PRAISE FOR *SOCRATES' CHILDREN*

"When I first began to pursue philosophy, I wanted a single resource to introduce me to all its principal players, to teach me their names, relative importance, and chief works, and to help me think their greatest thoughts. I wanted an introduction that let the philosophers have their say, but at the same time avoided the false impartiality of indifference to truth—one that, moreover, went about the whole daunting business with such brevity, directness, enthusiasm, wonder, storytelling, and humor as would suit my needs as a beginner. That resource did not exist. Now it does. It is *Socrates' Children*."

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"The moral, social, and religious problems of our time all ultimately reflect deep philosophical errors and thus, at least in part, require a philosophical solution. Yet philosophy has in recent decades retreated so far within the academy that the average person would not know where to begin to look for instruction. Peter Kreeft has long helped to remedy this problem, and this new work may be his most important yet."

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"Peter Kreeft provides bite-sized snapshots of one hundred of the most famous and influential philosophers who shape, often in unrealized ways, today's world. In his trademark crisp and clear style, he presents ancient, medieval, modern, and contemporary thinkers. While putting each philosopher in historical context, *Socrates' Children* also avoids historical relativism. This book provides both historical context and philosophical summaries of the most important ideas of the most important philosophers. Kreeft focuses on the ideas that make a difference for our lives, as well as on the most influential views of all time."

—**Christopher Kaczor**, Chair of the Department of Philosophy at Loyola Marymount University, St. Thomas Aquinas Fellow for the Renewal of Catholic Intellectual Life for the Word on Fire Institute

"Philosophy professors are always seeking ways to reach students with fresh approaches to the wisdom we have found so wonderful. Here is a fine option."

—**Ronda Chervin**, Emerita Professor of Philosophy at Holy Apostles College and Seminary

"True philosophy is a love affair: as Socrates taught long ago, philosophy is born in wonder, and is lived in passionate seeking. In *Socrates' Children*, Peter Kreeft guides the beginner through the history of philosophy with his characteristic wonder, wit, and wisdom. Reading these volumes is like taking a class in philosophy with one of its greatest living teachers. In Kreeft's hands, the history of philosophy becomes a dramatic story, a great conversation punctuated with surprise, humor, and insight. For the beginner curious about philosophy, beware: to pick up *Socrates' Children* is to embark on the great adventure of philosophical thinking, and so to risk falling in love. And when you fall in love, life is changed forever."

—**Paul A. Camacho**, Professor of Philosophy and Associate Director of the Augustinian Institute, Villanova University

SOCRATES' CHILDREN

SOCRATES' CHILDREN

AN INTRODUCTION TO PHILOSOPHY FROM THE 100 GREATEST PHILOSOPHERS

Volume III: Modern Philosophers

Peter Kreeft

Illustrations by Peter Voth

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to William Harry Jellema,
Brand Blanshard,
Balduin Schwarz,
and W. Norris Clarke, SJ,

who taught me how to philosophize

CONTENTS

(indicates important philosophers; ** indicates very important philosophers)*

A Salesman's-Pitch Introduction to This Book

Why the History of Philosophy Is the Best Introduction to Philosophy

There have been two very different conceptions of philosophy in the English-speaking world for the last century. Traditionally, philosophy was about life, and it was something to be lived. Philosophers were looked up to as "wise men" rather than "wise guys." Philosophical reason was something computers simply did not have. But ever since (1) Russell and Whitehead's *Principia Mathematica* in 1910, 1912, and 1913; (2) Wittgenstein's *Tractatus* in 1921; and (3) Ayer's *Language, Truth and Logic* in 1936, there has been a new conception of the task of the philosopher: (a) not to tell us what is, but to analyze the language of those who do; (b) in so doing, to imitate scientific and mathematical thinking, which is "digital," rather than ordinary language, which is "analog"; and (c) to that end, to use symbolic, or mathematical, logic (basically, computer logic) rather than traditional, Aristotelian, ordinary-language logic.

Indeed, this has been the mainline conception of philosophy in English-speaking cultures for over half a century. It calls itself "analytic philosophy." It has moved far beyond the early, narrow, and dogmatic claims for it, such as Ayer's, but its *style* of philosophical writing is still easily identifiable: you can spot an analytic philosopher by reading just one paragraph.

Such philosophers are useful as vacuum cleaners and garbage collectors are useful: to identify and dispose of waste. They clean well. But they do not cook very tasty or interesting meals. I think large philosophy departments should have at least one and at most two of them, as restaurants should have cleaning crews.

The best way to teach philosophy is by a story: the dramatic story of the history of philosophy, the narrative of the "great conversation," which you find in the "great books." It's politically incorrect to say it, but there is indeed a canon

or list of great books. That's why Plato and Shakespeare never die. Of course, the canon is arguable and not sacrosanct. It's only human. It's not a canon of sacred scriptures.

The most effective way to teach *anything* is by a story, a narrative. All the great teachers used stories, parables, examples, analogies, illustrations. It's really very easy to get ordinary human beings interested in philosophy: just put the picture back into the frame. The frame is the abstract, difficult questions that philosophers ask. The picture is the context of history, where they actually came from: the real, lived human conversations and arguments that passionately divided real individuals like Socrates and the Sophists, and whole cultures like ancient Rome or medieval Christendom and modern, secular, scientific democracies.

The primary reason why the history of philosophy works better than analytic philosophy—the primary reason why most students love it and often become philosophers and philosophy teachers through it—is embarrassingly simple: because the great masters of the past are more *interesting* than present-day philosophers.

But we are too arrogant to admit that. We judge the past by the standards of the present; the opposite idea hardly ever even occurs to us. So we study the past not to learn from them but to teach them, to show how primitive they were compared to ourselves. I refute this "chronological snobbery" by three simple words: Socrates, Plato, Aristotle.

The sciences progress almost automatically; the humanities do not. Philosophy is one of the humanities, not one of the sciences.

Our ancestors made mistakes, just as we do, but different ones. Theirs are now usually obvious to us; our own are not, and therefore are much more harmful. They are the glasses through which we look rather than the things we look at. "To see ourselves as others see us" is to broaden our minds. We wonder how we will we appear to our remote descendants, but we cannot know. We cannot read the books that haven't been written yet. But we can know how we would look to our remote ancestors, for we can read their books.

The only alternative to listening to the many who have already spoken, and died, is listening to the few who are now alive and speaking: ourselves. The first option, often called "tradition," is more democratic. It is what Chesterton called "the democracy of the dead": extending the vote to those who otherwise would be disqualified not by accident of birth but by accident of death.

A scientist studies the history of science as a series of instructive errors and gradual progress to enlightenment. And this is right in science, because in science the past really is inferior to the present, and has been proved to be that. But it is not right to do this in philosophy because philosophy is not science, and past philosophers have *not* been proved to be inferior to present ones. Here is a proof of that fact—or, rather, of the fact that at least unconsciously we *believe* that they were wiser than we are, and not vice versa: we do not speak of "modern wisdom"

but of "ancient wisdom." The noun we spontaneously connect with "modern" is not "wisdom" but "knowledge." Knowledge is incremental, like a stairway—it naturally progresses. Wisdom is not. And philosophy is the search for wisdom.

The best way to learn philosophy, then, is through its history. This is true even if your eventual goal is to be an analytic philosopher and analyze the issues logically and not historically (which is a perfectly legitimate and necessary job). For you simply can't find any better teachers to begin with than the ancients, especially Socrates, Plato, and Aristotle, even if you want to move beyond them.

The history of philosophy is not a series of dead facts but living examples. It is not to be studied simply for its own sake. We should apprentice ourselves to the great minds of the past for our sakes, not for theirs; for the sake of the present and the future, not the past.

I have tried just about every possible way to introduce philosophy to beginners (and some impossible ways too), and by far the most effective one I have ever found is the great books, beginning with the dialogues of Plato. (Why anyone would oppose "great books" blows my mind. Do they prefer tiny books, shallow books, or stupid books?) Most of the great books in the history of philosophy are surprisingly short and surprisingly clear, for they were written for intelligent, literate ordinary people, not for other philosophers. (This becomes increasingly rare as we approach the present time.)

If Plato was the first great philosophical *writer*, Socrates, his teacher, was the first great *philosopher*. Plato was to Socrates what Matthew, Mark, Luke, John, and Paul were to Jesus. (Socrates, like Jesus and Buddha, wrote nothing. He was too busy *doing* it to publish it.) And Aristotle, Plato's prime pupil, is to the West what Confucius is to China: the archetype of common sense, the one whom subsequent thinkers either build on as a primary foundation or attack as a primary opponent.

So here is the story of philosophy. It's the story of a long, long series of arguments in a very large and dysfunctional family; and Socrates is its main patriarch, so I've called it *Socrates' Children*. Welcome to the commodious and contentious family of his children.

Something About Passion

Most philosophy textbooks aren't fully human because they deliberately cut out all emotions, such as enthusiasm and wonder—even though Socrates, Plato, and Aristotle all said that wonder was the origin of philosophy! Most textbook authors try to imitate computers. I gladly announce that I am not a computer. I am a person, with both rational and irrational passions and feelings. One of these is the passion for philosophy, and the conviction that philosophy should be exciting—rather, that it is exciting, and therefore should be taught that way.

I am convinced that reason and passion, head and heart, are both very, very valuable and ought to be allies, not enemies.

The purpose of an introduction to philosophy is to introduce philosophy—that is, to lead-*into* (the literal meaning of "introduction") the-love-of-wisdom (the literal meaning of "philosophy"). To lead-into, not merely to see-and-analyze-from-afar. To be a door, not a microscope. And to lead the reader into the-love-of-wisdom, not the-cultivation-of-cleverness.

Love is a passion. Without blood from the heart, the brain does not work well. Without the will to understand, we do not understand. The brain is not merely a computer; it is a *human* brain. My ambition in this book is not just to inform and to summarize historical facts. I want to be your matchmaker. Jack and Jill, come up the hill and meet Plato. Fall in love with him. Struggle, be puzzled, get angry, fight your way out of the cave. This book is not just *data*—this is drama.

Why This Book?

I decided to write this book when the umpteenth person asked me the following question: "Could you recommend just one book that covers the whole history of philosophy that beginners can understand and even get excited about?"

Since I could not answer that question in words, I decided to try to answer it in deeds. I write the books I want to read when nobody else will write them. Sometimes you have to write a book first in order to get the satisfaction of reading it.

Twenty-one features make this book distinctive:

1. *It is "existential," practical, personal*. Philosophy is about human life and thought, so I concentrated on the ideas that *make a difference* to our experience, to our lives. That is William James' "pragmatic criterion of truth." His point is that if you can't specify *what difference it makes* if you believe or disbelieve an idea, then that idea is neither true nor false in any humanly significant sense.
2. *It is selective*. It doesn't try to cover too much. For an "introduction" means, literally, a "leading-into" rather than a summary or survey. It is not the last word but a first word, a beginning, for it is for beginners. Little philosophers get only a page or two; great philosophers get only a dozen; medium-sized philosophers get between three and six.
3. *It concentrates on the "Big Ideas."* (In fact, I thought of entitling it "What's the Big Idea?") This involves minimizing or omitting many "smaller" ideas. I think it is true of ideas, as of friends, that you can have too many of them. Better to have a few that are deeply understood and cherished than to have many that are not.

This book includes only what most students will find valuable. They will find valuable only what they remember years later. They will remember years later only those ideas that make a difference to their lives. And that's usually one Big Idea from each philosopher.

4. *It covers one hundred philosophers.* I chose them by two standards: (a) intrinsic excellence, wisdom, and importance; and (b) extrinsic historical influence and fame.
5. *It gives much more space to the "Big Nine": Socrates, Plato, Aristotle, Augustine, Aquinas, Descartes, Hume, Kant, and Hegel.* These are the most influential philosophers of all time.
6. *It presents the history of philosophy as a story, a "great conversation."* A book about the history of philosophy is not about history but about philosophy; yet, philosophers can be understood best historically, as partners in a dialogue with other philosophers. The whole history of Western philosophy is a very long and complex Socratic dialogue. The dialogue is exciting, for thought-revolutions are more important than political revolutions, and battles between ideas are more important than battles between armies.
7. On the other hand, *its point of view is not historical relativism*. I do not try to explain away any philosophers by reducing them to creatures of their times, as Marxists and Hegelians do. Though humans are rooted in *humus* (earth) like trees, yet like trees we also reach into the sky. Historians read the *Times*, but philosophers try to read the eternities.
8. *It is for beginners, not scholars.* It is not "scholarly" in style. It does not break new ground in content. It does not push any new philosophical theory.
9. *It is not "dumbed down."* Even though it is for beginners, it is for intelligent beginners, not dumb beginners. (It is also appropriate for intelligent high school seniors and for graduate students in departments other than philosophy.)
10. *It is for college courses in the history of philosophy.* But it is also a "do-it-yourself" book that does not require a teacher to interpret it.
11. *Its point of view is traditional rather than fashionable.* It neither assumes nor tries to prove any one particular philosophical position. Though I try to be fair to all philosophers and get "into their heads," I confess at the outset *a sympathy for common sense*. In philosophical terms, this usually (but not always) means, in one word, Aristotle rather than, for example, Nietzsche, Marx, or Derrida.
12. *It tries to be both clear and profound, both logical and existential.* For two or three generations, philosophers have been divided into two camps separated by these two ideals. English-speaking analytic philosophers have sought maximum clarity and logic, while continental philosophers have sought a more synthetic "big picture" that is more profound and existential. The result is that the former sound like chirping birds while the latter sound like muttering witch doctors.

