, expanded edition in 1859.)

**Soren Kirkegaard** (1813-1855, Danish), religious existentialist. In the absence of certainty about the meaning of life we must make “a leap of into the arms of God”, even if it is possible that God doesn’t exist. Works: *Either/Or* (1843), *Fear And Trembling* (1843), *Christian Discourses* (1848), *The Sickness Unto Death* (1849)

**Wilhelm Dilthey** (1833-1911, German) forerunner of hermeneutics.

**Philipp Mainländer** (1841-1876, German) pessimism in the tradition of Schopenhauer, atheism, and nihilism, although he also believed in humanist and social-democratic ideals. At age 34 he committed suicide. Works: *The Philosophy of Redemption* (volume 1 in 1876, vol 2 [posthumous] in 1886)

**Friedrich Nietzsche** (1844-1900, German). Major figure; see below.

**José Ortega y Gasset** (1883-1955, Spanish). Argued that the Cartesian *ego* is not enough to explain reality. The self also interacts with the things and events of the world around them; and the interaction may sometimes be oppressive. “Yo soy yo y mi circunstancia” (“I am me, and my circumstances.”) Works: *On Love* (1957, published posthumously; a reply to various works on love by Santayana.)

**Ferdinand de Saussure** (1857-1913, Swiss), forerunner of **semiotics**. Works: *Course in General Linguistics* (1916, published posthumously). Introduces the distinction between the *signifier* (the form of a sign, such as a word, concept, image, etc, that represents an object or concept) and the *signified* (the object or concept itself). He also discusses that their relationship is mutually supportive, not one-way.

**Georges Bataille** (1897-1962, French). Works: *Eroticism* (1957)

## Friedrich Nietzsche (1844-1900)

Here's another writer whose name tends to spark enormous volumes of uncritical praise and uncritical condemnation. He's one of the most influential and brilliant writers of his time, but also among the most dangerous: his ideas continue to inspire unhealthy behaviours in those who do not read him carefully.

Nietzsche was a philologist, historiographer, iconoclast, "a terrible explosive, endangering everything" (his definition of a philosopher). He was (and still is) the youngest person appointed Chair of Classical Philology at the University of Basel. Bad health forced him to resign after ten years, but he continued writing as far as he was able. Most famously, he lost his mind for the last ten years of his life. Various intellectual enemies attributed this to syphilis; the evidence suggests the more likely cause was a brain tumour.<sup>34</sup>

Nietzsche mounted what is probably the most successful attack on the foundations of Enlightenment thought prior to the 20th century. He showed how all the important big ideas of the Enlightenment were founded upon unexamined premises. But Nietzsche's most vicious attacks were against Christianity. Plenty of people before Nietzsche had declared themselves to be atheists; Nietzsche argued that they did not grasp the full implications of their declaration. Thus in *The Gay Science* (1882) he says that God is dead and that we have killed him: this is a deed of such greatness that "Must we ourselves not become gods simply to appear worthy of it?"

That question might be the key to understanding how Nietzsche addressed himself to the huge gaping hole in philosophy that he had just blasted. To take the place of God in our thinking, Nietzsche crafted one of his most famous ideas: the *ubermensch*, the Overman. This is the person who, as an act of will, creates their own values, as opposed to abiding by the values imposed upon them by others. Nietzsche argues that the most important psychological motivation in people's lives is not a wish for peace or justice or salvation, etc., but instead, the struggle for power. This is the quality that militant people sometimes point to as evidence that Nietzsche endorses conquest, oppression, exploitation of the weak, and/or various colonial and fascist values. To be fair, he does characterize struggle and conquest as natural features of life. But he did not believe in race-based theories of social or cultural superiority— that impression was imposed on his writings after his death by various editors, notably his sister Elizabeth who certainly did believe in militant ethnic nationalism.

Moreover, in addition to the will to power, Nietzsche's *Urbemensch* must also embody values like honesty, life-affirmation, and especially *amor fati*, the love of one's destiny no matter how strange or heartbreaking it might turn out to be. Nietzsche proposed a metaphysical thought-experiment, the Eternal Return, to help people understand how far your *amor fati* must go. Imagine if a demon were to visit you in the night and tell you:

"This life as you now live it and have lived it, you will have to live once more and innumerable times more; and there will be nothing new in it, but every pain and every joy and every thought and sigh and everything unutterably small or great in your life will have to return to you, all in the same succession and sequence – even this spider and this moonlight between the trees, and even this moment and I

<sup>34</sup> Leonard Sax, "What was the cause of Nietzsche's dementia?" *Journal of Medical Biography*, Vol.11 (2003), pp. 47-54.

myself. The eternal hourglass of existence is turned upside down again and again, and you with it, speck of dust!” Would you not throw yourself down and gnash your teeth and curse the demon who spoke thus? Or have you once experienced a tremendous moment when you would have answered him: “You are a god and never have I heard anything more divine.”

(*The Gay Science*, §341, pg. 373-4)

I will never discourage you from reading Nietzsche, but I recommend having a philosophy prof nearby who can help you. Reading Nietzsche is playing with fire.

Works: *The Birth of Tragedy* (1872), *Thus Spoke Zarathustra* (1883, a philosophical novel written like a modern-day gospel; it's here we see the first appearance of the motto 'God is dead'), *Beyond Good and Evil* (1886), *The Genealogy of Morals* (1887), *The Gay Science* (1882), *Ecce Homo* (1888, published 1908), and *The Antichrist*. (1895)

## American Pragmatism

**Charles Sanders Peirce** (1839-1914, American) mathematician and philosopher; “The American Aristotle”. Originator of more basic theories of **semiotics**. For instance, he argued that a signifier (see Ferdinand de Saussure, above) can take one of three forms: an *index*, an *icon*, and a *symbol*. Observing, also, that lots of signifiers point to more than one object or concept, and lots of objects and concepts have more than one signifier, he added a third point to the process: the *interpretant*, which is anything else which helps you sort out the relationship between signifier and signified.

**William James** (1842-1910, American) The first person in the United States to teach a course in general psychology. Works: *The Principles of Psychology* (1890), *The Varieties of Religious Experience* (1902), *What Pragmatism Means* (1906)

**John Dewey** (1859-1952, American) Creator of the Dewey Decimal System used in library catalogues all over the world. Works: *Reconstruction in Philosophy* (1920)

## 18th and 19th Century Mathematicians

**Thomas Bayes** (1701-1761, English) inventor of Bayesian Probability Theory

**Leonard Euler** (1707-1783, Swiss) Student of Johann Bernoulli. Complex analysis, graph theory and topology, especially the Seven Bridges of Königsberg problem; Euler's Constant (even though it was discovered by the Bernoulli brothers); and Euler's Identity, the most beautiful equation in all mathematics:  $e^{i\pi} + 1 = 0$

**Carl Gauss** (1777-1855)

**Charles Babbage** (1791-1871, English) invented a machine that he called the Analytical Engine: like a modern computer it had an arithmetic logic unit and a memory unit. But it was powered by a hand-crank, not by electricity.

**Pierre-Simon Laplace** 1749-1827)

**Joseph Fourier** (1768-1830)

**Joseph-Louis Lagrange** (1736-1813)

**Daniel Bernoulli** (1700-1782, Swiss) yes, he's a relative of the aforementioned brothers.

**Edmond Halley** (1656-1742) discovered the comet that bears his name; also discovered that appears in our skies every 76 years.

**Émilie du Châtelet** (1706-1749)

**Sophie Germain** (1776-1831)

**Anders Celcius** (1701-1744) invented the temperature scale that bears his name

**Mary Somerville** (1780-1872, Scottish) The world's first "scientist", in the sense that she was the first person to be described in print as a scientist (by William Whewell, in a newspaper review of one of her books, in 1835). Works: *Mechanism of the Heavens* (1831), *On the Connexion of the Physical Sciences* (1834), *Physical Geography* (1848), *Personal Reflections* (1874). Somerville College, part of the University of Oxford, is named for her.

**Évariste Galois** (1811-1832, French). Mathematician. He discovered the proof that the ancient problem of Squaring The Circle has no solution, and cannot be solved. He died at the age of twenty, from injuries sustained after fighting a duel. Further, because of the anti-monarchist causes in which he participated, his funeral caused a riot.

**Ada Lovelace** (1815-1852) Inventor of the modern algorithm. She understood Babbage's machine better than he did: for instance she saw how its output didn't have to be numbers. It could be colours, or musical notes, or even moving images. Alas, Babbage did not have a machine large enough to test her ideas, nor a budget large enough to build one.

**Bernard Riemann** (1826-1866) creator of the (at this time still unproven) Riemann Hypothesis.

**Florence Nightingale** (1820-1910) Best known as the founder of the profession of nursing. She also invented statistical analysis in health care, and a type of mathematical visualization called the Rose Diagram.

**David Hilbert** (1862-1943, German). Creator of 'Hilbert's Hotel', a thought experiment concerning the mathematics of infinity. "We must know, we shall know" (see below).

## The state of truth at the end of the 19th century...

Philosophers have debated the nature of truth since time immemorial. But throughout that debate there has tended to be a loose consensus: truth was something you could rely on, something you could trust. (from Middle English *troth*: a commitment, a pledge, fidelity, loyalty, faith; we still use this word when we say two people are *betrothed* to each other, such as in marriage.) Here's a few examples of how philosophers defined truth:

- Aristotle: "To say of what is that it is not, or of what is not that it is, is false, while to say of what is that it is, and of what is not that it is not, is true."
- Thomas Aquinas: "Truth is the agreement between intellect and object."
- Immanuel Kant: "Truth is the agreement of cognition with its object."
- F.H. Bradley: "An idea is true theoretically because, and so far as, it takes its place in, and contributes to, the organism of knowledge."

These are examples of *criterion for truth*. They're straightforward and useful enough, most of the time. But we philosophers like to look deeper. We want to know for sure. And so, in looking deeper, we discovered some questions still remained.

For example: Aristotle's and Wittgenstein's criteria suggest a *correspondence* theory of truth, in which a statement is true when it refers to an observable state of affairs. But what does it really mean for a statement to correspond to a state of affairs? What is the nature of that relation? Does it lead us to knowledge of the world, or knowledge of some *picture* of the world? Against Aquinas and Kant you might ask: who or what is doing the 'agreeing' here, and what does an 'agreement' mean? And against Bradley and his *coherence* theory of truth, you might say: there could be rival systems of knowledge, rival communities, and rival political blocks (today we call them **epistemic bubbles** and **echo chambers**) which use very different organisms of knowledge. One of those systems might certify a given statement as true and another might certify the same statement as false. Consider as an example, the kind of evidence different rival political communities might use to answer the question "Who won the 2020 American presidential election?"

But the heaviest blow to the concept of truth, up to the end of the nineteenth century, comes from Nietzsche. Perhaps prefiguring postmodernism, he regarded truth as a social convention, having as much to do with perspective and with power-relations as with anything else. Here's his remark in *On Truth And Lies In A Nonmoral Sense* (composed 1873 but published 1896):

What, then, is truth? A mobile army of metaphors, metonyms, and anthropomorphisms— in short, a sum of human relations, which have been enhanced, transposed, and embellished poetically and rhetorically, and which after long use seem firm, canonical, and obligatory to a people; truths are illusions about which one has forgotten that this is what they are... We still do not know where the urge for truth comes from; for as yet we have heard only of the obligation imposed by society that it should exist.<sup>35</sup>

So, where do we go from here? One possible direction was opened by the American pragmatists, especially C.S. Pierce. Pragmatism says that a statement is true if it makes a difference in your life, if it actually helps you to solve some problem, if it enables you to *do* something. So we have a third criteria for truth.

A second question concerning truth has to do with whether there is anything we human beings will never know. At the end of the nineteenth century this version of the question was raised by two mathematicians, Bois-Reymond and Hilbert. In 1872, Emil du Bois-Reymond, a German mathematician and medical doctor, gave a speech to the Congress of German Scientists and Physicians in which he expressed the view that human knowledge has limits. According to him: "ignoramus et ignoramibus" ("we do not know and we will never know") the following seven "world riddles":

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<sup>35</sup> Nietzsche, "On Truth And Lie In An Extramoral Sense", cited in Kaufman, *The Portable Nietzsche*, pg. 46-7]

1. The ultimate nature of matter and force,
2. The origin of motion,
3. The origin of life,
4. The “apparently teleological arrangements of nature”,
5. The origin of simple sensations (ie. consciousness),
6. The origin of language and intelligence,
7. Whether we human beings possess free will.<sup>36</sup>

The opposing view came from German mathematician David Hilbert, in his 1930 address to the same learned society, and in a radio address that was broadcast a few days later. His view is that everything is knowable, nothing is intrinsically mysterious, and we human beings can (eventually) discover everything:

The glory of the human spirit, so said the famous Königsberg mathematician Jacobi, is the single purpose of all science. We must not believe those, who today with philosophical bearing and a tone of superiority prophesy the downfall of culture and accept the *ignorabimus*. For us there is no *ignorabimus*, and in my opinion even none whatever in natural science. In place of the foolish *ignorabimus* let stand our slogan: We must know, we will know.<sup>37</sup>

Confident words, indeed. But in the twentieth century, doubt about the nature of truth, from both analytic and continental camps, will remain, and lead to some sticky problems, not only in logic, but also in politics. As we shall soon see.

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<sup>36</sup> Finkelstein, Gabriel. *Emil du Bois-Reymond: neuroscience, self, and society in nineteenth-century Germany*. (Cambridge, Massachusetts, and London, England: The MIT Press, 2013). pp. 272–273.

<sup>37</sup> Cited in: James T. Smith, “David Hilbert’s Radio Address” *Loci: Convergence* No.11 (February 2014)



## 9. The Twentieth and Twenty-First Centuries

### Events

We're into "living memory" now: events which were participated in, witnessed by, or initiated by people who are still alive today, or by their parents and grandparents. This makes it difficult to decide which events to include in the list. Events which loom large as of the moment you read these words might appear relatively minor in decades to come. Others which seem trivial today may prove to have long reaching consequences. I've chosen events which seemed to have the greatest influence on philosophy, while trying to keep the list down to only two pages.

- 1895: invention of the movie camera and movie projector, in France.
- 1903: the Wright brothers demonstrate powered flight. That same year, Brazilian inventor Albertos Santos-Dumont pilots his own heavier-than-air craft; he is one of several claimants to have demonstrated powered flight before the Wright brothers.
- 1908: Ford Motor Co. produces the Model T, the first commercially viable (and wildly successful) private automobile. The age of assembly-line manufacturing begins.
- 1914-1918: The Great War.
- 1915: Albert Einstein publishes the General Theory of Relativity.
- 1917: Russian Revolution; formation of the Soviet Union.
- 1922: fall of the Ottoman Empire; formation of modern Turkey, Saudi Arabia, various other Arab states in the Middle East.
- 1929-1939: The Great Depression
- 1938: invention of the cathode ray tube, and the electronic television
- 1939-1945: The Second World War (dates vary, depending on what country you're in.)
- 1940: mathematician Alan Turing invents *The Bombe*: the first electric analogue programmable computer.
- 1941-1945: the Holocaust. The Nazis arrest, enslave, and murder six million Jews, as well as thousands of gypsies, slaves, LGBTQ+, people with disabilities, and religious minorities. The personal, inter-generational, and cultural trauma of this event cannot be underestimated.
- 1945: detonation of the first nuclear bomb, near Los Alamos, New Mexico, USA. Later, two more would be dropped on the Japanese cities of Hiroshima and Nagasaki.
- 1945: foundation of the United Nations
- 1947: India achieves independence from Britain. The leader of the independence movement, Mohandas Ghandi, becomes an international political and spiritual hero.
- 1947: Churchill's "Iron Curtain" speech, and the enactment of the Truman Doctrine; beginning of the Cold War. American conservatives get super-paranoid about anything that smells of communism. (Look up the career of Senator Joseph McCarthy, as an example.)
- 1948: promulgation of the Universal Declaration of Human Rights
- 1949: foundation of the People's Republic of China.
- 1953: Charles David Keeling discovers that atmospheric carbon dioxide levels are rising.
- 1954-1968: Civil Rights movement in the United States.

