

Bibliographies for the Original 2005 Edition of Sense and Goodness without God by Dr. Richard Carrier

Part 1. Introduction

Section 1. What This Is

Section 2. How I Got Here

Part 2. How We Know

Section 1. Philosophy: What It Is and Why You Should Care

There is a lot more I could say about this, and I recommend reading two other essays on the subject of philosophy's value: Bertrand Russell's "The Value of Philosophy" appears in *The Problems of Philosophy* (1912), pp. 153-61; and Charles Sanders Peirce's "The Fixation of Belief" appears in *Popular Science Monthly* 15 (1877), pp. 1-15. Both can be found in James Gould's *Classical Philosophical Questions*, 8th ed. (1994), pp. 39-56.

Section 2. Understanding the Meaning in What We Think and Say

2.1 The Meaning of Words

2.1.1 Reducible and Irreducible Sensation

2.1.2 Meaning, Reality and Illusion

2.1.3 Experience is the Font of Knowledge

2.1.4 Getting at the Real Meaning of Words

2.2 The Meaning of Statements

2.2.1 Stipulations and References

2.2.2 Descriptions

2.2.3 Opinions

2.2.4 Moral Imperatives

2.2.5 Wishes and Commands

2.2.6 Facts and Hypotheses

2.2.7 The Nature of a Contradiction

2.2.8 Naturally Warranted Belief

Bibliographic note for all of the above:

For essential reading on the basis for my analysis of meaning, see the relevant part of the bibliography to II.3.2, "The Method of Reason.."

Quotes and paraphrases from Alvin Plantinga from "Reason and Belief in God," Nicholas Wolterstorff and Alvin Plantinga, eds., *Faith and Rationality: Reason*

and Belief in God (1983), p. 17. The argument is developed fully in Plantinga's books *Warrant and Proper Function* (1993), pp. 194-237, and *Warranted Christian Belief* (2000), pp. 227-240.

For more discussion, see my critical reviews of similar arguments by Michael Rea and Victor Reppert (www.infidels.org/library/modern/richard_carrier/rea.shtml and www.infidels.org/library/modern/richard_carrier/reppert.shtml). Note that I reject outright Plantinga's gratuitous claim that "proper" function is necessary for warrant. To the contrary, any truth-finding function that is *functioning* will suffice. The word "proper" has no business in any formulation of the criteria of warrant. For a recent, powerful defense of my view that beliefs must be based on evidence, see Jonathan Adler, *Belief's Own Ethics* (2002), while the philosophical foundations of "evidence," and what does and does not count as such, is addressed in technical detail by Peter Achinstein in *The Book of Evidence* (2001) and Susan Haack, *Evidence and Inquiry: Towards Reconstruction in Epistemology* (1995).

Section 3. Method

3.1 Finding the Good Method

3.2 The Method of Reason

To learn the methods of logic and mathematics, any college-level textbook will do. A good one to start with, which touches on everything, is Ronald Staszko and Robert Bradshaw, *The Mathematical Palette* (1991); another excellent introduction, relating math to reason, is Edward Burger & Michael Starbird, *The Heart of Mathematics: An Invitation to Effective Thinking* (2000). On the underlying philosophy of logic (what logic is and why): Susan Haack, *Philosophy of Logics* (1978).

On the nature and importance of meaning, and the connection between logic and language, see: A. J. Ayer, *Language, Truth, and Logic*, 2nd ed. (1946); Wesley Salmon, *Logic*, 3rd ed. (1984); Paul Horwich, *Truth*, 2nd ed. (1999); Patrick Suppes, *Introduction to Logic* (1999); Ernest Lepore, *Meaning and Argument: An Introduction to Logic through Language* (2000).

For applying logic and critical thought to real-life experiences and problems, see J. Anthony Blair and Ralph Henry Johnson, *Logical Self-Defense* (1994); Gregory Colomb & Joseph Williams, *The Craft of Argument* (2000); Merrilee Salmon, *Introduction to Logic and Critical Thinking*, 4th ed. (2001); Anne Thomson, *Critical Reasoning: A Practical Introduction* (2002); and Deborah Bennett, *Logic Made Easy: How to Know When Language Deceives You* (2004).

3.3 The Method of Science

For a practical guide: Stephen Carey, *A Beginner's Guide to Scientific Method* (1997). But for the heavy detail, see Ernest Nagel and Morris Cohen, *An Introduction to Logic and Scientific Method* (1934), which is greatly expanded upon by more recent works like Richard Boyd, Philip Gasper, and J. D. Trout, *The Philosophy of Science* (1991), and Mario Bunge, *Philosophy of Science I: From Problem to Theory* and *Philosophy of Science II: From Explanation to Justification* (1998). See also the very important work: Susan Haack, *Defending Science—Within Reason: Between Scientism and Cynicism* (2003), which explains the place of science on my scale of methods. Also important for the underlying logic of science (and everyday reasoning): Brian Skyrms, *Choice and Chance: An Introduction to Inductive Logic*, 4th ed. (1999); Ronald Giere, *Understanding Scientific Reasoning*, 4th ed. (1996); and Paul Horwich, *Probability and Evidence* (1982).

3.4 The Method of Experience

For a very basic introduction: Theodore Schick & Lewis Vaughn, *How to Think About Weird Things: Critical Thinking for a New Age*, 3rd ed. (2001).

But on the perfection of the method of personal experience, one would do best to understand the sorts of errors we are prone to, so you can avoid or compensate for them. See Massimo Piattelli-Palmarini, *Inevitable Illusions: How Mistakes of Reason Rule Our Minds* (1994), and Thomas Gilovich, *How We Know What Isn't So: The Fallibility of Human Reason in Everyday Life* (1993), just for starters. Perhaps also: Thomas Gilovich, Dale Griffin, and Daniel Kahneman, eds., *Heuristics and Biases: The Psychology of Intuitive Judgment* (2002) and Dietrich Dörner, *The Logic of Failure: Why Things Go Wrong and What We Can Do to Make Them Right* (1996).

It is also handy to study research on eye-witness testimony, since it contains clues to how much or little you can trust your own perception and memory and how you can improve them. See: Daniel Schacter, *The Seven Sins of Memory: How the Mind Forgets and Remembers* (2002); Elizabeth Loftus & James Doyle, *Eyewitness Testimony: Civil and Criminal*, 3rd ed. (1997); Daniel Schacter & Joseph Coyle, eds., *Memory Distortion: How Minds, Brains, and Societies Reconstruct the Past* (1995); and Gary Wells & Elizabeth Loftus, eds., *Eyewitness Testimony: Psychological Perspectives* (1984). But the real secret is learning on your own how to adapt ideas borrowed from logic and science to everyday life (see previous section bibliographies).

3.5 The Method of History

[NOTE: I have since published a book, *Proving History: Bayes's Theorem and the Quest for the Historical Jesus* (2012), which thoroughly updates my own analysis of sound historical methods and also updates my bibliography on historical methods. That said, the following is the original 2005 bibliography in *Sense and Goodness without God*.]

On the methods of history, which are my professional specialty, I say a good deal more in Chapter IV.1.2, "Miracles and the Historical Method." But for the real detail, see: Walter Prevenier and Martha Howell, *From Reliable Sources: An Introduction to Historical Methodology* (2001); J. Tosh, *The Pursuit of History: Aims, Methods and Directions in the Study of Modern History*, 3rd ed. (1999); Joyce Appleby, Lynn Hunt and Margaret Jacob, *Telling the Truth About History* (1995); C. Behan McCullagh, *The Truth of History* (1998) and *Justifying Historical Descriptions* (1984); Robert Shafer, *A Guide to Historical Method*, 3rd ed. (1980).

Works of lesser merit include: John Gaddis, *The Landscape of History: How Historians Map the Past* (2002); David Cannadine, ed., *What Is History Now?* (2002); Richard Evans, *In Defense of History* (2000); Paul Veyne, *Writing History: Essay on Epistemology* (1984); John Lukacs, *Historical Consciousness: The Remembered Past* (1968); William Dray, ed., *Philosophical Analysis and History* (1966); Marc Bloch, *The Historian's Craft* (1964); Edward Carr, *What Is History?* (1961); Homer Hockett, *The Critical Method in Historical Research and Writing* (1955; cf. Part I); Louis Gottschalk, *Understanding History: A Primer of Historical Method* (1950); and Gilbert Garraghan, *A Guide to Historical Method* (1946).

3.6 The Method of Expert Testimony

Relevant material on how to assess an expert's merit can be gleaned from legal guides to the issue: for example, Steven Lubet, *Expert Testimony: A Guide for Expert Witnesses and the Lawyers Who Examine Them* (1999) and James Richardson, *Modern Scientific Evidence, Civil and Criminal: Weight and Sufficiency, Admissibility, Objectives of Law and Science, Scientific Tests and Experiments, Specific Methods of Proof*, 2nd ed. (1981). See also: Benjamin Radford, *Media Mythmakers: How Journalists, Activists, and Advertisers Mislead Us* (2003).

3.7 The Method of Plausible Inference

3.8 The Method of Pure Faith

3.9 Final Remarks on Method

For more on the inadequacy of faith against reason, and on the proper use of logic and science, see the “Faith and Reason” section of the Secular Web (www.infidels.org/library/modern/reason). Also interesting is a short but apt discussion by Herbert Feigl in “Naturalism and Humanism,” *American Quarterly* 2 (1949), pp. 135-48; the relevant part is reproduced on pp. 59-67 of James Gould’s *Classical Philosophical Questions*, 8th ed. (1994). See also the bibliography concluding II.2.2.8, “Naturally Warranted Belief.”

Part 3. What There Is

Section 1. The Idea of a “Worldview”

For more on the idea of ‘worldview’, see David Naugle, *Worldview: The History of a Concept* (2002) and *A History and Theory of the Concept of ‘Weltanschauung’ (Worldview)* (1998); William Cobern, *World View Theory and Science Education Research* (1991); Leon McKenzie, *Adult Education and Worldview Construction* (1991). Using Christianity as an example: Michael Palmer and Stanley Horton, eds., *Elements of a Christian Worldview* (1998) and Ronald Nash, *Worldviews in Conflict: Choosing Christianity in a World of Ideas* (1992).

