



**Mere Economic Science:
C. S. Lewis and the Poverty of
Naturalism**

David J. Theroux
Founder and President, The Independent Institute

Independent Institute Working Paper Number 67

March 6, 2007

“Good is indeed something objective, and reason the organ whereby it is apprehended.”
—C.S. Lewis¹

“Religion without science is lame, but science without religion is blind.”
—Albert Einstein

For many years, much of the sciences, both natural and social (including economics), has been dominated by a naturalist (or modernist or structuralist) worldview that generally assumes that the universe and life are purposeless and that mankind is simply a more complex, material version of all else in the natural world. In other words, an individual human is viewed as no more and no less than a system of molecular processes determined by natural physical laws. In this system, all human endeavor and ideas are determined solely as the product of a mechanistic, causal process of physical events.

The philosopher Dallas Willard describes naturalism as a form of monism: “It holds, in some order of interdependence, that reality, knowledge and method . . . are of only one basic kind. That is, there are not two radically different kinds of reality or knowledge or method. [Naturalism] is fundamentally opposed to Pluralism, and most importantly to Dualism as traditionally understood (Plato, Descartes, Kant).” True to this form of monism, “[t]he one type of reality admitted by it is that of the sense-perceptible world and its constituents. All knowledge is, for it, reducible to (or in some manner continuous with) sense perception, and all inquiry essentially involves sense perception, directly or indirectly.” And despite the current preference for “‘the scientific’—the organization of data around empirically underdetermined hypotheses” over the “sense-perceptible,” “[the scientific] is understood to constitute empirical research and, hopefully, to yield empirical or descriptive knowledge.” Naturalism thus “staggers back and

I am very grateful for the helpful comments of numerous people in revising this paper, including Paul Cleveland, Kenneth Elzinga, Burton Folsom, Stewart Goetz, Gerald Gunderson, P.J. Hill, Peter Klein, Leonard Liggio, Andrew Morriss, Jennifer Roback Morse, Robert Nelson, Benjamin Powell, Nicholas Rescher, James Sadowski, Rodney Stark, Amy Sturgis, and Robert Whaples. However, any errors and deficiencies are entirely my own responsibility.

¹ C. S. Lewis, “The Poison of Subjectivism,” in *Christian Reflections*, edited by Walter Hooper (Grand Rapids, Mich.: William B. Eerdmans, 1967), 8.

forth between physicalism (materialism) as a general ontology and first philosophy, and outright physics-ism or scientism (which need not take the form of physics-ism)—often, though not always, trying to derive physics-ism from scientism and then physicalism from physics-ism. This continues up to the present.”²

Trained in philosophy and as a professor of medieval and renaissance literature at Oxford and Cambridge Universities, C. S. Lewis had become profoundly concerned with this issue as he witnessed the rise of total war and totalitarianism in the early part of the 20th Century, grounded in paradigms of ideas that he found pervasive in academia and among intellectuals more broadly. Was collectivism and the de-humanization of mankind inevitable or was it an error of ideas that could be addressed and refuted?

Lewis hence went on to examine this worldview—the naturalist view in which all of reality is defined in terms of the natural (material) world, subject solely to the laws of physics, and that no parallel or extranatural or supernatural world exists apart from *this* natural world—throughout his work, including its practical reality, showing that material “facts” alone, however they may be defined, cannot provide any conclusion without some independent basis to evaluate such data. He claims that the analysis of any world requires the existence of scientists whose views are not mechanically determined by the world they are examining.

In short, Lewis presents the “argument from reason” that the enterprise of science cannot exist if a strictly naturalist view of science were true. He finds that efforts to apply a naturalist theory to knowledge, including economic science, lead to a denial of the validity of reasoning and the notion of truth. As Lewis notes, “the Naturalist thinks that nothing but Nature exists, the word *Nature* means to him merely ‘everything’ or ‘the whole show’ or ‘whatever there is.’” Thus, “[w]hat the Naturalist believes is that the ultimate fact, the thing you can’t go behind, is a vast process in space and time which is *going on of its own accord*” (emphasis in original).

² Dallas Willard, “Knowledge and Naturalism,” in *Naturalism: A Critical Analysis*, edited by William Lane Craig and J. P. Morehead (London: Routledge, 2000), 26, 36.

Further, inside this total, closed system, every single event “happens because some other event has happened; in the long run, because the Total Event is happening.” In the end, everything “is what it is because other things are what they are; and so, eventually, because the whole system is what it is. All the things and events are so completely interlocked that no one of them can claim the slightest independence from ‘the whole show.’ None of them exists ‘on its own’ or ‘goes on of its own accord’ except in the sense that it exhibits, at some particular place and time, that general ‘existence on its own’ or ‘behavior of its own accord’ which belongs to ‘Nature’ (the great interlocked event) as a whole.” Lewis thus indicates that “no *thoroughgoing* [emphasis added] Naturalist believes in free will: free will would mean that human beings have the power of independent action, the power of doing something more or other than what was involved by the total series of events. And any such separate power or originating events is what the Naturalist denies. Spontaneity, originality, action ‘on its own,’ is a privilege reserved for ‘the whole show,’ which he calls *Nature*.”³

Contemporary naturalist writers such as evolutionary biologists Richard Dawkins, Daniel Dennett, and E. O. Wilson subscribe to a physicalism according to which only the material world exists. Such a worldview logically led naturalist philosopher Friedrich Nietzsche to propose that man “is beyond good and evil,” and behaviorist-naturalist B. F. Skinner to argue that man is “beyond freedom and dignity.”

Some readers may object at this point to what they consider Lewis’s overgeneralization, noting that there are naturalists who do *not* consider themselves to be strict materialists or physicalists. And some nonphysicalist naturalists, such as Buddhists, claim that matter itself ultimately is not basic to a reality, which they still define entirely by the universe, a difference really without a distinction. But all naturalists believe that the natural world itself is all there is to reality. My discussion here hence pertains to all versions of naturalism and examines the roots of

³ C. S. Lewis, *Miracles: A Preliminary Study*, 2nd ed. (1960; reprint, San Francisco: HarperCollins, 2001), 6–8.

science, especially pertaining to the study of human behavior, reason, the mind, and the requisites for rational human inquiry. Using Lewis's analysis as a starting point, I conclude that a worldview based on a dualist theism is required for reason, free will, and science to be possible. Moreover, such a perspective had to be widely adopted historically before science could be established.