- 1955: invention of the contraceptive pill.
- 1956: Suez Canal nationalized by Egypt; the British Empire ends.
- 1960s: 'Beatlemania' transforms global pop music.
- 1961: Yuri Gagarin is the first human to leave Earth's atmosphere and enter outer space.
- 1962: discovery of DNA, the genetic code of life.
- 1969: Neil Armstrong and Buzz Aldrin are the first humans to walk on the moon.
- 1969: Invention of the internet. Four universities in the US connect the first nodes in a packet-switching, distributed-control computer network.
- 1973: the Oil Crisis. Arab countries reduce or cut off oil supplies to Western countries.
- 1975: first appearance in print of the phrases 'climate change' and 'global warming' in scientific publications.
- 1977: *Star Wars* debuts in cinemas.
- 1979: Iranian revolution
- 1985: Irishman Bob Geldoff organizes the Live Aid concerts, generating global interest in alleviating poverty, and enormous sums of money for third-world charity. 1.9 billion people watch the concerts on live television: an estimated 40% of all humanity.
- 1986: AIDS epidemic; LGBTQ+ health and human rights movement.
- 1988: formation of the Intergovernmental Panel on Climate Change. With contributions from thousands of scientists from more than 100 countries, and including all branches of science, it is the largest global scientific collaboration in all human history.
- 1989: fall of the Berlin Wall; effective end of the Cold War.
- 1990: Tim Berners-Lee invents Hyper-Text Markup Language, thus creating the World Wide Web.
- 1990-1991: First Persian Gulf War
- 1991: end of the Soviet Union.
- 1993: enactment of the Maastricht Treaty; formation of the European Union.
- 2001: The "9/11" attack. Terrorists hijack four passenger aircraft and crash them into the World Trade Centre towers in New York, and into the Pentagon. The "forever wars" begin, as the US occupies Iraq and Afghanistan for more than twenty years.
- 2007-present: the global financial crisis, including a massive stock market crash in September 2008. Followed by the bail-outs: the largest movement of wealth from taxpayers to private corporations in all human history. As of this writing, the world has not recovered.
- 2007: Apple releases the iPhone, the first commercially successful 'smart phone' with a touch-screen interface.
- 2010: The Arab Spring.
- 2018: Cambridge Analytica scandal.
- 2020: the COVID-19 global pandemic.
- 2021: The January 6 Insurrection. Supporters of Donald Trump attack the US capitol building, in a failed attempt to overturn Trump's loss of the 2020 presidential election.
- 2022-present: Russian invasion of Ukraine.
- 2023-2025: Hamas (backed by Iran) launches an unusually vicious terror attack on Israel; Israel retaliates with massive disproportionate force, sparking accusations of genocide.

## The Vienna Circle

The city of Vienna, Austria, during its fin-de-siècle period (1890-1938) must have been an exciting place for intellectuals.<sup>38</sup> Freud, Jung, and the beginnings of psychoanalysis; Brentano, Husserl, and the beginnings of phenomenology; artists like Gustav Klimt and Egon Schiele create the Expressionist movement; composers like Schubert, Mahler, and Schoenberg brought classical music into its modern form.

And there was the Vienna Circle. It began when Moritz Schlick, who held degrees in both philosophy and physics, thought that his friends in the two fields might benefit from talking to each other. At first they met in his home; later, as the circle got bigger and received visitors, they met in a lounge on the University of Vienna campus. Its members Carnap, Hahn, and Neurath published a manifesto in 1929: *Wissenschaftliche Weltauffassung: Der Wiener Kreis* (“Scientific Conception of the World: The Vienna Circle”). They argued that there are only two kinds of meaningful statements: those which describe empirical facts, and those which describe the rules of logic. This position came to be called **Logical Positivism**.

Notice the anti-metaphysical position here: one of its implications is that the racist “blood and soil” ideology promoted by Nazis and fascists is false. Several members of the Circle would risk their lives for teaching this view. Schlick himself would die for it.

**Hans Hahn** (1878-1934, German), mathematician

**Otto Weininger** (1880-1903, Austrian-Jewish). In every person there is a male essence which is active, logical, moral, and rational, and a female essence which is passive, emotional, amoral, and irrational. Weininger believed people could find happiness and even genius by accepting both of these essences within themselves, though he also thought women were too strongly dominated by their female essence to be capable of this. In 1903 he rented a room in the same building in Vienna where Beethoven had died; and there he shot himself. Works: *Sex and Character: A Fundamental Investigation* (1903)

**Moritz Schlick** (1882-1936, Austrian). Student of Max Planck, the physicist. Founder and leader of the Vienna Circle, and founder of Logical Positivism. Murdered in 1936 by his former student Johann Nelböck for “corrupting his values”. Works: *General Theory of Knowledge* (1925), *On the Meaning of Life* (1927).

**Rudolph Carnap** (1891-1970, German) Student of Moritz Schlick.

**Friedrich Waismann** (1896-1959, Austrian-Jewish)

**Herbert Feigl** (1902-1988, Austrian-American)

**Frank Ramsey** (1903-1930, British), mathematician, friend of Russell and Wittgenstein.

Declared in 1927 that the whole concept of truth may well be redundant, “a superfluous addition”; to say that something is true is only to signal to others that you agree with it, nothing more. Prefiguring the ‘post truth’ and ‘virtue-signalling’ politics of the 21<sup>st</sup> century?

**Carl Gustav Hempel** (1905-1997, German) student of Carnap. Creator of the Raven Paradox, another version of the problem of induction.

**Hans Reichenbach** (1891-1953, German)

<sup>38</sup> For a closer look at the cultural and political context, see Carl Schorske, *Fin-de-siecle Vienna* (Knopf, 1979).

**Kurt Gödel** (1906-1978, Czech-German), mathematician and philosopher, student of Hahn, originator of Set Theory, and the Incompleteness Theorem. Possibly the only person who read Whitehead and Russell's *Principia Mathematica* cover to cover. Died from starvation due to paranoid fear of being poisoned by German spies. (There's something funny about mathematics and logic. Every once in a while, it drives people insane. Is that the cost we must pay so that we can have geniuses in our midst?)

**Otto Neurath** (1882-1945, Austrian-German), sociologist and philosopher; briefly involved in creating a short-lived communist state in Bavaria in 1919.

**Olga Hahn-Neurath** (1882-1937, Austrian). Sister to Hans Hahn; and in 1912 she married Otto Neurath.

## Bertrand Russell (1872-1970) and the Cambridge Logicians

In the 20th century we find several heroic efforts to pull all the different strings of philosophy, logic, and mathematics, together into a single integrated masterwork. The most influential and successful of these efforts was the *Principia Mathematica*, by **Bertrand Russell** and **Alfred North Whitehead**, both of whom were Cambridge professors at the time. It took them ten years to write it, and it was published in three volumes between 1910 and 1913. Their aim was to show that all of logic and mathematics, and indeed all human knowledge, could be 'reduced', or simplified without loss of meaning or logical integrity, into a kind of mathematically perfect language that followed a small number of basic rules.

This project, grand and ambitious as it was, still faced stiff criticism from other geniuses of the time. One of these was **Kurt Gödel**, German mathematician and possibly the only person in history who read the *Principia* entirely cover to cover—it's thousands of pages long. He showed how any formal system of axioms, such as the one Russell and Whitehead were trying to develop, must still contain some axioms that can't be defined in the same system's own language, and there's nothing you can do about it. This discovery is now called Gödel's Incompleteness Theorem, and it seems to show there is still some impossible-to-purge weirdness in mathematics and logic, after all.

Russell is probably the founder of the Analytic tradition of philosophy (see below). I suppose it begins when he introduced the work of **Gottlob Frege** to the English speaking world, and then published his *Principia* with Whitehead. It may also have begun when Russell persuaded his friend **G.E. Moore**, then a student of classics, to take up philosophy instead; in return Moore persuaded Russell to take another look at Plato. Which he did. And then they both came to dislike Plato very much indeed. At around this point Russell rejected neo-Hegelianism and British Idealism, committed himself to Frege's predicate logic for all philosophizing going forward, and developed his theory of **logical atomism**. That's the idea that the universe is a totality of states of affairs, all of which can be expressed by simple logical statements linked together with Boolean operators and/or similar indicator-words. From there, the Analytic tradition begins.

Russell lived at a time when the authors of dense philosophical books could become pop culture celebrities. Thus some of his arguments became famous, even among ordinary people. **Russell's Paradox**, concerning the **Incompleteness Theorem**, and a thought experiment about

religion known today as **Russell's Teapot**, are two examples (see the Glossary for their description.) And Russell used his celebrity for various public causes. For instance, he invented the Peace symbol while campaigning for the abolition of nuclear weapons; he did six months in jail for civil disobedience. He wrote proposals for public education reform, and operated an experimental school for children. He accepted a job at City University of New York, and arrived in America only to find he had already been fired, because he was an atheist. Overall, he wrote sixty books, two thousand essays, and 40,000 letters. In 1950 he won the Nobel Prize for Literature. But for all these accomplishments, he was probably a deeply lonely man. As a child, he attempted suicide; later he reported that he was saved by mathematics. He was married four times, and divorced three times.

Moore, by the way, would go on to write a Principia of his own, the *Principia Ethica* (1903), which takes a non-naturalist view of ethics, attempts a solution to Hume's old Naturalistic Fallacy, and even goes to far as to suggest that goodness itself may be impossible to define. I suspect that it's in reaction to Moore's position, among other things, that led four women over in Oxford to revive Virtue Theory, as we shall soon see.

## Ludwig Wittgenstein (1889-1951)

A student of Moore and Russell, but even they acknowledged he was the better logician. Whitehead would say of him that "All philosophy is a footnote to Plato—until Wittgenstein". He's the last philosopher who is common to both sides of the Analytic and the Continental divide (see below). He was associated with, but not exactly a member of, the Vienna Circle and the Cambridge Logicians; Russell was his doctoral supervisor. Works: *Tractatus Logico-Philosophicus* (1921), *Philosophical Investigations* (1953, published posthumously).

Wittgenstein began writing his *Tractatus* while he was a soldier in the First World War (and while sitting in the foxholes and trenches, getting shot at). The book had a serious and ambitious concern: he wanted to find the absolute limitations of human thought. Concluding that the limitations of thought were the same as the limitations of language, he declared that what can be said should be said clearly, and that what cannot be said should be "passed over in silence". All our philosophical problems arise, he thought, from talking about things that fundamentally cannot be talked about— especially metaphysical things like God, or Hegel's World-Spirit, or Plato's Divine Reason.

By the way: Wittgenstein came from Vienna, Austria, as did Karl Popper; Wittgenstein from a wealthy family and Popper from the working class. When they met for the first time, at a seminar in Cambridge supervised by Bertrand Russell, there was an incident of a sort. A fire poker was involved. It might entertain you to look it up.

## The Analytic-Continental Divide

The most noteworthy thing to happen to philosophy in the 20th century is the split between the Analytic and the Continental traditions. It begins in the 1940s. Around that time, most philosophers were still cleaning up leftover problems from previous centuries (especially those left by Kant, Hegel, and Marx); attempting to re-invent the principles of logic; and, most of all, traumatized by the wars.

Out of these circumstances, most philosophers in the English-speaking world (Canada, UK, America, etc) decided to go deeper into pragmatism, scientific epistemology, the logic of language, and utilitarian ethics. This came to be called *the Analytic tradition*. And most philosophers who lived on the continent of Europe decided to go deeper into existentialism, phenomenology, hermeneutics, Marxism, and (later on) post-modernism: this came to be called *the Continental Tradition*. Note that the name ‘continental thought’ was applied to this branch by the analytic philosophers, as a kind of patronizing dismissal; continental thinkers refer to what they do as ‘philosophy’.

Another good description of the differences between the two branches was given by Iris Murdoch. When discussing Ryle’s analytic philosophy of mind, she said his work comes from a world where “people play cricket, cook cakes, make simple decisions, remember their childhood, and go to the circus, not the world in which they commit sins, fall in love, say prayers, or join the Communist Party.”<sup>39</sup> That is to say, Analytic philosophers examine the kind of lives in which nobody commits to anything nor takes any risks. But R.M. Hare made a kind of counterpoint, on behalf of the analytics: “The thing wrong with the Existentialists and other Continental philosophers is that they haven’t had their noses rubbed in the necessity of saying exactly what they mean.”<sup>40</sup>

Yet Another Way to describe the differences can be seen in how the two traditions handled Kant’s last remaining aporia, the unknowability of the thing-in-itself:

- Analytic philosophers decided we can’t grasp it, *but we can talk about how we talk about it*. Thus, metaphysics becomes a matter of language and logic.
- Continental philosophers also decided we can’t grasp it, *but we can grasp what appears to our senses*. We can study that appearance as a phenomena in its own right, having a logic and a structure that can be analyzed. Further, the way things appear to us reveals not only the nature of the thing that appears, but also the working of the human mind. That insight would lead to the first “breakthrough” in modern continental thought: the invention of **phenomenology**.

And now, with all those contrasts illustrated, let’s look at each of these two traditions in turn.

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<sup>39</sup> Iris Murdoch, *Sartre: Romantic Rationalist* (New Haven, CT: Yale, 1959), pg. 42

<sup>40</sup> Lipscombe, *The Women Are Up To Something* (OUP, 2022), pp. 133

## 10. The Analytic Tradition

### Logical Positivism

**Alfred North Whitehead** (1861-1947, English), invented Process Philosophy. Bertrand Russell's teacher, and later co-author with him of the *Principia Mathematica*. (1910-13)

**Bertrand Russell** (1872-1970, English) Major figure; see above.

**G.E. Moore** (1873-1958, English) Collaborator with Russell; see above.

**W.D. Ross** (1877-1971, Scottish). A lone voice of deontological ethics in a sea of British utilitarians. Works: *The Right And The Good* (1930).

**Susan Stebbing** (1885-1943, English), founder of the journal *Analysis*, and the first woman in Britain to be appointed a professor of philosophy.

**Stanislaw Lesniewski** (1886-1939, Polish)

**Dame Frances Yates** (1899-1981, English), historiographer, specializing in the intellectual history of the Renaissance, and the history of magic and mysticism.

**Alfred Tarski** (1901-1983, Polish-American) contributes a 'deflationary' model of the concept of truth, in which a statement like "grass is green" is true if and only if grass is green. Which is obviously redundant. But it's what you expect if you follow Ramsey's claim that the whole notion of truth is redundant anyway. Another possible foreshadowing of 21<sup>st</sup> century 'post-truth' culture?

**Karl Popper** (1902-1994, Austrian). Originator of the Epistemic Values of Science, including 'falsification' as a solution to the **problem of induction**. Works: *The Open Society And Its Enemies* (1945), *The Poverty of Historicism* (1956), *The Logic of Scientific Discovery* (1934).

**Margaret McDonald** (1903-1956, English) Her PhD was supervised by Susan Stebbing.

**Willard Van Orman Quine** (1908-2000, American). A critic of logical positivism and Russell's atomism; he supported a kind of semantic holism and a coherentist theory of truth. Regarded philosophy as a branch of science, the branch that covers abstract realities: "Philosophy of science is philosophy enough." Originator (with Hilary Putnam) of the **Indispensability Argument**.

**Nelson Goodman** (1906-1998, American), creator of **the Grue Paradox**, another version of the Problem of Induction.

**A.J. Ayer** (1910-1989, English). An MI6 intelligence agent during the second world war. Works: *Language Truth And Logic* (1936)

**Edmund Gettier** (1927-2021, American) Originator of the Gettier Problems in epistemology: a series of thought experiments that explore whether it is possible to know something accidentally.