I try to bridge this gap by going back to Socrates, who demanded both clarity and profundity. Many other philosophers today are also trying to bridge that gap by dialoguing with each other across the Channel.

13. *Like Socrates, it takes logic seriously.* Therefore, *it summarizes not just conclusions but arguments*, and evaluates them logically. But it uses ordinary-language logic, commonsense logic, Socratic logic, rather than the artificial language of modern mathematical, symbolic logic.
14. *It uses three kinds of logic*, as Socrates did:
    a. It uses *inductive* logic by grounding and testing its abstract and general ideas in concrete and particular instances.
    b. It uses *deductive* logic in tracing practices back to their principles and principles back to their premises, and in following premises, principles, and practices out to their logical conclusions.
    c. And it uses *seductive* logic as a woman would seduce a man by her beauty. For philosophy can be very beautiful.
15. *It naturally interfaces with religion.* Many of the questions philosophers ask are also questions religion claims to answer, though the methods of these two enterprises are fundamentally different: philosophy uses human reason alone, while religion relies on faith in something that is more than human. Therefore, this book naturally interfaces with religion in its questions, but not in its methods. Neither religious belief nor unbelief is either presupposed or aimed at.
16. *It is so unfashionable as to seek truth, of all things!* Much of contemporary philosophy looks like intellectual navel-gazing. But real philosophy ("the love of wisdom") seeks the fruit of truth, not just fun, play, or displays of cleverness. It is mentally procreative.
17. *It emphasizes the classical philosophers*, for two reasons:
    a. We don't yet know which contemporary philosophers will be acknowledged as great and which will be forgotten. It takes time for history, like a sieve, to sort out the big and little stones. Every era makes mistakes about itself. "Our era is the only one that doesn't" is perhaps the stupidest mistake of all.
    b. The questions contemporary philosophers typically ask are not the questions real people ask. They are questions like whether we can prove that we're not just brains in vats being hypnotized into seeing a world that isn't there. How many people do you know who worry about that question? I suspect even philosophers don't really worry about it if they're sane; they just pretend to. (In other words, they pretend to be insane.) Real people ask questions like: What are we? What should we be? Why were we born? Why must we suffer? Why must we die? Why do we kill? How should we live? Is there a God? An afterlife? Where does morality come from? What is the greatest good? How do you know?

18. *It is full of surprises.* It emphasizes things readers probably do *not* already know, understand, or believe. It does not patronizingly pass off clichés as profundities. It emphasizes wonder, since "philosophy begins in wonder."

    This does not contradict its preference for common sense (point 11 above), for common sense, when explored, turns out to be more wonderful than any cleverly invented ideologies. For real life is much more fantastic than any fantasy; fantasy only imitates life, while life imitates nothing. (You can learn this, and similar things, from the most maverick pick among my one hundred philosophers, G.K. Chesterton.)
19. *It dares to be funny.* It includes humor whenever relevant, because reality does. Reality is in fact amazingly funny.
20. *It includes visual aids.* We both learn and remember more effectively with our eyes than with our ears.
21. The treatment of each of the 100 philosophers usually contains *eleven parts*, as follows:
    1. A *portrait* of the philosopher.
    2. A brief *bio*, including *the seven W's*:
        a. *Who*: his complete name
        b. *Where*: his place of birth and nationality
        c. *When*: his birth and death
        d. *What*: his job or career
        e. *Whimsy*: unusual, dramatic, or humorous facts or legends about him
        f. *Which*: his most famous book
        g. *Why* he asked the questions he did, which is the next point (point 3). Obviously, some philosophers' lives are much more interesting than others. Some philosophers are almost all life and hardly any theory (e.g., Diogenes the Cynic); others are almost all theory and almost no life (e.g., Hegel).
    3. His *historical situation* and problem; his dialogue with previous philosophers.
    4. His *Big Idea* or central insight or most important teaching.
    5. His *most famous quotation(s).* (You will find the following piece of advice unusual but practical, I think. When you come to a quotation from a philosopher in this book, long or short, read it *aloud*. This helps you to remember and also to more deeply understand it, because this not only reinforces one sense [seeing] with another [hearing] but also brings into play your unconscious mind, your intuition and feelings.)
    6. A *diagram* or sketch whenever possible, translating the abstract idea into a visual image.
    7. The *practical difference* the idea makes:
        a. to life—to *your* life;

   b. to thought (the idea's logical implications); and
   c. to history (to subsequent thinkers).
8. The essential *argument(s) for* this idea.
9. The essential *argument(s) against* it.
10. A short, recommended *bibliography*, both primary and secondary sources, but only when readable and helpful. (These bibliographies at the end of some of the chapters in this book—only the important ones—are for beginners, not scholars. They are chosen for readability, for their power to interest and move the reader.)
11. *Probable reading experience*; hints to make the philosopher come clear and alive.

A Very Short Introduction to Philosophy

The best introduction to philosophy is the history of philosophy. The best answer to the question "What is philosophy?" is not an ideal definition of it but real examples of it. If you want to know what philosophy is, read philosophers.

Start with Plato. Whitehead famously summarized the whole history of Western philosophy as "footnotes to Plato." (I thought of using that for the title of this book.) Plato is the first philosopher from whom we have whole books. He is the greatest philosophical writer, for no philosopher has ever improved on his style.

Philosophy Begins in Wonder

Philosophy, according to its three greatest inventors—Socrates, Plato, and Aristotle—begins in wonder and ends in wisdom. It is literally "the love (*philia*, friendship) of wisdom (*sophia*)."

"Wonder" means three things:

1. It starts with *surprise* (e.g., "What a wonder!—that despite my deepest desire to live, I must die!").
2. It leads to *questioning* (e.g., "I wonder *why* I must die").
3. It ends with deepened *appreciation* (e.g., "How wonderful that my life, like a picture, has a frame, a limit! How wonderful that what I so deeply fear—death—I also deeply need!").

The first kind of wonder (surprise) leads to the second (questioning). We question only what we find remarkable. And the second kind of wonder (questioning), when successful, leads to the third kind (appreciation, contemplative wonder): we contemplate, and appreciate, and intellectually "eat" the truths we discover through questioning and investigating and reasoning.

The Divisions of Philosophy

What do philosophers ask questions about? These are the *divisions* of philosophy. They include four main parts:

1. *Metaphysics*, which is the study of the truths, laws, or principles that apply to all reality, not just physics but "beyond" (*meta*) those limits, though including them.
2. *Philosophical anthropology*, or philosophical psychology, which is the philosophical study of human nature, or the self.
3. *Epistemology*, which is the study of knowing and how we know; this can include logic and methodology.
4. *Ethics*, which is the study of what we ought to do and be.

In other words:

1. What is real?
2. What am I?
3. How can I know?
4. What should I do?

But philosophers also apply philosophy to many other areas, such as:

1. social and political philosophy
2. philosophy of religion
3. philosophy of education
4. philosophy of art, or aesthetics
5. philosophy of science

etc.

We can philosophize about anything: sexuality, sports, humor, even soup. E.g., I wrote a philosophy of surfing entitled *I Surf, Therefore I Am*.

The Importance of Philosophy

Why is philosophy important?

1. Because it is distinctively human. Animals do not philosophize because they know too little, and God, gods, or angels do not philosophize because they know too much. To be human is to philosophize, for to be human is to wonder.

2. Because it makes a difference to everything. Sometimes the difference is a matter of life or death. Wars are fought for philosophical reasons. The Civil War was fought over the rightness or wrongness of slavery. World War II was fought over fascism, which was a philosophy. The Cold War was fought over a philosophy: Marxism, or communism. The present "culture wars" are being fought throughout Western civilization over many related philosophical issues: religion, human nature, "natural laws," human sexuality, the meaning of marriage and family, whether human lives have absolute or relative value, just and unjust wars, and the role of the state in human life.

Books of Philosophy

For a short but dramatic introduction to philosophy, I recommend you read four of the dialogues of Plato that center around the death of Socrates, the first great philosopher: *Euthyphro*, *Crito*, *Apology*, and *Phaedo*. Or—a very distant second best—read my *Philosophy 101 by Socrates: An Introduction to Philosophy via Plato's "Apology."*

The best way to learn philosophy is not through books *about* the philosophers—books like this one—but from the books written *by* the philosophers. Fortunately, most great philosophers wrote short, simpler books as well as long, harder ones; and almost always it was the shorter ones that became classics. For instance:

PHILOSOPHER	EASY, SHORT BOOK	HARD, LONG BOOK
Plato	*Apology*	*Republic*
Augustine	*Confessions*	*City of God*
Boethius	*The Consolation of Philosophy*	*On the Trinity*
Anselm	*Proslogion*	*Monologion*
Bonaventure	*Journey of the Mind to God*	(many)
Machiavelli	*The Prince*	*The Discourses*
Pascal	*Pensées*	*Provincial Letters*
Descartes	*Discourse on Method*	*Meditations*
Leibniz	*Monadology*	(many)
Berkeley	*Three Dialogues between Hylas & Philonous*	(many)
Hume	*An Enquiry Concerning Human Understanding*	*A Treatise of Human Nature*

PHILOSOPHER	EASY, SHORT BOOK	HARD, LONG BOOK
Kant	*Foundations of the Metaphysics of Morals*	*Critique of Practical Reason*
Heidegger	*Discourse on Thinking*	*Being and Time*
Sartre	*Existentialism and Human Emotions*	*Being and Nothingness*
Marx	*The Communist Manifesto*	*Capital*
Kierkegaard	*Philosophical Fragments*	*Concluding Unscientific Postscript*
Marcel	*The Philosophy of Existentialism*	*The Mystery of Being*

Unfortunately, four of the most important philosophers—Aristotle, Aquinas, Hegel, and Nietzsche—never wrote a short, clear, and simple book (though Aristotle wrote a long and simple one, the *Nicomachean Ethics*; Nietzsche wrote a few short but not simple ones; and Aquinas wrote a very long and clear but not simple one, the *Summa theologiae*).

Philosophy and Religion

Philosophy is not religion and religion is not philosophy.

All religions, however diverse their content, originate in faith rather than pure reason, and their ultimate appeal is to divine authority, the authority of divinely revealed scriptures (e.g., the Bible, the Quran), or institutions (e.g., the Catholic Church), or mystical experiences (e.g., Buddhist *nirvana*).

Philosophy, classically conceived, originates in and is justified by appeal to reason. Medieval philosophers often use philosophical reason to justify religious faith (e.g., rational proofs for the existence of God). Ironically, modern philosophers, in reaction against medieval philosophy, often begin by questioning the validity of faith and end by questioning the validity of reason and substituting ideology, feeling, or will (e.g., Hobbes, Hume, Rousseau, Kant, Fichte, Schopenhauer, Nietzsche, Dewey, Derrida). Philosophers who make this move usually construe "reason" much more narrowly than classical (premodern) philosophers did. They think of "reason" as *scientific* reasoning. If medieval philosophy is in bed with religion, modern philosophy is in bed with science.

The greatest difference between philosophers and other human beings is probably not philosophy but religion. For everyone has a philosophy, whether well thought out or not, but not everyone believes in a religion. According to the polls, only 5–10 percent of Americans identify themselves as atheists, but 75 percent of philosophers do. That fact explains why most histories of philosophy

do not understand religious philosophies very well. Religion, like sex, humor, and music, is something one understands from within much better than from without. Whenever I have my class argue about religion, I make the believers argue for atheism and the doubters, agnostics, and atheists argue for faith, and the result is always the same: the pretend atheists do a far better job than the pretend believers. Then we argue about whether this was because only the believers understood both sides or whether it was because the pretend believers had to argue for unarguable myths and superstitions.