Section 2. A General Outline of Metaphysical Naturalism

For further reading, see the “Naturalism” and “Materialism” sections of the Secular Web (in www.infidels.org/library/modern/nontheism). For a survey of the total scientific view of humanity and the universe that all naturalists share, see for example Greg Reinking, *Cosmic Legacy: Space, Time, and the Human Mind* (2003).

Books defending versions of Metaphysical Naturalism are legion: Andrew Melnyk, *A Physicalist Manifesto: Thoroughly Modern Materialism* (2003); Daniel Dennett, *Freedom Evolves* (2003); Taner Edis, *The Ghost in the Universe: God in the Light of Modern Science* (2002); Simon Altmann, *Is Nature Supernatural? A Philosophical Exploration of Science and Nature* (2002); Joseph Rouse, *How Scientific Practices Matter: Reclaiming Philosophical Naturalism* (2002); John Shook, *Pragmatic Naturalism and Realism* (2002); Matt Young, *No Sense of Obligation: Science and Religion in an Impersonal Universe* (2001); Robert Nozick, *Invariances: the Structure of the Objective World* (2001); Lewis Edwin Hahn, *A Contextualistic Worldview: Essays* (2001); Kai Nielson, *Naturalism and Religion* (2001).

That’s just from the 21st century. From the 20th century: J. T. Fraser, *Time,*

Conflict, and Human Values (1999); Roy Bhaskar, *The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences*, 3rd ed. (New York: Routledge, 1999); Willem Drees, *Religion, Science and Naturalism* (1996); Sidney Hook, *The Metaphysics of Pragmatism* (1996); Kai Nielson, *Naturalism without Foundations: Prometheus Lectures* (1996); Richard C. Vitzthum, *Materialism: An Affirmative History and Definition* (1995); Paul K. Moser and J. D. Trout, *Contemporary Materialism: A Reader* (1995); Jeffrey Poland, *Physicalism: The Philosophical Foundation* (1994); Peter French, Theodore Uehling, and Howard Wettstein, eds., *Philosophical Naturalism* (1994); John Ryder, *American Philosophic Naturalism in the Twentieth Century* (1994); David Papineau, *Philosophical Naturalism* (1993); Jeffrey Walther, *Religious Naturalism, the First Secular Western Culture Religion in History: An Introduction to a Significantly Modern, New and Different Religion* (1991); Paul Kurtz, *Philosophical Essays in Pragmatic Naturalism* (1990); Paul Kurtz, *In Defense of Secular Humanism* (1983); Wilfrid Sellars, *Naturalism and Ontology* (1979); Sterling Lamprecht, *The Metaphysics of Naturalism* (1967); Yervant Krikorian, *Naturalism and the Human Spirit* (1944). Also relevant are Paul Draper's chapter "God, Science, and Naturalism," in Bill Wainwright, ed., *Oxford Handbook of Philosophy of Religion* (2004) and Alex Rosenberg's article "A Field Guide to Recent Species of Naturalism," *British Journal for the Philosophy of Science* 47:2 (1996), pp. 1-29.

Several books criticize naturalism. None respond or relate to the form of naturalism I am defending, but rather an incoherent caricature of naturalism generally. I have also composed this book in a way that exposes the ineffectiveness of their criticisms. See: Victor Reppert, *C. S. Lewis's Dangerous Idea: In Defense of the Argument from Reason* (2003) and Michael Rea, *World without Design: The Ontological Consequences of Naturalism* (2002), on which see my critical reviews at the Secular Web (www.infidels.org/library/modern/richard_carrier/rea.shtml and [reppert.shtml](http://www.infidels.org/library/modern/victor_reppert/reppert.shtml)); James Beilby, ed., *Naturalism Defeated? Essays on Plantinga's Evolutionary Argument Against Naturalism* (2002); Frederick Olafson, *Naturalism and the Human Condition: Against Scientism* (2001); William Lane Craig & J. P. Moreland, eds., *Naturalism: A Critical Analysis* (2000); Mark Steiner, *The Applicability of Mathematics as a Philosophical Problem* (1998), on which see my critical review on the Secular Web; Steven Wagner & Richard Warner, eds., *Naturalism: A Critical Appraisal* (1994); Ronald Nash, *Worldviews in Conflict: Choosing Christianity in a World of Ideas* (1992); William Shea, *The Naturalists and the Supernatural* (1984).

There are also many bigoted critiques of naturalism, too, both ignorant and inept, lacking in honesty or sophistication. For example: Phillip Johnson's diatribes in *Reason in the Balance: The Case Against Naturalism in Science, Law & Education* (1998) and *The Wedge of Truth: Splitting the Foundations of*

Naturalism (2000); or David Noebel's *Understanding the Times: The Religious Worldviews of Our Day and the Search for Truth* (1994) and (with Tim LaHaye) *Mind Siege: The Battle for Truth in the New Millennium* (2000) or (with J. F. Baldwin & Kevin Bywater) *Clergy in the Classroom: The Religion of Secular Humanism*, 2nd ed. (2002). What they say has little to do with what I defend here.

Section 3. The Nature and Origin of the Universe

3.1 Plausibility and the God Hypothesis

For more on the implausibility of the god hypothesis, or the equal or greater plausibility of alternatives, see the sections at the Secular Web on the "Atheistic Cosmological Argument" (www.infidels.org/library/modern/nontheism/atheism/cosmological.html), the "Cosmological Argument" for God (www.infidels.org/library/modern/theism/cosmological.html), and "Physics and Religion" (www.infidels.org/library/modern/science/physics/). See also Victor Stenger's books on the subject: *Has Science Found God? The Latest Results in the Search for Purpose in the Universe* (2003), *Timeless Reality: Symmetry, Simplicity, and Multiple Universes* (2000), and *Not by Design: The Origin of the Universe* (1988).

3.2 God and the Big Bang

On the Big Bang theory, see: Joseph Silk, *The Big Bang*, 3rd ed. (2000); Alan Guth, *The Inflationary Universe: The Quest for a New Theory of Cosmic Origins* (1998); and Barry Parker, *The Vindication of the Big Bang: Breakthroughs and Barriers* (1993).

3.3 Modern Multiverse Theory

For Smolin's Selection theory, see: Lee Smolin, *The Life of the Cosmos* (1997), with Lee Smolin, "Did the Universe Evolve?" *Classical and Quantum Gravity* 9 (1992), pp. 173-192; and Damien Easson & Robert Brandenberger, "Universe Generation from Black Hole Interiors," *Journal of High Energy Physics* 6.24 (2001). For a discussion of all the plausible 'multiverse' concepts currently accepted as viable scientific theories, see: Paul Davies, "Multiverse Cosmological Models," *Modern Physics Letters A*, 19.10 (2004), pp. 727-743; and Martin Rees, *Before the Beginning: Our Universe and Others* (1998). For Chaotic Inflation theory, see the highly technical work by Andrei Linde, *Particle Physics and Inflationary Cosmology* (1990).

3.4 The Multiverse as Ultimate Being

3.5 Answering the Big Questions

3.5.1 The First Cause

3.5.2 The Origin of Order

3.6 Time and the Multiverse

On the view of time presented here see: Paul Davies, *About Time: Einstein's Unfinished Revolution* (1995); Huw Price, *Time's Arrow & Archimedes' Point: New Directions for the Physics of Time* (1997); Victor Stenger, *Timeless Reality: Symmetry, Simplicity, and Multiple Universes* (2000). But for a naturalist view of time radically different from mine, see Ilya Prigogine, *The End of Certainty* (1997). For a survey of views, but ultimately supporting mine, see Robin Le Poidevin, *Travels in Four Dimensions: The Enigmas of Space and Time* (2003).

Section 4. The Fixed Universe and Freedom of the Will

- 4.1 Why Determinism?
- 4.2 The Alternative: Libertarian Free Will
- 4.3 Why Libertarian Free Will Eliminates Responsibility
- 4.4 Compatibilism: The Only Sensible Notion of Free Will
 - 4.4.1 The Ability Condition
 - 4.4.2 The Control Condition
 - 4.4.3 The Rationality Condition
 - 4.4.4 The Cause Condition
- 4.5 What Free Will Really Is
- 4.6 The Fatalist Fallacy vs. Improving Self and Society

The court cases quoted are: *Conley v. Nailor et al.* (118 U.S. 127; 6 S. Ct. 1001; 1886 U.S.); *Godinez v. Moran* (No. 92-725, 509 U.S. 389; 113 S. Ct. 2680; 125 L. Ed. 2d 321; 1993), upholding and quoting *Faretta v. California* (No. 73-5772, 422 U.S. 806; 95 S. Ct. 2525; 45 L. Ed. 2d 562; 1975); and *United States v. Kozminski et al.* (487 U.S. 931; 108 S. Ct. 2751; 1988). Dressler is quoted from “Professor Delgado’s ‘Brainwashing’ Defense: Courting a Determinist Legal System,” in Michael Louis Corrado, ed., *Justification and Excuse in the Criminal Law: A Collection of Essays* (1994), pp. 497-516 (this entire book is relevant), reproduced from the *Minnesota Law Review* 63:335 (1979).

For further reading on compatibilist determinism, see: Daniel Dennett, *Freedom Evolves* (2003) and *Elbow Room: The Varieties of Free Will Worth Wanting* (1984); Gregory Rich, *A Defense of Compatibilism* (1982); Nicholas Dixon, *Compatibilism without Utilitarianism: Moral Responsibility in a Deterministic World* (1985); David DeMoss, *Compatibilism, Practical Wisdom, and the Narrative Self: Or If I Had Had My Act Together, I Could Have Done Otherwise* (1987); and Jack Kamerman and Gilbert Geis, eds., *Negotiating Responsibility in the Criminal Justice System* (1998).

For an important work applying modern brain science to the issue, see Daniel Wegner, *The Illusion of Conscious Will* (2002), though “illusion” Sense and

Goodness Without God here is a misleading term: our “self” is still a virtual model (and *post hoc* perception) of a real thing (see III.6, “The Nature of Mind”), and hence so is our “will.” On which, see: Henrik Walter, *Neurophilosophy of Free Will: From Libertarian Illusions to a Concept of Natural Autonomy* (2001).