**J.L. Austin** (1911-1960, English), pushes analytic philosophy beyond the positivist views of his colleagues by showing that the truth-values of a statement are only part of the statement's meaning. Some statements are also 'speech acts', in which the act of saying something is also to perform an action. Works: *How To Do Things With Words* (1962)

**Paul Grice** (1913-1988, English) Conversational implicature, semantics.

**Donald Davidson** (1917-2003, American) Although contributing to the ‘deflation’ of the concept of truth begun by Ramsey and Tarsky, he also argued that truth has an important role in everyday life, and shouldn’t be eliminated. Works: *The Folly of Trying To Define Truth* (1996).

**R.M. Hare** (1919-2022, English) meta-ethics, prescriptivism, preference-utilitarianism.

**Richard Rorty** (1931-2007, American), neo-pragmatism, the “linguistic turn” of analytic philosophy.

**Peter Suber** (b.1951, American), inventor of *Nomic*, the logical-philosophical game in which a change of the rules of the game constitutes a move in the game itself. He was also among the founders of the world’s first Open Access initiatives and other forms of information commons, to make knowledge as widely available as possible. Before his career as a philosopher, he was also a stand-up comic. Works: *The Paradox of Self-Amendment* (1990)

## The Revival of Virtue Ethics

Important note: Foot, Murdoch, Midgeley, and Anscombe were students together at Oxford, and remained friends for all of their lives. Their relationship to each other, and their various objections to the kind of analytic utilitarianism taught at Oxford at the time, is the most important reason that virtue ethics gained a 20th century revival.<sup>41</sup>

**Philippa Foot** (1920-2010, English), originator of the famous Trolley Problem thought experiment (with Judith Jarvis Thompson).

**Iris Murdoch** (1919-1999, Irish-British), philosopher and novelist; introduced French Existentialism to English-speaking audiences.

**Mary Midgeley** (1919-2018, English) Works: *Beast and Man: The Roots of Human Nature* (1978), *Wickedness* (1984), *Science As Salvation* (1992).

**Gertrude Elizabeth Margaret Anscombe** (1919-2001, English)

**Alasdair MacIntyre** (b.1929, Scottish). Works: *After Virtue* (1981), *Whose Justice Which Rationality?* (1988)

**Onora O’Neill** (b.1941, Northern Irish). Kantian ethics and Virtue ethics. Also a peer of Britain’s House of Lords. Works: *Towards Justice and Virtue* (1996), *Autonomy And Trust In Bioethics* (2002), *A Philosopher Looks At Digital Communication* (2002).

**Rosalind Hursthouse** (b.1943, English-New Zealandic)

## Anglo-American social, political, and economic thought

**Leo Strauss** (1899-1973, German-Jewish-American), conservative political theory. He believed that modern liberalism inevitably leads to relativism, which in turn inevitably leads to nihilism. Many of his students (often called the ‘Straussians’) went on to careers as senior civil servants in the US federal government.

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<sup>41</sup> See, for instance, Benjamin Lipscombe, *The Women Are Up To Something* (Oxford University Press, 2021)



**Patrick Devlin** (1905-1992, English), lawyer and high court judge; contributor to the Hart-Devlin Debate concerning the relationship between law and morality.

**H.L.A. Hart** (1907-1992, English) Contributor to the Hart-Devlin Debate.

**Isaiah Berlin** (1909-1997, Russian-Latvian-British-Jewish) Liberalism, value-pluralism, and, because as a child he witnessed the Bolshevik Revolution, anti-Marxism. He regarded all argumentation as needing to be understood historically; to understand a given writer or movement, you also have to understand who or what influenced them. Originator of the twin concepts of freedom: positive, or “freedom to”, and negative, or “freedom from”. Probably the finest historian of ideas of the twentieth century. Works: *The Fox And The Hedgehog* (1953), *Two Concepts of Liberty* (1958), and numerous collections of essays and lectures on the history of ideas, of which the best are *The Sense Of Reality* (1996) and *The Power Of Ideas* (2000, posthumous publication).

**George Grant** (1918-1988, Canadian) “Red Toryism”, communitarian, and Canadian idealism: that’s a form of idealism that derives from Hegel via British idealism, which emphasizes historical consciousness, the pursuit of freedom via community life, and a critique of Enlightenment materialism. Through much of the 1980s, Grant warned the Canadian public about the danger of allowing American culture to overwhelm Canadian culture. Only the conservatives seemed to listen. Works: *Philosophy in the Mass Age* (1959), *Lament for a Nation: The Defeat of Canadian Nationalism* (1965), *Technology And Empire* (1969), *Technology And Justice* (1986).

**John Rawls** (1921-2002, American). Major figure; see below.

**Martin Luther King Jr.** (1929-1969, American) Theologian, Baptist minister, social activist. Probably the most important leader of the civil rights movement in the U.S. in the 1960s. Assassinated by an anti-liberal activist.

**Charles Taylor** (b.1931, Canadian). Communitarianism, philosophy of culture, religious thought, selfhood and identity, modernism, Canadian idealism (see George Grant, above). His doctorate was supervised by Isaiah Berlin. Recipient of the Templeton Prize. In 2007 the government of Quebec invited him to lead The Consultation Commission on Accommodation Practices Related To Cultural Differences. Works: *Sources of the Self* (1989), *The Malaise of Modernity* (1991), *A Secular Age* (2007); *Building The Future: A Time For Reconciliation* (2008; this is the final report of the aforementioned Consultation Commission), *Cosmic Connections: Poetry in the Age of Disenchantment* (2024).

**John Searle** (b.1932), originator of the ‘Chinese Room’ thought experiment concerning whether or not computers can be intelligent. Works: *The Construction of Social Reality* (1995), *Minds Brains and Programs* (1984)

**Amartya Sen** (b.1933, Indian) philosophy of economics, co-creator (with Nussbaum) of the Capabilities Approach to justice theory.

**Brian Barry** (1936-2009, English) aimed to bring analytic philosophy together with political science. His doctorate was supervised by H.L.A. Hart.

**Václav Havel** (1936-2011, Czech) playwright, political dissident. Last president of Czechoslovakia and first president of the Czech Republic.

**Robert Nozick** (1938-2002, American). Libertarian, conservative. Originator of the ‘experience machine’ thought experiment. He argued that a just distribution of the wealth of a community

involves people making fair trades together, and making original acquisitions from nature (ie. gathering resources not already claimed by others). The trouble with this view is that the further back one might look in the history of how a given object or resource or property is traded, the more likely it is that exploitation and theft is involved; consider lands stolen from Indigenous people during a **colonial** period. Works: *Anarchy State And Utopia* (1974)

**Martha Nussbaum** (b.1947, American) Philosophy of law, philosophy of education. Originator (with Amartya Sen) of the Capabilities Approach to the theory of justice. An advocate for free and universal education in the liberal arts. Works: *The Fragility of Goodness* (1986), *Cultivating Humanity* (1997), *Sex and Social Justice* (1999), *Hiding from Humanity* (2004).

**John Ralston Saul** (b.1947, Canadian) Works: *Voltaire's Bastards* (1992), *The Unconscious Civilization* (1995), *On Equilibrium* (2001).

**John McMurtry** (1939-2021, Canadian). Major figure, see below.

**Francis Fukuyama** (b.1952, American). Conservative political theory in the tradition of Leo Strauss. Works: *The End of History And The Last Man* (1992); this work famously argued that the final stage of human cultural development had been reached with American-style liberal democracy and capitalism; a position he changed as subsequent history unfolded. It is a sign of a good philosopher that they can change their views as evidence and logic requires.

**Cornel West** (b.1953, African-American). The first African-American to receive a PhD in philosophy. Works: *The Ethical Dimensions of Marxist Thought* (1991), *The American Evasion of Philosophy* (1989), *Race Matters* (1993), *The Future Of The Race* (1996), *Pro+Agonist* (2012), *Black Prophetic Fire* (2014).

**Jason Stanley** (b.1969, American). Works: *How Fascism Works* (2020), *How Propaganda Works* (2016)

**Dan Hind** (b.?, English). Works: *The Threat to Reason* (2007)

## John Rawls (1921-2002)

Through much of the second half of the twentieth century, almost all philosophy of justice in the English speaking world was the philosophy of Rawls. His influence rests upon his creation of a provocative thought experiment called the 'Veil of Ignorance', also known as the 'Original Position', as well as the conclusions that he thinks follow from it.

It goes like this. Imagine if everyone in society sat down at a bargaining table together, to decide how the wealth and power of their society will be distributed to all of society's members. And imagine that we entered this negotiation without anybody knowing what side they're on. In this hypothetical *original position*, Rawls says, "No one knows his place in society, his class position or social status, nor does anyone know his fortune in the distribution of natural assets and abilities, his intelligence, strength, and the like." The Original position is a kind of metaphor for the rationality and objectivity people should have while they decide how the wealth of their community shall be distributed among all members.

Rawls argues that if everyone bargained this way, each person at the table might bet that there's a good chance they'll end up among the least well-off people in society. So it's in their interest to want the situation of those worst-off people improved as much as possible. Thus,

Rawls argued that people reasoning this way would hit upon two principles of basic social justice:

- (1) There should be equal and extensive civil rights and freedoms for everyone, and,
- (2) The **Difference Principle**: when dividing the wealth and power of society into individual shares, society should seek to maximize the size of the smallest share. “The social order is not to establish and secure the more attractive prospects of those better off unless doing so is to the advantage of those less fortunate.”

You’ll note that a little bit of inequality is acceptable, in this theory. But it has to be the kind of inequality that the least-well-off people would find agreeable. The influence of this idea was so great that Rawls was invited to serve as an advisor to U.S. President Bill Clinton.

Works: *A Theory of Justice* (1972), *Political Liberalism* (1993) *The Law Of Peoples* (1999), *Justice As Fairness* (2001).

By the way: Rawls’ most important rival for the brains of the 20th century students of justice is probably **Robert Nozick** (see above); Rawls representing the Liberal camp, Nozick the Conservative and Libertarian camp. In the 21st century, both philosophers and their theories would be supplanted by Wokism and **Postcolonial** thought (for the Left), and various forms of **techno-futurism** and/or Donald Trump populism (for the Right).

## John McMurtry (1939-2021)

It may seem strange to feature McMurtry as a major figure in 20th century analytic philosophy. Even among politically left-leaning writers like himself, American names are better known than his. I’m including him here anyway as a figure whose ideas are often attributed to others, either by accident, or by coincidence: versions of his ideas were often discovered independently by others. Also, he completes a spectrum of 20th century political and economic thought: McMurtry for the left, Rawls and Nussbaum for the centre (or perhaps centre-left), and Nozick and Hardin for the right.

McMurtry wrote his doctorate on Marx, but left the Marxist tradition when he realised it had nothing to say about environmental concerns. In its place he developed the theory of the Civil Commons: “society’s organized and community-funded capacity of universally accessible resources to provide for the life preservation and growth of society’s members and their environmental life-host.”<sup>42</sup> Air to breathe, water to drink, a language to speak, space to move and grow, education, health care, religious traditions, education, arts and culture, scientific knowledge, ecological stability, political participation, and so on, are necessary and indispensable for human life and flourishing; it is therefore it is the obligation of the community to provide and maintain them by means of a well regulated civil commons, and also to protect them against profit-seeking capitalist exploitation.

The value-theory this principle rests upon is called Life-Value Onto-Axiology, which is a mouthful of a name; it means a theory of ethics having to do with *being* (onto-) and with *first principles* (axioms). The highest of all possible first principles is *life*, which McMurtry defines as the ability to think, feel, and act; life and being-alive is the pre-condition for the possibility of all

<sup>42</sup> John McMurtry, *Unequal Freedoms: The Global Market as an Ethical System*, (Toronto: Garamond, 1998), pg. 24.

other values, including freedom: “X is a value if and only if, and to the extent that, X enables a more comprehensive range of thought, feeling, and action” (*ibid*).

Born in Toronto to a wealthy family, McMurtry was also a professional football player with the Calgary Stampeders for one season.

Works: *Understanding War* (1989), *Unequal Freedoms* (1998), *The Cancer Stage of Capitalism* (1999), *Value Wars* (2002). Editor and contributor to the “Philosophy and World Problems” section of the *UNESCO Encyclopedia of Life-Support Systems* (2004-2011).

## The Triumph of Utilitarianism

Almost all ethics in the Analytic tradition is Utilitarianism: a tradition which begins with **Bentham**, **Sidgwick**, and **Mill**. In the 20th century, the big names include:

**Bernard Williams** (1929-2003, English). **Thick vs Thin** ethical concepts; relativism; **moral luck**.

**John Leslie** (b.1940, British-Canadian) pantheism and philosophy of religion; cosmology; utilitarianism; axiarchism. Major figure in the development of the ‘**Fine Tuning**’ argument for the existence of God. Originator of the Carter-Leslie Doomsday Argument (often erroneously attributed to physicist Brandon Carter alone) which shows how one should calculate the probability of a global disaster as always more likely to happen sooner rather than later. Invented a variant of chess called Hostage Chess. Works: *The End Of The World* (1996), *Universes* (2002), *Immortality Defended* (2007), *What God Might Be* (2007)

**Jonathan Glover** (b. 1941, English). Works: *Causing Death And Saving Lives* (1977), *Utilitarianism And Its Critics* (1990), *Women, Culture, and Development* (collaboration with Nussbaum, 1995), *Humanity: A Moral History of the Twentieth Century* (1999)

**Peter Singer** (b.1946, Australian) Analytic utilitarianism, especially as applied to animal rights, vegetarianism, global economic inequality. An early essay of his, *All Animals Are Equal*, initiated the animal rights movement almost by itself. Another essay, *Rich And Poor*, influenced the Effective Altruism movement. And still other works of his concerning medical issues initiated a sub-field of utilitarianism called **Bioethics**. Works: *Animal Liberation* (1983), *Practical Ethics* (1979; 1993, 2011), *The Life You Can Save* (2009)

**Derek Parfit** (1942-2017, English). Analytic utilitarianism. Originator of the Non-Identity Problem; a supporter of the Reductionist view of personal identity. Regarded as a ‘grandfather’, though not an originator, of Longtermism and Effective Altruism. Works: *Reasons and Persons* (1984)

**Roger Scruton** (1944-2020, English) Conservative traditionalism; aesthetics and philosophy of art.

## 21st Century Techno-Utopianism and Techno-Futurism

- **The TESCREAL Bundle** (it's pronounced "tes-kree-all"); acronym coined by Émile Torres for Transhumanism, Extropianism, Singularitarianism, Cosmism, Rationalism, Effective Altruism, and Longtermism; a catch-all term for various right-wing techno-utopian worldviews popular among early 21st century tech developers and investors, and their fans. Its proponents hope that advanced technologies could some day create a post-scarcity society, allow the human colonization of the galaxy, and achieve practical human immortality in either biological or digital form. Some proponents also hold that the fastest way to accomplish these and similar goals is to create an artificial general intelligence smart enough to show us how to do it: basically, a literal *deus ex machina*. There's a surprising amount of religion in these worldviews.
- **Effective Altruism**: the claim that people should give their charity money only to groups that are more likely to help with problems that are "big in scale, tractable, and unfairly neglected".<sup>43</sup> In effect, the idea is that people should get rich, and/or only give charity money to those who are already rich, so that they will have more money to spend on charity. Also, that charity should be spent 'effectively', ie. only on projects likely to produce the most utility over the longest possible span of time, and on people who are more likely to be innovative problem-solvers (ie. not the poor). (See: Longtermism, below).
- **Longtermism**: a component of Effective Altruism; the claim that "positively influencing the long-term future is a key moral priority of our time."<sup>44</sup> Thus, longtermism holds that we should give moral priority to solving the kinds of problems that could result in the annihilation of the human race as a whole, such as the risk that a large asteroid could strike the Earth and cause another mass extinction. Critics show how this kind of thinking could cause all present-day moral problems, such as poverty, climate change, the struggle against racism and sexism, etc., to be ignored, as the utility of present-day people could be overwhelmed by the utility of some enormously large number of hypothetical future people.
- **Transhumanism**: the claim that we ought to use technology to enhance human cognition, biological performance, and longevity, to the point where (some) people may evolve beyond our present-day human condition and become a genetically and/or digitally advanced 'posthuman' super-being.
- **Accelerationism**: The idea that we should pursue the aforementioned technologies as fast as possible. Also: it's the idea that the current condition of the world is unsustainable and/or obsolete. It should be destroyed as quickly as possible (and not necessarily peacefully), in order to hasten the arrival of the next stage in human civilization: a stage which accelerationists describe as hyper-capitalist, non-democratic, and technology-intensive, but somehow better. Textbook: MacKay & Avanesian, eds. *The Accelerationist Reader* (2014). As the editors themselves define it: "Accelerationism is the name of a contemporary political heresy: the insistence that the only radical political response to capitalism is not to protest,

<sup>43</sup> This definition of Effective Altruism comes from the movement's own community website: [effectivealtruism.com](https://effectivealtruism.com). Retrieved 12 January 2023.