Science vs. Scientism

Lewis himself does not attempt to provide a systematic refutation of positivism *per se*⁴, but in his work he does give us a powerful framework to reestablish the essential need for a worldview before science can proceed and have any meaning.⁵ Although trained in classical and medieval philosophy and literature, rather than in economics, he offers an important link with the work of such classical economists as Jean-Baptiste Say, John Cairnes, and Nassau Senior; Austrian School economists such as Carl Menger, Friedrich A. Hayek, Ludwig von Mises, Israel Kirzner, and Murray Rothbard; public-choice economists such as James Buchanan and Gordon Tullock; and those neoclassical and other economists who have similarly seen the embrace of positivism and scientism as contrary to the development of knowledge regarding human action. Like Lewis, such economists can be termed *social ontologists*, who believe in an objective, rational reality

⁴ Positivism as first formulated by Auguste Comte in his 1830 book, *Cours de Philosophie Positive*, claims a Universal Rule that there have been three stages of social history and that the first two, the "Theological" and "Metaphysical" phases, have given way to the post-Enlightenment "Scientific" or "Positive" phase in which *all* knowledge must be provable empirically, not through argumentation, meaning that only testable, repeatable events can provide truth. However, since the theory of positivism cannot itself be proven empirically, as Comte's theory would require, it is circular and self-refuting. Moreover, by insisting that truth is limited to testable, repeatable physical events, positivism banishes most human knowledge which necessarily includes deductive logic and the historical evidence of unique past events, none of which are observable. As a result, positivism produces a metaphysical naturalism and is fundamentally based on a materialist fideism.

⁵ In economics and other fields, this is not to say that many scholars who may embrace or are oblivious to the claims or implications of naturalism are not in fact producing important scientific findings, but they are necessarily doing so despite naturalism. As discussed in this paper, science requires a nonnaturalist philosophical framework for rational analysis to proceed and have any meaning.

“both as a logical starting point and as a criterion of validity.”⁶ Rothbard's definition of scientism can be used to sum up their view: “Scientism is the profoundly unscientific attempt to transfer uncritically the methodology of the physical sciences to the study of human action. Both fields of inquiry must, it is true, be studied by the use of reason—the mind’s identification of reality. But then it becomes crucially important, in reason, not to neglect the critical attribute of human action: that, alone in nature, human beings possess a rational consciousness.”⁷ Similarly, the founder of the Austrian school of economics, Carl Menger, earlier critiqued naturalistic and mechanistic analyses of human choices, rejecting all “attempts to carry over the peculiarities of the natural-scientific method of investigation uncritically to economics,”⁸ because human choices are uncertain, decision-making is subjective, and knowledge is limited.

Hayek notes that in the study of economic and social phenomena during the eighteenth and early nineteenth century, “a new attitude made its appearance. The term *science* came more and more to be confined to the physical and biological disciplines which at the same time began to claim for themselves a special rigorousness and certainty which distinguished them from all others.” He decried this misapplication of the methods of the physical sciences to social studies, labeling it “*scientism* or *scientistic* prejudice.” According to his view, “[i]t should be noted that, in the sense in which we shall use these terms, they describe, of course, an attitude which is decidedly unscientific in the true sense of the word, since it involves a mechanical and uncritical application of habits of thought to fields different from those in which they have been formed.”⁹

⁶ Emil Kauder, “Intellectual and Political Roots of the Older Austrian School,” *Zeitschrift für Nationalökonomie* 17, no. 4 (1958): 411–25, cited in Murray N. Rothbard, “Praxeology as the Method of the Social Sciences,” in *Phenomenology and the Social Sciences*, vol. 2, edited by Maurice Natanson (Evanston, Ill.: Northwestern University Press, 1973), 47.

⁷ Murray N. Rothbard, “The Mantle of Science,” in *Scientism and Values*, edited by Helmut Schoeck and James W. Wiggins (Princeton, N.J.: D. Van Nostrand, 1960), 163.

⁸ Carl Menger, *Principles of Economics* (New York: New York University Press, 1981), 47.

⁹ F. A. Hayek, *The Counter-revolution of Science: Studies on the Abuse of Reason* (New York: Free Press, 1952), 19–21, 23–24.

In the nineteenth century, John Henry Newman defined scientism as “an evident deflection or exorbitance of science from its proper course,” distinguishing between the validity of the natural sciences and “the inappropriate application of their assumptions and methods and the excessive claims for their regulative status in life and curricula.”¹⁰

In discussing scientism, Lewis draws upon the classic writings of Aristotle, Plato, Aeschylus, Virgil, the apostle John, and Augustine, as well as upon the more contemporary work of Thomas Aquinas and the Scholastics, Dante Alighieri, Edmund Spenser, John Donne, George Herbert, John Milton, Richard Hooker, Samuel Johnson, G.K. Chesterton, Owen Barfield, and others. In particular, both Aquinas’s notion of “common sense” (*communis sensus*) as described in his *Summa Theologica* and the legacy of rational theism found in Jewish, Islamic, Christian, and certain pagan writers—the core philosophical system of the West—had a powerful effect on Lewis. To him, the culture of “modernism” is not just an historical aberration of this “common sense,” but a profound threat to the pursuit of truth, goodness, and civilization itself.

This “common sense,” or Lewis’s notion of common rationality, consisted in part on the intrinsic understanding by each individual as a human being of an objective, universal, and natural legal order of truth and morality (the “natural law,” or what Lewis calls the “Tao”¹¹), upon which each person discerns, chooses, and acts.¹² For Lewis, each individual responds to and can come to know and experience this external reality of truth—it is a “common knowledge.” This insight is similar to that of Adam Smith in his 1759 book, *The Theory of Moral Sentiments*, in which he discusses how individuals are born with an innate moral

¹⁰ As described by Michael Aeschliman in *The Restitution of Man: C. S. Lewis and the Case Against Scientism* (Grand Rapids, Mich.: William B. Eerdmans, 1998), 35.

¹¹ Lewis’s use of the term “Tao” (literally meaning the “way” or “path”) to describe natural moral law should not be confused with the Chinese naturalist philosophy of Taoism (Daoism), the various forms of which uphold nihilism, ethical skepticism, relativism, mysticism, intuitionism, and primitivism.

¹² C. S. Lewis, *The Abolition of Man* (San Francisco: HarperSanFrancisco, 2001), 18–19, 83–101. Also see C. S. Lewis, *Mere Christianity* (San Francisco: HarperSanFrancisco, 1952); C. S. Lewis, *God in the Dock* (Grand Rapids, Mich.: William B. Eerdmans, 1970).

conscience and “sympathy” for the well-being of others by following the natural law.¹³

Similarly, in line with this idea of common knowledge, Aldous Huxley criticizes scientism as “intensive specialization [that] tends to reduce each branch of science to a condition almost approaching meaninglessness,” pointing to “many men of science who are actually proud of this state of things. Specialized meaninglessness has come to be regarded, in certain circles, as a kind of hallmark of true science.”¹⁴

Lewis is particularly a critic of the modern materialist view of mankind, which, according to Jacob Bronowski, defines mankind as “a part of nature, in the same sense that a stone is, or a cactus, or a camel.”¹⁵ In response to this view, Lewis notes not only that no stone, cactus, or camel possesses reason, but that to claim that humans are no different is to deny the existence of mankind itself and incoherently to reduce the individual to a mechanistic entity, a claim that defies all “common sense.” Hence, Lewis’s approach agrees with that of the philosopher William Barrett, with its focus on a “moral will” that is larger than the physical: “We still go about our everyday business guided by this moral will, and we still discriminate on its terms. . . . In short, without being aware of it, we do follow Kant’s view that the moral will is the center of the personality. And yet, amazingly enough, modern philosophers have yet to come to terms with this fact.”¹⁶

To underscore the basic problem in the “strict materialist” view, Lewis quotes the Marxist biologist J. B. S. Haldane: “If my mental processes are determined wholly by the motion of atoms in my brain, I have no reason to suppose that my beliefs are true . . . and hence I have no reason for supposing my brain to be composed of atoms.”¹⁷

¹³ Adam Smith, *The Theory of Moral Sentiments* (Indianapolis, Ind.: Liberty Fund, 1976), 47-48.