Some naturalists still reject determinism and argue for the existence of libertarian free will as a naturally emergent property of a reasoning brain. Prominent among them is Corliss Lamont, *Freedom of Choice Affirmed* (paperback ed. with new preface, 1969). See also “The Volitional Brain: Towards a Neuroscience of Free Will,” *Journal of Consciousness Studies* 6:8-9 (August-September, 1999).

Section 5. What Everything is Made of

5.1 Space-Time

On time, see bibliography to section III.3.6, “Time and the Multiverse.” On space, see next section.

5.2 Matter-Energy

On the connection between space-time, geometry, and matter-energy, see: Henning Genz, *Nothingness: The Science of Empty Space* (1999) and Brian Greene, *The Fabric of the Cosmos: Space, Time, and the Texture of Reality* (2004). On Superstring Theory and other approaches to explaining everything by appealing to the geometry of space-time: Brian Greene, *The Elegant Universe: Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory* (2000) and Dan Falk, *Universe on a T-Shirt: The Quest for the Theory of Everything* (2004).

For a discussion of all the particles of matter and energy which as far as we know comprise everything that exists, the evidence we have supporting that conclusion, and the science that governs these things (Quantum Mechanics), see: G. L. Kane, *The Particle Garden: Our Universe As Understood by Particle Physicists* (1996); Timothy Smith, *Hidden Worlds: Hunting for Quarks in Ordinary Matter* (2003); and Kenneth Ford, *The Quantum World: Quantum Physics for Everyone* (2004).

On chemistry, the science of how these particles combine to produce most forms of matter as we know it, see: John Sevenair and Allan Burkett, *Introductory Chemistry: Investigating the Molecular Nature of Matter* (1997) and Mark Bishop, *Introduction to Chemistry* (2001).

For more advanced discussions of the fundamental science of matter and energy, see works like: Tony Hey & Patrick Walters, *The New Quantum Universe*, 2nd ed.

(2003); Anthony Zee, *Quantum Field Theory in a Nutshell* (2003); Jim Al-Khalili, *Quantum: A Guide for the Perplexed* (2003); R. Stephen Berry, Stuart Rice, and John Ross, *The Structure of Matter: An Introduction to Quantum Mechanics*, 2nd ed. (2001); Riazuddin Fayyazuddin, *A Modern Introduction to Particle Physics*, 2nd ed. (2000); Gerard t’Hooft, *In Search of the Ultimate Building Blocks* (1996); Elliot Leader & Enrico Predazzi, *An Introduction to Gauge Theories and Modern Particle Physics* (1996); Richard Feynman, *QED: The Strange Theory of Light and Matter* (1985).

5.3 Physical Laws

For a general survey of all that science has discovered about the universe, see Nigel Calder, *Magic Universe: The Oxford Guide to Modern Science* (2003), which will provide you with sources to pursue on every realm of study, from both Classical and Quantum Mechanics, to Relativity and Chaos or Complexity theory.

For more specific discussion of what the laws of physics are and how we know them, see works like: Paul G. Hewitt, *Conceptual Physics: A New Introduction to Your Environment*, 8th ed. (1997); Roger Newton, *Thinking About Physics* (2000). A. I. Burshtein, *Introduction to Thermodynamics and Kinetic Theory of Matter* (1995); and Albert Einstein & Leopold Infeld, *The Evolution of Physics: From Early Concepts to Relativity and Quanta* (1938).

5.4 Abstract Objects

5.4.1 Numbers, Logic, and Mathematics

5.4.2 Colors and Processes

5.4.3 Modal Properties

5.5 Reductionism

In addition to the readings recommended in earlier sections, see: Gail Fine, *On Ideas: Aristotle’s Criticism of Plato’s Theory of Forms* (1995); Richard Jones, *Reductionism: Analysis and the Fullness of Reality* (2000); Ansgar Beckermann, Hans Flohr, and Jaegwon Kim, eds., *Emergence or Reduction? Essays on the Prospects of Nonreductive Physicalism* (1992); Harold Kincaid, *Individualism and the Unity of Science* (1997); Edward O. Wilson, *Consilience: The Unity of Knowledge* (1999).

Also, regarding abstractions and mathematics in particular, see Mary Tiles, *The Philosophy of Set Theory: An Introduction to Cantor’s Paradise* (1989) and Penelope Maddy, *Naturalism in Mathematics* (1997), as well as: Paul Benacerraf and Hilary Putman, *Philosophy of Mathematics* (1964); Hugh Lehman, *Introduction to the Philosophy of Mathematics* (1979); Bruce Aune, *Metaphysics: The Elements* (1985); and Bertrand Russell, *Principles of Mathematics* (1938), with Jaakko Hintikka, *The Principles of Mathematics Revisited* (1998).

Most importantly, Ian Stewart proves with abundant examples in *What Shape is a Snowflake?* (2001), as Michael Resnik does with rigorous philosophical argument in *Mathematics as a Science of Patterns* (1997), that all of mathematics is simply a human language that describes the real shapes and patterns of matter-energy in space-time.

For more discussion of all the issues related to that point: Barry Mazur, *Imagining Numbers: (Particularly the Square Root of Minus Fifteen)* (2002); George Lakoff & Rafael Núñez, *Where Mathematics Comes From: How the Embodied Mind Brings Mathematics into Being* (2001); Reuben Hersh, *What is Mathematics, Really?* (1999); Brian Butterworth, *What Counts: How Every Brain is Hardwired for Math* (1999); and chapter 7 of: John Barrow, *Impossibility: The Limits of Science and the Science of Limits* (1998).

Section 6. The Nature of Mind

6.1 The Mind as Brain in Action

6.2 The Mind as Virtual Reality

6.3 The Chinese Room

The “Chinese Room” was first described in John Searle, *Minds, Brains and Science* (1984), pp. 28-41, under the chapter heading “Can Computers Think?” The rest of the book develops his alternative naturalist explanation of consciousness. For more on the idea of a Turing Machine, see plato.stanford.edu/entries/turing-machine. For quantum computers: George Johnson, *A Shortcut through Time: The Path to the Quantum Computer* (2003). For the kinds of computation the brain actually appears to employ: Peter Dayan & L. F. Abbott, *Theoretical Neuroscience: Computational and Mathematical Modeling of Neural Systems* (2001).

For more on our mind as neural computer, see: Nikola K. Kasabov, *Evolving Connectionist Systems: Methods and Applications in Bioinformatics, Brain Study and Intelligent Machines* (2002); Patricia Churchland & Terrence Sejnowski, *The Computational Brain* (1992); Paul Churchland, *A Neurocomputational Perspective: The Nature of Mind and the Structure of Science* (1989); Patricia Churchland, *Neurophilosophy: Toward a Unified Science of the Mind-Brain* (1986); Aaron Sloman, *The Computer Revolution in Philosophy: Philosophy, Science and Models of Mind* (1978): www.cs.bham.ac.uk/research/cogaff/crp.

On the nature of mind and consciousness, see the final bibliography at the end of this chapter.

6.4 The Mind as Machine

6.4.1 Thoughts

6.4.2 Abilities, Memories, and Traits
6.4.3 What Machines Can't Yet Do
6.4.4 Qualia

For more on this issue, see: Leopold Stubenberg, *Consciousness and Qualia* (1998) and Stephen Palmer, *Vision Science: Photons to Phenomenology* (1999); but or a different view than mine, see: David Chalmers, *The Conscious Mind: In Search of a Fundamental Theory* (1996). An important paper illuminating my position is Allin Cottrell's "Sniffing the Camembert: On the Conceivability of Zombies," *Journal of Consciousness Studies* 6.1 (1999), pp. 4–12 (www.imprint.co.uk/cottrell/jcsmainframe.html).

6.5 The Nature of Knowledge
6.6 The Evidence for Mind-Body Physicalism
6.6.1 General Brain Function Correlation
6.6.2 Specific Brain Function Correlation
6.6.3 Positive Evidence Mapping the Mind to the Brain
6.6.4 Negative Evidence Mapping the Mind to the Brain
6.6.5 Brain Chemistry and Mental Function
6.6.6 Comparative Anatomy and Explicability
6.7 Evidence Against Mind-Body Physicalism?
6.8 Immortality and Life After Death

For further reading, see the Secular Web sections on "Life After Death" (www.infidels.org/library/modern/lifeafterdeath/), the "Argument from Physical Minds" (www.infidels.org/library/modern/nontheism/atheism/minds.html), and bibliographies for sections III.6.4.4 ("Qualia") and III.8.3, "The Evolution of Mind." I discuss mind-brain issues in more detail in "Critical Review of Victor Reppert's Defense of the Argument from Reason" (2004, at www.infidels.org/library/modern/richard_carrier/reppert.shtml).

For book treatments: Gerald Edelman, *Wider than the Sky: The Phenomenal Gift of Consciousness* (2004); Steven Johnson, *Mind Wide Open: Your Brain and the Neuroscience of Everyday Life* (2004); Christof Koch, *The Quest for Consciousness: A Neurobiological Approach* (2004); Susan Blackmore, *Consciousness: An Introduction* (2003); Julian Paul Keenan, et al., *The Face in the Mirror: The Search for the Origins of Consciousness* (2003); Joseph Ledoux, *Synaptic Self: How Our Brains Become Who We Are* (2002); Robert Aunger, *The Electric Meme: A New Theory of How We Think* (2002).

Other useful treatments include: John Ratey, *A User's Guide to the Brain: Perception, Attention and the Four Theaters of the Brain* (2001); Bernard Baars and James Newman, eds., *Essential Sources in the Scientific Study of Consciousness* (2001); Sandro Nannini & Hans Sandkühler, eds., *Naturalism in the Cognitive Sciences and the Philosophy of Mind* (2000); Steven Pinker, *How the Mind Works* (1997); Daniel Dennett, *Kinds of Minds: Towards an*

Understanding of Consciousness (1997) and *Consciousness Explained* (1992); Paul Churchland, *The Engine of Reason, The Seat of the Soul: A Philosophical Journey into the Brain* (1995); A. G. Cairns-Smith, *Evolving the Mind: On the Nature of Matter and the Origin of Consciousness* (1996).