<sup>44</sup> MacAskill, "What Is Longtermism?" *BBC Future*, 7th August 2022

disrupt, critique, or détourne it, but to accelerate and exacerbate its uprooting, alienating, decoding, abstractive tendencies.”

I consider most of this stuff to be comic-book fantasy philosophy. But as of the time of writing this outline, some of the richest people in the world are spending their fortunes on it. And some of the most high-profile (and best paid) media-celebrity philosophers of our time are devoting their whole careers to it.

**Ray Kurzweil** (b. 1948, American) Computer scientist and technologist, author of numerous books promoting Transhumanism including *The Age of Spiritual Machines* (1999) and *The Singularity Is Near* (2005)

**Nick Land** (b. 1962, English) Founder and main promoter of Accelerationism; extreme right-wing anti-democratic philosophy of technology; advocated for a return to pre-Enlightenment city-state feudalism supported by modern technology, a worldview he called the ‘Dark Enlightenment’.

**Nick Bostrom** (b.1973, Swedish). Philosophy of technology, transhumanism, and futurism. Originator of the Simulation Argument: a kind of 21<sup>st</sup> century version of Descartes’ Evil Genius, or Plato’s Cave; it says that we might be living in a computer-generated simulation, and not in the real world. As chair of the Future of Humanity Institute at Oxford University (before the university dissolved it), he contributed to research in Effective Altruism and Transhumanism. Works: *Are you living in a computer simulation?* (2003), *In Defence of Posthuman Dignity* (2005), *Existential Risk Reduction As A Global Priority* (2013), *Superintelligence* (2014) *Letter From Utopia* (2020).

**William MacAskill** (b. 1987, Scottish), co-founder of The Centre For Effective Altruism. Works: *What We Owe The Future* (2022)

**Émile P. Torres** (b.?, American). Once a visiting scholar at The Future Of Humanity Institute, he became a vocal critic and opponent of TESCREAL and related worldviews. Works: *Human Extinction: A History of the Science and Ethics of Annihilation* (2023)

- **The Future Of Humanity Institute.** (2005-2024). A research team organized by the philosophy department at Oxford, to study the science and ethics of existential risks to humanity. Nick Bostrom was its director. It received generous private funding from several billionaires, especially those who had an interest in artificial intelligence. The university dissolved it in 2024 following various ethics scandals, including the publication of a paper that appeared to endorse eugenics.

## Analytic Philosophy of Language And Mind

**Gilbert Ryle** (1900-1976, English) Originator of the term “ghost in the machine”, to refer to the Cartesian idea that the mind is separate from, and yet somehow inhabits, the body.

**P.F. Strawson** (1919-2006, English)

**Jeremy Fodor** (1935-2017, American)

**Thomas Nagel** (b.1937, Serbian-American) invented the **Qualia** theory of consciousness; introduced (with Bernard Williams) the concept of **moral luck**. Works: *What is it like to be a bat?* (1989)

**Paul Feyerabend** (1924-1994, Austrian), philosophy of science.

**Saul Kripke** (b.1940, American)

**Frank Jackson** (b.1943, Australian) creator of the Mary's Room thought experiment concerning **qualia**. Works: *What Mary Didn't Know* (1986).

**Hilary Putnam** (1926-2016, American)

**Daniel Dennett** (1942-2024, American) studied under Ryle. Promoter of atheism. Works: *Intuition Pumps* (2014)

**Ian McGilchrist** (b.1953, British) psychiatrist, literary theorist. Works: *The Master And His Emissary: The Divided Brain and the Making of the Western World*. (2009), *The Matter With Things* (2021)

**David Chalmers** (b.1966, Australian-American). Produced the best formulation (so far) of the 'hard problem of consciousness'. Originator of the 'philosophical zombie' thought experiment.

**Hubert Dreyfus** (1929-2017, American). A critic of the 'intelligence' of Artificial Intelligence using Heideggerian principles. The short version of his critique: machines are not conscious because they do not care about anything.

## 11. Practical Ethics in the Anglo-Analytic Tradition

Let's define *practical ethics* as the branch of philosophy which studies the concepts that underlie our practices (if you're a Continentalist). Or, it's the application of ethical principles, especially the Utilitarian calculus and the Kantian Imperatives, to various social, cultural, industrial, and everyday problems (if you're Analytic). By the late 20th century, analytic practical ethics became a way for philosophers to justify their existence to university administrators looking for ways to cut their budgets. Practical Ethics allowed philosophers to present themselves as problem-solvers and technicians with critical thinking skills everyone needs: a universal transferrable skill that all students must learn.

But we all know the real reason to study philosophy is because it's awesome.

### Feminist Thought And Action

Feminism is a social and cultural movement which aims to resist and overcome the various social forces that keep women marginalized or oppressed, which prevent gender equality, and/or which perpetuate **the patriarchy**. Historically, it has advanced in three (maybe four) "waves":

- **First Wave** (mid 19th century - late 1960's): focused on specific legal inequalities faced by women, such as women's right to vote, to divorce, to inherit property, to be counted as persons in the eyes of the law, etc.

- **Second Wave** (early 1970's - early 90's): expanded the range of concern to include informal inequalities and various social issues including reproductive rights, violence against women, consciousness-raising (that is, acts of public activism which draw attention to women's experiences), and the overall place of women in society. Second wave feminists also postulated essential differences between men and women: that is to say, there are irreducible differences of human nature, differences of *essence*, between how women and men think, feel, speak, perceive the world, relate to others, and pursue their lives. Today this position is called **gender essentialism**.

- **Third Wave** (early 1990's - mid 2000s): rejected the gender essentialism of the second wave, and considered more carefully how differences of ethnicity, class, sexual identity and orientation, etc., affected women's experiences. It also incorporated some of the insights of **postmodernism**, and expanded to explore the oppression of other marginalized individuals and groups. (See also: **Queer Theory**.)

- **Intersectional** (mid 2000s - present): extends the 3rd wave concern with difference to examine the ways that different forms of oppression (racism, sexism, homophobia, etc.) intersect each other. It's also concerned with the analysis of **privilege** (see the Glossary). Intersectional feminism also tends to make greater use of humour, satire, sarcasm, and black comedy, than previous waves.

**Sojourner Truth** (Isabella Baumfree, 1797-1883, African-American) Human rights activist, suffragette, abolitionist.



- Susan B. Anthony** (1820-1906, American) suffragette, abolitionist. Arrested in 1872 for attempting to vote in an election in New York. She was convicted and ordered to pay a fine, which she refused to pay. The state decided not to collect.
- Laura Jane Addams** (1860-1935, American) invented the profession of social work. Nobel Peace Prize winner in 1931.
- Nellie McClung** (1873-1926, Canadian) earned for Canadian women the right to vote and to run for public offices. Member of the Legislative Assembly of Manitoba.
- Betty Friedan** (1921-2006, American), writer and activist, originator of the second wave of feminism. Works: *The Feminine Mystique* (1963).
- Mary Daly** (1928-2010, American) Second wave feminist. Works: *Beyond God The Father* (1973), *The Spiritual Dimension of Women's Liberation* (1971), *God is a Verb* (1974).
- Virginia Held** (b.1929). Originator (with Carol Gillian) of the **Ethics of Care**. Works: *Ethics of Care* (2006)
- Gloria Steinem** (b.1934, American) activist and journalist.
- Audre Lorde** (1934-1992, African-American) poet and activist, third-wave feminist, and cancer survivor. Works: *Uses of the Erotic* (1978), *A New Spelling Of My Name* (1982), *Sister Outsider* (1984), *Your Silence Will Not Protect You* (posthumous collection of essays and speeches, 2017).
- Carol Gillian** (b.1936), originator of the **Ethics of Care**. Works: *In A Different Voice* (1982), *Mapping the Moral Domain* (1988), *The Birth of Pleasure* (2002).
- Lorraine Code** (b.1937, Canadian) Feminist epistemology. Works: *What Can She Know?* (1991), *Epistemic Responsibility* (1987), *Ecological Thinking* (2006).
- Alison Jaggar** (b.1942, English). Works: *Feminist Politics and Human Nature* (1983)
- Carol Christ** (1945-2021, American) Theologian. Works: *Why Women Need The Goddess* (1978)
- Karen J. Warren** (b.1947, American). Originator [with Vandana Shiva] of **Ecofeminism**.
- Starhawk** (Miriam Simos, b. 1951, Jewish-American), feminist neo-paganism and ecofeminism. Originator of the 'power-over', 'power-with', and 'power-from-within' categories of political influence. Works: *The Spiral Dance* (1979, 3rd edition 1999), *Dreaming The Dark* (1982, 3rd edition 1997), *Truth Or Dare* (1988).
- bell hooks** (Gloria Jean Watkins, 1952-2021, African-American). Works: *All About Love* (2000)
- Vanadana Shiva** (b.1952, Indian). Works: *Monocultures of the Mind* (1993), *Ecofeminism* (with Maria Mies, 1993), *Reclaiming the Commons* (2020). See also: **Ecofeminism**.
- Judith Butler** (b.1956, American), third-wave feminism, practical ethics, queer theory. She presented the first version of the argument that gender (as distinguished from sex) is a social construct and a public performance, not a biologically determined fact. Works: *Gender Trouble* (1990), *Bodies That Matter* (1993).
- Rebecca Walker** (b.1969, American), activist, originator of the third wave of feminism.
- **Feminist Bioethics** (see **Bioethics**, below.)

## Environmental Thought And Action

- Forerunner movement in America: Transcendentalism. A worldview, popular in 19th century America, influenced by Romanticism and by Hinduism. It held that human nature is basically good, but often corrupted by civilization, particularly by industrialization. It encouraged people to be self-reliant, to see the divine in the embodied natural world, to prefer intuition over reason, to cultivate aesthetic appreciation of nature; in general, to ‘transcend’ our social-political world and become a more ‘natural’ human being. Its most important advocates are probably the poets Ralph Waldo Emerson (1803-1882) for his essay *Nature* (1836), and Walt Whitman (1819-1892) for his poetry collection *Leaves of Grass* (1855)

- Forerunner movement in Europe: The Heimatschutz [‘homeland protection’]. This began more or less with groups of German students, most of them middle-class teens from Berlin. Inspired by reading Rudorff (see below), they took long hiking trips into the forests and mountains, and called themselves *Wandervogels* [‘Free Birds’]. Their journeys sometimes took days or weeks at a time. As they grew older some became *Naturmenschen* [‘Nature-men’] or *Liebensreform* [‘life-reformers’]: advocates for minimalist-living, homeopathic and natural medicine, back-to-Nature romanticism, and sometimes neo-paganism. Basically, they were the first modern-day hippies. The *Bund Heimatschutz*, the ‘League for Homeland Protection’, founded in 1904 by members of these groups (Rudorff among them) influenced land planning laws and helped create some of Europe’s first environmental protection policies.<sup>45</sup> In the 1930s the Nazis co-opted the movement into their ‘blood and soil’ ideology: this is an example of how beautiful and life-affirming ideas are vulnerable to takeover by death-worshipping political movements.

- Other forerunners: Jean-Jacques Rousseau, Alexander von Humboldt.
- See also, in the glossary: Ecofeminism, Ecomodernism.

**Henry David Thoreau** (1817-1862, American). Transcendentalist, anti-slavery activist, advocate of civil disobedience especially for tax avoidance. Works: *Walden* (1854), an autobiographical account of the two years he spent living a minimalist and (mostly) self sufficient life on the shores of Lake Walden, near Concord Massachusetts USA.

**John Muir**. (1838-1914, Scottish-American), naturalist, scientist, farmer, and environmentalist. Influenced the creation of America’s system of natural parks. Co-founder of the Sierra Club, a political advocacy organization for wildlife and landscape protection.

**Ernst Rudorff** (1840-1916, German), polemicist, musical composer, and aristocrat. Advocated for making landscapes more accessible, protected from development, and sometimes protected from private ownership, though he also believed in the necessity of class divisions. Works: *On the Relationship of Modern Life to Nature* (1880)

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<sup>45</sup> William Rollins, *A Greener Vision of Home: Cultural Politics and Environmental Reform in the German Heimatschutz Movement, 1904-1918* (Ann Arbor: University of Michigan Press, 1997); Gordon Kennedy, ed. *Children of the Sun: A Pictorial Anthology From Germany to California, 1883-1949*. (Ojai, CA, USA: Nivara Press, 1998)

- Albert Schweitzer** (1875-1965, German), medical doctor, organist and musicologist, theologian, and humanitarian activist. Originator of the ethics of ‘Reverence For Life’. Works: *The Philosophy of Civilization* (1923).
- Aldo Leopold** (1887-1948, American), forester and ecology professor, creator of the “Land Ethic”. Works: *A Sand County Almanac* (1949).
- Nan Shepherd** (1893-1981, Scottish) novelist and poet. Rejected the ‘struggle’ and ‘conquest’ attitude toward nature often found in Thoreau and Muir; preferring a relationship to nature based on embodiment and love. Works: *The Living Mountain* (1977).
- Hans Jonas** (1903-1993, German-Jewish), see Continental Political Thought, below.
- Rachel Carson** (1907-1964, American). Biologist. Works: *Silent Spring* (1962), the first scientific work to describe pollution and species extinction as a moral problem.
- Lynn White Jr.** (1907-1987) Historian. Works: *The Historical Roots of our Ecological Crisis* (1967) which argued that “Christianity is the most anthropocentric religion the world has ever known...” and that Christianity prepared the way for the ecological crisis “by destroying pagan animism”. Ironically, this essay inspired a movement of Christian ecological thinkers intent on showing that White was wrong.
- David Brower** (1912-2000, American) Founder of numerous environmental activist organizations including Friends Of The Earth, and Earth Island Institute.
- Arne Naess** (1912-2009, Norwegian), originator [with George Sessions] of **Deep Ecology** and the concept of the ‘Green Self’.
- Thomas Berry** (1914-2009, American) Catholic theologian, though he preferred the term ‘geologian’. Works: *The Christian Future And The Fate Of Earth* (2009).
- Garrett Hardin** (1915-2003, American). Argued that all communally-owned ecological resources, such as agricultural land, must eventually end up depleted. Although anthropologists had already shown how public commons in forestry, animal pastures, etc., have worked just fine for centuries, Civil Commons theory in philosophy emerged as various writers tried to show why Hardin was either prophetically right or dangerously wrong. Just as happened to Lynn White Jr. Works: *Tragedy of the Commons* (1968; one of the most cited scientific papers of all time), *Lifeboat Ethics: The Case Against Helping The Poor* (1974).
- Paul W. Taylor** (1923-2015, American). Biocentrism; environmental ethics based on Kantian deontology. Works: *Respect for Nature* (1986).
- Holmes Rolston III** (b.1932, American)
- Paul Ehrlich** (b.1932, American). Biologist. Works *The Population Bomb* (1968) which popularized the view that all environmental, social, and political problems are caused by “overpopulation”. This simplistic, one-word, unimaginative explanation for all global problems continues to dominate debates about solutions.
- Tom Regan** (1938-2017, American) Animal rights
- George Sessions** (b.1938,) collaborator with Naess, co-creator of Deep Ecology.
- J. Baird Callicott** (b.1941, American). Promoter of Leopold’s Land Ethic. In 1971 he taught the first undergraduate course in environmental ethics ever offered at an American university.
- Vaclav Smil** (b.1943, Czech-Canadian) Interdisciplinary environmental science and policy analysis. Major influence upon **Eco-modernism** and especially on Bill Gates.