¹⁴ Aldous Huxley, *Ends and Means* (London: Chatton and Windus, 1937), 276.

¹⁵ Jacob Bronowski, *The Identity of Man* (Garden City, N.J.: Natural History Press, 1965), 2.

¹⁶ William Barrett, *The Illusion of Technique: A Search for Meaning in a Technological Civilization* (Garden City, N.J.: Anchor-Doubleday, 1978), 232–33.

¹⁷ Lewis, *Miracles*, 15. Lewis quoted from J. B. S. Haldane, *Possible Worlds and Other Essays* (1927; reprint New Brunswick, N.J.: Transaction, 2001).

Although some “nonreductive” naturalists do not consider themselves strict materialists, Lewis maintains that even nonmaterialist naturalism fails. As Victor Reppert characterizes this failure,

Any genuinely naturalistic position requires that all instances of explanation in terms of reasons be further explained in terms of a non-purpose substratum. For if some purposive or intentional explanation can be given and no further analysis can be given in non-purposive and non-rational terms, then reason must be viewed as a fundamental cause in the universe, and this strikes me as a huge concession to positions such as theism, idealism and pantheism, which maintain that reasons are fundamental to the universe. Any genuine naturalistic position will be subject to the same objections.¹⁸

Naturalism as a creed is a very old one. A number of the pre-Socratic philosophers (e.g., Thales, Empedocles, Anaxagoras, and Democritus) were probably the first to propose an early version of naturalism, resulting in Lucretius’s book *On the Nature of Things* in the first century B.C. Plato, Parmenides, and Aristotle discredited the pre-Socratic naturalists, and it was not until much later that the naturalist creed resurfaced in a major way in the eighteenth and nineteenth centuries with David Hume, Auguste Comte, Henri de Saint-Simon, Friedrich Nietzsche, Karl Marx, Sigmund Freud, Charles Darwin, and others.¹⁹ Michael Rea traces the origin of naturalism to the nineteenth century “in the writings of such philosophers as Comte, [John Stuart] Mill, and the German materialists.”²⁰ Hayek similarly connects these writers’ views to Comte, Saint-Simon, and others, but further points out that the latter “physicalists” suffer from an intellectual bigotry. For example, in the seventeenth century, an earlier key advocacy of a puritanical

¹⁸ Victor Reppert, *C. S. Lewis’s Dangerous Idea: In Defense of the Argument from Reason* (Downers Grove, Ill.: InterVarsity Press, 2003), 51.

¹⁹ Louis Markos, *Lewis Agonistes: How C. S. Lewis Can Train Us to Wrestle with the Modern and Postmodern World* (Nashville, Tenn.: Broadman and Holman, 2003), 32.

²⁰ Michael Rea, *World Without Design: The Ontological Consequences of Naturalism* (Oxford: Oxford University Press, 2004), 23.

naturalism made nonscientist British Lord Chancellor Francis Bacon the “demagogue of science” and resulted in his irrational prejudice against Copernican astronomy, and Comte’s narrow-minded naturalism/collectivism led him to proclaim that the use of the microscope should be banned outright.²¹

Bacon was also the principal advocate for an explicitly utilitarian basis for science (“scientific knowledge is power”), and as a positivist he opposed Plato, Aristotle, and Aquinas, who believed that all phenomena were understandable in philosophical terms of preconceived objective ideas. In response to Bacon, Lewis quotes his words that to follow scientism “is to extend Man’s power to the performance of all things possible,”²² an ominous amoral view, especially given the megadeath weaponry and war, the Gulag, and the concentration-camp gas ovens and “medical” experiments of the modernist epoch. Accordingly, Lewis refers to the amoral utilitarian view of science as “futilitarianism,”²³ in which mankind is brutalized in unprecedented “scientific” ways in the name of progress.

In 1946, George Orwell similarly pointed to those who defended the Soviet Union’s “scientific” materialism: “They appear to think that the destruction of liberty [and life] is of no importance so long as their own line of work is for the moment unaffected.”²⁴ Scorn for the amorality of scientism can also be found in the work of a wide range of other writers.²⁵

²¹ Hayek, *The Counter-revolution of Science*, 22.

²² Lewis, *The Abolition of Man*, 48.

²³ C.S. Lewis, “De Futilitate,” in *Christian Reflections*, edited by Walter Hooper (Grand Rapids, Mich.: William B. Eerdmans, 1967), 57-71. Also see C.S. Lewis, “Introduction,” to D.E. Harding, *The Hierarchy of Heaven and Earth: A New Diagram of Man in the Universe* (Gainesville, Flor.: University Press of Florida, 1951), reprinted as “The Empty Universe,” in *Present Concerns*, edited by Walter Hooper (New York: Harcourt, 1986), 81-86.

²⁴ George Orwell, “The Prevention of Literature,” in *The Collected Essays of George Orwell*, edited by S. Orwell and I. Angus (New York: Harcourt, Brace, 1968), 4: 70.

²⁵ A small selection of such writers includes Irving Babbitt, George Berkeley, William Blake, Louis Bredvold, Edmund Burke, Samuel Butler, Herbert Butterfield, Samuel Coleridge, Lester Crocker, John Donne, Fyodor Dostoevsky, T. S. Eliott, Desiderius Erasmus, Richard Hooker, Soren Kierkegaard, Arthur Koestler, E. R. Leavis, Paul Elmer More, Blaise Pascal, John Passmore, Alexander Pope, Ezra Pound, Edward Said, E. F. Schumacher, William Shakespeare, Alexander Solzhenitsyn, Jonathan Swift, Basil Willey, among others.