On whether a soul can survive death of the brain: Gerald Woerlee, *Mortal Minds: A Biology of the Soul and the Dying Experience* (2003); Antony Flew, *Merely Mortal? Can You Survive Your Own Death?* (2001); Susan Blackmore, *Dying to Live: Near-Death Experiences* (1993) and *Beyond the Body: An Investigation of Out-of-the-Body Experiences* (1992); Mark Fox, *Religion, Spirituality, and the Near-Death Experience* (2002); documenting cultural differences in NDE's is Karlis Osis and Erlendur Haraldsson, *At the Hour of Death*, now in its 3rd ed. (1997), though the 1st ed. (1977) contains cases later omitted. Also relevant is Paul Edwards, *Reincarnation: A Critical Examination* (1996), and Peter & Elizabeth Fenwick, *The Truth in the Light: An Investigation of Over 300 Near-Death Experiences* (1995), which, though favoring the case for survival after death (like Osis and Haraldsson), nevertheless contains a lot of evidence for the hallucinatory nature of NDE's. A famous case is that of renowned atheist A.J. Ayer, reported in "What I Saw When I Was Dead," Lewis Hahn, ed., *The Philosophy of A.J. Ayer* (1992), pp. 41-53.

Many other books collectively document so much evidence for mind-brain physicalism that there is no longer any reason to doubt it. See, for example: Oliver Sacks, *The Man Who Mistook His Wife for a Hat, and Other Clinical Tales* (1998) and Frederick Schiffer, *Of Two Minds: The Revolutionary Science of Dual-Brain Psychology* (1998), as well as the many excellent works on the subject by V. S. Ramachandran, such as: *A Brief Tour of Human Consciousness: From Impostor Poodles to Purple Numbers* (2004); *Phantoms in the Brain: Probing the Mysteries of the Human Mind* (1999); and the *Encyclopedia of the Human Brain* (2002).

Section 7. The Meaning of Life

For more on these issues, I always recommend Bertrand Russell's *The Conquest of Happiness* (1930) and Epicurus' "Letter to Menoeceus," which can be found in *The Essential Epicurus* (1993), and also online at www.epicurus.net. See also: E. D. Klemke, *The Meaning of Life*, 2nd ed. (1999); Keith Augustine, "Death and the Meaning of Life" (in www.infidels.org/library/modern/keith_augustine) and James Still, "Death Is Not an Event in Life" (in www.infidels.org/library/modern/james_still). Many also recommend Albert Camus, *The Myth of Sisyphus* (also available online in the Secular Web's historical library).

Recently relevant are: Peter Heinegg, ed., *Mortalism: Readings on the Meaning of*

Life (2003); David Cortesi, *Secular Wholeness: A Skeptic's Paths to a Richer Life* (2002); Nicolaos Tzannes, *Life Without God: A Guide to Fulfillment Without Religion* (2002); George E. Vaillant, *Aging Well: Surprising Guideposts to a Happier Life from the Landmark Harvard Study of Adult Development* (2002); and Michael Martin, *Atheism, Morality, and Meaning* (2002).

The program of Dr. Albert Ellis is popularized by David Burns in *Feeling Good: The New Mood Therapy*, rev. ed. (1999). Other secular ways to happiness are described by Martin Seligman in *Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment* (2002), and even by Christian therapist David Myers in *The Pursuit of Happiness: Discovering the Pathway to Fulfillment, Well-Being, and Enduring Personal Joy* (1992). For a good scientific study of how to improve the “luck” in your life (and thus your enjoyment of being) with simple, beneficial life strategies, see: Richard Wiseman, *Luck Factor: Changing Your Luck, Changing Your Life—the Four Essential Principles* (2003).

Also, see the works on happiness cited in the section bibliography for V.2.1.3, “Self Worth and the Psychological Need for a Moral Life.”

Section 8. How Did We Get Here?

8.1 Biogenesis

For all the current science on this topic, see: Tom Fenchel, *Origin and Early Evolution of Life* (2003); Fred Adams, *Origins of Existence: How Life Emerged in the Universe* (2002); Iris Fry, *The Emergence of Life on Earth: A Historical and Scientific Overview* (2000); Geoffrey Zubay, *Origins of Life: On Earth and in the Cosmos*, 2nd ed. (2000); Christopher Wills and Jeffrey Bada, *The Spark of Life: Darwin and the Primeval Soup* (2000); Peter Ward and Donald Brownlee, *Rare Earth: Why Complex Life is Uncommon in the Universe* (2000); Noam Lahav, *Biogenesis: Theories Richard Carrier of Life's Origin* (1999); Andri Brack, ed., *The Molecular Origins of Life: Assembling Pieces of the Puzzle* (1998).

On probability arguments in particular, see my related online research paper, “Are the Odds Against the Origin of Life Too Great to Accept?” (www.infidels.org/library/modern/richard_carrier/addendaB.html), and my more advanced article: “The Argument from Biogenesis: Probabilities Against a Natural Origin of Life,” *Biology & Philosophy* [19.5 (Nov 2004): 739-64].

8.2 Evolution by Natural Selection

For further reading, see the Secular Web's sections on the “Argument to

Design” (www.infidels.org/library/modern/theism/design.html) and “Creationism” (www.infidels.org/library/modern/science/creationism/).

See John Maynard Smith and Eörs Szathmáry, *The Origins of Life: From the Birth of Life to the Origin of Language* (1999) and *The Major Transitions in Evolution* (1997); Monroe Strickberger, *Evolution*, 3rd ed. (2000); Stephen Jay Gould, *The Structure of Evolutionary Theory* (2002); Ian Tattersall, *The Monkey in the Mirror: Essays on the Science of What Makes Us Human* (2001); and for even more detail: Mark Ridley, *Evolution*, 3rd ed. (2003) and Douglas Futuyma, *Evolutionary Biology*, 3rd ed. (1998).

On the superiority of natural selection to creation theory: Eugenie C. Scott, *Evolution vs. Creationism: An Introduction* (2004); Niall Shanks, *God, the Devil, and Darwin: A Critique of Intelligent Design Theory* (2004); Matt Young & Taner Edis, eds., *Why Intelligent Design Fails: A Scientific Critique of the New Creationism* (2004); Mark Perakh, *Unintelligent Design* (2003); Richard Dawkins, *The Blind Watchmaker: Why the Evidence of Evolution Reveals a Universe Without Design* (1997); Douglas Futuyma, *Science on Trial: The Case for Evolution* (1995).

On reconciling religion with evolution: Michael Ruse, *Can a Darwinian Be a Christian? The Relationship Between Science and Religion* (2000) and *The Evolution Wars: A Guide to the Debates* (2002). Discussing opposition to this: Barbara Forrest & Paul Gross, *Creationism's Trojan Horse: The Wedge of Intelligent Design* (2003).

8.3 The Evolution of Mind

See: William Calvin, *A Brief History of the Mind: From Apes to Intellect and Beyond* (2004); Nicholas Humphrey, *The Inner Eye: Social Intelligence in Evolution* (2003); Bruce Bridgeman, *Psychology and Evolution: The Origins of Mind* (2003); Nicholas Humphrey, *A History of the Mind: Evolution and the Birth of Consciousness* (1999). Important supporting evidence is provided by Gary Marcus, *The Birth of the Mind: How a Tiny Number of Genes Creates the Complexities of Human Thought* (2003).

8.4 Memetic Evolution

See David Hull, *Science as a Process: An Evolutionary Account of the Social and Conceptual Development of Science* (1988); Alan Cromer, *Uncommon Sense: The Heretical Nature of Science* (1995); Dan Sperber, *Explaining Culture: A Naturalistic Approach* (1996); Susan Blackmore, *The Meme Machine* (2000); Robert Aunger, *Darwinizing Culture: The Status of Memetics as a Science* (2001)

and *The Electric Meme: A New Theory of How We Think* (2002); Leda Cosmides, et al., eds., *What Is Evolutionary Psychology? Explaining the New Science of the Mind* (2002).

Section 9. The Nature of Reason

9.1 Reason vs. Intuition

9.2 Why Trust the Machine of Reason?

9.3 Contradiction Revisited

9.4 Alternative Accounts Are Not Credible

For further reading on the evolution and physiology of a reasoning brain: William Calvin, *How Brains Think* (1996); Robert Moss, *Brain Waves Through Time* (1999); Manfred Spitzer, *Hare Brain, Tortoise Mind* (1999); Lesley Rogers, *Minds of Their Own* (1998); Dietrich Dörner, *The Logic of Failure: Why Things Go Wrong and What We Can Do to Make Them Right* (1996); Eduard Hugo Strauch, *How Nature Taught Man to Know, Imagine, and Reason: How Language and Literature Recreate Nature's Lessons* (1995); Valerie Walkerdine, *The Mastery of Reason: Cognitive Development and the Production of Rationality* (1990).

For philosophical analyses of reason: Robert Nozick, *The Nature of Rationality* (1993); Nicholas Rescher, *Rationality: A Philosophical Inquiry into the Nature and the Rationale of Reason* (1988); Newton Garver & Peter Hare, eds., *Naturalism and Rationality* (1986). See also: Ruth Millikan, *Language, Thought, and Other Biological Categories: New Foundations for Realism* (1984) and *Clear and Confused Ideas: An Essay about Substance Concepts* (2000), as well as Patricia Churchland, *Brain-Wise: Studies in Neurophilosophy* (2002). And for extensive discussion, see: Richard Carrier, "Critical Review of Victor Reppert's Defense of the Argument from Reason" (www.infidels.org/library/modern/richard_carrier/reppert.shtml).

For the science of intuition: Thomas Gilovich, Dale Griffin, and Daniel Kahneman, eds., *Heuristics and Biases: The Psychology of Intuitive Judgment* (2002); David Mayers, *Intuition: Its Powers and Perils* (2002); Michael R. DePaul and William Ramsey, eds., *Rethinking Intuition: The Psychology of Intuition and Its Role in Philosophical Inquiry* (1998); Robbie Davis-Floyd and P. Sven Arvidson, eds. *Intuition: The Inside Story* (1997). Also: M. D. Lieberman, "Intuition: A Social Cognitive Neuroscience Approach," *Psychological Bulletin* 136 (2000), pp. 109-137; D. A. Shirley & J. Langan-Fox, "Intuition: A Review of the Literature," *Psychological Reports*, 79 (1996), pp. 563-584.