This book is not about religion but about philosophy, but one of the primary questions of philosophy is whether something like God exists; for this idea makes more of a difference to everything else, both in life and in philosophy, than just about any other idea. It makes a difference to personal identity, death, morality, and "the meaning of life." The God-idea is almost certainly either the most important error and illusion or the most important truth in the history of human thought. So a book on philosophy cannot ignore the idea. Most great philosophers did not. However, it treats the idea philosophically (by reason) rather than religiously (by faith). It is no part of this book either to presuppose or to try to prove or disprove religious faith, either overtly or as a hidden agenda. I have tried to be equally fair to all points of view, including philosophies I strongly disagree with such as nihilism, skepticism, Marxism, and even deconstructionism, which I cannot help suspecting is not even serious but just "jerking our chain."

A Doable Do-It-Yourself Course in the Classics of Philosophy

Many people have asked me for a recommended booklist for a teach-yourself philosophy course. Many beginning philosophy teachers have asked me for a similar list for an introductory course in philosophy.

Again, I know of no more effective way to teach philosophy, to yourself or others, than the apprenticeship to the masters that is called the "great books." The canon of great books is certainly not fixed, or stuffy, or irrelevant to today's world. The list is pragmatic: it is a list of what has "worked."

Based on my own experience of what works—that is, what (a) is comprehensible to beginners and (b) inspires them to think and perhaps even to fall in love with philosophy—here is my list.

There is a primary list and a secondary list for each of the four periods in the history of philosophy. For a high school course, one of these eight lists would seem to fit into one semester; for a college course, two; and for a graduate course, three or four. The lists are deliberately short and selective; far better to spend much time with a few great friends than a little time with many little ones.

Ancient Philosophy (Primary)

Solomon, *Ecclesiastes*

Plato, *Meno* and *Apology*

Plato, *Republic*, excerpts. (If you use the Rouse translation, *Great Dialogues of Plato*, and mentally divide each book into three parts—A, B, and C—you could cover Book I, Book IIA, Books VB through VIIA, Book IXC, and Rouse's helpful summary of the rest.)

Aristotle, *Nicomachean Ethics*, excerpts. (Select your own excerpts but be sure to cover Books I and VIII.)

Plotinus, "Beauty"

Ancient Philosophy (Secondary)

Parmenides' poem

The rest of Plato's *Republic*

Plato, *Gorgias*

The rest of the *Nicomachean Ethics*

A secondary source summary of Aristotle, either Adler's *Aristotle for Everybody* (easy) or Ross' *Aristotle* (intermediate).

Medieval Philosophy (Primary)

Augustine, *Confessions* 1–10 (Word on Fire Classics edition, which uses the Sheed translation)

Boethius, *The Consolation of Philosophy*

Anselm, *Proslogion*

Aquinas, *Summa theologiae*, at least 1.2.3 ("On God's Existence") and 1-2.2 ("On Those Things in Which Happiness Consists"). These and more, with explanatory notes, are included in my *A Shorter Summa*.

Medieval Philosophy (Secondary)

Bonaventure, *Journey of the Mind to God*

Aquinas, more of the *Summa*. My *Summa of the Summa* anthology is five hundred pages, with many footnotes.

Nicholas of Cusa, *Of Learned Ignorance*

Modern Philosophy (Primary)

Machiavelli, *The Prince*

Descartes, *Discourse on Method*

Hume, *An Enquiry Concerning Human Understanding*

Kant, *Foundations of the Metaphysics of Morals*

Modern Philosophy (Secondary)

Pascal, *Pensées* (or my *Christianity for Modern Pagans: Pascal's "Pensées"—Edited, Outlined & Explained*)

Descartes, *Meditations*

Leibniz, *Monadology*

Kant, *Critique of Pure Reason*, excerpts

Contemporary Philosophy (Primary)

Sartre, *Existentialism and Human Emotions* (or *Existentialism Is a Humanism*)

James, "What Pragmatism Means" and "The Will to Believe" (short lectures)

Marx, *The Communist Manifesto*

C.S. Lewis, *The Abolition of Man*

Buber, *I and Thou*

Contemporary Philosophy (Secondary)

Mill, *Utilitarianism*

Russell, *The Problems of Philosophy*

Ayer, *Language, Truth and Logic*

Wittgenstein, *Tractatus Logico-Philosophicus*

Chesterton, *Orthodoxy*

Clarke, *Person and Being*

A Personal Bibliography

Please note: this is merely *a* bibliography—one among many possible lists of recommended further reading—of other books I have written about these philosophers. The very best books to read are, of course, the books of the great philosophers themselves.

1. Solomon: *Three Philosophies of Life: Ecclesiastes: Life as Vanity, Job: Life as Suffering, Song of Songs: Life as Love* (chapter 1)
2. Shankara, Buddha, Confucius, and Lao Tzu: "Questions of Faith: The Philosophy of Religion" (recorded lectures)
3. Pre-Socratics, Greeks, and Moderns: *The Journey: A Spiritual Roadmap for Modern Pilgrims*
4. Socrates: *Philosophy 101 by Socrates: An Introduction to Philosophy via Plato's "Apology"*
5. Plato: *The Platonic Tradition*
6. Plato: *A Socratic Introduction to Plato's "Republic"*
7. Aristotelian logic: *Socratic Logic: A Logic Text Using Socratic Method, Platonic Questions, and Aristotelian Principles*
8. Jesus: *The Philosophy of Jesus*
9. Jesus: *Socrates Meets Jesus: History's Greatest Questioner Confronts the Claims of Christ*
10. Jesus: *Jesus Shock*
11. Augustine: *I Burned for Your Peace: Augustine's "Confessions" Unpacked*
12. Muhammad: *Between Allah & Jesus: What Christians Can Learn from Muslims*

13. Aquinas: *Summa of the Summa*

14. Aquinas: *A Shorter Summa: The Essential Philosophical Passages of St. Thomas Aquinas' "Summa Theologica" Edited and Explained*

15. Aquinas: "The Modern Scholar: The Philosophy of Thomas Aquinas" (recorded lectures)

16. Aquinas: *Practical Theology: Spiritual Direction from Saint Thomas Aquinas*

17. Machiavelli: *Socrates Meets Machiavelli: The Father of Philosophy Cross-Examines the Author of "The Prince"*

18. Pascal: *Christianity for Modern Pagans: Pascal's "Pensées"—Edited, Outlined & Explained*

19. Descartes: *Socrates Meets Descartes: The Father of Philosophy Analyzes the Father of Modern Philosophy's "Discourse on Method"*

20. Hume: *Socrates Meets Hume: The Father of Philosophy Meets the Father of Modern Skepticism—A Socratic Cross-Examination of Hume's "An Enquiry Concerning Human Understanding"*

21. Kant: *Socrates Meets Kant: The Father of Philosophy Meets His Most Influential Modern Child—A Socratic Cross-Examination of Kant's "Critique of Pure Reason" and "Foundations of the Metaphysics of Morals"*

22. Marx: *Socrates Meets Marx: The Father of Philosophy Cross-Examines the Founder of Communism—A Socratic Dialogue on "The Communist Manifesto"*

23. Kierkegaard: *Socrates Meets Kierkegaard: The Father of Philosophy Meets the Father of Christian Existentialism*

24. Freud: *Socrates Meets Freud: The Father of Philosophy Meets the Father of Psychology*

25. Sartre: *Socrates Meets Sartre: The Founder of Philosophy Cross-Examines the Founder of Existentialism—A Socratic Dialogue on "Existentialism and Human Emotions"*

26. Tolkien: *The Philosophy of Tolkien: The Worldview Behind "The Lord of the Rings"*

27. Lewis: *C.S. Lewis for the Third Millennium: Six Essays on "The Abolition of Man"*

28. Modern philosophers systematically argued with from a Thomist perspective: *Summa Philosophica*

29. The history of ethics: "What Would Socrates Do? The History of Moral Thought and Ethics" (recorded lectures)

30. Ethical classics: *Ethics for Beginners: Big Ideas from 32 Great Minds*

A Few Recommended Histories of Philosophy

Here are a few selected histories of philosophy that do not duplicate mine but have somewhat different ends.

1. Frederick Copleston, SJ, has written the most clear and complete multi-volume history of Western philosophy available, with increasing detail and attention as it gets more and more contemporary. It is not exciting or dramatic or "existential," but it is very fair, clear, logical, and helpful.
2. Will Durant's *The Story of Philosophy* is charmingly and engagingly written, though very selective and very personally angled toward Enlightenment thinkers.
3. Bertrand Russell, a major philosopher himself, has written a very intelligent, elegant, and witty little history of Western philosophy from the viewpoint of a modern Enlightenment atheist, semi-skeptic, and semi-materialist. Don't expect fair and equal treatment of both sides.
4. Francis Parker's one-volume history of philosophy up to Hegel, *The Story of Western Philosophy*, neatly structures this history by centering on the theme of the one and the many.
5. Mortimer Adler's *Ten Philosophical Mistakes* does not offer a complete history but a diagnostic treatment of key errors in modern philosophy.
6. Étienne Gilson's *The Unity of Philosophical Experience* does the same, finding reductionisms of philosophy to one of the sciences as a nearly universal modern error.
7. William Barrett's *Irrational Man*, though purportedly only an introduction to existentialism, has some very powerfully written and engaging historical chapters on pre-existentialist philosophy from an existentialist viewpoint, as well as the best one-chapter summaries of Kierkegaard, Nietzsche, Heidegger, and Sartre available in print. His *The Illusion of Technique* thoughtfully compares James, Wittgenstein, and Heidegger.

8. Richard Tarnas' *The Passion of the Western Mind* is indeed passionate, and existential, and focuses on the more general surrounding historical and cultural events and influences.
9. Samuel Enoch Stumpf (*Socrates to Sartre*) and Robert Solomon and Kathleen Higgins (*A Short History of Philosophy*) have also produced good one-volume histories of Western philosophy.

Most philosophy texts today are not "great books" histories but anthologies of recent articles written by recent philosophers about recent systematic, logical issues. Most of these are thin, dry, technical, dull, and lacking in existential bite as well as style, though all of them are very intelligent. They have their place, but usually only math and science students, not English or history students, like them. Students, especially in the humanities, will find *histories* of philosophy much more interesting for the same reason they find stories more interesting than formulas, and dialogues more interesting than monologues. That was Plato's genius. His Socratic dialogues remain the single best introduction to philosophy ever written.

Introduction to Modern Philosophy

This is the third volume in a four-volume history of philosophy.

This volume is longer than the previous two, even though its time period is shorter. The two centuries between Descartes and Hegel, between 1637 (the publication of the *Discourse on Method*) and 1831 (Hegel's death), are like a sudden jungle growth of philosophical systems. Comparing modern with medieval philosophy is like comparing New Yorkers with Alaskans. (This is not a value judgment: I personally love them both.)

The Story Line of Modern Philosophy

The story line of ancient and medieval philosophy is fairly straightforward, but the story of modern philosophy is messy, multiple, and complex. The history of modern philosophy presents a challenge to the teacher because the logical developments and the chronological developments do not coincide as they usually did in the ancient and even the medieval era. So if we arrange our philosophers strictly chronologically, we will be jumping from one topic to another and back again. So I have divided this volume into two sections, corresponding to the two main new foci in modern philosophy: epistemology and politics.

Thus, though Machiavelli and Bacon precede Descartes chronologically, we begin with Descartes, who is logically "the father of modern philosophy." Bacon is an early empiricist, and most of modern empiricism is a later reaction against the rationalism that begins in Descartes, so Bacon is put after Descartes even though he lived earlier. Also, Machiavelli and Hobbes, though earlier than Descartes, fit into our second topical category, political philosophers. (Look at the Table of Contents if this confuses you.)

Postmedieval philosophy focuses on five issues. The first two will be covered in Volume III (modern) and the last three in Volume IV (contemporary):

1. The primary modern issue is epistemology (theory of knowledge). Modern philosophers are like teenagers who, instead of thinking first of all about the

world and other people, think about themselves: Who am I? Am I ugly? Am I any good? And above all, how can I be certain of anything? Epistemology is like taking off your glasses and looking at them. Almost all premodern philosophers are first of all metaphysicians; almost all important modern philosophers are epistemologists, either *instead* of being metaphysicians or at least *before* being metaphysicians. All the classical modern philosophers think they have to critique reason, their tool, before they build philosophical buildings with it.

This begins with Descartes, who is called "the father of modern philosophy" because he changed the central topic of "the great conversation" when he published his *Discourse on Method* in 1637. Classical modern philosophy begins there and runs through Hegel (who died in 1831). It has a clearly defined story line of three options, three epistemologies, three answers to the epistemological question: (a) rationalism (Descartes, Spinoza, and Leibniz); (b) empiricism (Bacon, Hobbes, Locke, Berkeley, Hume, and Reid); and (c) German idealism (Kant, Fichte, Schelling, Hegel, and Schopenhauer).