Science and Religion

Interestingly enough, Western science developed from the Thomist “commonsense” view that the universe is orderly and rationally intelligible. As Rodney Stark discusses in his book *The Victory of Reason*, the Scientific Revolution was not, as is popularly supposed, the result of an alleged Enlightenment battle of “secular forces of reason” against the “irrational religious dogma” of the Middle Ages. “Rather, these achievements were the culmination of many centuries of systematic progress by medieval Scholastics, sustained by that uniquely Christian twelfth-century invention, the university. Not only were science and religion compatible, they were inseparable—the rise of science was achieved by deeply religious Christian scholars.”²⁶

Such insights were rooted in a Christian theology that went back to the very origins of the Christian Church and were developed in the work of many early writers. Quintus Tertullian of the second century A.D., said, “Reason is a thing of God, inasmuch as there is nothing which God the Maker of all has not provided, disposed, ordained by reason—nothing which He has not willed should be handled and understood by reason.”²⁷ Clement of Alexandria in the third century noted, “Do not think that we are to be asserted by reason. For indeed it is not safe to commit these things to bare faith without reason, since assuredly truth cannot be without

²⁶ Rodney Stark, *The Victory of Reason: How Christianity Led to Freedom, Capitalism, and Western Success* (New York: Random House, 2005), 12. For an examination of the development of economics by the Scholastic moralists and philosophers, see also Alejandro A. Chafuen, *Faith and Liberty: The Economic Thought of the Late Scholastics* (Lanham, Md.: Lexington Books, 2003); Murray N. Rothbard, *Economic Thought before Adam Smith: An Austrian Perspective on the History of Economic Thought*, vol. 1 (Brookfield, Vt.: Edward Elgar, 1995), 51–64, 97–133; Marjorie Grice-Hutchinson, *The School of Salamanca: Readings in Spanish Monetary Theory, 1544-1605* (Oxford University Press, 1952) and *Early Economic Thought in Spain 1177-1740* (London: Allen & Unwin, 1978); Laurence S. Moss, ed., *Economic Thought in Spain* (Aldershot, England: Edward Elgar, 1993); and Raymond de Roover, *Business, Banking, and Economic Thought in Late Medieval and Early Modern Europe* (Chicago: University of Chicago Press, 1976).

²⁷ Quintus Tertullian, *On Repentance*, chap. 1, quoted in Stark, *The Victory of Reason*, 7.

reason.”²⁸ Hence, by the fifth century, Augustine expressed the conventional view of the day: “Heaven forbid that God should hate in us that by which he made us superior to the animals! Heaven forbid that we should believe in such a way as not to accept or seek reasons, since we could not even believe if we did not possess rational souls. . . . [F]or faith to precede in certain matters of great moment that cannot yet be grasped, surely the very small portion of reason that persuades us of this must precede faith.”²⁹

Stark further notes that this scientific tradition recognized that “science is not technology.” It is rather “a *method* utilized in *organized* efforts to formulate *explanations of nature*, always subject to modifications and corrections through *systematic observations*. Put another way, science consists of two components: *theory* and *research*.” By definition, “[s]cientific theories are *abstract statements* about *why* and *how* some portion of nature (including human social life) fits together and works.” Moreover, these theories are scientific “only if it is possible to deduce from them some definite predictions and prohibitions about what will be observed.” Science, then “is limited to statements about natural and material reality—about things that are at least in principle observable. Hence, there are entire realms of discourse that science is unable to address, including such matters as the existence of God.” Further, “this definition of science excludes all efforts through most of human history to explain and control the material world. . . . [P]rogress was the product of observation and of trial and error but was lacking in explanations—in theorizing.”³⁰

In summary, real science arose only in Christian Europe. According to Stark, “The earlier technical innovations of Greco-Roman times, of Islam, of China, let alone prehistoric times, do not constitute science and are better described as lore, skills, wisdom, techniques, crafts,

²⁸ Quoted in David C. Lindberg and Ronald L. Numbers, eds., *God and Nature: Historical Essays on the Encounter Between Religion and Science* (Berkeley: University of California Press, 1986), 27–28.

²⁹ Quoted in R. W. Southern, *Medieval Humanism and Other Essays* (New York: Harper Torchbooks, 1970), 49.

³⁰ Stark, *The Victory of Reason*, 13, emphasis in original.

technologies, engineering, learning, or simple knowledge.” He traces the “launch of Western science” to the Scholastics, “fine scholars who founded Europe’s great universities.”³¹ Virtually all of the founders of the various scientific fields were Christian theists, including Nicolaus Copernicus, Johannes Kepler, Galileo Galilei, Robert Boyle, Isaac Newton, Gregor Mendel, and so on. Joseph Schumpeter, Marjorie Grice-Hutchinson, Raymond de Roover, and Emil Kauder have further shown that it was the Italian and Spanish Scholastics, especially those at the University of Salamanca, who applied rational theism to develop the science of economics in the theories of value/utility, prices, money, and competition. As this influence spread to Italy, Portugal, and the low countries of Europe, it formed the basis for the Austrian school of economics.³²

Both Lewis and the philosopher and mathematician Alfred North Whitehead believed that science arose only because the Christian theistic beliefs of medieval European scientists led them to consider the universe to be a systematic realm of objective reality, and that non-Christian beliefs hindered or prevented science. As Whitehead notes, “The greatest contribution of medievalism to the formation of the scientific movement [was] the inexpugnable belief that . . . there is a secret, a secret which can be unveiled,” rooting this conviction in “the medieval insistence on the rationality of God, conceived as with the personal energy of Jehovah and with the rationality of a Greek philosopher. Every detail was supervised and ordered: the search into nature could only result in the vindication of the faith in rationality.”³³

Whitehead further notes that polytheistic, pantheistic, and monist views were too irrational and detached from humanity to make science possible. In China, for example, naturalist religions such as Confucianism and Taoism upheld essences or ideas that were

³¹ Ibid., 13, 5.

³² Murray N. Rothbard, “New Light on the Prehistory of the Austrian School,” in *The Foundations of Modern Austrian Economics*, edited by Edwin Dolan (Kansas City: Sheed and Ward, 1976), 52–74.

³³ Alfred North Whitehead, *Science and the Modern World* (New York: Free Press, 1967), 13.

impersonal and that created and changed nothing. Stark notes, “As conceived by Chinese philosophers, the universe simply is and always was. There is no reason to suppose that it functions according to rational laws or that it could be comprehended in physical rather than mystical terms. Consequently, Chinese intellectuals pursued ‘enlightenment,’ not explanations.”³⁴ Based on his extensive studies of the history of Chinese technology, Joseph Needham concurs that the Chinese failed to develop science *because* their naturalistic religious views prevented them from believing in natural laws. They simply did not believe that science mattered or was possible: “For those holding these religious premises, the path to Nature never developed. . . . It was not that there was no order in Nature for the Chinese, but rather that it was not an order ordained by a rational personal being, and hence there was no conviction that rational personal beings would be able to spell out in their lesser earthly languages the divine code of laws which he had decreed aforesaid.”³⁵

The ancient Greeks and Romans’ polytheistic system of gods did not include a creator not subject to the same universe of continuous cycles of progress and decline affecting mortals, and, according to this system, inanimate objects were living beings with personal aims and foibles, as opposed to being subject strictly to physical laws. Major Greek thinkers, including Plato and Aristotle, also rejected the notion of progress. Indeed, Aristotle believed that “the same ideas recur to men not once or twice but over and over again” and that everything had “been invented several times over in the course of ages.”³⁶ Rea notes that “Paramenides threatened to bring natural sciences to a standstill with his powerful arguments for the conclusion that the world is unchanging, unmoving, ungenerated, and indestructible. . . . [And Plato] did share the

³⁴ Stark, *The Victory of Reason*, 16–17.