Section 10. The Nature of Emotion

10.1 Emotion as Appraisal

10.2 Reason as the Servant of Desire

For the whole scoop on emotions, see the chapters on emotion in any good college psychology textbook, plus specialized works like Michael Lewis & Jeannette Haviland-Jones, eds., *Handbook of Emotions*, 2nd ed. (2000) and Richard Lane, Lynn Nadel, & Geoffrey Ahern, eds., *Cognitive Neuroscience of Emotion* (2000).

But for more specific treatments dealing with what I have emphasized here, see Antonio Damasio's trilogy: *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain* (2003), *The Feeling of What Happens: Body and Emotion in the Making of Consciousness* (2000), and *Descartes' Error: Emotion, Reason, and the Human Brain* (1995). Also: Martha Nussbaum, *Upheavals of Thought: The Intelligence of Emotions* (2002); Bennett Helm, *Emotional Reason: Deliberation, Motivation and the Nature of Value* (2001); Joseph Ledoux, *The Emotional Brain: The Mysterious Underpinnings of Emotional Life* (1998); D. P. Goleman, *Emotional Intelligence* (1995); Richard & Bernice Lazarus, *Passion and Reason: Making Sense of Our Emotions* (1994); G. L. Clore & W. G. Parrott, *Moods and Their Vicissitudes: Thoughts and Feelings as Information* (1991).

10.3 The Nature of Love

For a modern scientific treatment of the emotion of love, with all its faults and glory, see: Helen Fisher, *Why We Love: The Nature and Chemistry of Romantic Love* (2004).

10.4 The Nature of Spirituality

Quote from: Carl Sagan, "Does Truth Matter? Science, Pseudoscience, and Civilization," *Skeptical Inquirer* 20:6 (1996), p. 29.

Still important is William James, *The Varieties of Religious Experience: A Study in Human Nature* (1902), along with Charles Taylor, *Varieties of Religion Today: William James Revisited* (2002).

We now know religious and mystical experience has an identifiable physical cause in the human brain, and is therefore a natural, biological phenomenon: see Eugene D'Aquili & Andrew Newberg, *The Mystical Mind: Probing the Biology of Religious Experience* (1999) and *Why God Won't Go Away: Brain Science and the Biology of Belief* (2001); Joseph Giovannoli, *The Biology of Belief: How Our Biology Biases Our Beliefs and Perceptions* (2000); John Horgan, *Rational*

Mysticism: Dispatches from the Border between Science and Spirituality (2003). See also the bibliography to section IV.2.2.4, “Religion as Medicine.”

Important examples of secular spirituality, with discussion of its very nature, include: Robert Solomon, *Spirituality for the Skeptic: The Thoughtful Love of Life* (2002); David Cortesi, *Secular Wholeness: A Skeptic's Paths to a Richer Life* (2002); Matt Berry, *A Human Strategy: Toward a Genuine Spirituality* (1999); Carl Sagan, *The Demon-Haunted World: Science As a Candle in the Dark* (1997) and Richard Dawkins, *Unweaving the Rainbow: Science, Delusion and the Appetite for Wonder* (2000). The issue is also discussed by Martin Seligman in *Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment* (2002), and secular spirituality is often exemplified in the writings and speeches of Robert Ingersoll (cf. Roger Greeley, ed., *Best of Robert Ingersoll: Selections from His Writings and Speeches*, 1983).

Part 4. What There Isn't

Section 1. Not Much Place for the Paranormal

For further reading, see the Secular Web's sections on “Mysticism and the Paranormal” (www.infidels.org/library/modern/paranormal/) and my essay “Defending Naturalism as a Worldview: A Rebuttal to Michael Rea's *World Without Design*” (2003, at www.infidels.org/library/modern/richard_carrier/rea.shtml), which discusses in more detail my idea of a natural-supernatural distinction.

There are many valuable books on the lack of evidence for the supernatural: Massimo Polidoro, *Secrets of the Psychics: Investigating Paranormal Claims* (2003); David Marks, *The Psychology of the Psychic*, 2nd ed. (2000); Wendy Kaminer, *Sleeping With Extra-Terrestrials: The Rise of Irrationalism and Perils of Piety* (1999); Stuart Vyse, *Believing in Magic* (1997); Michael Shermer, *Why People Believe Weird Things: Pseudoscience, Superstition, and Other Confusions of Our Time* (1997); Susan Blackmore, *In Search of the Light: The Adventures of a Parapsychologist* (1996); Joe Nickell, *Entities: Angels, Spirits, Demons, and Other Alien Beings* (1995) and *Looking for a Miracle: Weeping Icons, Relics, Stigmata, Visions & Healing Cures* (1993); John Cornwell, *The Hiding Places of God: A Personal Journey into the World of Religious Visions, Holy Objects, and Miracles* (1991); John Schumaker, *Wings of Illusion: The Origin, Nature and Future of Paranormal Belief* (1990); and Terence Hines, *Pseudoscience and the Paranormal: A Critical Examination of the Evidence* (1989).

Best of all are the works of James Randi, who has had a one million dollar prize

sitting in a bank waiting for anyone to prove anything paranormal—there have been no takers in over twenty years. See his books: *Flim-Flam! Psychics, ESP, Unicorns, and Other Delusions* (1988), *An Encyclopedia of Claims, Frauds, and Hoaxes of the Occult and Supernatural: James Randi's Decidedly Skeptical Definitions of Alternate Realities* (1997), and (with Carl Sagan), *The Faith Healers* (1989).

1.1 Science and the Supernatural

1.1.1 The “Scientific Method”

1.1.2 The Advantage of Doubt

1.1.3 The Science of Faith

1.1.4 The Power of Artifice

1.1.5 Distinguishing Fact from Theory

1.1.6 The Marriage of Creativity with Truth

1.1.7 The Lessons of History and the Burden of Proof

1.1.8 The Balance of Proof and Proof of the Extraordinary

1.1.9 Simplicity and Occam’s Razor

For a good book explaining the difference between science and pseudoscience in lay terms, with entertaining examples, see Michael Shermer, *The Borderlands of Science: Where Sense Meets Nonsense* (2001).

On defenses of science and reason against various postmodern critics: Susan Haack, *Manifesto of a Passionate Moderate: Unfashionable Essays* (2000) and *Deviant Logic, Fuzzy Logic: Beyond the Formalism* (1996); and Paul Gross & Norman Levitt, *Higher Superstition: The Academic Left and Its Quarrels With Science* (1997). For more on scientific methods, see bibliography for section II. 3.3, “The Method of Science.”

1.2 Miracles and Historical Method

1.2.1 The Rain Miracle of Marcus Aurelius

Evidence that Marcus Aurelius was intolerant of Christians is presented in T.D. Barnes, “Legislation against the Christians,” *Journal of Roman Studies* 58 (1968) pp. 39-40.

Ancient sources for the rain miracle: Eusebius, *Ecclesiastical History* 5.5.1-4, *Chronicon* 1.206-7, 2.619-21; Tertullian, *Apologeticus* 5.6, *Ad Scapulam* 4; Cassius Dio 71.8.10 (= epitome of book 72). For depictions of the miracle in stone, see Scene XVI of the Column of Marcus Aurelius in, e.g., Giovanni Becati, *Colonna Di Marco Aurelio* (1957). For photograph of Harnouphis Inscription: Marie-Christine Budischovsky, *La Diffusion des Cultes Isiaques Autour de la Mer Adriatique* (1977), pp. 124-25 (no. 25). For photographs and reconstructions of the Statue of Jupiter Thunderbolter: Werner Jobst, *II. Juni 172 n. Chr.: der Tag des Blitz- und Regenwunders im Quadenlande* (1978), cf. Abb. 29 - 30 (No. 24 /

Bd. 335). For images of the Hermes Coin: Mattingly & Sydenham, *Roman Imperial Coinage* (1930), vol. 3, pl. 12, no. 247.

For modern scholarship: Garth Fowden, “Pagan Versions of the Rain Miracle of AD 172” and Michael Sage, “Eusebius and the Rain Miracle: Some Observations,” both in *Historia: Zeitschrift für Alte Geschichte* 36 (1987), pp. 83-113; Michael Sage, “Marcus Aurelius and ‘Zeus Kasios’ at Carnuntum,” *Ancient Society* 18 (1987), pp. 151-72. See also: Julien Guey, “La Date de la «Pluie Miraculeuse» (172 Après J.-C.) et la Colonne Aurélienne,” *Mélanges d’Archéologie et d’Histoire de l’École Française de Rome* 60-61 (1948-49), pp. 105-27, 94-118 and “Encore la «Pluie Miraculeuse»: Mage et Dieu,” (1948), *Revue de Philologie* (3e ser.) 22 (1948), pp. 16-62.

1.2.2 Understanding the Ancient Milieu

Quotations of Edward Gibbon’s *The History of the Decline and Fall of the Roman Empire* (1776-1788) are from the Womersley ed. (1994), vol. 1, ch. 15, pp. 511-512 and vol. 2, ch. 28, pp. 92-3. Quote from Hume: “Of Miracles,” *An Enquiry Concerning Human Understanding* 10.94 (1777).

On the value of historical records in the ancient period, see Michael Grant’s exposition on the nature of historical unreliability even in the most reliable sources: *Greek and Roman Historians: Information and Misinformation* (1995).

On popular gullibility of the time, the Syrian satirist Lucian is a vital reference, writing in the 2nd century. Of his works, the most important here are the “Death of Peregrinus” and “Alexander the Quack Prophet,” which are available in a very readable and engaging English translation in Lionel Casson, *Selected Satires of Lucian* (1962), while Lucian’s equally important work “Lover of Lies” (*Philopseudes*) is accessible in the Loeb Classics Series published by Harvard. For scholarship, see: Ramsay MacMullen, *Christianity & Paganism in the Fourth to Eighth Centuries* (1997); Graham Anderson, *Sage, Saint, and Sophist: Holy Men and their Associates in the Early Roman Empire* (1994); Robin Lane Fox, *Pagans and Christians* (1987); C. P. Jones, *Culture and Society in Lucian* (1986); E. R. Dodds, *The Greeks and the Irrational* (1951). See also Ramsay MacMullen, *Paganism in the Roman Empire* (1981), which includes a photograph of a Glycon statue on the cover (and on pp. 120-21).