**Robin Wall Kimmerer** (b.1953, Potawatomi First Nation [Canada]) Biologist. Works: *Gathering Moss* (2003), *Braiding Sweetgrass* (2013).

**David Abram** (b.1957, American) synthesis of Analytic and Continental ideas in relation to ecology and environmental thought. Works: *The Spell of the Sensuous* (1996)

**George Monbiot** (b.1963, English) zoologist, journalist, and activist. Critic of capitalism and of eco-modernism. Works: *Feral* (2013), *How Did We Get Into This Mess?* (2016), *Regenesis* (2022), and a regular column in the environment section of *The Guardian* newspaper.

- **The Club Of Rome**: organization founded in 1968, members including current and former heads of state, various diplomats, scientists, academics, etc. Commissioned *Limits To Growth* (1972), the report which made the first formulation of the principle of Sustainable Development.

**Timothy Morton** (b.1968, English) object-oriented ontology. Works: *The Ecological Thought* (2010), *Dark Ecology* (2016), *Hyperobjects, Ecology Without Nature* (2020).

**His Holiness, Pope Francis** (b.1936, Argentinian; papacy began in 2013) published an encyclical on environmental stewardship: *Laudato Si': On Care For Our Common Home* (2015).

**Kate Raworth** (b.1970, English) originator of “Donut Economics”: a theory of economics in which there are several economic indicators of human impacts on the environment which must be kept within certain boundaries: neither too low, thus curtailing human flourishing, nor too high, thus damaging the global biosphere. Works: *The Donut of Social and Planetary Boundaries* (2017)

**Naomi Klein** (b. 1970, Canadian) Geography professor, social activist, and filmmaker. Works: *No Logo* (1999), *The Shock Doctrine* (2007), *This Changes Everything* (2014).

**Carolyn Merchant** (b.1936, American). Ecofeminist. Works: *The Death of Nature* (1980) which argues that the roots of our ecological crisis lie in the scientific revolution and the Enlightenment, and not, contra Lynn White Jr, in Christianity.

**Charlene Spretnak** (b.1946, American), Ecofeminist. filmmaker.

**Greta Gaard** (American), Ecofeminist, literary scholar, filmmaker, co-founder of the Minnesota Green Party.

**Carol J Adams** (b.1951, American) Ecofeminist.

## Postcolonial and Anti-Colonial Thought And Action

*Important Note:* If you live in the United States at the time of this writing, it may be illegal to teach postcolonial thought in your college or school. Check with your administrator on the status of “critical race theory” in your state or jurisdiction.

When we speak of Postcolonial thought, we speak of the ideas created or advanced by members of a colonized nation (see **Colonialism** in the Glossary), including their efforts to understand and resist colonialism, and to craft an independent tradition of thought after the colonizing force withdraws.

Notice that many of the writers under this heading could also be dual-classed with **Feminism**, **Critical Theory**, and other branches of social and political thought. Many are influenced by both Analytic and Continental camps of philosophy. And some, it may be argued, belong in the canon

of African, Indigenous, or Middle Eastern thought, more than in the Western. But here they are anyway; and I put them in their own category to make it easier to find them.

**Frederick Douglass** (1818-1895, African-American) civil rights leader, anti-slavery campaigner, and statesman.

**Frantz Fanon** (1925-1961, French Afro-Caribbean) Psychoanalysis and psychiatry, Marxism, critical theory, and post-colonial studies. Probably the most influential post-colonial and anti-colonial philosopher of the 20th century. Works: *Black Skin, White Masks* (1952), *A Dying Colonialism* (1959), *The Wretched Of The Earth* (1961).

**Edward Said** (1935-2003, Palestinian-American) musician, literary critic and professor of literature. Works: *Orientalism* (1978), which initiated the present-day discussion of colonialism as an oppressive social-political worldview.

**Angela Davis** (b.1944, African-American). Student of Marcuse. Feminism, marxism, gender theory, critical race theory, and critic of the American prison system. Briefly listed on the FBI's "Ten Most Wanted" list because she bought several firearms which had been used by their previous owners to commit several crimes; a jury acquitted her of all charges.

**Gayatri Spivak** (b. 1954, Indian) Argued that oppressed people don't have the time or resources to speak for themselves; they need intellectuals to speak for them. Intellectuals who aim to do this, she said, must employ a 'strategic essentialism', that is, treating them as though the most important fact about them is their membership in a distinctive group based on language, religion, class, ethnicity, etc. This is an early form of contemporary Identity Politics.

**Kwame Anthony Appia** (b.1954, Ghanaian-American). Social justice theory, Cosmopolitanism. Works: *In My Father's House* (2018), *The Ethics of Identity* (2005), *The Lies That Bind* (2018)

**Robin DiAngelo** (b. 1956, American.) Works: *White Fragility: Why It's So Hard For White People To Talk About Race* (2018)

**Glen Coulthard** (b. 1974; Dene First Nation [Canada]). Works: *Red Skin, White Masks* (2014).

**Ibram X Kendi** (b. 1982, African-American) argued that there is no such thing as being 'not racist': you are either proactively anti-racist in all fields of your life, or else you are racist, and there is no middle ground. Works: *How To Be An Antiracist* (2019; a major influence on the 'Wokeism' of the 2020s)

## Philosophy of information, communication, and media

**Walter Lippmann** (1889-1974, American). Journalist and essayist. He observed that for every event in the world that we cannot witness personally, we have to trust what other people tell us about it. This gives people like newspaper owners rather a lot of power. They might bend the truth, or lie to us, to suit their various commercial or political purposes. This may also prompt hard questions for news-readers: What is real? How do we separate the real from the unreal? If we treat that which appears in media networks as real, how much power to define reality itself do we hand over to the owners and controllers of those networks? Works: *Public Opinion* (1922).

**Walter Benjamin** (1892-1940, German-Jewish) Also associated with the Frankfurt School (see below). He studied how the mass-reproduction of images changes the meaning of those images. Committed suicide in order to escape capture by the Nazis. Works: *The Work Of Art In The Age of Mechanical Reproduction* (1935).

**Marshall McLuhan** (1911-1980, Canadian) Celebrity media theorist. Coined the motto “The medium is the message”; the idea is that the nature of communications media technology influences the meaning of the information that passes through it. Works: *The Mechanical Bride* (1951), *Understanding Media: The Extensions of Man* (1964)

**Claude Shannon** (1916-2001, American) Mathematician and electrical engineer; the ‘father of information theory’. Works: *The Mathematical Theory of Communication* (1964)

**John Berger** (1926-2017, English) novelist, art critic, and writer. Works: *Ways of Seeing* (a book and a BBC documentary film, 1972)

**Noam Chomsky** (b. 1928, Jewish-American). Political theorist and activist, social critic, ‘father of modern linguistics’ and general philosophical polymath— it’s really hard to decide where to fit him in an outline history like this one. He may be among the top five most influential American public intellectuals of all time. His big idea is called ‘universal grammar’: the claim that all languages share a fundamental and simple logical structure. His more famous work is in political communications: how corporations and governments use language, rhetoric, style, and so on, to shape how people think. Works: *Manufacturing Consent* (1988), a study of the methods of psychological manipulation and propaganda in the mass media.

**Guy Debord** (1931-1994, French) Philosopher and film-maker. Founding member of the Situationist International. He defines the Spectacle as “a social relationship between people that is mediated by images”, and “The spectacle is capital accumulated to the point where it becomes image.” Works: *The Society of the Spectacle* (1967)

**Neil Postman** (1931-2003, American) writer, essayist, critic of technology. Works: *Amusing Ourselves To Death* (1985)

**Shoshana Zuboff** (b. 1951, American) Philosopher, psychologist. Works: *The Age of Surveillance Capitalism* (2019)

**C. Thi Nguyen** (b.?, Thai-American). Former food writer, now a philosophy professor focusing on technology and game theory. Works: *Echo Chambers and Epistemic Bubbles* (2020; he coined the terms appearing in the title of that work.)

## Philosophy of Science

**Michael Polanyi** (1891-1976, Hungarian) Chemist, social scientist, and philosopher. Argued that all knowledge is personal, and that empiricism and logical positivism tends to ignore the role of personal commitments in the construction of knowledge including scientific knowledge. This would later influence Kuhn and Feyerabend. Argued that life is an emergent property of nature: a complete understanding of organic life cannot be entirely reduced to the underlying physics and chemistry. Works: *Science Faith And Society* (1946), *Personal Knowledge* (1958), *The Tacit Dimension* (1966)

**Karl Popper** (1902-1994, Austrian) See The Cambridge Logicians, above.

**Marjorie Grene**, (1910-2009, American) Studied with Heidegger and Jaspers. Founder of the philosophy of biology.

**Thomas Kuhn** (1922-1966, American), originator of the ‘Paradigm Shift’ model of scientific revolutions. Works: *The Copernican Revolution* (1957), *The Structure of Scientific Revolutions* (1962)

**Mary Hesse** (1924-2016, English)

**Paul Feyerabend** (1924-1994, Austrian)

**Wesley Salmon** (1925-2001, American) Works: *Causality and Explanation* (1998)

**Michael Ruse** (1940-2024, British-Canadian) philosophy of biology, Darwinism, evolutionary ethics.

**Bas van Fraassen** (b.1941, Dutch) Works: *Scientific Representation* (2008)

**Jenann Ismael** (b. 1968, American). Works: *The Situated Self* (2007), *How Physics Makes Us Free* (2016)

## Philosophy of Education

Forerunners: Plato, Rousseau, Dewey, Nussbaum.

**Maria Montessori** (1870-1952, Italian) originator of the Montessori style of education.

**Benjamin Bloom** (1913-1999, American), educational psychologist. Works: *Taxonomy of Educational Objectives* (1956; better known as Bloom’s Taxonomy).

**Paolo Freire** (1921-1997, Brazilian). Works: *Pedagogy of the Oppressed* (1968)

**Philip Kitcher** (b.1947, British) Works: *The Main Enterprise Of The World: Rethinking Education* (2021)

## Bioethics and Philosophy of Medicine

The term ‘bioethics’ was coined by Van Rensselaer Potter in 1971, and to him it referred to the ethics that includes and incorporates the whole biosphere of the Earth. But in the time that followed, the term came to be more narrowly applied to ethical problems arising from the study of human biology and medicine. It covers questions of right and wrong in topics like in-vitro fertilization, surrogate motherhood, abortion, genetics, the allocation of medical resources, best practices in nursing, organ donation, scientific experimentation on humans and on animals, patient’s rights, euthanasia, and the concept of ‘brain death’.

Contributors to the field come from a wide range of backgrounds: not only philosophers, but also clinicians, lawyers, scientists, and theologians. The field was more-or-less founded by **Peter Singer** (see above). But many religious communities also have long traditions of bioethics, often centring on the principle of the ‘**sanctity of life**’: the view that there is something special, important, and therefore morally valuable, about being alive and being a member of the species *Homo sapiens*. The opposite view is the ‘**quality of life**’ view, which holds that what matters is how happy people are, and whether they find their lives worth living. Though most questions in

the field take the form of ‘Is it right or wrong to do X?’, some are more speculative: What is health? What is illness? What is disability? Where is the line between life and death?

**Judith Jarvis Thompson** (1929-2019, American) Works: *A Defence of Abortion* (1971), the essay with the famous ‘unconscious violinist’ thought experiment.

**Dan Brock** (1937-2020, American)

**Laura Purdy** (b. 1940, English) Feminist bioethics. Works: *Reproducing Persons* (1996)

**James Childress** (b. 1940, American) Theologian.

**James Rachels** (b. 1941, American)

**Baruch Brody** (1943-2018, American)

**Arthur Caplan** (b. 1950, American)

**Helga Kuhse** (b. 1962, German-Australian). Works: *The Sanctity-Of-Life Doctrine in Medicine: A Critique* (1987)

**Julian Savulescu** (b. 1963, Australian), studied under Peter Singer.

**Richard Hull** (b.?, English) ethics of disability and its palliation.

## Pop Philosophy

This category is for writers whose ideas are published by trade-paperback publishers or who aim at a general, non-academic audience, where the standards for logical depth and precision tend to be lower. They usually have a fringe theory of their own to promote, rather than a problem inherited from the history of philosophy to solve. There’s a wide range of interests and political views here, and a wide range of contact or non-contact with formal academic training in philosophy. (And in case you’re curious, this is where I’d fit most of my own philosophical books.)

**Wilhelm Gottlieb Tennemann** (1761-1819, German). In 1804 he published an 11-volume history of philosophy, which became the template for most histories of its kind to follow.

**Pierre Teilhard de Chardin** (1881-1985, French). Catholic priest, paleontologist, vitalist (one who believes organic matter has special properties that inorganic matter lacks), cosmic evolutionary theory. An influence on Matthew Fox and Brian Swimme (see below). de Chardin also believed that some day in the future, humanity will create technologies that will allow us to “break through the material framework of Time and Space”, and so converge with the divine: his name for that day is the “Omega Point”, a kind of techno-Christian precursor to Transhumanist dreams of the Singularity. Some of his works were censured by the Church for ambiguity and for doctrinal errors. Works: *The Phenomenon of Man* (1955), *The Divine Millieu* (1957).

**Will Durant** (1885-1981, American) and **Ariel Durant** (1898-1981, American). This husband and wife team wrote the most popular summaries of the history of philosophy in their time. First, Will wrote *The Story Of Philosophy* (1926); then they collaborated on the 11-volume *The Story Of Civilization* (1935-1975).

**Julius Evola** (1898-1974, Italian). Argued that Western civilization once enjoyed a Golden Age ruled by a warrior aristocracy, and that it has since declined into decadence, lack of vision,



empty materialism, and weakness. He also argued for natural hierarchies and natural social castes among people: men over women, athletes and ‘men of action’ over artists and intellectuals, the white race over other races, heterosexuality over homosexuality and lesbianism. These hierarchies were, in his view, essential features of that mythical Golden Age. (Important note: that mythical Golden Age never existed in real history.) A self-professed fascist, antisemitic, anti-democratic, and anti-liberal writer: Evola was admired by, and influential upon, the Italian fascists and the Nazis during the Second World War. Some 21st century American far-right activists, including Steve Bannon (advisor to former U.S. President Trump) also professed admiration for him. Works: *Revolt Against The Modern World* (1934). This is the kind of philosophy embodied by all those schoolyard bullies who used to gang up on you, beat you up, and then laugh at you for being a loser.

**Joseph Campbell** (1904-1987, American). Literary scholar. Popularizer of ‘The Hero’s Journey’, also known as the Monomyth: a template for interpreting and comparing world mythology. Works: *The Hero With A Thousand Faces* (1949), *The Power of Myth* (1988; also a television broadcast with Bill Moyers interviewing Campbell).

**Ayn Rand** (1905-1982, Russian-American). Novelist, atheist, hyper-individualist, and hyper-capitalist. Often treated as a philosopher by her fans. But her nonfiction works contain little systematic argumentation, and almost no engagement with the history of ideas. Her best ideas were already advanced, and with better logic, by people like Adam Smith and Friedrich Nietzsche. Most actual philosophers regard her as a novelist with fanatical fans.