³⁵ Joseph Needham, *Science and Civilization in China*, vol. 1 (Oxford: Oxford University Press, 1954), 581.

³⁶ Stark, *The Victory of Reason*, 18–20.

Parmenidean view that the most fundamentally real things in the world are unchanging.”³⁷

Because of such views, science was unable to develop in the Greek or Roman worlds.

In Islam, the world was not created and does not function according to rational principles, and the Qur’an teaches that the universe is governed by a *very* active God whose sheer will continually keeps things afloat. Although it is indeed true that for centuries the Islamic world kept Greek learning alive, most Muslim intellectuals considered this learning, especially that of Aristotle, to be a form of Scripture to be believed without question rather than examined.³⁸ In contrast, Christian scholars such as Augustine and Aquinas were able to learn from *and question* Greek philosophy, but in so doing they also rejected its antiscientific elements.

According to Stark, Judaism and Islam, although embracing a creator God, by and large emphasize a literal approach to Scripture as law to be followed, not as the basis for inquiry. Both are “orthoprax” faiths, focusing on correct (*ortho*) practice (*praxis*) regarding the regulation of social life. In contrast, Christianity is an “orthodox” religion, stressing correct (*ortho*) opinion (*doxa*) and emphasizing the intellectual structure of beliefs. While there are exceptions to this characterization in the history of all three faiths³⁹, generally speaking, only Judaism and Christianity have embraced “a directional conception of history” as opposed to “an endlessly repeated cycle or inevitable decline,” and although Stark claims that Judaism stresses procession

³⁷ Rea, *World Without Design*, 23–24.

³⁸ Stark, *The Victory of Reason*, 21. Stark cites Caesar E. Farrar, *Islam: Beliefs and Observances*, 5th ed. (Hauppauge, N.Y.: Barron’s, 1994), 199.

³⁹ Various critics of Stark’s thesis, such as Alan Wolfe, have claimed that he neglects the important impact of Jewish and Islamic scholars. Perhaps the most noteworthy of these scholars is the Jewish Scholastic Moses Maimonides, the 12th-century Spanish rabbi-philosopher, who influenced such Scholastic philosophers as Albertus Magnus, Thomas Aquinas, and Duns Scotus. Well-versed in the writings of the Arabian Aristotelians, Maimonides strove to harmonize and differentiate the work of Aristotle with the teachings of Jewish theology. However, in keeping with Stark’s analysis, both Jewish scholars and the Arabians themselves owed their knowledge of the work of Aristotle and other Hellenistic scholars and scientists to the earlier work of the Nestorian and other Christian scholars of Syria from the 5th century A.D. onward. See DeLacy O’Leary, *How Greek Science Passed to the Arabs* (London: Routledge Kegan Paul, 1949).

in history, Christianity alone has most clearly embraced the idea of progress.⁴⁰ Moreover, Stark points out,

unlike Muhammad and Moses, whose texts were accepted as divine transmissions and therefore have encouraged literalism, Jesus wrote nothing, and from the very start the church fathers were forced to reason as to the implications of his remembered sayings—the New Testament is not a unified scripture but an *anthology*. Consequently, the precedent for a theology of progress began with Paul: “For our knowledge is imperfect and our prophesy is imperfect.” Contrast this with the second verse of the Qur’an, which proclaims itself to be “the Scripture whereof there is no doubt.”⁴¹

The search for truth or understanding is thus fundamental to the Christian belief system. Christian theologians believed that “the application of reason can yield an increasingly accurate understanding of God’s will.”⁴² In the fifth century, Augustine wrote, “Has not the genius of man invented and applied countless astonishing arts, partly the result of necessity, partly the result of exuberant invention, so that this vigour of mind . . . betokens an inexhaustible wealth in the nature which can invent, learn, or employ such arts. What wonderful—one might say stupefying—advances has human industry made in the arts of weaving and building, of agriculture and navigation.”⁴³ And he further stated, “Never will we find truth if we content ourselves with what is already known. . . . Those things that have been written before us are not laws but guides. The truth is open to all, for it is not yet totally possessed.”⁴⁴ This Christian understanding of reason, free will, and the idea of progress was unique in the world and gave

⁴⁰ Frederick M. Denny, “Islam and the Muslim Community,” in *Religious Traditions of the World*, edited by H. Byron Earhart (San Francisco: HarperSanFrancisco, 1993), 612.

⁴¹ Stark, *The Victory of Reason*, 8–9.

⁴² *Ibid.*, 9.

⁴³ Augustine, *The City of God*, book 22, chap. 24, quoted in Stark, *The Victory of Reason*, 9–10.

⁴⁴ Quoted in Jean Gimpel, *The Medieval Machine: The Industrial Revolution in the Middle Ages* (New York: Penguin Books, 1976), 165.

birth to scientific study in the West because “of the enthusiastic conviction that the human intellect can penetrate nature’s secrets.”⁴⁵

Methodological Individualism

This bold advance in thinking arose in part from the revolutionary insight of *methodological individualism* in the study of human action, wherein the individual is considered primary. As Jon Elster has noted, “The elementary unit of social life is the individual human action. To explain social institutions and social change is to show how they arise as the result of the actions and interaction of individuals. This view, often referred to as methodological individualism, is in my view trivially true.”⁴⁶ Similarly, Rothbard says, “The fundamental axiom, then, for the study of man is the existence of individual consciousness.”⁴⁷ And Stark points out that although almost every other early culture and religion viewed human society in terms of the tribe, polis, or collective, “it is the individual who was the focus of Christian political thought, and this, in turn, explicitly shaped the views of later European political philosophers.”⁴⁸

This focus produced a radical change in a world in which, despite notable but limited exceptions of political decentralization, slavery and nearly universal and unyielding despotism had ruled⁴⁹, where people were treated as mere members of a group without rights. With Christianity, each and every person is “a child of God” or holy object (*res sacra homo*) who has free will and is responsible for the choices he or she makes. In this tradition, Aquinas stated, “A man can direct and govern his own actions also. Therefore the rational creature participates in the

⁴⁵ Stark, *The Victory of Reason*, 17.

⁴⁶ Jon Elster, *Nuts and Bolts for the Social Sciences* (Cambridge: Cambridge University Press, 1989), 13.

⁴⁷ Rothbard, “The Mantle of Science,” 177.

⁴⁸ Stark, *The Victory of Reason*, 23.