On Vespasian and healing statues: Suetonius, *Life of Vespasian* 7.13; Tacitus, *Histories* 4.81; Lucian, *Council of the Gods* 12, *Lover of Lies* 18-20; Pausanias 6.5.4-9, 11.2-9; Athenagoras, *Legatio Pro Christianis* 26. The “two volume” work I mention is Edelstein & Edelstein’s *Asclepius: A Collection and Interpretation of the Testimonies* (1945), esp. §423-450. For photos of a Glycon statue and coin:

Francis Greenleaf Allinson, *Lucian, Satirist and Artist* (1926), pl. opp. p. 108.

On ancient miracles generally: Wendy Cotter, *Miracles in Graeco-Roman Antiquity: A Sourcebook for the Study of New Testament Miracle Stories* (1999); Harold Remus, *Pagan-Christian Conflict over Miracle in the Second Century* (1981); Robert Grant, *Miracle and Natural Law in Graeco-Roman and Early Christian Thought* (1952). Also relevant is Bengt Ankarloo and Stuart Clark, eds., *Witchcraft and Magic in Europe: Ancient Greece and Rome* (1999); and Thomas Matthews, *The Clash of the Gods: A Reinterpretation of Christian Art* (1993)

On Apollonius: Maria Dzielska, *Apollonius of Tyana in Legend and History* (1986), translated by Piotr Pienkowski.

1.2.3 Historical Method Saves the Day

1.2.4 The Argument to the Best Explanation

1.2.5 The Argument from Evidence

There are plausible natural explanations of an apparent resurrection. The four most prominent are the survival theory, the mistake theory, the conspiracy theory, and the bodysnatching theory. I present the best case for the possibility of a mistake or a theft in “The Burial of Jesus in Light of Jewish Law” and “The Plausibility of Theft.” Both in Jeffrey Jay Lowder and Robert Price, eds., *The Empty Tomb: Jesus Beyond The Grave*, to be published by Prometheus Books in 2005.

But this is not the most plausible natural explanation of the origin of Christianity. That would be the theory that there was no physical resurrection, but that Christ was seen risen in visions, as Paul reports, while the stories in the Gospels are the accumulated result of exaggeration, symbolism, and doctrinal and legendary development, over two or more generations. I present the case for this in “The Spiritual Body of Christ and the Legend of the Empty Tomb,” also in the same anthology cited above.

The quotation of Douglas Geivett is from “The Evidential Value of Miracles,” *In Defense of Miracles: A Comprehensive Case for God’s Action in History* (1997), pp. 185-6. Many others have made similar claims that the resurrection of Jesus is “supremely” well attested historically and thus ‘believable’: e.g. Josh McDowell, *The New Evidence That Demands a Verdict* (1999), esp. §9.5A, 9.8A; and Lee Strobel, *The Case for Christ: A Journalist’s Personal Investigation of the Evidence for Jesus* (1998).

A good, neutral summary of extra-biblical mentions of Jesus (and his Resurrection) is Robert Van Voorst, *Jesus Outside the New Testament: An Introduction to the Ancient Evidence* (2000). Important reading is also all the

material in the Secular Web on the “Resurrection” specifically (www.infidels.org/library/modern/theism/christianity/resurrection.html), and on “Christianity” in general (www.infidels.org/library/modern/theism/christianity/).

On Caesar’s crossing the Rubicon, ancient sources that survive include Julius Caesar, *The Civil War*; Appian, *The Civil Wars*; Cassius Dio, *History*; Plutarch, *Life of Caesar*; Suetonius, *Life of the Divine Julius*. Many others are cited or mentioned by ancient authors but do not survive. Modern scholarship on all this (including the material evidence) include Ronald Syme, *The Roman Revolution* (1939); M. Gelzer, *Caesar: Politician and Statesman*, 6th ed. (1968); L. Kreppie, *Colonization and Veteran Settlement in Italy: 47-14 BC* (1983); P.A. Brunt, *The Fall of the Roman Republic and Related Essays* (1988).

(For sources on the historical method, see bibliography concluding section II.3.5, “The Method of History”)

1.2.6 The Criteria of the Good Historian

1.2.7 Prophecy and History

The prophetic criteria come from a Christian apologist who actually ignores or abuses them: Robert Newman, “Fulfilled Prophecy as Miracle,” *In Defense of Miracles: A Comprehensive Case for God’s Action in History* (1997), p. 215. In contrast, on other blatant failures of Biblical prophecy, see Tim Callahan, *Bible Prophecy: Failure or Fulfillment?* (1997), and the Secular Web library on “Prophecy” (www.infidels.org/library/modern/theism/christianity/prophecy.html).

Section 2. Atheism: Seven Reasons to be Godless

2.1 Metaphysical Naturalism is True

2.2 The Religious Landscape is Confused and Mundane

2.2.1 Religion Didn’t Win by Playing Fair

This is all standard, established history. Any mainstream college textbook will reveal the details, and one can follow its bibliography for more. I recommend John McKay, Bennett Hill, and John Buckler, *A History of Western Society*, 6th ed. (1999), in two volumes (*I: From Antiquity to the Enlightenment and II: From Absolutism to the Present*).

But for more specific detail on Christianity’s abuse of power and use of violence, in contrast with greater pagan tolerance, see: Helen Ellerbe, *The Dark Side of Christian History* (1995); Jim Hill and Rand Cheadle, *The Bible Tells Me So: Uses and Abuses of Holy Scripture* (1996); Ramsay MacMullen, *Christianity and Paganism in the Fourth to Eighth Centuries* (1997), *Christianizing the Roman Empire: A.D. 100-400* (1986), and *Paganism in the Roman Empire* (1981); and

combine the very-readable C. Warren Hollister, *Medieval Europe: A Short History*, 7th ed. (1994) with some actual primary sources, like: *The Carolingian Chronicles: Royal Frankish Annals and Nithard's Histories*, tr. by Bernhard Scholz (1972), and Bede, *Ecclesiastical History of the English People* (Penguin Classics ed., 1955). Various histories of slavery and of tribal peoples in America add even more to the horrible story.

On world religions, a good place to start is the *Oxford Dictionary of World Religions* (1997). Just follow its bibliographies for further reading. Also, see H. L. Mencken, *Treatise on the Gods* (1946). Finally, an elegant example of how mundane social forces, not divine aid or even truth, decide the success of religions even today see Roger Finke, *The Churching of America, 1776-1990: Winners and Losers in Our Religious Economy* (1993), and Stephen Prothero, *American Jesus: How the Son of God Became a National Icon* (2003). And applying sociology to Christianity's early days: Rodney Stark, *The Rise of Christianity* (1996).

2.2.2 To the Victor Goes the Spoil

2.2.3 Dissent is Checked at the Door

2.2.4 Religion as Medicine

For more detailed argument that all belief in gods is caused by various cognitive illusions with cultural and behavioral explanations, see: Pascal Boyer, *Religion Explained: The Evolutionary Origins of Religious Thought* (2002); Scott Atran, *In Gods We Trust: The Evolutionary Landscape of Religion* (2002); Robert Buckman, *Can We Be Good Without God? Biology, Behavior, and the Need to Believe* (2002); Michael Shermer, *How We Believe: Science, Skepticism, and the Search for God*, 2nd ed. (2003); Stewart Guthrie, *Faces in the Clouds* (1993).

2.3 The Universe is a Moron

2.4 The Idea of God Doesn't Make Any Sense

2.5 Too Much Needless Cruelty and Misery

2.6 Not Enough Good from God

2.7 Anything Defended with Such Absurdities Must be False

2.7.1 The Argument from Mystery

2.7.2 The "Free Will Defense" Deployment Number One

2.7.3 The "Free Will Defense" Deployment Number Two

2.7.4 The "Arrogance Defense" Deployment Number One

2.7.5 The "Arrogance Defense" Deployment Number Two

2.7.6 The Great Deceiver Defense

2.7.7 Facing the Absurd and Calling it Bunk

For more on this last point, see Antony Flew, "Theology & Falsification: A Golden Jubilee Celebration," *Philosophy Now* October/November 2000, pp. 28-9, reproduced on the Secular Web at www.infidels.org/library/modern/antony_flew/theologyandfalsification.html. On the many natural, nonrational causes of religious feelings and beliefs, see bibliographies concluding the preface to IV.1,

“Not Much Place for the Paranormal,” and after III.10.4, “The Nature of Spirituality.”

For more on atheism generally, see Nicholas Everitt, *Non-Existence of God* (2003) and Michael Martin & Ricki Monnier, eds., *The Impossibility of God* (2003), as well as the Secular Web’s libraries on “Arguments for the Existence of a God” (www.infidels.org/library/modern/theism/arguments.html), and “Theism” generally (www.infidels.org/library/modern/theism/), as well as the rather copious library on “Atheism” (www.infidels.org/library/modern/nontheism/atheism/). There is also a growing section of “Testimonials” written by all sorts of atheists telling the story of their path to nonbelief (www.infidels.org/library/modern/testimonials/), and also a section devoted to “Ex-Christians” telling their own unique stories (www.infidels.org/library/modern/theism/christianity/ex-christian.html).

There is a boundless supply of literature on atheism. And amazingly, much of it is not slanderous. Decent defenses or discussions of atheism include: Michael Martin, *Atheism: A Philosophical Justification* (1992); Theodore Drange, *Nonbelief & Evil: Two Arguments for the Nonexistence of God* (1998); Robin Le Poidevin, *Arguing for Atheism: An Introduction to the Philosophy of Religion* (1996); George Smith, *Atheism: The Case Against God* (1980); Douglas E. Krueger, *What Is Atheism? A Short Introduction* (1998).

There is also a rich literature on leaving or rejecting Christianity for atheism, where many eloquent thinkers have told their story, including: Dan Barker, *Losing Faith in Faith: From Preacher to Atheist* (1992); Michael Martin, *The Case Against Christianity* (1993); Ludovic Kennedy, *All in the Mind: A Farewell to God* (1999); Charles Templeton, *Farewell to God: My Reasons for Rejecting the Christian Faith* (2000); Marlene Winell, *Leaving the Fold* (1993); Bertrand Russell, *Why I Am Not a Christian, and Other Essays on Religion and Related Subjects* (1977).