**Alan Watts** (1915-1973, English-American) Self-professed ‘philosophical entertainer’. Likely more responsible than anyone else for introducing the West to Indian, Chinese, and Japanese ideas, especially Buddhism. Works: *The Way of Zen* (1957), *The Book On The Taboo Against Knowing Who You Are* (1966), *Tao: The Watercourse Way* (1975)

**Robert Pirsig** (1928-2017, American) Works: *Zen and the Art of Motorcycle Maintenance* (1974)

**Matthew Fox** (b. 1940, American). Former Dominican priest. Created a school called the Institute of Culture and Creation Studies, which was too eclectic and too feminist for his Dominican brothers, leading to his expulsion from the Catholic Church. So he became an Episcopalian priest. Originator of Creation Spirituality, and the doctrine of Original Blessing.

**Ken Wilbur** (b.1949, American). Integral Theory. Works: *The Spectrum of Consciousness* (1977)

**Brian Swimme** (b.1950, American). mathematician, associate of Matthew Fox’s at the ICCS. Evolutionary cosmology.

**Jordan Peterson** (b.1962, Canadian). Behavioural psychologist, conservative media celebrity. Often treated as a philosopher by his fans. Argues that men and women have different essential natures, that gender is an absolute binary and not a spectrum, that there are natural hierarchies in human society, and that people tend to suffer when they fail or refuse to grasp reality properly. Works: *12 Rules For Life* (2018)

**Alain de Botton** (b.1969, Swiss-English), founder of The School Of Life, a private foundation and film studio which promotes emotional intelligence.

## 12. The Continental Tradition

To analytic philosophers, Continental philosophy can look like one big branch of philosophy on its own. But in fact it has as much internal disagreement and debate as any branch of Analytic thought. An illustrative example is the Cassirer-Heidegger Debate. It took place at an academic conference in Davos, Switzerland, in March and April of 1929, where Ernst Cassirer and Martin Heidegger gave several lectures on Kant, with Carnap and Soloveitchik in the audience. Cassirer argued that science can indeed give us definite truths about the world. Heidegger argued that even the hard sciences are subject to Kant's *a priori* categories of thought, like space and time, which exist in the mind and not in the world. Incidentally, this debate also shows how the old Kantian problem, 'Can we know the thing-in-itself?', was still alive and well after more than two centuries.

The shadow of German idealism looms over Continental thought more than it does over Analytic philosophy. We can see this most obviously in the way philosophers working in Postmodernism and in Critical Theory use something called the method of **dialectic** as part of their logic. Evolved out of Hegel and Marx, this is a way of doing philosophy which might look to an inexperienced reader as if it makes no sense at all. In my grad school days, one of my profs, himself a specialist in Continental thought, told us: "Continental philosophers don't make arguments; they just utter profundities."<sup>46</sup>

**Dialectic**, in 20th and 21st century philosophy, is a study and an interpretation of world-processes (such as history, economics, politics, communications, religion, psychology, science, romantic love, etc) with special attention to the various mutually opposed or even contradictory forces involved in the ongoing behaviour and development of that world-process over time. From the point of view of this method, it is entirely unsurprising when a given world-process gets turned upside-down compared to how it started. A politics of freedom for everyone eventually produces a faction which aims for the oppression of some minority; a religion of peace and love produces a faction which endorses violence and hate for non-believers; an economics of prosperity and fairness produces a faction which accepts extreme wealth-disparity and extreme poverty in the name of efficiency and justice.

### The Austrian School

The Austrian School of empirical psychology and realist phenomenology is sometimes called The School of Brentano, because of the enormous influence Brentano and his students had on the rest of 20th century philosophy. From the soil of the Austrian school grows the roots of the science of psychology, which (among other things) takes over philosophy's ancient function of helping people find happiness and the good life.

**Franz Brentano** (1838-1917, Austrian) philosopher, psychologist, former Catholic priest.

Originator of Gestalt psychology. Reintroduced the concept of **Intentionality**, which had

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<sup>46</sup> It's probably for the best if I don't tell you who it was who said that.

lapsed since the end of Scholasticism; this would go in to be important in Phenomenology. At first, Brentano was a supporter of ‘psychologism’: the view that all of logic is reducible to psychological states and mechanisms. But he was persuaded to reject it by **Gottlob Frege**. Among Brentano’s students at the University of Vienna: Rudolph Steiner (occultist and founder of Anthroposophy), Edmund Husserl (father of phenomenology; see below), Tomáš Masaryk (the first president of Czechoslovakia), Sigmund Freud (inventor of psychoanalysis), and almost everyone in the Austrian School.

**Lou Andreas-Salomé** (1861-1937, Russian), psychoanalyst, essayist. Associated with a diverse range of thinkers including Nietzsche, Freud, and the poet Rainer Maria Rilke. Nietzsche proposed marriage to her twice; both times, she said no.

**Alfred Adler** (1870-1937, Austrian), originator of Individualist Psychology, the ‘first school’ of Austrian psychology (there are three in all from this period).

**Sigmund Freud** (1856-1939, Austrian-Jewish), philosopher, medical doctor, atheist, inventor of psychoanalysis (the ‘second school’ of Austrian psychology), and discoverer(!) of the subconscious mind. It’s easy to make fun of him these days for his methods, his cocaine habit, and some strange views about sexuality. Karl Popper, a fellow Austrian, would declare psychoanalysis a false science, because the existence of the unconscious mind is an unfalsifiable hypothesis. Still, without him there would be no science of developmental psychology, no clinical psychology, no verdicts of ‘not criminally responsible’ in courts of law, and no Carl Jung. Apart from psychology, Freud also published on the philosophy of civilization, and on religion. Works: *The Interpretation of Dreams* (1899), *The Future of an Illusion* (1927), *Civilization and its Discontents* (1930), *Moses and Monotheism* (1939), *An Outline of Psychoanalysis* (1940).

**Carl Jung** (1875-1961, Swiss) collaborated with Freud for a while on developing psychoanalysis, but the two men came to various disagreements. Particularly: Freud came to believe that Jung’s theories about psychic phenomena and the collective unconscious was not scientific, and Jung came to believe Freud’s emphasis on sex was too narrow. Jung also believed Freud had not taken proper account of the influence of history and environment upon people’s minds. Jung developed the theory of archetypes: universal symbols, images, and themes, that recur in people’s lives, stories, and dreams, influencing their behaviour and the interpretation of their problems. Among them: the *anima* or *animus* (one’s opposite-gendered self-image), and the *shadow* (any part of your psyche that you repress, out of fear or shame). He also invented the extrovert-introvert personality categories, and was the first psychoanalyst to speak out against the criminalization of homosexuality.

**Alexius Meinong** (1853-1920, Austrian), student of Brentano

**Kazimierz Twardowski** (1866-1938, Polish) student of Brentano

**Carl Stumpf** (1848-1936, German) philosopher and comparative musicologist, student of Brentano.

**Sabina Spielrein** (1885-1942, Russian-Jewish). Psychoanalyst and physician. At first she was a patient of Carl Jung; then she became his research assistant, then his student, and then his lover. (Freud thought the relationship unprofessional; this was another reason he ended his friendship with Jung.) Spielrein influenced both Jung and Freud in various ways, especially with her essay *Destruction as the Cause of Coming Into Being* (1912) which inspired Freud to

include the death-instinct in his theory of mind. Speilrein helped transition psychology into a scientific field independent of philosophy, and also helped it to take the feelings of women and children more seriously. In 1942, the Nazis murdered her.

**Viktor Frankl** (1905-1997, Austrian-Jewish). Originator of logotherapy, the existentialist-flavoured ‘third school’ of Austrian psychology. Frankl argued that our happiness emerges from the sense that life is meaningful; and that this sense of a meaningful life emerges from having something to do that you look forward to completing, and from having someone to love. Works: *Man’s Search for Meaning* (1946; this work includes an outline of logotherapy and also an account of his life as a prisoner in the Nazi concentration camp at Auschwitz.)

## Phenomenology and Existentialism

Remember the Kantian problem of knowing the thing-in-itself? To remind you: it’s the idea that we do not see objects in the world as they are. We see them, instead as they conform to our concepts. You may have heard this idea expressed in the famous aphorism, “we do not see things as they are: we see them as we are.”<sup>47</sup> Or in this one: “...it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail.”<sup>48</sup> Philosophically, the basic idea, though not the exact phrase, goes back to Kant and Hume. I mention it here because it’s a rough and simple way of explaining what phenomenology is all about. The idea is to set aside the Kantian problem of knowing the thing-in-itself [the *noumena*] and to focus instead on the way things appear to the senses and to consciousness [the *phenomena*]. We encounter things in the world, not in terms of their objective properties, but rather in terms of their values and meanings in relation to our intentions. **Phenomenology** is the study of those values, meanings, and intentions; it’s like a study of the human mind from the inside.

Following the work of Edmund Husserl (who created the field), a short version of the method of phenomenology goes like this:

- (1) We start with the *Natural Attitude*: also called one’s *Home World*; the way in which we go about our lives normally; the standards for what count as normal and ab-normal; the everyday, ordinary belief in the existence of the world.
- (2) But sometimes we have an *Encounter with the Strange*: The situation that enables the possibility of the Philosophical Attitude; the encounter with someone else’s natural attitude/home world, which cannot be a mere instance of the ab-normal. (Notice the almost Hegelian master-servant move there.)
- (3) The Strange makes it possible to adopt the *Philosophical Attitude*: The ‘standpoint’ from which the natural attitude may be called into question; the standpoint that refrains from naïve belief in the existence of the world.
- (4) and in the Philosophical Attitude we can conduct an act of ***Epoché***: “abstention, withdrawal, standing-back”. This is a Greek term used by ancient sceptics to designate suspension of

<sup>47</sup> This contemporary version of the idea was coined by the French-American writer Anaïs Nin, *Seduction of the Minotaur* (1961), and then popularized out of context by the self-help author Steven Covey.

<sup>48</sup> Abraham Maslow, *The Psychology of Science* (New York and London: Harper & Row, 1966) pg. 15-16

belief; Husserl used it to designate the suspension, bracketing, or turning-off of the belief in the factual existence of the world (ie. of the Kantian thing-in-itself).

- (5) This leaves us with the pure appearance of things, the thing's **Reduction** to its phenomena alone. The phenomena is a function of the mind and not of the world: and it's where all the interesting philosophical discoveries about knowledge, consciousness, and meaning, can begin.

**Edmund Husserl** (1859-1938, Austrian-Czech-Jewish), mathematician, psychologist, and philosopher, student of Brentano and Stumpf. Creator of phenomenology, a field he defined as the study of essences. After his death, some 50,000 pages of his unpublished work was smuggled out of Nazi Germany and into Leuven, in Belgium, where Merleau-Ponty studied them: this would be German phenomenology's first point of entry into French philosophy. Works: *Ideas* (1913), *Logical Investigations* (1900-01)

**Martin Buber** (1875-1965, Austrian-Jewish), theologian and humanist. Nominated ten times for the Nobel Prize for Literature and seven times for the Nobel Peace Prize. Works: *I And Thou* (1923)

**Karl Jaspers** (1883-1969, German-Swiss) Originally trained as a medical doctor and psychiatrist. Turned to philosophy as he grew unhappy with the way the medical establishment treated mental illness. Forerunner of existentialism: he originated some of the vocabulary of existentialism and phenomenology, including terms like *Dasein*, *Existenz*, *Axial Age*, *Limit Situation*, and the subject-object distinction.

**Franz Rosenzweig** (1886-1929, German-Jewish), theologian, translator, and philosopher. Discovered a lost Hegel manuscript. Collaborated with Buber in various ways, especially in translating the Bible, but disagreed with Buber's Zionism. Founded an alternative school, the *Lehrhaus*, to teach a humanist curriculum.

**Gabriel Marcel** (1889-1973, French), Christian existentialist; also known for his work on inter-subjectivity. Some of his ideas arose from his experience as a Red Cross worker during the First World War.

**Martin Heidegger** (1889-1976, German). Student of Husserl. Going back to the Greeks, he revived an old question from Parmenides: "what is the nature of Being?" As an answer, he argued that there is a peculiarly human way to Be, which he called *Dasein*, or being-in-the-world. It is characterised by thrown-ness (ie. we don't choose to be born, we are 'thrown' into the world); various capacities for reason, language, and technological invention; and an ongoing relationship with time and with death. Thus he re-framed phenomenology for the rest of the 20<sup>th</sup> century. Alas, some thorny questions remain concerning his membership in the Nazi party, and his refusal to discuss it after the war was over. Works: *Being and Time* (1927), *Basic Writings* (a collection of his best essays, 1977), and *The Black Notebooks* (thirty-four private journals, discovered in archives and private holdings after his death, and published in 2014; they contain explicit antisemitic commentary.)

**Edith Stein** (1891-1942, Polish-Jewish) a philosopher whose life and example is more important than her writings. Scored first place in the entrance exam to *L'Ecole Normale Supérieure* (that same year, Simone de Beauvoir got second); Husserl supervised her doctorate. A committed pacifist, but joined the Communist partisans in the Spanish civil war. A committed agnostic

despite her Jewish upbringing, but became a Christian mystic while recovering from war wounds in Assisi, Italy. Killed by the Nazis in Auschwitz. Canonized a saint by the Catholic Church. There is disagreement concerning whether she is more correctly considered a Jewish or a Christian heroine. Works: *On the Problem of Empathy* (1916), *Finite and Eternal Being* (1950), *Philosophy of Psychology And The Humanities* (1922), *The Science of The Cross* (1950).

**Hannah Arendt** (1906-1975, German-American-Jewish). Student of Heidegger, and (briefly) his lover. Jaspers supervised her doctorate. She's mainly a political philosopher, but her work cannot really be classified on the liberal-conservative spectrum as we have it today. She argued for a kind of Aristotelian model of citizenship and civic responsibility; she also analyzed the psychology of political action. She was a critic of modernity, yet also a critic of any politics founded on traditionalism including religious or ethnic or national identity. As a journalist, she covered the trial of Nazi war criminal Adolph Eichmann. Works: *The Origin of Totalitarianism* (1951), *The Human Condition* (1958). "The ideal subject of totalitarian rule is not the convinced Nazi or the dedicated Communist, but people for whom the distinction between fact and fiction, true and false, no longer exists."

**Joseph Soloveitchik** (1903-1993, Belarussian-American-Jewish) the most important theorist of Orthodox Judaism to date, though he still had a strong relationship with the Jewish existentialists Buber, Heschel, and Rosenzweig.

**Jean-Paul Sartre** (1905-1980, French) Coined the central proposition of existentialism: "Existence precedes essence". Simone de Beauvoir's lover. The only man to ever decline a Nobel Prize. An intellectual celebrity and even a sex symbol in his time. Works: *Being and Nothingness* (1943), *Existentialism is a Humanism* (1946).

**Emmanuel Levinas** (1906-1995, Lithuanian-French-Jewish). Studied Heidegger while held in a POW camp during WW2: the second path by which German phenomenology entered French thought. He invented the phenomenology of **Otherness**, which would go on to influence Sartre and DeBeauvoir. Works: *Time And The Other* (1947), *Totality And Infinity* (1961)

**Abraham Joshua Heschel** (1907-1972, Jewish) major figure in Jewish Existentialism.

**Simone de Beauvoir** (1908-1986, French), existentialism, feminism. Originator of the concept of the male gaze. A major influence on the second wave of feminism. Originator of the 'ethics of ambiguity': the tension that arises from the way you are a subject to yourself but an object to others. Works: *The Ethics of Ambiguity* (1947), *The Second Sex* (1949) "One is not born, but rather becomes, a woman."

**Maurice Merleau-Ponty** (1908-1961, French) Perhaps because he was also a dancer, he argued that consciousness and intentionality is distributed throughout the body, and does not live exclusively in the brain. Works: *The Primacy of Perception* (1964)

**Simone Weil** (1909-1943, French) Decreation, political thought especially anarchism, Christian mysticism.

**Emil Cioran** (1911-1995, Romanian) pessimism, nihilism.

**Karsten Harries** (b. 1937, German-American) aesthetics and ethics in the tradition of Heidegger. Works: *The Ethical Function of Architecture* (1997)

**Jeff Mitscherling** (b.1940, Californian-Canadian). Proposed a new 'Copernican Revolution' in phenomenology, in which consciousness arises from intentionality, instead of the other way

around as had been assumed since Brentano. Works: *Aesthetic Genesis* (2010), *Artistic Creation* (2019).