⁴⁹ See for example: Thomas J. Thompson, “Ancient Stateless Civilization: Bronze Age India and the State in History,” *The Independent Review* (Winter 2005), 365-384; Jesse L. Byock, *Medieval Iceland: Society, Sagas, and Power* (Berkeley, Calif.: University of California Press, 1988); David Friedman, “Private Creation and Enforcement of Law: A Historical Case,” *Journal of Legal Studies* 8, no. 2: 399-415; and Harold J. Berman, *Law and Revolution: The Formation of the Western Legal Tradition* (Cambridge: Harvard University Press, 1983).

divine providence not only in being governed but also in governing.”⁵⁰ Similarly, Augustine explained that, “without any delusive representation of images or phantasms, I am most certain that I am, and that I know and delight in this. In respect to these truths, I am not at all afraid of the arguments of the Academicians, who say, What if you are deceived? For if I am deceived, I am. For he who is not cannot be deceived; and if I am deceived, by this same token I am. . . . And, consequently, neither am I deceived in knowing that I know. For, as I know that I am, so I know this also, that I know.”⁵¹

Rothbard notes how, in contrast, scientism attempts to deny the reality of individual choice through the organismic analogies of *methodological holism or collectivism* that “attribute consciousness to ‘social wholes’ which do not exist apart from the individuals that do exist. ‘Society,’ ‘the group,’ ‘the public,’ ‘the community,’ etc, do not have values nor pursue ends. Not only are these entities held up as living things; they are supposed to exist more fundamentally than do individuals, and their goals take precedence over individual ones.” In rejecting methodological collectivism, Rothbard firmly concludes that “there is no ‘public good,’ ‘general welfare,’ etc., above and beyond the welfare and goods of individuals.”⁵² And Ludwig von Mises notes that, “[T]he collective has no existence and reality but in the actions of individuals. It comes into existence by ideas that move individuals to behave as members of a definite group and goes out of existence when the persuasive power of these ideas subsides.”⁵³

The concept of the self (individualism) and free will had been discussed by Marcus Tullius Cicero and others before the Christian era, but it was not until Jesus personally asserted in words and deeds the concept of moral equality before and responsibility to God and not until Christian theologians made it a central feature of their doctrine that the rights of *each and every*

⁵⁰ Quoted in *ibid.*, 25.

⁵¹ Augustine, *The City of God*, book 11, chap. 26, quoted in Stark, *ibid.*, 25–26.

⁵² Rothbard, “The Mantle of Science,” 171-172.

⁵³ Ludwig von Mises, *The Ultimate Foundation of Economic Science: An Essay on Method* (Indianapolis, Ind.: Liberty Fund, 2006), 80.

individual were championed and slavery was condemned. As explained by the third-century Christian theologian L. Caecilius Firmianus Lactantius, “The second constituent of Justice is *equality*. I mean this . . . in the sense of treating others as equals. . . . For God who gives being and life to men wished us all to be equal. . . . Since human worth is measured in spiritual not in physical terms, we ignore our various physical situations: slaves are not slaves to us, but we treat them and address them as brothers in spirit.”⁵⁴

Subsequently, with the end of the Roman Empire, opposition to slavery grew (starting in A.D. 324 with the Christian Council of Granges), and by the seventh century “priests began to urge owners to free their slaves as an ‘infinitely commendable act’ that helped ensure their own salvation.”⁵⁵ In the eighth century, Charlemagne, king of the Franks and leader of the Holy Roman Empire, opposed slavery, and during the eleventh century St. Wulfen and St. Anselm successfully campaigned to eliminate slavery throughout most of Europe. During the Middle Ages, despite the opposition of numerous despots, the Vatican issued papal bulls condemning slavery elsewhere in no uncertain terms in 1430, 1537, and 1639.⁵⁶

Opposition in the 16th century to the widespread abuses and enslavement of Native Americans by the Castilian conquistadors after the Spanish conquest was led by numerous Christian clerics including the Spanish Friar and Bishop, Bartolome de Las Casas, author of *In Defense of the Indians*⁵⁷, who received his law degree at the School of Salamanca. The discoveries in the New World had brought the issues of human rights and international law to the forefront in the Iberian universities. Las Casas in turn fought the conquistadors in Spain and the Americas, showing that their violence, cruelty, and claims of the inferiority of Amerindians were entirely at odds with the legacy of all Christian writing and teaching: “Our Christian religion is

⁵⁴ Quoted in Stark, *The Victory of Reason*, 71.

⁵⁵ *Ibid.*, 29.

⁵⁶ *Ibid.*, 200–201.

⁵⁷ Bartolome de Las Casas, *In Defense of the Indians: The Defense of the Most Reverend Lord, Don Fray Bartolome de Las Casas, of the Order of Preachers, Late Bishop of Chiapa* (DeKalb, Ill.: Northern Illinois University Press, 1992).

suitable for and may be adapted to all the nations of the world, and all alike may receive it; and no one may be deprived of his liberty, nor may he be enslaved on the excuse that he is a natural slave.”⁵⁸ And Pope Paul III’s 1537 bull, *Sublimis Deus*, stated that: “The said Indians and all other people who may later be discovered by Christians, are by no means to be deprived of their liberty or the possession of their property, even though they may be outside the faith of Jesus Christ ... nor should they in any way be enslaved.”⁵⁹ This persistent Christian opposition to slavery spread, ultimately resulting in the abolition of slavery throughout Latin America, in the British Empire under the leadership of Christian pastor William Wilberforce, and in the United States because of the Christian-inspired persistence of William Lloyd Garrison and the Abolitionists.

So powerful did the moral authority of Christianity become that, starting with Constantine, despots and opportunists of all stripes sought to wrap themselves in the Christian banner in order to hide their egregious crimes, which were clearly evident in the Crusades and in other wars and brutalities. Yet even when Christians and others have pursued invasive wars and tyrannies “in the name of God,” the condemnation of such actions by others as wrong has stemmed directly *from* the Christian teachings of *individual* sanctity and worth. In areas of the world without the revolutionary insights from Christianity of individual worth, free will, and reason, the crushing impact of total despotism remained the standard, as was especially evident in Asia where the *idea* of “self” was either entirely unknown or stringently suppressed by the weight of imperial and bureaucratic rule.⁶⁰

The core of naturalism and scientism is thus a modern throwback to the fallacies that kept most of mankind in darkness, misery, and chains before the Christian era began, an incoherent

⁵⁸ Leonard P. Liggio, “The Heritage of the Spanish Scholastics,” *Religion & Liberty* (January-February 2000), 2.

⁵⁹ Liggio, 3.

⁶⁰ Karl Wittfogel, *Oriental Despotism: A Comparative Study of Total Power* (New Haven, Conn.: Yale University Press, 1967).

denial of the objective truth of purposive, individual, human choice as the basis for human action and morality.