For one man’s story of rejecting Islam for atheism, see: Ibn Warraq, *Why I Am Not a Muslim* (1995).

One should also not forget the collected essays on religion by the likes of Robert G. Ingersoll and Mark Twain, which can be found in many editions and anthologies.

Part 5. Natural Morality

Section 1. Secular Humanism vs. Christian Theism

1.1 Do Secular Humanists Have No Reason to be Moral?

1.1.1 Love as Reason to be Moral

1.1.2 Debt as Reason to be Moral

1.1.3 Goodness as Reason to be Moral

1.1.4 Self Interest as Reason to be Moral

1.1.5 Trust as Reason to be Moral

1.1.6 Self-Image as Reason to be Moral

1.1.7 Worldly Self-Interest as Reason to be Moral

1.2 What's Wrong with Secular Humanism?

1.2.1 Do We Live in a Sick Society?

On what Secular Humanism *really* means and *really* entails, see the Secular Web's library on the subject (www.infidels.org/library/modern/nontheism/secularhumanism). Books on it are numerous, including: Corliss Lamont, *The Philosophy of Humanism*, 8th ed. (1997); Antony Flew, *Atheistic Humanism* (1993); Paul Kurtz, *In Defense of Secular Humanism* (1983). There are also many anthologies of humanist literature, e.g. Norm Allen, Jr., ed., *African American Humanism: An Anthology* (1991) and Margaret Knight, Edward Blishen, and Jim Herrick, eds., *Humanist Anthology: From Confucius to Attenborough* (1995). There are also at least three "Humanist Manifestos" in print: *Humanist Manifesto I* (1933), *II* (1973), and *III* (2000).

1.2.2 Does Believing in Evolution Make Us Immoral?

1.2.3 Selfish Genes and Selfish Memes

For more, see section V.2.2, esp. 2.2.1, "Evolution of Moral Values."

On why genes are not always 'selfish': Mark Ridley, *The Cooperative Gene: How Mendel's Demon Explains the Evolution of Complex Beings* (2001). On the scientific basis for how evolution can select for kindness and other moral qualities, see the landmark paper by John Collier and Michael Stiglitz, "Evolutionary Naturalism and the Objectivity of Morality," *Biology and Philosophy* 8 (1993), pp. 43-50.

On how genes and memes, nature and nurture, biology and environment, interact in complex ways to produce good and compassionate people, see: Dale Jamieson, *Morality's Progress: Essays on Humans, Other Animals, and the Rest of Nature* (2004); Matt Ridley, *Nature via Nurture: Genes, Experience, and What Makes Us Human* (2003); Shelley Taylor, *The Tending Instinct: Women, Men, and the Biology of Nurturing* (2002); Leonard Katz, ed., *Evolutionary Origins of Morality: Cross-Disciplinary Perspectives* (2001); Andrew Brown in *The Darwin Wars: The Scientific Battle for the Soul of Man* (1999); Jane Maienschein and Michael Ruse, eds., *Biology and the Foundation of Ethics* (1999); Larry Arnhart, *Darwinian Natural Right: The Biological Ethics of Human Nature* (1998); Elliott Sober and David Sloan Wilson, *Unto Others: The Evolution and Psychology of*

Unselfish Behavior (1998); Matt Ridley, *The Origins of Virtue* (1997); Frans de Waal, *Good Natured: The Origins of Right and Wrong in Humans and Other Animals* (1996).

Section 2. Morality in Metaphysical Naturalism

2.1 Outlining a Moral Theory

[NOTE: The abbreviation *MDAP* stands for the book *Moral Discourse and Practice*, edited by Stephen Darwall, Allan Gibbard, and Peter Railton and published in 1997.]

For views very similar but not always identical to mine, which nevertheless complement what I say here with even more rigorous analyses, see: Richard Boyd, “How to Be a Moral Realist,” *MDAP*, pp. 105-35, plus a further list of relevant works on moral realism, *ibid.* p. 106; also Peter Railton, “Moral Realism,” *MDAP*, pp. 137-6.

Excellent defenses of naturalistic moral realism are legion, and I list here the best: David Owen Brink, *Moral Realism and the Foundations of Ethics* (1989); Joseph Daleiden, *The Science of Morality: The Individual, Community, and Future Generations* (1998); and Paul Bloomfield, *Moral Reality* (2001).

Also relevant to my perspective: Jason Casebeer, *Natural Ethical Facts: Evolution, Connectionism, and Moral Cognition* (2003); Richard Taylor, *Virtue Ethics: An Introduction* (2002); Michael Martin, *Atheism, Morality, and Meaning* (2002); Owen Flanagan & Amelie Oksenberg, eds., *Identity, Character, and Morality: Essays in Moral Psychology* (1993); David Carr, *Educating the Virtues: An Essay on the Philosophical Psychology of Moral Development and Education* (1991); Barry Arnold, *The Pursuit of Virtue: The Union of Moral Psychology and Ethics* (1989); N. Dent, *The Moral Psychology of the Virtues* (1984).

2.1.1 The Goal Theory of Moral Value

2.1.2 Happiness and the Moral Life

2.1.3 Self Worth and the Need for a Moral Life

Quotations from Kant are from *Groundwork of the Metaphysic of Morals* or *Grundlegung zur Metaphysik der Sitten* (1785) § 3.4 (by Kant’s arrangement), or § 4.454 (in the standard edition of the Royal Prussian Academy in Berlin), or pp. 112-3 in Kant’s 2nd German ed. (1786), or p. 122 of H. J. Paton’s English translation, Harper Torchbooks ed. (1964); see also, Robert Wolff, *The Autonomy of Reason: A Commentary on Kant’s Groundwork of the Metaphysic of Morals* (1986), § 3.5, p. 211.

Regarding the link between (secular) morality and happiness, see Ruut Veenhoven, *Conditions of Happiness* (1984), a masterwork of social psychology, wherein happiness is treated in fairly great detail, e.g. defined, scientifically measured, etc. However, his work did not explore distinctions between happiness-defeating and happiness-improving moral systems, and such research is greatly needed.

See also: Martin Seligman in *Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment* (2002); Stephen Braun, *The Science of Happiness: Unlocking the Mysteries of Mood* (2001); David Lykken, *Happiness: The Nature and Nurture of Joy and Contentment* (2000); and Michael Argyle, *The Psychology of Happiness*, 2nd ed. (2001), which comes with an extensive bibliography on the issue. Books recommended in III. 10.2, “Reason as the Servant of Desire” are also relevant here.

Also important is philosophical literature that draws on the same kind of data and concepts, such as: A. C. Grayling, *Life, Sex, and Ideas: The Good Life Without God* (2003); David Cortesi, *Secular Wholeness: A Skeptic's Paths to a Richer Life* (2002); Richard Warner, *Freedom, Enjoyment, and Happiness: An Essay on Moral Psychology* (1987); or Russell Gough, *Character Is Destiny: The Value of Personal Ethics in Everyday Life* (1997). Even some Christian writers, like David Myers, agree with this view (see bibliography to chapter III.7).

2.1.4 The Futility of Secret Violations

2.2 How Naturalism Accounts for Value

On the nature of ‘values’ essential reading is Nicholas Rescher, *Introduction to Value Theory* (1969) and William Smart, *Introduction to the Theory of Value* (1966), but more recently and most in accord with my conclusions is Gerald Gaus, *Value and Justification: The Foundations of Liberal Theory* (1990).

On the study of ‘value’ by science see Gaus, as well as: Daniel Kahneman & Amos Tversky, *Choices, Values and Frames* (2000); Herbert Hyman, *The Value Systems of Different Classes: A Social Psychological Contribution to the Analysis of Stratification* (1993); Andrew Reid Fuller, *Insight into Value: An Exploration of the Premises of a Phenomenological Psychology* (1990); etc.

2.2.1 Evolution of Moral Values

For Railton’s theory of social rationality, see *MDAP*, pp. 150-4; Allan Gibbard, “Wise Choices, Apt Feelings,” *ibid.*, pp. 179-198; David Gauthier, “From Morals by Agreement,” *MDAP*, pp. 341-61.

On the evolutionary basis of moral sentiments and values, see the bibliography to

section V.1.2.3, “Selfish Genes and Selfish Memes.” For a broader survey of all the relevant science: Michael Shermer, *The Science of Good and Evil: Why People Cheat, Share, Gossip, and Follow the Golden Rule* (2004). On cultural evolution in general: e.g. Carol & Melvin Ember, *Cultural Anthropology*, 9th ed. (1998); for more specific treatment of morality: e.g. John Cook, *Morality and Cultural Differences* (1998).

2.2.2 Human Nature

This has been aptly defended by Boyd, who articulates a more thorough defense of the use of ‘natural kinds’ within naturalism (*MDAP*, p. 111, 115-18), even though no doctrine of essentialism is necessary to the concept of human nature. See also Paul Ehrlich, *Human Natures: Genes, Cultures, and the Human Prospect* (2002) and Steven Pinker, *The Blank Slate: The Modern Denial of Human Nature* (2002), both of whom address many other important issues we have touched on before.

2.2.3 Personhood

2.2.4 Speciesism

2.2.5 The Meaning of Normative Propositions

2.2.6 Moral Relativism and Moral Controversy

2.2.7 Defining Good and Evil

For more: see Aristotle’s *Nicomachean and Eudemian Ethics*; Russ Shafer-Landau, *Whatever Happened to Good and Evil* (2003); and Richard Taylor, *Good and Evil: A New Direction* (1999).

2.2.8 Moral Reason and Moral Intuition

2.3 Eliminating Some Metaethical Defeaters

2.3.1 What About Moral Suicide?

2.3.2 What About Weird Aliens and Psychopathic Robots?

See Dennis Doren, *Understanding and Treating the Psychopath* (1996); and William Reid, John Walker, & Darwin Dorr, eds. *Unmasking the Psychopath: Antisocial Personality and Related Syndromes* (1986).