But it is impossible to do epistemology without doing at least an implicit metaphysics, or at least a discussion of the possibility or impossibility of metaphysics. The two always imply each other. For whatever comes under metaphysics (all being that we know) comes under epistemology (the study of knowing). And whatever comes under epistemology (all that knowing is) comes under metaphysics (the study of what-is). This is sometimes called "the gnoseo-ontological circle." Each half presupposes the other.

2. A second issue, and second conversation, is practical and political. It is not new, but it begins anew with Machiavelli, the founder of modern political philosophy, and moves through Hobbes, Locke, Rousseau, and Marx, all of whom offer alternatives to the natural law theory common to all premodern philosophers except the Greek Sophists and the late medieval nominalists.
3. A third issue is "existential" (personal, psychological, ethical, and religious). This, too, is not new, but it begins anew with Pascal, in a much more typically modern way—that is, subjectively—and, after a two-century hiatus, emerges with Kierkegaard, Nietzsche, Heidegger, Sartre, Marcel, and Buber, all of whom are loosely classified as "existential" philosophers, who center on questions of concrete, individual human existence like death, evil, freedom, values, and purpose.
4. A fourth issue, about language, begins later, in the twentieth century. Its main founders are Moore, Ayer, and Russell, and its main figure is Wittgenstein. From it emerges "analytic philosophy," which is the main way of "doing philosophy" today everywhere in the world where English is the primary language.
5. Not neatly fitting into any one of these four conversations but intersecting with all of them are pragmatists, phenomenologists, and postmodernists

(especially deconstructionists), three more twentieth-century developments, all focusing on methodology.

"Ancient" and "Medieval" vs. "Modern"

What is "modern"? What distinguishes "the modern mind" from the ancient and medieval minds?

Answer #1 (the most obvious): They can be distinguished by their relation to Christianity. The ancient mind was pre-Christian, the medieval mind was Christian, and the modern mind is (in varying and increasing degrees) post-Christian.

Answer #2: They can be distinguished by their center, which gives them their perspective on everything else. All minds think about three levels of things: things subhuman (the cosmos), things human, and things superhuman (God or gods or absolutes). But any one of the three can be taken as the assumed center, the perspective, the context, or the frame for the other two. So the ancient mind was *cosmocentric* (gods and men found their place in the cosmos, the ordered whole); the medieval mind was *theocentric* ("nature" was re-christened "the creation" and man was defined by his divine origin and destiny); and the modern mind is *anthropocentric* (philosophers think about God and the cosmos more for their relation to us than for themselves, philosophy becomes increasingly distinct from theology, and natural science becomes increasingly distinct from philosophy).

Answer #3: The model for philosophy in the Middle Ages was theology. Philosophy was labeled "the handmaid to theology." The model for philosophy in modern times is modern science. Philosophy usually both seeks to imitate the method and certainty of science and responds to the issues raised by science.

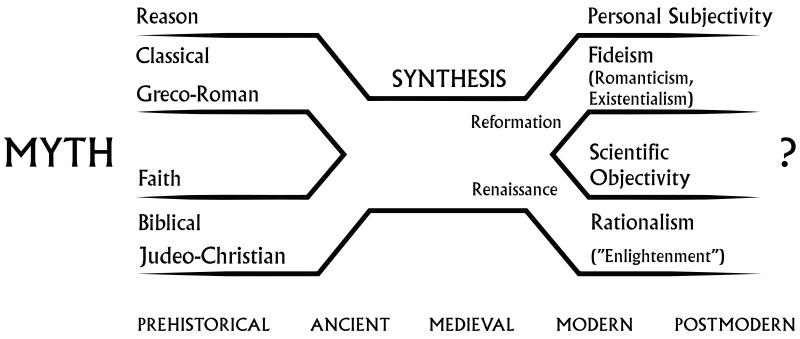
Answer #4: The ancient mind was objective. Human and divine *subjects* (persons) were viewed *objectively*. With the exception of the mystics, the same was true of the medieval mind. But the modern mind becomes more and more subjective. Even *objects* are viewed *subjectively*, and solipsism (look it up!) appears as a real problem and danger, as it never did in premodern thought.

Answer #5: They can be classified according to their fears. The cosmocentric ancient mind feared death. The theocentric medieval mind feared guilt, sin, and hell. The anthropocentric modern mind fears uncertainty, unfreedom, and powerlessness.

Answer #6: They can be classified by their answer to the classic, obviously primary question of the *summum bonum* or "greatest good," the ultimate meaning and end and purpose of human life. The *summum bonum* for the ancients was *eudaimonia*, "blessedness," an objectively perfect and therefore subjectively happy human life ("perfect" especially intellectually and morally). For the medievals it was union with God. For moderns it is the scientific and technological power over nature.

Answer #7: They can be classified as three kinds of women. Ancient philosophy was like a virgin; medieval philosophy was like a married woman (married to religion); modern philosophy is like a separated, divorced, and remarried woman. It gradually separates from its old husband (Jewish, Christian, or Muslim religion) and marries another (science).

Answer #8: They can be classified according to their place on a kind of intellectual road map. Imagine two rivers, independently sourced but joined at one point, then separated again. Medieval philosophy is a synthesis or marriage of the two rivers of Greek reason and Christian faith; it ends in a divorce, and modern philosophy moves in two opposite streams from the divorce. One stream tightens "reason" to something more scientific; the other stream loosens it to something more personal (Romanticism, existentialism, subjectivism).



These are all analogies. Analogies prove nothing, but they illumine and suggest much. Good analogies do not contradict, but complement, each other.

Modern vs. Medieval

One of the best short answers to how modern philosophy differs from medieval is given by Frank Parker in *The Story of Western Philosophy* (numbering added):

> 1. The most basic and general feature of the transition from medieval to modern philosophy is a new, deeper, and more enduring separation of reason from faith.
>
>   This new freedom of man's mind from its medieval tie to a revealed transcendent God who establishes nature and man's bond with nature will be seen to grow gradually into . . . the isolation of the human subject from nature, which develops out of reason's isolation from a transcendent author of nature. . . . Subjectivity, the freedom of the

subject from the objective world, therefore will emerge as the defining essence of modern philosophy as a whole.

2. Secondarily and less fundamentally modern philosophy will be marked by a struggle to achieve the correct definition of this freed human reason in terms of a proper balance between its conceptual and its sensory powers, between sensation and reason in the narrow sense of intellection and conceptualization. . . . Continental Rationalism (Descartes, Spinoza, Leibniz) will emphasize deductive, conceptual reason; British Empiricism (Bacon, Locke, Berkeley, Hume) will emphasize inductive, sensory experience; and the final movement, usually called German Idealism (Kant, Fichte, Schelling, Hegel . . .) will seek a synthesis of rationalism and empiricism in a . . . dynamic conception of mind. . . .

   To understand better this interplay of faith and reason and reason and sensation, and also to grasp the mediating position of Thomas Aquinas as a background of the development of modern philosophy, let us use the image of man as created lower than angels and higher than the brutes. Man is the highest being in the natural order but the lowest being in the supernatural order. Caught in between these two orders of existence, he shares something with both and also possesses a unique in-betweenness, his own peculiar difference. The supernatural factor in man, that which he shares with the angelic and the divine, is his participation in God's vision by means of divine revelation. The purely animal factor in man, that which he shares with the brutes, is his sense experience, an awareness of the particular and fluctuating features of the things in nature. And his peculiar in-betweenness, his distinctively human characteristic, which marks him off both from the brutes below and the angels above, is his reason . . . his native power of discerning the unchanging and universal characteristics of things through his sense experience. . . . Thus did Thomas Aquinas try to hold sensation, reason, and revelation all together in a harmony in which each is necessary and none is reducible to any other. What basically distinguishes late medieval and early modern philosophy is the gradual breaking down of this union.

We could summarize the five typical new features of modern philosophy as follows:

1. Its relation to religion: not a marriage but a divorce or a separation.
2. Man's adversarial relationship with nature; the subject (the "conqueror") versus the object (the "conquered").
3. The crisis of reason; the priority of epistemology; the problem of skepticism and solipsism.

4. The turn to self-consciousness and subjectivity.
5. Dropping two key concepts of premodern ethics and politics: the natural moral law and the *summum bonum*.

Introduction to Epistemology

The following is a very oversimplified introduction to a difficult subject.

"Epistemology" means "the science of knowing." It is the division of philosophy that studies how human knowledge works or ought to work. This is a typically modern question. Premodern philosophers usually began with (1) metaphysics and (2) philosophical anthropology, and deduced their (3) epistemology from this, since they thought that (3) how man knows depends on (2) what man is, and that (2) what man is depends on (1) what is.

But modern philosophers, beginning with Bacon and Descartes, typically begin with epistemology, since they think that a builder should examine his tools before he builds buildings. For them, the justification of reason comes before the use of it.

Like all of philosophy, epistemology is distinctively human, for even if animals have consciousness, only humans have self-consciousness, and therefore think about thinking.

Three main questions emerge here: (1) the origin, (2) the nature, and (3) the extent of human knowledge. Three main answers, or schools of thought, emerge, each of which answers all three of these questions: rationalism, empiricism, and German idealism.

Their differences concern the relationship between the two parts or poles of human knowing: sensation and reason (or intellection). They differ on: (a) Which of the two do we begin with? (b) Which is closer to the essence of knowledge? and (c) Which gives us more certainty? Rationalism answers "reason" and empiricism "sensation" to all three of these questions.

A third epistemological answer, an alternative to both rationalism and empiricism that Kant calls "the Copernican revolution in philosophy," joins reason and sensation. It does this, however, not as Aristotle and Aquinas did, by abstracting rational concepts from sense images, but in the opposite way, by reason imposing its structures on experience so that objects conform to mind rather than mind conforming to objects. (This will become clearer when we get to Kant.)

We can distinguish five possible answers to question (c) above, the question of certainty, arranged in a hierarchy from less certainty to more:

1. *Skepticism*: we know nothing with certainty at all.
2. *Kantianism*: we cannot know "things-in-themselves" (objective reality) but only phenomena (appearances, how things appear to human minds).

3. *Empiricism*: we can know only what is given in sense experience (and reflection, or inner experience), and (usually) only with probability.
4. *Epistemological realism* (Aristotle): we can know the nature of real things by intellectually abstracting their forms (natures) from sense images of material things, and we can know what we can deduce from these things (e.g., a First Cause).
5. *Rationalism*: we can know beyond experience by direct intellectual intuition into essences (Plato) or deduction from innate "clear and distinct ideas" (Descartes).

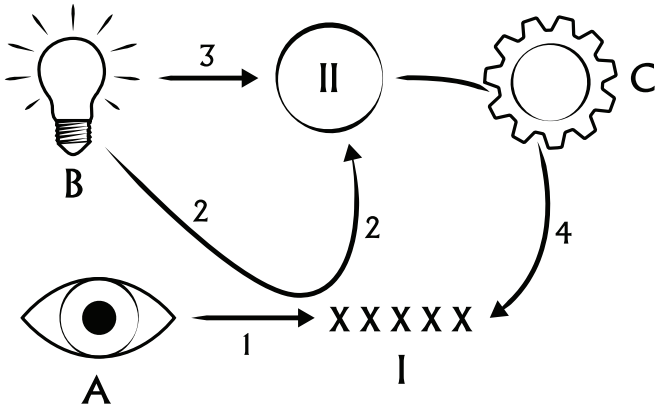
If you find this section too confusing at this point, just ignore it and read the philosophers instead; then come back to it and it will look simple—probably much too simple.

Four Epistemologies

Classical modern philosophy is neatly divided. Its main interest is epistemology, and the three positions that emerge are all geographically located.

1. First there is continental (European) rationalism, with Descartes (French), Spinoza (Portuguese and Dutch), and Leibniz (German). This has roots in Plato and Augustine.
2. Then there is British empiricism, with Bacon, Hobbes, Locke, Berkeley, and Hume, who were respectively English, English, English, Irish, and Scottish. This epistemology has roots among the medievals in William of Ockham and Roger Bacon, who were also British. Most empiricists are British and most British philosophers are empiricists. (Don't ask me why; maybe it's in the tea.)
3. Then there is German idealism, Kantianism, or voluntarism, including Kant, Fichte, Schelling, Hegel, and Schopenhauer. This position is a new one, in fact so new that Kant called it "the Copernican revolution in philosophy." All five of these philosophers are German. (Don't ask me why; maybe it's in the sausages.)
4. A fourth epistemology, that of Aristotle and Aquinas, is surprisingly absent from the list of modern options, especially since it is the most popular and most commonsensical option in the opinion of most non-philosophers.