In his book *The Counter-revolution of Science*, Hayek examines scientism and echoes Jean-Baptiste Say by distinguishing between the qualitative (subjectivist) nature of the social sciences (or the study of human action) and the quantitative (objectivist) nature of the natural sciences. According to this distinction, to understand social phenomena one must start by recognizing that human action is based on subjective *choices by individuals*, which then produce objective outcomes. This understanding itself is objectively fundamental and empirically undeniable, without which human knowledge itself becomes self-contradictory: “While for the natural scientist the contrast between objective facts and subjective opinions is a simple one, the distinction cannot as readily be applied to the object of the social sciences. The reason for this is that the object or the ‘facts’ of the social sciences are . . . merely opinions, views held by the people whose actions we study.” Hayek notes that the subjectivist approach of the social sciences deals with “the phenomena of individual minds, or mental phenomena, and not directly with material phenomena. They deal with phenomena which can be understood only because the object of our study has a mind of a structure similar to our own.” Further, “[a]ll the ‘physical laws of production’ which we meet in economics are not physical laws in the sense of the physical sciences, but people’s beliefs about what they can do.” Thus, in the final analysis, “[n]ot only man’s action toward external objects but also all the relations between man and all the social institutions can be understood only by what men think about them. Society as we know it is, as it were, built up from the concepts and ideas held by the people; and social phenomena can be recognized by us and have meaning to us only as they are reflected in the minds of men.”⁶¹

Say points to “the advantage enjoyed by every one who, from distinct and accurate observation, can establish the existence of . . . general facts, demonstrate their connection, and

⁶¹ Hayek, *The Counter-revolution of Science*, 47–65. Also see F. A. Hayek, *Individualism and the Economic Order* (Chicago: University of Chicago Press, 1996).

deduce their consequences. They [these deductions] as certainly proceed from the nature of things as the laws of the material world. We do imagine them; they are results disclosed to us by judicious observation and analysis. . . . They can be admitted by every reflecting mind.”⁶² And, as Rothbard notes, “There is a basic reason for the quantity-quality dichotomy between the physical and the social sciences. The objects of physical science do not act; they do not choose, change their minds, and choose again. Their natures may therefore be investigated, and the investigations replicated indefinitely, with quantitative precision. But people do change their minds, and their actions, all the time; their behavior cannot be predicted with exact and therefore scientific precision.”⁶³

In this regard, Lewis’s work draws the crucial distinction between ordinal and cardinal valuation, an insight that many contemporary economists have yet to grasp. In his book *The Problem of Pain*, Lewis discusses how the human experience of pain cannot be summed across individuals because it is qualitative, not quantitative.⁶⁴ Valuation is not a physical characteristic of a thing (e.g., pain or happiness), but the relation (preference) of one thing to another, a metaphysical ordering relationship that indicates preference (or nonpreference) for one thing over other things. This relation is manifested when a person makes a choice, which occurs with every action.

Mises also recognizes a fundamental dualism in reality, “Mortal man does not know how the universe and all that it contains may appear to a superhuman intelligence. Perhaps such an exalted mind is in a position to elaborate a coherent and comprehensive monistic interpretation of all phenomena. Man—up to now, at least—has always gone lamentably amiss in his attempts to bridge the gulf that he sees yawning between mind and matter, between the rider and the

⁶² Jean-Baptiste Say, *A Treatise on Political Economy*, translated by C. C. Biddle (New York: Kelly, 1964), xxvi, quoted in Murray N. Rothbard, “Praxeology as the Method of the Social Sciences,” 328.

⁶³ Rothbard, “Praxeology,” 326.

⁶⁴ C. S. Lewis, *The Problem of Pain* (San Francisco: HarperSanFrancisco, 1940), 116–17.

horse, between the mason and the stone.” But as a “nonreductive” or “soft” naturalist, he dismisses in a single sentence “the soundness of a dualistic philosophy,” while substituting a pragmatic *methodological dualism* in order to try to avoid the obvious dilemma described by Lewis of what a strictly materialist monism would mean. Mises claims that “Methodological dualism refrains from any proposition concerning essences and metaphysical constructs. It merely takes into account the fact that we do not know how external events—physical, chemical, and physiological—affect human thoughts, ideas, and judgments of value. This ignorance splits the realm of knowledge into two separate fields, the realm of external events, commonly called nature, and the realm of human thought and action.”⁶⁵

On the one hand, Mises well understands that naturalism is based on metaphysics: “Materialist monism contends that human thoughts and volitions are the product of the operation of bodily organs, the cells of the brain and the nerves. . . . This too is a metaphysical hypothesis, although its supporters consider it as an unshakable and undeniable scientific truth.”⁶⁶ Yet, he tries to avoid the fact that his own methodological dualism similarly must rest in metaphysics, and in the end, his own “dualist” version of monism cannot escape the problems of metaphysical naturalism.

Nonetheless, to the great credit of Mises and others, methodological individualism clearly shows that human action is qualitative and based on the fact that individuals choose and use means to achieve ends. The true sciences of man rest upon this fact, and its denial is a major cause of so many of the erroneous and very harmful directions in public debate. In common with Lewis’s analysis, Rothbard derides the materialist characterization of man in nature as equal to “a stone, a cactus or a camel”: “If men are like stones, if they are not purposive beings and do not

⁶⁵ Ludwig von Mises, *Theory and History* (New Haven, Conn.: Yale University Press, 1957), 1.

⁶⁶ Ludwig von Mises, *Human Action: A Treatise on Economics*, 3rd rev. ed. (Irvington-on-Hudson, N.Y.: Foundation for Economic Education, 1996) 17-18.

strive for ends, then there is no economics, no psychology, no ethics, no science or man whatever.”⁶⁷

For Mises, “A stone is a thing that reacts in a definite way. Men react to the same stimuli in different ways. And the same man at different instants of time may react in ways different from his previous or later conduct.”⁶⁸ And to Rothbard, “The key to scientism is its denial of the existence of individual consciousness and will. This takes two main forms: applying mechanical analogies from the physical sciences to individual men, and applying organismic analogies to such fictional collective wholes as ‘society.’ The latter course attributes consciousness and will, not to individuals, but to some collective organic whole of which the individual is merely a determined cell. Both methods are aspects of the rejection of individual consciousness.”⁶⁹ He further expounded: “Stones, molecules, plants cannot choose their courses; their behavior is strictly and mechanically determined for them. Only human beings possess free will and consciousness: for they are conscious, and they can, and indeed must, choose their course of action. To ignore this primordial fact about the nature of man—to ignore his volition, his free will—is to misconstrue the facts of reality and therefore to be profoundly and radically unscientific.”⁷⁰

Despite the fact that from introspection all individuals know that they choose, naturalism denies the existence of free will because with naturalism, all mindless matter must be determined and purposeless. Interestingly enough, however, all philosophical naturalists exempt themselves from their own theories, placing themselves *outside* the natural world, which they claim is the only thing that exists, and implicitly acknowledging the Aristotelian/Thomist law of noncontradiction. They believe that someday they will have a physical/deterministic explanation for human choice, because such knowledge is itself determined, but how will they know one way

⁶⁷ Rothbard, “The Mantle of Science,” 163.