**Felix O'Muirchadha** (b.1965, Irish)<sup>49</sup> major figure in the 'theological turn' of 21<sup>st</sup> century phenomenology. Works: *The Time of Revolution* (2012), *A Phenomenology of Christian Life* (2013), *The Formation of the Modern Self* (2022).

**Quentin Meillassoux** (b.1967, French) Student of Alain Badiou. Argued that phenomenology, by ignoring the search for the Kantian thing-in-itself (cf. Husserl), made all reality dependent on perceivers, and all objects depend on subjects. To put it another way: phenomenology made everything "subjective". Further, Meillassoux argued that this move was a mistake: it caused phenomenology to lose its grasp on reality.

## Hermeneutics and Semiotics

**Hermeneutics** is the study of interpretation, and how we interpret things, especially texts. **Semiotics** is the study of signs and symbols. Both of these fields have to do with the study of *meaning*: how we create, communicate, and share meaning; how we come to understand one another or fail to do so; how we come to discover and/or attribute meaning to objects and events and systems in the world around us.

**Hans-Georg Gadamer** (1900-2002, German). Studied under Heidegger. Invented the field of hermeneutics, the study of interpretation and meaning. Works: *Truth and Method* (1960). As he developed them, the key principles of hermeneutics are:

- (1) *phronesis*, 'practical wisdom', Aristotle's term, which Gadamer revived and treated as a kind of pre-logical self-awareness arising from dialogue with others and one's relations with the state of the world. Gadamer's use of *phronesis* here is similar to **Schweitzer's** use of the term **world-view**.
- (2) All interpretations of anything (works of art, stories in the news, smalltalk at a party, etc) involve one's pre-judgments. Gadamer used the word *Vorurteil*, often translated as 'prejudice': by which he means a kind of anticipatory structure in one's worldview that gives you a preliminary sense of things. Notice the almost Kantian move here: he's looking to study the (psychological) conditions for the possibility of something being meaningful.
- (3) Chief among these prejudices is the 'anticipation of completeness': the (revisable) presupposition that events can be understood as part of some coherent and hence meaningful whole.

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<sup>49</sup> Here's a little exercise in philosophical genealogy. O'Muirchadha was the doctoral student of Klaus Held (b.1936), at Wuppertal. Held took courses from Heidegger, and wrote his doctorate supervised by Ludwig Langrebe (1902-1991) who was Brentano's assistant. Langrebe was supervised by Oskar Kraus (1872-1942). Kraus was supervised by Friedrich Jodl (1849-1914) and Anton Marty (1847-1914). Marty was a student of Brentano's, and his doctorate was supervised by Hermann Lotze (1817-1881) who also supervised Carl Stumpf. Lotze was supervised by Ernst Heinrich Weber (1795-1878), Alfred Wilhelm Volkmann, Gustav Fechner, and Christian Hermann Weisse. E.H. Weber was supervised by Johann Christian Rosenmüller (1771-1820). Weisse was advised (informally, via letters) by Immanuel Hermann Fichte, the son of Gottlieb Fichte. And the senior Fichte was supervised by Kant. Felix O'Muirchadha was one of Brendan's doctoral supervisors at NUIG, in Ireland; the other was Richard Hull, who was an analytic utilitarian specializing in practical ethics, and a former student of Derek Parfit. Yeah, I know it's a little self-indulgent of me to include this here. But I enjoy feeling like I'm part of a tradition of philosophy that goes back to the great thinkers. Remember, *you are part of that tradition, too*.

- (4) Another is your ‘historically affected consciousness’, arising from the history and culture that shaped you.
- (5) The presence of these prejudices lead to the conclusion that perfect objectivity is unattainable. Meaning arises through the only other available alternative: inter-subjective communication and the ‘fusion of horizons’.

**Alexandre Kojève** (1902-1968, Russian-French). Entrepreneur, diplomat, an architect of the European Union, possibly a smuggler, and possibly a Soviet spy. Kojève regarded Hegel’s Dialectic of the Master and Slave, a short section of the *Phenomenology of Spirit*, as the key to understanding the whole of Hegel’s massive and difficult corpus. This interpretation remains the norm in nearly all discussions of Hegel’s work today. Georges Bataille, Jacques Lacan, Maurice Merleau-Ponty, Éric Weil, Hannah Arendt, Jean-Paul Sartre, Simone de Beauvoir, Frantz Fanon, and Emmanuel Levinas, among other big names, attended his lectures on Hegel. Works: *Introduction to the Reading of Hegel* (1946).

**Roland Barthes** (1915-1980, French) Works: *Mythologies* (1957), *Empire of Signs* (1970)

**Umberto Eco** (1932-2016, Italian) He is perhaps more famous as a novelist: his mediaeval murder mystery story *The Name Of The Rose* (1980) was made into a movie. As a boy, Eco witnessed the rise of fascism in Italy; later he published an essay called *Ur-Fascism* (1995) in which he identified fourteen general features of fascism to help people recognize it wherever it arises.

**Ernst Cassirer** (1874-1945, German-Jewish). Philosophy of science, culture, and semiotics. Argued for a strong distinction between *mythos* and *logos*, mainly as a way to try and understand why the Nazis rose to power so quickly. In general: nationalist and fascist movements reject *logos* (even while dressing themselves in its clothes), and profess to live by the *mythos* of an imagined past that is somehow more heroic, more real, and more free, than the movement’s own time. Critic of Heidegger, whom he believed was responsible for weakening philosophy’s ability to resist the irrationality of fascism. Works: *Philosophy of Symbolic Forms* (1929), *An Essay On Man* (1944).

**Roman Ingarden** (1893-1970, Polish)

**Rudolph Bultman** (1884-1976, German). Lutheran theologian. Proposed an existential interpretation of the Bible. Revived the old Greek concept of ἀλήθεια [*aletheia*; truth, reality; the property of being revealed, unconcealed, uncovered]; this concept would later influence Heidegger.

**Paul Ricoeur** (1913-2005, French) Proposed a theory of time, in which time is a function of storytelling and narrative, and that the most important fact about human beings is that we are producers of stories. Invented a theory of ‘narrative identity’ as response to the reductionism of the anglo-analytic philosophers (especially Parfit). Possibly among the last Huguenot Protestant philosophers in France. Works: *Oneself As Another* (1990), *Time And Narrative* (1983), *Memory History And Forgetting* (2004; this one was dedicated to French President Emmanuel Macron.)

**Karl-Otto Apel** (1922-2017) Transcendental pragmatics.



## The Frankfurt School, and Critical Theory

This group of philosophers came together at the Institute of Social Research, at the University of Frankfurt, in 1929. Being influenced by a wide variety of sources, notably Marx and Weber, it does not really present a unified worldview or outlook. Its founder, Max Horkheimer, described it as an effort to synthesize the practical concerns of the social sciences with the abstract and theoretical concerns of philosophy. (See also **Critical Theory**, in the Glossary).

When the Nazi party rose to power in 1933, the ideas produced by the Frankfurt School were treated as subversive and anti-nationalist. Most members of the Frankfurt School fled to America to save their lives.

Philosophers from this school, and others inspired by them or building upon them, are the ones who today's American conservatives attack for promoting 'cultural Marxism' and 'critical race theory'. Those terms are also thrown around at pretty much anyone who is critical of either capitalism, or American evangelical Christianity, or American exceptionalism, or all three.

But these charges are straw-men. Scholars of the Frankfurt School were as critical of Marx as they were of everybody else, and some of them were social conservatives themselves (though admittedly, not very many).

**Antonio Gramsci** (1891-1937, Italian) Forerunner of Critical Theory. Argued that the ruling classes control the working classes not only by force, as Marx argued, but also by using systems of education, religion, media, and culture, to glamorize the values of the ruling class. Thus the working classes come to adopt the values of the ruling class, even when adopting those values is contrary to their class interests. Works: *The Prison Notebooks* (so called because he wrote them in a prison between 1929 and 1935).

**Max Horkheimer** (1895-1973), director of the Institute of Social Research at the time the Frankfurt School was formed. Works: *Dialectic of Enlightenment* (1947, collaboration with Adorno), *Eclipse of Reason* (1947), *Critical Theory: Selected Essays* (1972)

**Herbert Marcuse** (1898-1979) Marxism and free love. Works: *Eros And Civilisation* (1955), *One-Dimensional Man* (1964)

**Günther Anders** (1902-1992, German-Austrian-Jewish). Philosopher, journalist, poet; Walter Benjamin's cousin; Hannah Arendt's first husband. Anders attended seminars with Horkheimer; attended lectures by Heidegger; and Husserl supervised his doctorate. He argued that technology, consumerism, mass production, and the television and film industry, dehumanizes people. He was especially worried about nuclear weapons, the destructive power of which he thought had outpaced humanity's ability to understand and to control. Works: *On the Obsolescence of Man* (Vol.1 in 1956, Vol.2 in 1980).

**Theodor Adorno** (1903-1969), worried that science and technology were pushing humanity into "a new kind of barbarism", not imposed by the ruling class, but instead imposed by the dehumanizing effects of technology itself: resulting in a "totally administered society". He was also a musicologist, composer, and critic of the culture industry (ie. television, radio, film, etc), which he thought made art that glamorized technology and capitalism when art should criticize and perhaps subvert them. Works: *Dialectic of Enlightenment* (1944, collaboration with Horkheimer), *Minima Moralia: Reflections from a Damaged Life* (1951), *Negative*

*Dialectics* (1966, which introduced a turn to the “preponderance of the object” in Continental thought), *Aesthetic Theory* (1970), *The Culture Industry* (1991)

**Jurgen Habermas** (b.1929, German) Seeing as many of our highest values emerge from discussions, negotiations, and disagreements in the public sphere, Habermas thought there needed to be some moral principles covering how that discussion could be carried out: hence his theories of **Discourse Ethics**. Works: *The Theory of Communicative Action* (1981), *The Structural Transformation of the Public Sphere* (1962), *The Future of Human Nature* (2001).

**Oskar Negt** (b.1934)

**Claus Offe** (b.1940). Proponent of universal basic income.

**Axel Honneth** (b.1949)

**Graham Harman** (b.1968, American) developed an object-oriented ontology, with influence from Adorno’s ‘preponderance of the object’, independent of Morton’s.

## Post-Modernism

Postmodernism may be described as Continental social-political thought. But in stark contrast to the Frankfurt School, the postmodernists were not overmuch interested in building links between philosophy and the social sciences. Instead they were more interested in the links between philosophy and art and culture, including pop culture. Postmodern philosophical works are notoriously difficult to read, as they often use obscure technical terms in non-consistent ways, and often engage in irony, parody, and cynicism. Its main guiding principle, itself subject to cynical depreciation, is “incredulity toward metanarratives”, as **Lyotard** coined the phrase; radical doubt about, even rejection of, any worldview that claims to be universal, all-inclusive, all-encompassing. The claim that no system of belief, no matter how rational, can claim authority over all others. In other words, there are no ‘grand narratives’, no master worldviews, no Ultimate Truths, neither left-wing nor right-wing, neither religious nor secular. Culture has thus shifted out of its ‘modern’ period, and into whatever period must come next; in the absence of a better name for that next period, we’ll call it the ‘post’-modern period.

This is, perhaps, a twentieth century version of the same disaffection or dissatisfaction with the state of the world that we already saw during the decades following the end of Alexander’s Greek empire, during the centuries of Rome’s slow decline into the Dark Ages, during the end of the Medieval period, and during the end of the Enlightenment, and so on. But unlike these previous moments of paradigm-shifting turmoil, postmodernism is much better documented.

**Jacques Lacan** (1901-1981, French), philosopher and psychoanalyst, originator of the concept of **jouissance**. Lacan was so devoted to the work of Kojève, that after his death Lacan broke into Kojève’s office to steal all the unpublished manuscripts he could find.

**Jean-Francois Lyotard** (1924-1998, French). Commissioned by the government of France to assess the influence of technology upon the sciences, he concluded that technology had rendered the modern world-view obsolete. The Holocaust, in particular, Lyotard said, destroyed all confidence in the modernist belief that technological progress must lead to enlightenment and utopia. Works: *The Postmodern Condition* (1979; this is the book that coined the term ‘postmodern’ itself), *The Differend* (1983)

**Gilles Deleuze** (1925-1995, French) Argued that philosophy is not involved in a search for truth; it's involved in the creation of better concepts and better metaphors. Foucault called Deleuze's work "theatrical". His collaboration with Guattari, *Anti-Oedipus* (1972), was a surprise influence on Nick Land and **Accelerationism**.

**Michel Foucault** (1926-1984, French) studied the relations between knowledge and power. Argued that every definition of 'truth' is involved in someone's or some group's exercise of the Nietzschean will-to-power. He also argued that political power does not always flow 'top-down', so to speak; rather, it sloshes around society, according to the ebb and flow of political **discourses**; that is to say, power emerges from how we *talk* about power. The ability to define the meaning of words like "true", "false", "reality", "fantasy", "sanity" and "madness", he argued, is the single most important form of power anyone can have over the social order. This would become a major influence on **postcolonial** thought and action. Works: *Madness and Civilization* (1961), *Discipline And Punish* (1975), *The History of Sexuality* (1976).

**Jean Baudrillard** (1929-2007, French). Introduced the concept of the 'hyper-real': the simulated or artificial reality with no original reality for its progenitor; the simulated or artificial worlds we create, primarily via media, which people prefer over the real world, even to the point where the distinction between fantasy and reality becomes hard to find. For which reason, he famously declared that the 1991 war in Iraq did not happen! Not that there was no war, but that the representation of the war in our news media was as much a baseless simulation as anything else in mass media. Works: *Simulacra and Simulation* (1981), *The Illusion of the End* (1994).

**Jacques Derrida** (1930-2004, French-Algerian). Invented a form of literary criticism called Deconstruction, which involves examining a text with special attention to the problems or even outright contradictions which inform the meaning of the text. Traced the origin of Western civilization's sense of identity back to a tension between *Logos* and *Mythos*; showing that every attempt to ascribe more authority to *Logos* ends up expressing that authority in some relationship to *mythos*.

**Luce Irigaray** (b.1930, Belgian)

**Felix Guattari** (1930-1992, French) Marxism, psychoanalysis, semiotics, environmental thought. Works: *Anti-Oedipus* (1972), *A Thousand Plateaus* (1980). Both titles were collaborations with Deleuze, under the 'series' title *Capitalism and Schizophrenia*.

**Hélène Cixous** (b.1937, French-Algerian-Jewish) Works: *The Laugh of the Medusa* (1976)

**Alain Badiou** (b.1937, French) Founder of the *Université de Paris VIII* together with Deleuze, Foucault, and Lyotard. Argues for a revival of communism, and for the abolition of identitarian politics. Works: *The Communist Hypothesis* (2015; an attempt to re-frame the idea of communism, and free it from the baggage and brutalities of the past.)

**Jean-Luc Nancy** (1940-2021, French)

**Julia Kristeva** (b.1941, Bulgarian-French) Literary criticism, psychoanalysis, and semiotics.

**Bruno Latour** (1947-2022, French). Relational ontology. He held that all truths, including scientific truths, are socially constructed by networks of institutions like universities, publishers, scientific research organizations, funding agencies, and the like. Therefore, nothing can serve as an objective guide to the true nature of reality. But near the end of his

life, he acknowledged implications of this view that troubled him. Works: *Laboratory Life* (1979), *We Have Never Been Modern* (1991), *Pandora's Hope* (1999).