These four epistemologies, or theories of how human knowledge works, can be visualized by the following diagram:



Key to the symbols:
Subjective Human Faculties of Knowing: A. Senses; B. Intuitive Reason; C. Calculating Reason.
Objects Known: I. Concrete Particular Substances; II. Universal Forms.
Operations in Knowing: 1. Sensation; 2. Abstraction; 3. Understanding; 4. Deduction.

This is a picture of how human knowledge works according to Aristotle, in four steps. (1) First, the senses perceive particular concrete substances (e.g., human beings), which are made up of form and matter. (2) Then, the intellect abstracts the essence or essential nature from the accidents (body-and-soul from height, weight, gender, etc.). (3) This essence is understood by intellectual intuition. (4) On the basis of this understanding, the reason deduces consequences (e.g., that all human beings, even those we do not see or those yet to be born, can think [because they have minds] and die [because they have bodies]).

Step 2 is the connector between steps 1 and 3 to explain where we get universals, and step 3 is the connector between steps 2 and 4 to explain the mutual dependence of induction, or "inductive abstraction," and deduction.

The other three epistemologies can be plotted on this graph. They all lack the distinctive Aristotelian step of abstraction (step 2). Cartesian rationalism begins with step 3 as innate ideas, then deduces from them (step 4). Humean empiricism begins and ends with step 1. Descartes affirms only the top half of the circle, Hume the bottom. Both lack the link between them (step 2). Kant, like Aristotle, synthesizes top and bottom, reason and sensation, but "backward," with form imposed on matter instead of abstracted from it.

(If this strange-looking picture hinders you more than it helps you to understand the four epistemologies, just ignore this subsection. Diagrams are sometimes almost as hard to explain as jokes.)

Rationalism is essentially steps 3 and 4 without 1 and 2. It begins not with sense experience (1), but with innate ideas (3), and emphasizes deduction (4) rather than induction or abstraction (2).

Empiricism is essentially steps 1 and sometimes 2, but without 3 and 4; but step 2 signifies only induction, not abstraction, for all empiricists are suspicious of abstract, universal ideas. They are nominalists.

Rationalism is essentially the affirmation of the top part of the circle, and empiricism the bottom part.

Kantian epistemology, like Aristotelianism, joins the two halves of the circle, but it reverses the direction of it (the movement goes from the top down rather than from the bottom up), since it has the mind actively imposing three kinds of innate structures, (a) sensory, (b) logical, and (c) metaphysical, on the objects known rather than abstracting them from the objects. (If you don't understand this yet, don't worry; we'll get to Kant soon. If you *do* understand it, perhaps you ought to worry.)

The four epistemologies fit with four metaphysics, four answers to the classical "problem of universals."

Rationalism fits extreme realism, for if universals *exist* separately from particular things, they can be *known* separately, as "innate ideas."

Aristotelian "soft empiricism" fits moderate realism, for if universals exist but only in particular, concrete, sensible things, they can be known by abstraction from those things.

Kantian epistemology fits Abelard's "conceptualism" or "moderate nominalism": universals are needed, but they are only mental concepts, not existing realities.

Humean "hard empiricism" fits extreme nominalism: there are no universals, period. There are not even concepts, only words. Hard empiricists mercilessly attack "abstract ideas."

Metaphysics and epistemology always go together. Which one comes first, which is the source of the other, is a "chicken/egg" question. But empiricism in epistemology always corresponds to an empiricist metaphysics, as rationalism in epistemology always corresponds to a rationalist metaphysics. For the objects of empirical knowledge, such as Zeus, Socrates, Lassie, the apple you just ate, and Uranus, are always

1. concrete and individual, not abstract and universal;
2. temporal and changing, not timeless; and
3. contingent (they could be different), not necessary.

Thus, our knowledge of them is only probable, not certain. For the empiricist's world is full of a plurality of concrete, changing, contingent particulars.

But the objects of rational, intellectual knowledge, such as *the essential nature of* a god, a man, a dog, an apple, or a planet, are

1. abstract and universal,
2. timeless, and
3. necessary.

Thus, the rationalist's world is full of Ideas, Forms, truths, laws, and principles that are general (universal), changeless, necessary, and known with certainty.

If all this continues to be confusing, re-read the short paragraph just before the subsection entitled "Four Epistemologies" again.

I have not included recommended bibliographies for modern or contemporary philosophers because the relatively few primary sources that are accessibly clear and short are mentioned in the text. I have written secondary sources on Descartes, Pascal, Hume, Kant, Machiavelli, Marx, Sartre, and Kierkegaard.

THE EPISTEMOLOGICAL PHILOSOPHERS

55

RENÉ DESCARTES

AD 1596—1650

Descartes' *Discourse on Method* (1637) changed the philosophical landscape. It made more of a difference to how philosophy was done than any other book ever written, except perhaps Plato's dialogues. Every major philosopher for the next two hundred years, except Pascal, followed Descartes in attempting to apply some aspects of the scientific method to philosophy, though they all produced different philosophical systems than Descartes'.

Descartes' revolution was similar to that of Socrates': both changed the meaning of "reason" itself by tightening it, so to speak. Socrates was the first person in history who clearly understood and practiced the art of deductive reasoning, while Descartes was the first to deliberately apply to philosophy the new scientific method. Or perhaps he was the second: Bacon had done this too, before Descartes. But where Bacon emphasized the empirical and inductive aspect of the scientific method, Descartes emphasized the mathematical and deductive aspect of it.

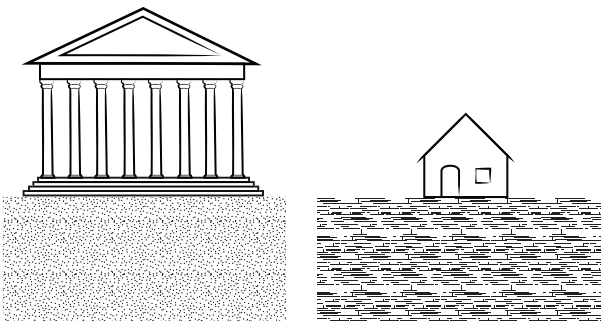
Why did Descartes try to do philosophy by a new method? Because he noticed two things: that every one of the sciences had progressed remarkably in his age, and that philosophy had not.

He asked the simple question "Why?" What made the difference? And his answer was the scientific method. That was the common factor in the progress of all the sciences. Yet no one had applied it to philosophy.

He then asked: What was in this new method that gave it the power to progress to a point where disagreements were actually settled conclusively for the first time in history? And he answered: The method of mathematics. He wrote:

> I took especially great pleasure in mathematics because of the certainty and the evidence of its arguments. But I did not yet notice its true usefulness and, thinking that it seemed useful only to the mechanical arts, I was astonished that, because its foundations were so solid and firm, no one had built anything more noble upon them. On the other hand, I compared the writings of the ancient pagans who discuss morals to very proud and magnificent palaces that are built on nothing but sand and mud. They place virtues on a high plateau and make them appear to be valued more than anything else in the world, but they do not sufficiently instruct us about how to know them.

If we imagine a great palace on a foundation of sand next to a little shed on a foundation of rock, we can see why Descartes wanted to rebuild the old palace on the new foundation.



Descartes' "buildings," i.e., his essential conclusions (that God and the world, mind and matter, soul and body, all exist), are quite traditional, but his method of proving them (the new "foundation") is radically new. (Socrates, too, was also both traditional and radical in the same way.)

Descartes' revolution can best be defined by comparing Plato's "divided line" in the *Republic*. Plato distinguishes four levels of reason and, thus, of education:

1. seeing secondhand images of real things;
2. firsthand sense perception of real things;
3. logical and mathematical reasoning; and
4. intellectual intuition, wisdom, or understanding of the eternal Forms.

The scientific method essentially omits (1) and (4), for opposite reasons (because (1) is too low and (4) is too high). It combines (2) observation of empirical data with (3) exact reasoning.

Descartes' method demands mathematical exactness, what he calls "clear and distinct ideas"—like numbers. His ideal is a universal mathematical science.

Aristotle had taught that *method* depends on *object* (subject matter), and that there are different sciences and different methods because there are different objects, or subject matters, dealt with by the different sciences. He distinguished the methods of practical science from the methods of theoretical sciences and, within the latter, three different levels of abstraction and thus three different kinds and methods of theoretical sciences: physical, mathematical, and metaphysical. Descartes' contrary idea is that there is one and only one best method for every subject. (Thus, his title is literally "Discourse on *the* Method," *Discours de la méthode*.)

It is probably not possible to decide whether Descartes' attempt to do philosophy by the method of science can work until we see how he does it. But even if his attempt proves to be a confusion and a failure, the attempt was inevitable. Philosophy was in a sorry state in 1637, divided between (1) verbal quibbles and partisan battles among unoriginal late medieval Scholastics who used highly technical language and multiplied abstract verbal distinctions, (2) flaky nature-mystics and occultists like Paracelsus, and (3) smart but cynical skeptics like Montaigne. Every other science had made more progress in the previous two hundred years than in the previous two thousand, but not philosophy. Why? Descartes' answer seemed obvious. The scientific method was the fuel that sent all the other rockets (sciences) up. Why not use it for philosophy too?

Descartes' Life

Descartes was the man to do it. He was one of the most intelligent men who ever lived. He thought of himself primarily as a scientist rather than a philosopher. He personally knew all the great scientists of his day, many of whom congregated around a circle of friends in Paris of which Descartes was the center. He made essential contributions in geometry (he invented analytic geometry), optics, astronomy, physiology, and other sciences. He was one of the last of the universal geniuses, before the age of specialization.

He summarized his intellectual biography briefly and charmingly in *Discourse on Method*. Trained in the best Jesuit schools in the world, interacting with all the greatest minds of his age, he sought certainty rather than probability or arguments from "fittingness" or from authority; and he found certainty nowhere except in mathematics. He wondered why this exact reasoning had been confined to quantity (number) alone, and not applied to the great questions of philosophy such as the nature of knowledge, truth, human nature, God, and the soul.

One day, returning from the battlefields of the Thirty Years' War (which terribly traumatized Europe and tarnished the religion(s) that caused it), while snowbound in a little heated room, he conceived the essential idea for a whole new philosophy, which was (1) to come from his own individual mind alone rather than relying on the great philosophers of the past, (2) to begin with his own experience, and (3) to use only logical reasoning and the scientific method.

This was the beginning of the career of the most famous philosopher in the world. The end came when the Queen of Sweden, a would-be intellectual herself, persuaded Descartes to come to Sweden to instruct her. Descartes accepted, but died of pneumonia, brought on by the Swedish winter and the queen's demand to rise at 4:30 a.m. to give her philosophy lessons.

Reading the *Discourse on Method*

The *Discourse on Method* (DM) is one of the easiest and clearest philosophy books ever written.

Section I is a brief and charming intellectual autobiography.

Section II sets forth the four rules of the method.

Section III gives four temporary and pragmatic rules of practice to live by in an untroubled way until a more scientific ethics is formulated.

Section IV summarizes, in five pages, the application of the method to philosophy. Descartes expanded this to a whole book in *Meditations on First Philosophy*. These two books should be read together.

Section V is about some applications of the method to physics.

Section VI forecasts that the application of the method would result in a utopia; the conquest of nature; and the cure of "an infinity of maladies, both of body and mind, and even perhaps the enfeeblement brought on by old age." Despite the contrast between Descartes' rationalism and deductivism and Bacon's empiricism and inductivism, these opposite methods, or opposite emphases within the scientific method, were used by both philosophers as means to the same end: a utopian heaven on earth brought about by what Bacon called "man's conquest of nature" by science and technology, the new *summum bonum* of modernity.

The Starting Point

DM begins with a revolutionary claim—the claim that reason (which Descartes calls "good sense" or "common sense") is by nature equal in all men. This amounts to a redefinition of "reason." For this is obviously *not* true of *wisdom*, the ultimate meaning of "reason" for the ancients and the fourth level of Plato's "divided line"; but it is true of levels 2 and 3 of Plato's line, which together make up the scientific

method. This method, unlike wisdom, is impersonal and public; anyone can do it. It does not require superior personal gifts of wisdom.

Thus, Descartes democratizes reason, and implies that if everyone used the same method, everyone would discover the same truths and come to the same conclusions. The implication is that if this were done, then the terrible ideological and religious wars that were destroying Europe could end. A bold and idealistic hope indeed! But Descartes had to conceal this radical political implication of his philosophy from the censors, and only hint at it for the few more perspicacious readers who would pick up the hints—thus in practice treating reason as not so democratic after all.