Section 3. Moral Conclusions: Tying it All Together

A wide-ranging critique of traditional theistic ethics and metaethics appears in Joseph Daleiden, *The Final Superstition: A Critical Evaluation of the Judeo-Christian Legacy* (1994). Regarding how theism actually creates new problems for the ethical philosopher, see: Michael Martin, “Copan’s Critique of Atheistic Objective Morality,” *Philosophia Christi* (Series 2) 2:1 (2000), pp. 75-89; Richard Gale, “Freedom and the Free Will Defense,” *Social Theory and Practice* 16:3

(Fall, 1990); Theodore Schick, Jr., "Morality Requires God... or Does It?" *Free Inquiry* 17:3 (Summer, 1997); Graham Oppy, "Is God Good by Definition?" *Religious Studies* 28 (1992), pp. 467-474; Adolf Grünbaum, "The Poverty of Theistic Morality," *Science, Mind and Art: Essays on Science and the Humanistic Understanding in Art, Epistemology, Religion and Ethics, in Honor of Robert S. Cohen* (1995), pp. 203-242; Richard Gale, "R. M. Adams's Theodicy of Grace," *Philo* 1 (1998), pp. 36-44.

Part 6. Natural Beauty

Section 1. Beauty as Emotional Appraisal

Section 2. Eight Rules of Beauty

- 2.1 The Peak Shift Effect**
- 2.2 The Correlation Effect**
- 2.3 The Stand-Out Effect**
- 2.4 The Contrast Effect**
- 2.5 The Symmetry Effect**
- 2.6 The Counter-Symmetry Effect**
- 2.7 The Analogy Effect**
- 2.8 The Anticipation Effect**

Section 3. Beauty in Human Life

- 3.1 Is Beauty Bunk?**
- 3.2 The Subjective Nature of Beauty**
- 3.3 The Higher Virtues of Art**
 - 3.3.1 Art as Communication**
 - 3.3.2 Art as Education**
 - 3.3.3 Art as Skill**

On the biological and sociological basis for artistic feelings and inclinations see: Caleb Crain, "The Artistic Animal," *Lingua Franca* (October, 2001), pp. 28-37, who summarizes the landmark work of Ellen Dissanayake in *What Is Art For?* (1988), *Homo Aestheticus: Where Art Comes from and Why* (1992) and *Art and Intimacy: How the Arts Began* (2000); see also: Margaret Livingstone, *Vision and Art: The Biology of Seeing* (2002); Semir Zeki, *Inner Vision: An Exploration of Art and the Brain* (2000); Joseph Goguen, ed., *Journal of Consciousness Studies: Art and the Brain: Controversies in Science and the Humanities* (1999); Joseph A. Goguen and Erik Myin, eds., *Journal of Consciousness Studies: Art and the Brain Part II: Investigations Into the Science of Art* (2000); and William Benzon, *Beethoven's Anvil: Music in Mind and Culture* (2001). See also: Richard Dawkins, *Unweaving the Rainbow: Science, Delusion and the Appetite for Wonder* (2000).

Part 7. Natural Politics

On the biological and sociological basis for artistic feelings and inclinations see: Caleb Crain, “The Artistic Animal,” *Lingua Franca* (October, 2001), pp. 28-37, who summarizes the landmark work of Ellen Dissanayake in *What Is Art For?* (1988), *Homo Aestheticus: Where Art Comes from and Why* (1992) and *Art and Intimacy: How the Arts Began* (2000); see also: Margaret Livingstone, *Vision and Art: The Biology of Seeing* (2002); Semir Zeki, *Inner Vision: An Exploration of Art and the Brain* (2000); Joseph Goguen, ed., *Journal of Consciousness Studies: Art and the Brain: Controversies in Science and the Humanities* (1999); Joseph A. Goguen and Erik Myin, eds., *Journal of Consciousness Studies: Art and the Brain Part II: Investigations Into the Science of Art* (2000); and William Benzon, *Beethoven’s Anvil: Music in Mind and Culture* (2001). See also: Richard Dawkins, *Unweaving the Rainbow: Science, Delusion and the Appetite for Wonder* (2000).

Section 1. Morality vs. Politics

Section 2. The Rationality of the Moderate

Section 3. Basic Political Theory

For the thought that led to the creation of the most novel and important democratic republic in history see: Thomas Paine *The Rights of Man* (1791) and *Common Sense* (1776); and Alexander Hamilton, James Madison, and John Jay, *The Federalist Papers* (1788). And everyone should read the Constitution of the United States—it is far from perfect, but it is the first of its kind: a social charter with general human happiness as its declared aim, and universal liberty its declared means.

For more on political science and philosophy in general, and as understood today, see: Austin Ranney, *Governing: An Introduction to Political Science*, 8th ed. (2000); Thomas Dye, Harmon Zeigler, and L. Harmon Zeigler, *The Irony of Democracy: An Uncommon Introduction to American Politics*, 11th ed. (2000); and Jonathan Wolff, *An Introduction to Political Philosophy* (1996).

Section 4. The Politics of Metaphysical Naturalism

4.1 Political Method

4.2 The Best Polity

4.3 Choosing Our Leaders

Section 5. My Politics

5.1 A Commitment to Freedom

For the whole story of human rights from a variety of perspectives (not all of them mine), see: Robert Maddex, Mary Robinson, and Desmond Tutu, *International Encyclopedia of Human Rights: Freedom, Abuses, and Remedies* (2000); Charles Black, *A New Birth of Freedom: Human Rights, Named and Unnamed* (1999); Tara Smith, *Moral Rights and Political Freedom* (1995). On regulatory law, see next section.

5.2 A Commitment to Social Reform

Some worthwhile reading on the debate over how much government should or shouldn't do for us: Erich Fromm, *The Sane Society* (1990); Phillip Brown and Hugh Lauder, *Capitalism and Social Progress: The Future of Society in a Global Economy* (2001); Richard A. Epstein, *Principles for a Free Society: Reconciling Individual Liberty with the Common Good* (1998); Stephen Elkinand and Karol Soltan, eds., *A New Constitutionalism: Designing Political Institutions for a Good Society* (1993).

5.3 A Commitment to Executive Reform

For more on all of this, see: David Osborne and Ted Gaebler, *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector* (1993); Philip Howard, *The Death of Common Sense: How Law Is Suffocating America* (1996); David Osborne and Peter Plastrik, *Banishing Bureaucracy: The Five Strategies for Reinventing Government* (1998); Al Gore, *Creating a Government that Works Better and Costs Less* (1993) and *The Best Kept Secrets in Government: How the Clinton Administration Is Reinventing the Way Washington Works* (1996).

5.4 A Commitment to Education

There are countless important works on education, but these at least are required reading: Joe Harless, *The Eden Conspiracy: Educating for Accomplished Citizenship* (1998); David Levine, Robert Lowe, Robert Peterson, and Rita Tenorio, eds., *Rethinking Schools: An Agenda for Change* (1995); David Berliner, Bruce Biddle, and James Bell, *The Manufactured Crisis: Myths, Fraud, and the Attack on America's Public Schools* (1996); Gerald W. Bracey, *Setting the Record Straight: Responses to Misconceptions about Public Education in the United States* (1997).

Against the idea of public funding of private schools: Gerald W. Bracey, *The War Against America's Public Schools: Privatizing Schools, Commercializing Education* (2001); Edd Doerr, Albert Menendez, and John Swomley, *The Case*

Against School Vouchers (1996); Edd Doerr and Al Menendez, *Church Schools & Public Money: The Politics of Parochialism* (1991); and Art Must, ed., *Why We Still Need Public Schools: Church/State Relations, and Visions of Democracy* (1992).

5.5 A Commitment to Defense

On the nature and importance of war, and how to conduct it, there are several classic works that ought to be required reading for anyone who wants to understand the subject: Sun Tzu, *The Art of War* (c. 270 B.C.); Niccolò Machiavelli, *The Art of War* (c. 1520); and Karl Von Clausewitz, *On War* (1832). Related to the issue of military leadership is Oren Harari, *The Leadership Secrets of Colin Powell* (2002).

On guns in America: Michael Bellesiles, *Arming America: The Origins of a National Gun Culture* (2001); Gary Kleck and Don Kates, *Armed: New Perspectives on Gun Control* (2001); Terry O'Neill, *Gun Control: Opposing Viewpoints* (2000). On the subject of personal self-defense, see: Sanford Strong, *Strong on Defense: Survival Rules to Protect You and Your Family from Crime* (1996).

5.6 A Commitment to Secularism

These are just some of the issues surrounding church-state separation. There is a lot one could learn about it, and a good place to start is the Secular Web's library on the "Separation of Church and State" (www.infidels.org/library/modern/church-state/).

Important books include: Robert Boston and Barry Lynn, *Why the Religious Right Is Wrong About Separation of Church & State* (1994); Isaac Kramnick and R. Laurence Moore, *The Godless Constitution: The Case Against Religious Correctness* (1997); Marvin Frankel, *Faith and Freedom: Religious Liberty in America* (1995).

On the specific issues I raise: Robert Alley, *School Prayer: The Court, the Congress, and the First Amendment* (1994); NAS Council, *Science and Creationism: A View from the National Academy of Sciences* (1999); Ruth Dixon-Mueller & Paul Dagg, *Abortion and Common Sense* (2002); Robert Baird and Stuart Rosenbaum, eds., *The Ethics of Abortion: Pro-Life vs. Pro-Choice* (2001); Cynthia Gorney, *Articles of Faith: A Frontline History of the Abortion Wars* (2000); Rickie Solinger, ed., *Abortion Wars: A Half Century of Struggle, 1950-2000* (1998). On education, see VII.5.4, "A Commitment to Education."

Section 6. The Secular Humanist's Heaven

On humanistic futurism: Wil McCarthy, *Hacking Matter: Levitating Chairs, Quantum Mirages, and the Infinite Weirdness of Programmable Atoms* (2003); Douglas Mulhall, *Our Molecular Future: How Nanotechnology, Robotics, Genetics, and Artificial Intelligence Will Transform Our World* (2002); Gerard O'Neill, *High Frontier: Human Colonies in Space*, 3rd ed. (2000); Michio Kaku, *Visions: How Science Will Revolutionize the 21st Century* (1998); and see the Secular Web section on "Extropianism" (www.infidels.org/library/modern/lifeafterdeath/extropianism/).

Part 8. Conclusion