**Slavoj Žižek** (b.1949, Slovenian), psychoanalysis, post-Hegelianism, post-Marxism. Argued that all worldviews, if adopted widely enough, become ideologies; and that all ideologies must eventually become totalitarian and oppressive. This is the key political idea underlying most postmodern political thought, and it is the reason why many postmodernists regard themselves as radical, anti-establishment, and anti-fascist geniuses (even if they're not). Žižek became a global celebrity when he organized *Communism: A New Beginning?*, a televised academic conference in New York in 2008. The conference was prompted by a massive global financial crisis which began in the previous year and which continues today. At the plenary, with Alain Badiou sitting beside him, he announced "We are back: the communists." Another highly-publicised conference involving him, called *Happiness: Capitalism vs Marxism*, also known as *The Peterson-Žižek Debate* (at the University of Toronto, 19 April 2019), billed as a kind of intellectual heavyweight boxing match between Žižek and Jordan Peterson, turned out to be a duller affair. Surprising almost everyone, including themselves, the two thinkers found more points of agreement than disagreement.

**Alan Sokal** (b. 1955, American) Critic of postmodernism. Responsible for the 1996 Sokal Affair, in which he got an essay made of randomly-generated meaningless statements published in a leading academic journal of postmodern cultural studies. Works: *Fashionable Nonsense* (1998), *Beyond The Hoax* (2008).

## Continental political thought that isn't Frankfurt School

**Ernst Jünger** (1895-1998, German) Philosopher, scientist, photographer, former wandervogel (see Environmental Ethics, above) and a soldier in both world wars where he received multiple battle honours. One could call Jünger a war philosopher: he supported conservative, nationalist, and militarist ideas, and his early writings appeared to glorify war. Yet he was also critical of Nazism and twice rejected their offer of a seat in the Reichstag.

**Hans Jonas** (1903-1993, German-Jewish), environmental philosophy from a Continental perspective, where most others in the field came from the Analytic camp. Originator of the **Precautionary Principle**.

**Louis Althusser** (1918-1990, French) Marxism, anti-humanism.

**Niklas Luhmann** (1927-1998, German), social theorist, communications theorist, systems theorist. It's possible to fit him in that schema I gave earlier on how philosophers used the Kantian method of *critique*: for Luhmann the most important conditions for the possibility of some concept or practice are the *communicative* and especially *media-communicative* conditions.

**Bernard Stiegler** (1952-2020, French) philosophy of "techné".

**Thomas Piketty** (b.1971, French) Economist. Works: *Capital in the Twenty-First Century* (2013)

## Summary Remarks: Where do we go from here?

### The state of truth at the beginning of the 21st century...

We've now seen how the problem of the criterion of truth, although perhaps solved by the pragmatists, didn't go away. From the Analytic camp, we had Frank Ramsey and Alfred Tarsky 'deflating' the concept of truth to an irrelevance. We also find Isaiah Berlin's value-pluralism, in which the matter of truth, whenever incompatible values are in play, is always involved in some kind of negotiation or compromise. From the Continental camp we get Heidegger's essay *On The Essence Of Truth* (1930), in which he asks what conditions must be met in order for a statement to correspond to reality (notice the Kantian move there). He concludes that no conditions are ever adequate. So he suggests replacing the concept of truth with the old Greek concept of *aletheia*, 'un-concealed-ness'. But Heidegger's expression here remains fraught with obscurity, and open to the same charge of redundancy and irrelevance.<sup>50</sup> The postmodernists were equally unhelpful. They found that truth cannot be untangled from fantasy and myth (Derrida, Beaudrillard) or from power-relations (Foucault, Zizek) or institutions (Latour). Some postmodernists said that nobody really cares about truth anymore anyway (Lyotard, Beaudrillard, Deleuze).

But starting around 2015, philosophers in this field began to wonder whether the "incredulity toward metanarratives" (Lyotard's definition of postmodernism), which they had often encouraged, might have contributed to the resurgence of right-wing populism, and fascism. For in the absence of any ability to make strong claims about what's true (and real, and good, and so on), it becomes harder to condemn what is false, illusory, irrational, and evil. Further, fascists and populists seized the opportunity to sow distrust in responsible media, to sow distrust in science and expert knowledge, and to undermine well-established views of ethics and justice. Thus they were able to portray their anti-intellectual, anti-feminist, racist, antidemocratic, and reactionary ideas as plausible solutions to world problems. Ernst Cassirer, Umberto Eco, and Hanna Arendt warned us about this already, almost a hundred years previously.

Similarly, some corporate interests seized the opportunity to instil doubt about major socially-important scientifically-established facts, such as the cancer-causing properties of tobacco smoke (thus to sell more cigarettes), or the reality of the climate crisis (thus to sell more oil and more plastics), or the socially and psychologically destructive effects of social media (thus to sell more advertising).

Journalists, pundits, social scientists, and politicians now regularly speak of "post-truth", or "the age of post-factual politics": an age in which truth is not accorded much importance in public discussions of public problems. In its place, importance is accorded to style, spectacle, emotional appeal, partisan loyalty, 'alternative facts', and 'truthiness'.

I'm going to call this situation **The 21<sup>st</sup> Century Crisis of Truth**. Every philosophical age has its relativists and radical skeptics, but ours is the first in which people who believe their own lies

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<sup>50</sup> He should have been reading theologians like Rudolph Bultmann, John MacQuarrie, Karl Rahner, and Paul Tillich, who revived the concept of *aletheia* about a generation earlier.

also command nuclear arsenals. So I shall define the current crisis of truth as the situation in which no one, or almost no one, can parse the very concept of truth itself, yet at the same time the destructive and murderous consequences of the absence of a working concept of truth is obvious for everyone to see. I think that in the next few years, it will be the prime responsibility of philosophers to solve this crisis.

At least some postmodernists might be changing their minds. Quentin Meillassoux, as we saw, argued that phenomenologists need to get back to grasping reality again. Bruno Latour, as another example, was confronted by a scientist at an academic conference who asked him whether he still believed in reality anymore. As a result he came to revise his views on where truth comes from, and to take a closer look at what scientists do and how they do it.<sup>51</sup>

Philosophy's next big revelation about the nature of truth, whatever it will be, must preserve what was best among the insights of postmodernism, retain the precision of logical positivism, and also grant no foot-hold for its fascist appropriation. A tall order! But a necessary one. And we shall have to look for it everywhere, especially in fields that Western academic philosophy tends to neglect. The challenge of academic writing today is not to exclude any realm of knowledge for the sake of achieving a narrow and impersonal standard for objectivity and rigorousness: at the risk of committing equivocation, let us note that *rigour*, a word commonly used to describe logically tight and cogent argumentation, is also a property of a dead body. Rather, the challenge is to preserve academic seriousness whilst including all meaningful realms of knowledge— that is to say, to find new ways to love wisdom!

## Some questions about the future of philosophy

- Will analytic and continental philosophy ever unite again?
- Will Western philosophy learn anything from Indian, Chinese, Islamic, African, Jewish, and Indigenous thought?
- If postmodernism falls out of prominence, as I think is likely to happen, what will rise to take its place?
- Philosophy is hard. *Very* hard. In fact it's supposed to be hard; that is part of its glory. Thus, those who want to be good at it have to be smart. *Very* smart. And upon discovering that they're very smart, some philosophers start to think rather highly of themselves. *Too* highly. To the point that they start to feel intellectually superior to others, which in turn risks making them spokespersons for various brands of prejudice, up to and including racism, sexism, classism, and other brands of pseudo-intellectual superiority. Can philosophers learn to be smart— *very* smart — without becoming assholes? Without treating philosophy as a zero-sum game which some must lose so that they may win? Without losing their capacity for empathy, without losing their sense of humour and play, or without falling into chauvinism or hubris? The current Crisis of Truth reminds me of Rousseau's warning about rationality: it can enable us to look on the suffering of others and say 'Perish if you will; I am secure'.

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<sup>51</sup> See, for instance, Ava Kofman: "Bruno Latour, the Post-Truth Philosopher, Mounts a Defense of Science" *The New York Times Magazine*, 25 October 2018.

- The rise and influence of social media, smart-phone technology, and rapid search-engine retrieval of information has made knowledge easier to obtain, in less time and across greater distances. Yet some of this technology is deliberately designed to be psychologically addictive. Those who are addicted tend to have shorter attention spans, a weakened executive function, and a drastically reduced ability to concentrate on hard problems for long periods of time. How will these technologically-induced impairments of human cognition affect our ability to do philosophy? Or for that matter, to find workable solutions to any number of hard global problems like climate change, economic instability, war, pandemic disease control, or any form of social injustice?

- There's an awful lot of dead straight white guys in this history. Yet many students today, and certainly many of *my* students, demand that histories of philosophy should include more people who are not straight white guys. This invites questions about who to include in the canon of Western thought, and how to include them. Shall we run a parallel canon for women, africans, queer theorists, and so on? Shall we expand the existing canon to include them as equals to the dead straight white guys? Shall we ignore the dead straight white guy canon altogether, and start anew? Or dig in, and insist that the canon should remain as it is?

- Similarly: shall we remove or downplay the significance of canonical philosophers whose life-choices and other moral commitments run contrary to today's ethical and political standards? Think of Aristotle's argument that some people are natural born slaves, for example. There's also Rousseau's misogyny, Kant's bigotry toward Africans and Asians, Hegel's imperialism in his "Right of Heroes", Heidegger's enthusiastic membership in the Nazi party, Nietzsche's militarism and misogyny, Foucault's approval of pedophilia, and Locke's ownership of shares in a corporation that ran slave plantations in America. Philosophy did not free itself of these associations in the twentieth century. Garrett Hardin's work on 'overpopulation', for instance, is consistent with the principles of white nationalism.<sup>52</sup> In early 2023, a crypto-currency trading company associated with Effective Altruism, FTX Trading, was found to be riddled with graft and fraud. Its director, Sam Bankman-Fried, believed that utilitarian principles made it permissible to lie and to steal in pursuit of greater goods.<sup>53</sup> Nick Bostrom, arguably the most important thought leader for Longtermism, Transhumanism, and Effective Altruism, published explicitly racist statements on internet chat boards in his youth.<sup>54</sup> Can the philosophical work produced by these men be separated from the men themselves?<sup>55</sup>

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<sup>52</sup> Entry on Garrett Hardin on the online database of the *Southern Poverty Law Centre*. <https://www.splcenter.org/fighting-hate/extremist-files/individual/garrett-hardin>

<sup>53</sup> Annie Lowrey, "Effective Altruism committed the sin it was supposed to correct" *The Atlantic*, 17 December 2022. Victoria Bekiempis and Dani Anguiano, "Caroline Ellison says she felt 'relief not to have to lie any more' after FTX collapse" *The Guardian*, 11 October 2023.

<sup>54</sup> Read Bostrom's account of the statement, and his apology for it, here: <https://nickbostrom.com/oldemail.pdf>

<sup>55</sup> My solution is to remember that philosophy is intellectual discovery, and to remember that whatever has been discovered by others can be discovered again by you. Whatever was right, good, and true in the works of such men need not belong to them and only them forever. It is there, in the world, and/or the systems and procedures of reasoning, where it may be re-discovered, re-thought, re-examined, and re-presented anew, by other thinkers (who, to be sure, will have their own problems, but one hopes such problems will be not so bad as to derail the whole train of thought.)

- Seeing as the majority of philosophical work is now done in universities, how will the organization and culture of the modern university affect the kind of philosophical work that gets done? Note that this is a culture of budget cuts, campus culture wars, a permanent precariat class of adjuncts and sessional lecturers, corporate donations and foundation funding which trivializes or excludes research that doesn't lead to market commodities, the punishment of whistle-blowers and others who draw attention to malpractices or harms caused by the university or its wealthiest donors, and the publish-or-perish imperative which rewards tenured professors for publishing noncontroversial research and which raises the barriers-to-entry for recent graduates exceedingly high.<sup>56</sup>

- The early 21<sup>st</sup> century sees the rise of mass anti-intellectual movements including far-right authoritarianism and outright fascism: Putin in Russia, Bolsonaro in Brazil, Modi in India, Erdogan in Turkey, Orban in Hungary, Johnson in the UK, LePen in France, Trump in America. Its most visible expressions at the time of writing include the January 6th Insurrection in America, the Rohingya genocide in Myanmar, the Uyghur genocide in China, and Russia's invasion of Ukraine. How will this hard right turn affect the world? How will philosophers respond?

## Knowledge is fragile.

The second impetus to create this outline struck me in April of 2022, when I learned of the complete destruction of Mariupol State University of the Humanities, in Ukraine. It was a small institution, only a few buildings, only five departments. I must admit with some embarrassment that I had never heard of it until Russian tanks and artillery flattened its buildings, burned its library, killed its professors and students, and in effect caused it to cease to exist except in historical memory. When I found out about that, I felt great pain.

It is easy to theorize about how the story of human knowledge is a story of progress from ignorance to enlightenment: a jagged line which, though it may lie flat once in a while, trends upward in the long term. But that story is just not true. Knowledge is fragile. Knowledge can be lost. You might think the principles of mathematics and logic are universal, fixed features of reality, there to be discovered by anyone who thinks about them hard enough. But the work needed to discover them is a struggle, and it's a struggle we often have to repeat. If logic and mathematics were lost and reinvented, still there shall never again be a Plato, never again a Euclid; no second Wittgenstein, no second Hilbert. Their unique insights, their fingerprints on the discoveries, shall never be repeated. If their discoveries are lost, we shall have to invent them anew, but they won't be the same. And we shall have wasted centuries of time re-discovering things that we could have built upon and raised ourselves higher all the sooner. It is only worse for literature. If the works of Shakespeare, Victor Hugo, or W.B. Yeats should be lost, they will never be re-written. Lost poetic creations can never be remade. War is one way that such lights of human genius can be erased. But war is not the cause of a backslide into ignorance. It is only the last act in a larger drama whose other players include complacency, impatience, distraction,

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<sup>56</sup> See, for example, Maeve McKeown, "The View from Below: How the Neoliberal Academy Is Shaping Contemporary Political Theory" *Society* (2022)



bullishness, stupidity, greed, pride, short-sightedness, and pig-headed fundamentalism, with some or all of those things masquerading as integrity.

When the Roman empire fell, everybody forgot the recipe for concrete. You might wonder how that could possibly happen: then, as now, concrete was a ubiquitous material. Whole temples were built of it. Streets were paved with it. Today, you can go to any building supply store and buy a sack of it, and mix it yourself with a garden hose and a wheelbarrow. How is it possible to forget how to make concrete? Well, it *is* possible, such as when libraries that hold the recipe are damaged and destroyed, and the last people who have the knowledge in their heads die before they can write it down or teach it to others. Sure, the recipe for concrete was re-discovered. But think of what we could have done had we *not* forgotten the recipe for sixteen centuries! And I repeat: the situation is worse for the arts. For art depends on the unique and un-reproducible combination of the creator and her times. It's likely there are hundreds, perhaps thousands, of poets and playwrights and artists, in every civilization that ever rose and fell, whose books all vanished in shipwrecks, house fires, bandit raids, puritanical purges, or simple neglect. We shall never know anything about them. They're gone forever. Knowledge is fragile.

Thus when I heard of the destruction of Mariupol's university, I think that I discovered the real story of human knowledge. It's the story of three brothers, a scientist and an artist and a teacher, making candles in the dark. Mostly they cooperate; sometimes they compete over who is the wisest and who is the one the others cannot do without. Meanwhile a fourth brother, who forgot he's part of the family, steals all the candles he thinks are the best, and works to destroy the ones he cannot steal. And there's a storm brewing outside, just strong enough to quench all the candles if the fourth brother flings open the door, like he's always threatening to do if he doesn't get his way. The story of knowledge is the story of who took up their turn to light candles in a storm, whether and how they fended off their bullish fourth brother, and what happened when the responsibility to care for those candles passed to their children. It is now your turn, my friend. Thousands of philosophers from every culture that ever existed are standing over your shoulder now, cheering you on, hoping that someone from your time gets it right.

Let us reason together, to find the real, the true, the good, and the beautiful.

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