> Good sense is the most evenly distributed commodity in the world, for each of us considers himself to be so well endowed with it that even those who are the most difficult to please in all other matters are not likely to desire more of it than they have. It is not likely that anyone is mistaken about this, but it provides evidence that the power of judging rightly and of distinguishing the true from the false (which, properly speaking, is what people call good sense or reason) is naturally equal in all men.*

If "reason" means "wisdom," it is obviously *not* equal in all men. But if it means only what we call "science," it is. Wisdom is personal; science is impersonal. Because of this difference, philosophers and ordinary people who seek wisdom have always disagreed, while scientists, who have lowered their aims from "wisdom" to "testable empirical knowledge," have always eventually come to consensus and agreement. Descartes' revolution here is to seek universal agreement in philosophy by using the methods of science. This would overcome "diversity of opinions"—*if*, as Descartes goes on to say, this diversity is based not on innate differences in wisdom but only differences in (1) method and (2) data, which can easily be overcome by (1) using the scientific method and (2) sharing data.

> Thus the diversity of our opinions does not arise from the fact that some people are [innately] more reasonable than others, but merely from the fact that we conduct our thoughts along different lines [methods] and do not consider the same things [data].

Machiavelli (see chap. 69) had divided all causes of human achievement into two categories: *virtù* (internal strength of mind and will) and *fortuna* (external chance). Descartes claims that everyone has equal rational *virtù*, or strength of

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* Can you detect the logical fallacy of "begging the question" (look it up!) in Descartes' argument in this very first paragraph?

mind, so it must have been mere chance (*fortuna*), and not his innate genius and superiority, that caused him to discover this new method:

> I have never presumed that my mind was in any respect more perfect than anyone else's. [Can he really mean this?] But . . . I have been fortunate; I have, since my youth, found myself on paths that have led me to certain considerations and maxims from which I have formed a method.

The old method for philosophy had always begun by humbly learning from past philosophers before entering "the great conversation" at the present point in its history. Philosophy was a historical and communal activity, not a purely individual and private one. Descartes is the first to repudiate this method and to claim to begin all over again, all alone, like Adam in Eden, as if there were nothing to learn from his predecessors except their mistakes:

> I thought that book learning . . . having been built up from and enlarged gradually by the opinions of many different people, does not draw as near to the truth as the simple reasonings that can be made naturally by a man of good sense concerning what he encounters. . . . For I have already reaped from it [this method] such a harvest that . . . I take immense satisfaction in the progress that I think I have made in the search for truth.

(What would Socrates say about this "satisfaction"?)

The Method

In Part II, Descartes gives us the four rules of his new method (numbering added):

1. The first was never to accept anything as true that I did not know evidently to be so; that is, carefully to avoid precipitous judgment and prejudice; and to include nothing more in my judgments than what presented itself to my mind with such clarity and distinctness that I would have no occasion to doubt it.
2. The second, to divide each of the difficulties I was examining into as many parts as possible and as is required to solve them best.
3. The third, to conduct my thoughts in an orderly fashion, commencing with the simplest and easiest to know objects, to rise gradually, as by degrees, to the knowledge of the most composite things, and even supposing an order among those things that do not naturally precede one another.
4. And last, everywhere to make enumerations so complete and reviews so general that I would be sure of having omitted nothing.

On the one hand, these rules seem commonsensical, useful, practical, and open-minded. On the other hand, they have hidden assumptions:

1. a. Can we in fact doubt *everything*? How can we begin with nothing at all?
   b. Is clarity and distinctness the criterion for either certainty or truth? Aren't some truths unclear and confusing, and aren't some falsehoods quite clear and distinct?
2. Is all truth reached by analysis ("division") and not synthesis?
3. Is all truth reached by moving from oneness to manyness, from simple to complex, rather than vice versa?
4. If we are not infallible and omniscient, can we ever be sure our enumerations and reviews have been total?

Descartes then makes an amazing claim for this method:

> These long chains of reasoning, each of them simple and easy, that geometricians commonly use to attain their most difficult demonstrations, have given me occasion for hoping that all the things that can fall within human knowledge follow one another in the same way and that, provided only that one abstain from accepting anything as true that is not true [rule 1] and that one always maintain the order to be followed in deducing the one from the other [rule 3], there is nothing so far distant that one cannot finally reach nor so hidden that one cannot discover.

This is the typical "Enlightenment" optimism: the hope of answering *all* questions and solving *all* problems, theoretical and practical, by scientific reason. (Has it in fact been fulfilled? Can it be? Why or why not?)

Universal Methodic Doubt

Rule 1 is the most important and radical one. It consists of (a) universal methodic doubt and (b) the clarity and distinctness of an idea as the test of its truth.

Descartes, far from embracing doubt as his *conclusion*, like the skeptics, wants to overcome it more definitively than ever before. He demands not just *truth* but *certainty*. But to do that, he begins, as his premise, with a more total doubt than ever before. He climbs down to the depth of the doubter's pit because he is convinced he has a ladder strong enough to escape into total sunlight. The doubt is only methodic, not lived. He is not a skeptic; in fact, he is the opposite of a skeptic: he demands absolute certainty. But to get there, he begins with skepticism, with universal doubt, as his method.

In the scientific method, doubt is indeed essential. Ideas must be treated as guilty (doubtful) until proven innocent (certain). But in real life, persons, in their words, and even things, in their appearances, should be treated as innocent (truthful) until proven guilty (deceptive). Which of these two methods should philosophy use?

Socrates, Plato, and Aristotle all said that philosophy should begin with *wonder*, which is not the same thing as doubt. Rabbi Abraham Heschel says that "wonder rather than doubt is the root of all knowledge." And Augustine said, in his *Confessions*, "I began to realize that I had believed countless things which I had never seen or which had taken place when I was not there to see, so many events in the history of the world, so many facts about places and towns which I had never seen; and so much that I believed on the word of friends or teachers or various other people. Unless we took these things on trust, we should accomplish absolutely nothing in life." Descartes does not disagree with this rule for practical everyday life. The question that divides Descartes from these thinkers is whether philosophy should more resemble science or life. For Descartes, it is science; and that is the essence of the Enlightenment.

Socrates, too, began by doubting others' ideas, but he gave the believer the default position, so to speak, taking upon himself the onus of disproof. It was a kind of methodic faith. ("Let's assume you are right . . . *but* . . .") Descartes puts the onus of proof on the believer, no matter what idea is believed. And this is indeed the strict scientific method. But he does not pretend to live this way. There is a disconnect between philosophy and life in Descartes because philosophy is now conceived as a science in the modern sense. No one can live as a skeptic, but a scientist should think as a skeptic.

Descartes mentions four levels of doubt, each one more radical and universal than the one before:

1. "Thus, since our senses sometimes deceive us, I decided to suppose that nothing was exactly as our senses would have us imagine."
2. "And since there are men who err in reasoning, even in the simplest matters of geometry . . . judging that I was just as prone to error as the next man, I rejected as false all the reasonings that I had previously taken for proofs."
3. "And finally, taking into account the fact that the same thoughts we have when we are awake can also come to us when we are asleep, without any of the latter thoughts being true, I resolved to pretend that everything that had ever entered my mind was no more true than the illusions of my dreams." ("All that we see or seem / Is but a dream within a dream." —Edgar Allen Poe)
4. In the *Meditations* he adds: "I will suppose not a supremely good God, the source of truth, but rather an evil genius, as clever and deceitful as he is powerful, who has directed his entire effort to misleading me. I will regard the heavens, the air, the earth, colors, shapes, sounds, and all external things as nothing but the deceptive games of my dreams, with which he lays snares for my credulity.

I will regard myself as having no hands, no eyes, no flesh, no blood, no senses, but as nevertheless falsely believing that I possess all these things."

How can you be certain that all your consciousness is not hypnosis and mental telepathy from the devil? This is, of course, a mere methodic thought experiment, a puzzle to be solved by a philosopher, not a real doubt to be lived. That would be paranoia in need of psychoanalysis.

Pascal argued, against Descartes, that this doubt will not lead us to certainty; that we *cannot* be certain by reason alone; that we must make an initial leap of faith in reason itself, since our reason cannot, without begging the question, decide whether or not to trust our reason (i.e., to trust that it comes from a trustable mind [God] rather than an untrustable mind [the devil] or from no mind at all but only blind chance [which is just as untrustable]). So faith in reason must precede reason. But must there not also be *reasons* for any faith or trust? Is this a "which comes first, the chicken or the egg?" problem?

The most distinctively Cartesian aspect of the method is the demand for "clear and distinct ideas" as the criterion for truth, or rather for certainty about truth. Descartes demands not just *truth*, like any honest philosopher, but *certainty*. This also is distinctively Cartesian.

By the "clarity" of an idea Descartes means its power to irresistibly impress itself upon the mind. By the "distinctiveness" of an idea Descartes means its being so sharply separated from all other ideas (like whole numbers) that there is no overlapping, nothing in common between the two ideas to allow them to be confused with each other.*

This "atomistic" conception of ideas corresponds to an atomistic conception of reality, especially the clear and total distinction between mind and matter, which will lead to Descartes' most famous and problematic heritage, the "mind-body problem." *Mind = thought without spatial extension, matter = spatial extension without thought*; therefore, it seems that the two cannot meet or touch, any more than two positive integers can.

Descartes' Provisional Ethics

Part III of DM is a purely pragmatic, temporary moral code to live by "conveniently" while working on a serious philosophy, which eventually would produce a more scientific, rationally certain ethics. Descartes never produced this ethics.

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* Many questions arise here: (1) Is time atomistic, like numbers? Are its moments separate? (2) Is space? (3) Are events? Is one historical event related to another one as numbers are? (4) On the other hand, doesn't quantum physics reduce all physical reality to atomistic quanta? Yet light is both continuous waves and discontinuous particles (photons).

He is one of the very few major philosophers who never wrote an ethics. Perhaps he just died too early. But more likely, he was not really all that interested in ethics. For ethics consists in conforming the soul and its desires to objective reality in the form of spiritual moral principles; but from DM Part VI it is clear that what interested Descartes most was the opposite: the Baconian program of conforming objective reality in the form of the material world to the desires of the soul, and among these desires not so much the desire for moral virtue but for material pleasure, long life, and contentment.*

The four rules of the provisional ethics (DM Part III) parallel the four rules of the method (DM Part II) in *form*. The first is about what to doubt. The second is about procedural success. The third is about order and priorities. The fourth is about a universal review. But the *content* of the first three of these four rules is just the opposite of the content of the first three rules of the method.

1. The method tells us to doubt everything in thinking; the ethics tells us to doubt nothing in practice. "The first [rule] is to obey the laws and customs of my country." It is not profitable, in a conservative society, to appear to be a revolutionary, even (especially) if you really are one.
2. "The second maxim was to be as firm and resolute in my actions as I could be, and to follow with no less constancy the most doubtful opinions, once I have decided on them, than if they were very certain." This works best in practice, even though its opposite works best in scientific theorizing.
3. "The third maxim was always to try to conquer myself rather than fortune, to change my desires rather than the order of the world." This is the exact opposite of the Baconian program of conquering nature by applied science. Descartes advises us to be humble, conservative, and traditional in ethics, but radical, progressive, and demanding in science. His successors would change his ethical advice but not his scientific advice.
4. "Finally . . . to review the various occupations that men take up in this life so as to try to choose the best one."

Descartes applied his new scientific method to every other division of philosophy—metaphysics, cosmology, natural theology, anthropology, and epistemology—but not ethics. Kant, who took ethics much more seriously and centrally, tried to do just that 150 years later—to construct a purely rational,

* This perhaps defines the difference between premodern and modern man more primordially than anything else. C.S. Lewis puts it simply and strikingly in *The Abolition of Man*: "There is something which unites magic and applied science [technology] while separating both from the 'wisdom' of earlier ages. For the wise men of old, the cardinal problem had been how to conform the soul to reality, and the solution had been knowledge, self-discipline, and virtue. For magic and applied science alike the problem is how to subdue reality to the wishes of men: the solution is a technique."

logical, almost geometrical ethics (though with a different epistemology than either Bacon's empiricism or Descartes' rationalism)—thus filling in this blank space in Descartes' "Enlightenment" program.

Descartes' Door to Certainty: "Cogito Ergo Sum"

"Cogito ergo sum" (I think, therefore I am) is probably the single most famous sentence in the history of philosophy. It is Descartes' first and foundational certainty, the first rung on his escape ladder from skepticism. It is his "Archimedean point." Archimedes, the Greek scientist who discovered that the power of the lever to move heavy objects was proportionate to the length of the lever, reputedly said, "Give me only a lever long enough and a fulcrum to rest it on, and I can move the whole world." A philosopher's "Archimedean point" is his first premise, starting point, or foundation for the rest of his philosophy.

> I resolved to pretend that everything that had ever entered my mind was no more true than the illusions of my dreams. But immediately afterward I noticed that, during the time I wanted thus to think that everything was false, it was necessary that I, who thought thus, be something. And noticing that this truth—*I think, therefore I am*—was so firm and so certain that the most extravagant suppositions of the skeptics were unable to shake it, I judged that I could accept it without scruple as the first principle of the philosophy I was seeking.

This even answers the *Meditations*' extreme skepticism in which he asks how he can be sure he is not being hypnotized by a demon: "But there is a deceiver (I know not who he is) powerful and sly in the highest degree, who is always purposely deceiving me. Then there is no doubt that I exist, if he deceives me. And deceive me as he will, he can never bring it about that I am nothing so long as I shall think that I am something. Thus . . . the statement 'I am, I exist' is necessarily true every time it is uttered by me or conceived in my mind."

Augustine had used the same argument long ago, in his *Contra academicos* (Against the Academics). His version was "Dubito ergo sum" (I doubt, therefore I am). But he had not based his whole subsequent philosophy on it, as Descartes is about to do. Descartes had studied Augustine and clearly borrowed this argument from him (but without crediting him with it, for Descartes is claiming to begin philosophy anew).

There is an obvious strength to this argument against skepticism. Even if a demon is deceiving me, I must exist in order for him to deceive me. So my own existence is the one thing I cannot doubt. But there are also weaknesses to Descartes' "Cogito ergo sum" refutation of skepticism.

The most obvious weakness is that it is a deductive argument, and thus presupposes unproved premises. It is an enthymeme, a syllogism with an implied premise:

Implied premise: Whatever thinks, exists.
Expressed premise: I think.
Conclusion: I exist.

This argument is logically valid (the conclusion follows with logical necessity from its premises), both its premises are true, and all its terms are unambiguous and clear. So there is nothing logically wrong with it. But it is a syllogism (i.e., an argument with two premises). A total skeptic would doubt each premise and demand proof for them. And that would require two more arguments with four more premises. This process would never end: the skeptic would demand premises for the premises of the premises, et cetera ad infinitum. As one skeptic said, Descartes should have written, "I think I think, therefore I think I am—I think."

In *Meditations*, published four years later, Descartes avoids this difficulty, because there he calls "I am, I exist" *not* the conclusion of an argument but a self-evident *proposition*. He says, "The *statement* 'I think, I exist' is necessarily true."

A necessary truth or self-evident proposition like "$a=a$" or "x is not non-x" or "black birds are birds" needs no proof and no premises; it proves itself. It is literally indubitable. Its denial is self-contradictory, self-refuting, because its predicate merely repeats all or part of its subject. Its predicate is essential, not accidental, to its subject. "Birds" is part of the essence of "black birds," as "small" is not.

Will this refutation of skepticism work? If the proposition "I exist" is necessarily true, as Descartes claims, then his whole philosophy is founded on a certainty; if not, it's not. Everything in his philosophy depends on this, since everything else in his system is deduced from this. The system is like an upside-down pyramid, standing on its point.

But "I exist" is *not* logically self-evident, or "necessarily true," as Descartes claims it is. For its predicate, "exist," is not essential but accidental to its subject, which is Descartes. Descartes exists contingently, not necessarily. He is *given* existence at birth (or conception) and *no longer* exists in this world after death. Only God's existence is essential, is his essence. Descartes is implicitly confusing himself with God. (He was, after all, a bit arrogant, like most geniuses!)

"I exist" is, however, *psychologically* self-evident even though it is not logically self-evident. The individual who utters it can be absolutely certain that it is true, even though no one else can. That is why Descartes added the last phrase to the sentence in *Meditations*: "'I exist' is necessarily true *every time it is uttered by me or conceived in my mind*." It is certain to *him* but only to him. It is a private certainty. "I do not exist" is personally, practically, subjectively, or existentially

self-contradictory. The proposition does not contradict itself; it contradicts the person proposing it while he is in the very act of proposing it.

But that is not science. What Descartes needs is a public certainty, not just a private one. His "cogito" is not the logical foundation for an objective, scientific philosophy, as he thinks it is; but it can be the personal foundation for a subjective, experiential philosophy, i.e., for what later would be called existentialism. Sartre, the inventor of the term "existentialism," explicitly credits Descartes for this subjectively certain starting point. But that was far from Descartes' intention. He wanted to found a scientific philosophy, not an "existential" one.

Another logical problem with the "cogito" is that thinking does not necessarily logically imply an individual human thinker as its cause. The cause of thinking might be God (as it is for the pantheist Spinoza, the next great rationalist philosopher after Descartes), or a single impersonal, universal Mind (as it is for some forms of Hinduism and Buddhism).

Descartes' Anthropology

Now that he has his first certainty, that he exists, Descartes' next step is to investigate what he can know with certainty about *what* he is. He has not yet proved his senses to be trustworthy, or the material world to be real, so all he knows about himself so far is that he thinks. And this proves to him that thinking is his essence:

> Then, examining with attention what I was, and seeing that I could pretend that I had no body and that there was no world nor any place where I was, but that I could not pretend, on that account, that I did not exist; and that, on the contrary, from the very fact that I thought about doubting the truth of other things, it followed very evidently and very certainly that I existed. On the other hand, had I simply stopped thinking, even if all the rest of what I have ever imagined were true, I would have no reason to believe that I existed. From this I knew that I was a thing which in order to exist, needed no place and depended on no material thing. Thus this "I," that is, the soul through which I am what I am, is [1] entirely distinct from the body, [2] and is even easier to know than the body, [3] and even if there were no body, the soul would not cease to be all that it is.

(Why does Descartes believe these three conclusions logically follow? Is he right or wrong? Why?)

Descartes' anthropology centers on these four theses:

1. The essence of the self is simply the soul, or at least its power of thinking (i.e., the mind). Descartes often identifies self with soul, soul with mind, mind with reason, and reason with his new, narrowed, mathematically clear scientific reasoning.
2. The soul and body are two distinct substances. His criterion of truth, "clear and distinct ideas," proves this; mind and body are two clear and distinct ideas and therefore two clear and distinct realities. They are two clear and distinct ideas because a mind can think and is not extended in space (it has no physical size), while a body is extended in space but cannot think. The atoms of your brain are not the thinker. The second after you die, they are all there, yet thinking is no longer possible.

   Descartes is not a materialist but a dualist. A materialist believes that only matter exists; a dualist believes that both matter and mind, or soul, or thought, exist. A brain is not a mind; a brain is an organ of the body. Brains do not think; persons, souls, or minds think, using brains. When the soul (the source of life) leaves the body at death, all brain activity stops. Brains, of themselves, can no more think than typewriters can type. *People* do both.
3. The soul (mind) is known not empirically, from sensory experience of what it does (e.g., art, speech, technology), but is known directly, easily, and with certainty by immediate self-consciousness ("I think").

   This, Descartes believes, is our essence, because it cannot be thought away. Descartes argues that we can be certain only of essences, not accidents. He shows this by the famous example of a piece of wax. The wax changes all its visible, bodily accidents when melted or reshaped, but not its (chemical) essence. It becomes hotter, smaller, or rounder, but not more or less waxy. Thus, we can be certain of our minds, which are our essence, but not our bodies, which change like the wax. Our minds can know unchanging truths by reason, which can give us certainty, while sensation can only know changing material things, which do not give us certainty.
4. Souls are immortal. The soul has an essence distinct from the body, for it thinks, while bodies don't; meanwhile, bodies have size (spatial extension), while souls don't. Therefore, the soul must be a separate substance, for (Descartes assumes) what is essentially distinct in thought must be essentially distinct in reality. And since the soul is a separate substance, a separately existing entity, it follows that it is not dependent on the body for its existence. And therefore it does not die when the body dies, since each substance has its own existence. (This is similar to Plato's argument in Book 10 of his *Republic*.)

It is instructive to contrast Descartes with Aquinas here. Aquinas, using Aristotle's hylomorphism (matter-form theory), saw man as one substance, not two, with the soul as the form of the body (and, implicitly, the body as the

matter of the soul). This is essentially what psychologists call "psychosomatic unity": body and soul are two dimensions of one person, like the words and the meaning of a book. So Aquinas would disagree with the first three of these theses of Descartes—though he also affirmed the substantiality and immortality of the soul, as Plato did and Aristotle did not. For him the soul is both a substance *and* a form (of the body). The body is neither.

The relation between these two substances constitutes the "mind-body problem" that Descartes left to his successors. We will see how difficult it is to solve that problem at the end of this chapter.

Descartes' Epistemology: the Criterion of Truth

If man is essentially mind, then knowledge is essentially reason, not sensation. (Descartes is a rationalist, not an empiricist.) This means essentially two things:

1. that reason, not sensation, is to be *trusted*, and
2. that reason, not sensation, is the *origin* of true and certain knowledge.

The criterion for truth, then, is the indubitability of a rational idea. The second half of the first rule of the method tells us that this certainty comes from two qualities of the idea. The first is positive: its clarity (as the open eye cannot avoid seeing light, the mind cannot avoid "seeing" the essence or meaning of an idea like "two" or "mind" or "size"). The second is negative: the idea's distinctness (absence of any confusion with any other idea).

Descartes offers this argument for clear and distinct ideas as the universal criterion for truth:

> After this, I considered in a general way what is needed for a proposition to be true and certain; for since I had just found one proposition that I knew was true ["I exist"], I thought I ought also to know in what this certitude consists. And having noticed that there is nothing in all of this—I think, therefore I am—that assures me that I am uttering the truth, except that I see very clearly that, in order to think, one must exist, I judged that I could take as a general rule that the things we conceive very clearly and very distinctly are all true.

This is a merely inductive argument, from a particular example to a universal principle, and therefore only probable. (In fact, it is from only *one* example, so it is a very weak induction.) Later, Descartes will strengthen his case by a deductive argument from God's perfection (a perfect God would not deceive us). But he has not yet proved God's existence. If he uses his criterion of truth to prove

God's existence and also uses God to prove his criterion of truth, he is arguing in a circle. This criticism is so famous it has come to be called "the Cartesian circle." His contemporary Arnauld put it this way: "I have . . . an uncertainty about how a circular reasoning is to be avoided in saying: the only secure reason we have for believing that what we clearly and distinctly perceive is true, is the fact that God exists. But we can be sure that God exists only because we clearly and evidently perceive that."

If clear and distinct ideas do not deceive us, what is the cause of error? Descartes' answer is that the cause of error is not the mind itself but its improper use by the will, when the will runs ahead of the evidence presented by the mind and makes judgments precipitously. There is no error in simple concepts like "Socrates" and "angel," but only in hasty judgments like "Socrates is an angel." For judgment is an act made (or at least caused) by the will, which actively chooses to combine two concepts that had been passively received by the mind as subject and predicate of a proposition; while the mind is limited to the essences it knows, the will is unlimited in its ability to choose how to combine these essences in judgments, so that the will can easily run ahead of the mind in making judgments.

Descartes' Arguments for God's Existence

Descartes has now

1. doubted everything,
2. proved his own existence,
3. deduced that the self is essentially a soul (mind), and
4. arrived at clear and distinct ideas as the criterion for truth.

Where can he go from here? He is still confined to his ideas and has not yet proved that anything in the external world exists, including his own body. He cannot use sense experience to prove anything without abandoning his universal doubt. All he knows are ideas. Are there any ideas that, simply by being the ideas they are, prove the existence of anything else, anything outside the ideas?

Descartes finds one and only one such idea: the idea of God. God will be his only logical bridge between the knowledge of himself and the knowledge of the world, between subject and object, mind and matter.

Of course, he cannot prove God's existence from any external data such as the existence of things or design or causal order in the universe, because thus far he has only doubted, and not proved, the universe. But two unique aspects of the idea of God, he thinks, give Descartes two ways to prove God's existence.

1. "God" means "a wholly perfect being." Descartes knows that his mind is imperfect, for it is full of doubts and ignorance. Where could the idea of a perfect being have come from? Not from his own imperfect self, nor from anything else in an imperfect world, but only from God himself. Why? Because the cause of something perfect cannot be less than perfect. The effect cannot be greater than the cause.

   Descartes takes this principle of causality as a logically self-evident truth:

   > It is evident by the light of nature [natural reason] that at the very least there must be as much in the total efficient cause as there is in the effect of that same cause. For, I ask, where can an effect get its reality unless it be from its cause? And how can the cause give that reality to the effect unless the cause also has that reality? Hence it follows that something cannot come into existence from nothing, nor even can what is more perfect, that is, that contains in itself more reality, come into existence from what contains less.

   And the idea of God as a wholly perfect being does exist, at least in his mind. Why does Descartes think that this proves that it must exist in reality? Because by the principle of causality, *something* that exists must cause the existence of the idea of God, and the cause cannot have less perfection or less reality than its effect. How could the imperfect mind of Descartes be the adequate cause of something as infinitely perfect as the idea of God?
2. Descartes also uses St. Anselm's "ontological argument," which likewise argues not from any external data in the world but from the perfect *idea* of God to the reality of God; but it does so without using the principle of causality. Instead, Anselm deduces God's existence from his essence (definition). The shortest way to put his argument is:
   a. "God" means "the being that lacks no conceivable perfection."
   b. Real, objective existence, independent of a mind, is a conceivable perfection: it is more perfect than merely subjective, mental existence, dependent on a human mind.
   c. Therefore, God cannot lack real, independent, objective existence.

   If you say that he does lack real, independent, objective existence, you contradict yourself: you say that the being that by definition has all conceivable perfections lacks this conceivable perfection.

   Descartes realizes that this argument "feels" wrong because we are deducing the real existence of something from its mere idea. It feels like a magician pulling a live rabbit out of nothing but a paper hat. But he explains why he thinks it is logically legitimate to deduce God's existence merely from his essence, or definition, or concept, even though he cannot do this validly for anything else:

> I saw very well that by supposing, for example, a triangle, it is necessary for its three angles to be equal to two right angles, but I did not see anything in all this which would assure me that any triangle existed. On the other hand, returning to an examination of the idea I had of a perfect being, I found that existence was contained in it, in the same way as the fact that its three angles are equal to two right angles is contained in the idea of a triangle. . . . Consequently it is at least as certain that God [a being so perfect] exists as any demonstration in geometry can possibly be.

(See Aquinas and Kant for critiques of this argument.)

3. There is also a third, and most commentators think weaker, argument for the existence of God in Descartes: that God must exist as the ultimate cause of the origin of Descartes' thinking self, because if he had been his own cause and creator, he would not have made himself with any imperfections, which he evidently has (e.g., ignorance and doubt).

The World

But all Descartes has proved so far is his own mind and God. Among the countless ideas in his mind, they are the only two that prove themselves. How can he build a bridge from self (mind) to world? How can he escape solipsism? How can he be sure that even if he perfectly obeys the rules of his method, his conclusions will be true not just in the realm of ideas but also in the realm of objective reality that these ideas claim to reveal?

An assurance that thinking according to the method will correspond to the world cannot come from the method itself. Nor can it come from the world, for that has not yet been proved to exist. It must therefore come from God. God is Descartes' "bridge" from self to world. For a perfect God would neither deceive nor be deceived. And if God is the author of my mind and my senses, he would "program" these powers in me correctly, so to speak, so that so long as I used these instruments properly, I would not err.

> Since God is no deceiver, it is very manifest that He does not communicate to me these ideas [of material things] immediately and by Himself. . . . For since He has given me no faculty to recognize that this is the case, but on the other hand a very great inclination to believe that they are conveyed to me by corporeal objects, I do not see how He could be defended from the accusation of deceit if these ideas were produced by causes other than corporeal objects. Hence we must allow that corporeal things exist.

Thus, the validity of sense experience and the existence of the material world they reveal, all of which Descartes began by doubting, are now proved.

Notice that the idea of matter thus "proves itself," in a sense, as the idea of self and God did:

> If any one of my ideas [viz., the idea of the material world] is of such a nature as clearly to make me recognize that it is not in me . . . and that . . . I cannot be the cause of it, it follows of necessity . . . that there is another being . . . which is the cause of this idea.

Descartes also argues that the material world often influences me against my will (e.g., pain and death), so that I could not have been its author.

Is it true that we cannot help but believe that material things exist? Yes, answers Descartes, and that is his premise for concluding that they do exist. Berkeley would answer no and say that we not only can but should believe that matter does not exist, but only mind (see chap. 61).

Pascal criticized Descartes here not logically but psychologically, by pointing out that once Descartes proved God's existence and deduced from it the reliability of our mind and senses, and thus the reality of the world, he was no longer interested in God at all but only in our scientific and technological conquest of that world. God was merely the necessary foundation for science and, like the foundation for a building, remained underground, invisible and forgotten. He was used as a means rather than as the End (though Descartes, as a Catholic, does not *deny* that he is our final end).

Thus, Descartes claims to prove the existence of (1) his own mind, (2) God, and (3) bodies (the material world), in that order. But he never attempts to prove a fourth thing: the existence of other minds (although he does believe they exist).

Descartes' *Summum Bonum*

Pascal's criticism may be unfair, but it is certainly true that the rest of Descartes' life, and the rest of the *Discourse on Method*, is entirely concerned with "the conquest of nature." In Part V he predicts the triumphs in physics that the use of his method would bring. The method is a means to a better (more certain) philosophy, which in turn is a means to a better (more certain) foundation for physical science, which in turn is a means to the technological "conquest of nature" that is Descartes' *summum bonum* or final end as much as it is Bacon's. As at least a nominal Catholic, Descartes would believe, or say he believed, that our *summum bonum* is God's conquest of man (salvation), but in his philosophical practice his *summum bonum* was "man's conquest of nature" (technology).

In Part VI he gives us his "salesman's pitch" and prophecy of the utopia that the new technology would give to humanity. I quote it at length because this is for Descartes the ultimate goal of his whole philosophy.

> As soon as I had acquired some general notions in the area of physics, and, beginning to test them on various specific difficulties, I had noticed just how far they can lead and how much they differ from the principles that people have used up until the present, I believed I could not keep them hidden away without greatly sinning against the law that obliges us to procure as best we can the common good of all men. [This is the only time Descartes gets serious enough to use the word "sinning."]
>
> For these general notions show me that it is possible to arrive at knowledge that is very useful in life and that in place of the speculative philosophy taught in the Schools, one can find a practical one, by which, knowing the force and the actions of fire, water, air, stars, the heavens, and all the other bodies that surround us, just as we understand the various skills of our craftsmen, we could, in the same way, use these objects for all the purposes for which they are appropriate, and thus make ourselves, as it were, masters and possessors of nature. ["Speculative" means not "uncertain" but "seeking truth for its own sake as an end rather than as a means to use"; see vol. 1, chap. 25, "The Ordering of All Knowledge," for Aristotle's defense of this "speculative" or "theoretical" knowledge.]
>
> This is desirable not only for the invention of an infinity of devices that would enable us to enjoy without pain [back to Eden!] the fruits of the earth and all the goods one finds in it, but principally for the maintenance of health, which unquestionably [sic!] is the first good and the foundation of all the other goods in this life. [Nearly all philosophers offer candidates for the *summum bonum*; has any other one ever offered *health*? Is this the philosophy of the young or of the old?]
>
> For even the mind depends so greatly upon the temperament and on the disposition of the organs of the body that, were it possible to find some means to make men generally more wise and competent than they have been up until now, I believe that one should look to medicine to find this means.

Descartes may be obscurely thinking of something like the fruits of genetic engineering here, though of course he did not know about genetics, for he continues:

> It is true that the medicine currently practiced contains little of such usefulness; but without trying to ridicule it, I am sure that there is no one, not even among those in the medical profession, who would not admit that

> everything we know is almost nothing in comparison to what remains to be known, and that we might rid ourselves of an infinity of maladies, both of body and mind, and perhaps also of the enfeeblement brought on by old age, were one to have a sufficient knowledge of their cause and of all the remedies that nature has provided for us.

"Man's conquest of nature" is not complete until he has conquered pain, disease, old age, and perhaps even death itself, nature's trump card. Descartes wrote, in a letter to Burnham, "It should not be doubted that human life could be indefinitely prolonged if we knew the appropriate art." If that is what Descartes had in mind, this raises the ghost of the serpent-tempter in Genesis 3 ("You shall be as gods"). It is the dream of Faust, and of Prometheus, and of the Tower of Babel.

This is typical "Enlightenment" optimism, not only concerning how far science and technology can progress but also concerning the social consequences of this progress, which the Enlightenment took to be wholly benign. Because of what we have seen of the use of technology in the twentieth century, "the century of genocide," the century of Auschwitz and Hiroshima, most people are much less optimistic today. Descartes may be "the father of modern philosophy," but it is Pascal (chap. 56), Descartes' less famous, less rationalistic, less optimistic, and more existential critic, who seems much more prophetic for our present and future.

The Mind-Body Problem

This is the loose thread Descartes left hanging in his system. Mind and body are two clear and distinct ideas, for *mind = thought without spatial extension* and *body = extension without thought*. Since clear and distinct ideas are the criterion of truth, it must be true that mind and body really are distinct.

This produces the problematic anthropology of "the ghost in the machine." A mere ghost cannot change a machine; it has no physical fingers to press buttons. Nor can a machine change a ghost (e.g., you can't kill a ghost with a gun).

But our constant experience seems to show that the "ghost" and "machine" constantly interact causally, or, even more intimately, always act together like two blades of a pair of scissors, or rather like two *dimensions* of one thing rather than two things. If they are indeed two substances, they must meet somewhere in order to interact. Where? Why does my arm actually move when my mind commands it to move?

Descartes' only answer was the pineal gland, a newly discovered ductless gland at the base of the brain. Of course, this is no answer at all, for it is wholly on the material side and not a bridge to spirit. If the mind has no size, it cannot be a gland, or in a gland; for a gland, no matter how small, has size. And if the mind

has no size, how can it influence things that do have size? And how can things that do have size influence thought, which has no size?

This dualism also seems to entail a very strange view of animals, which Descartes views as merely complex machines, so that there is no *essential* difference between breaking a lever off a machine and breaking a leg off a dog.

The mind-body dualism also seems to invalidate Descartes' argument for the real existence of the corporeal world (bodily things); in fact, it seems to make it impossible for the mind to know (and thus be influenced by) bodies at all. If bodies (the universe) cannot act on minds, they cannot produce ideas of themselves in minds.

Occasionalism: Geulincx and Malebranche

None of Descartes' successors solved the mind-body problem that he left to them. His immediate disciples, Geulincx and Malebranche, offered "occasionalism" as the solution: since mind and matter, as two clear and distinct ideas and therefore two clear and distinct substances, have nothing in common, they cannot touch or cause or act on each other. Therefore, the apparent causal interaction between our minds and bodies must be brought about not by mind on body or by body on mind but by God, who authored both and can change both. On the occasion of God knowing an event happening in one of these two worlds, he, and he alone, causes a corresponding event in the other world.

Geulincx (1624–1669) affirmed only God-to-body causality, not God-to-mind causality: when I will my arm to move, God moves it, but when my eye sees a tree, God does not put the idea of the tree into my mind. Matter, not God, moves my mind, through my senses; but my mind does not move my body—God does.

Malebranche (1638–1715), more consistently, said that God was the cause of mental events as well as bodily events. On the occasion of his knowing that a knife cuts our flesh, he causes our pain-awareness. There are no natural, finite causes at all. God does everything. He is not only the first cause but the sole cause. This is possible, Malebranche said, because all finite minds are "in" God's mind as bodies are in space. (This is a kind of semi-pantheism, which Spinoza would extend into a full pantheism.)

This occasionalism is similar to that of the Muslim Ash'arite philosophers of the Middle Ages: creatures are nothing, God is everything. Augustine flirted with this sort of explanation just a little bit, but only in the area of explaining sensation, since as a Platonist he also believed, like Descartes, that matter could not act on mind.

The Mind-Body Problem and Man's Alienation

The mind-body problem is not just a conceptual problem for philosophers but a social and psychological problem for modern man as a whole: our felt alienation from nature—our reduction of nature to a passive, lifeless object for physical science and the reduction of ourselves to mental, detached scientific observers of it—has spilled out of the laboratory into life, and has produced a deep longing to "return to nature." Such a longing was unknown in premodern societies because they did not feel the modern problem of alienation. That problem comes more from Descartes than from any other philosopher.

But this alienation seems inseparable from science itself, for science succeeds only when it reduces the world to manageable dimensions, ignoring any that do not fit its method.

The only difference between Descartes and a materialist is that he affirms mind as well as body. But he reduces the bodily half of his mind-body dualism to a machine. This includes our own bodies, as well as animals. They are only complex machines. His own body is thus depersonalized into an "it" rather than a "him." It is not part of his soul and thus not part of him but only the most intimate part of the external world.

This is deeply problematic psychologically: to see a human body, even your own, not as a dimension of a person, a subject, "in here," but as an object, as part of the "out there." One cannot help wondering how many distinctively modern psychological problems, especially in the area of sexuality, are rooted in this Cartesian dualism.