⁶⁸ Ludwig von Mises, *Theory and History*, 5.

⁶⁹ *Ibid.*, 169.

⁷⁰ *Ibid.*, 163.

or the other? Karl Popper further notes that to be able to predict the future, we would have to predict what knowledge we will possess in the future, but we cannot do so because then we would be in possession of that knowledge now.⁷¹

Regarding scientism, philosopher Hans Jonas says: “Modern theory is about objects lower than man, even stars, being common things, are lower than man.”⁷² Michael Aeschliman points out that, “Yet even in the so-called ‘human sciences,’ whose objects of attention and study *is* man, Jonas notes, the object remains lower than man: ‘For a scientific theory of him to be possible, man, including his habits of valuation, has to be taken as determined by causal laws, as an instance and part of nature.’”⁷³ Jonas then notes, “The scientist does take [man to be determined by causal laws]—but not himself while he assumes and exercises his freedom of inquiry and his openness to reason, evidence, and truth.”⁷⁴ And Aeschliman concludes, “His own working assumptions involve free will, deliberation, and evaluation as aspects of himself, but those qualities and capacities are stripped away from and denied to the human ‘object’ or ‘thing’ that he is inspecting.”⁷⁵

For C. S. Lewis, the rational intelligibility of the universe is at the core of the truth of the intellectual legacy of Western culture, and he sought an end to what Whitehead castigated as “scientific materialism.” As Lewis notes, “Unless all that we take to be knowledge is illusion, we must hold that in thinking we are not reading rationality into an irrational but responding to a rationality with which the universe has always been saturated.”⁷⁶

Lewis’s work thus contrasts scientism with *sapientia*, metaphysical wisdom. Socrates and Cicero had recognized *sapientia* as comprising the inter-connection of a true rational

⁷¹ Karl Popper, *The Poverty of Historicism* (New York: Harper and Row, 1964), vi–viii.

⁷² Hans Jonas, *The Phenomenon of Man: Toward a Philosophical Biology* (New York: Harper and Row, 1966), 196.

⁷³ Aeschliman, *The Restitution of Man*, 54.

⁷⁴ Jonas, *The Phenomenon of Man*, 196.

⁷⁵ Aeschliman, *The Restitution of Man*, 55.

⁷⁶ Lewis, “De Futilitate,” 65.

understanding of man's nature with transcendent metaphysical truths. Aquinas later said that such knowledge at its pinnacle brings an individual into personal contact with the Divine, "*Deus est ipsa sapientia*." Samuel Johnson, whom Lewis greatly admired, acclaimed Socrates's work in turning philosophy "from the study of nature to speculation upon life" and bemoaned the trend reversing this turn back to a study of nature: "the innovators whom I oppose . . . seem to think that we are placed here to watch the growth of plants, or the motions of the stars. Socrates was of opinion that what we had to learn was, how to do good, and avoid evil."⁷⁷

The practice of science thus springs entirely from and is dependent on the rational method of philosophy, for, as Whitehead puts it, "[o]bjectivity itself is a judgment of value. . . . It is not an immediate or necessary inference from any 'objects' per se, but the resulting confusion of 'objects' and 'objectivity' does great damage by obscuring the attributions of value that are made in every choice, decision, experiment, or selection." According to Whitehead: "There has been conscious selection of the parts of the scientific field to be cultivated and this conscious selection involves judgments of value. These values may be aesthetic, or moral, or utilitarian, namely, judgments of exploring the truth, or as to utility in the satisfaction of physical wants. But whatever the motive, without judgments of value there would have been no science."⁷⁸

Responding to the equation of humans with physical objects, G.K. Chesterton writes, "It is not commonsense to call man a common object of the country or seashore." In line with John Passmore's apt phrase describing scientism as a view to "de-anthropomorphize human beings," Chesterton notes that the scientific fantasy of eugenics directly sprang from the view that "Materialism is really our established church."⁷⁹ For Chesterton, Christian theism is "a religion

⁷⁷ Samuel Johnson, "Milton," in *Lives of the English Poets* (1779; reprint, London: Oxford University Press, 1906), 1: 73.

⁷⁸ Alfred North Whitehead, *Adventures in Ideas* (Cambridge: Cambridge University Press, 1961), 37.

⁷⁹ Aeschliman, *The Restitution of Man*, 40.

in the sense of a rule; a real trust in some external standard as a reality.”⁸⁰ “The common man may well be the victim of a new series of tyrannies, founded on this scientific fad of regarding him as a monkey,” a comment made by Chesterton even before Nazism, communism, and other modern so-called value-neutral “scientific” tyrannies appeared.⁸¹

In discussing Chesterton’s work in critiquing “sham science,” or what became known in sociology as “functional rationality,” Aeschliman shows that “the materialist cannot without contradiction apply categories of meaning, purpose, value, or ethics, and yet to the extent that his thought and conduct are coherent, they of course depend on these as directive realities.” For anyone to dismiss these categories “as ‘merely subjective’ is to surrender sanity itself, but the tendency to do so is a chief factor in modern deterministic thinking, leading in practice to demoralization and amorality.”⁸²

Hence, again, mankind pursues two interconnected forms of knowledge (i.e., dualism). “As *homo sciens*, man the knower of *scientia* [correct knowledge], he tends to matters of fact, quantity, matter and the physical realm; as *homo sapiens*, man the knower of *sapientia*, he shows his interest in the qualities of meaning, purpose, value, idea and the metaphysical realm,” explains Aeschliman. In order to have truth, both forms of knowledge are crucial. Denial of *scientia* is characteristic of “the radical transcendentalism of eastern religions, but today the even greater and more damaging imbalance is found in the pervasive radical immanentism of much Western culture and thought that attributes validity only to *scientia*.” Advocates of scientism do not understand that *scientia* is “utterly dependent on *sapientia* for direction and meaning; their fervent attempts to pursue *scientia* in isolation from *sapientia* amount to a tragic rush into meaninglessness—the very antithesis of a genuine search for knowledge.”⁸³

⁸⁰ G. K. Chesterton, *Generally Speaking* (London: Methuen, 1937), 239.

⁸¹ G. K. Chesterton, *The Common Man* (London: Sheed and Ward, 1950), 9.

⁸² Aeschliman, *The Restitution of Man*, 42–43.

⁸³ *Ibid.*, 48.

Science versus Naturalism

Various perceptive contemporary scientists have decried the dangers of scientism in undermining the enterprise of science. Astrophysicist Owen Gingerich, for example, states that “scientism is a . . . dogmatic philosophy that can develop from [scientific observation], saying that since this is the only way we can find out about nature, that is all there is.”⁸⁴ In discussing why many scientists resist the theory of the Big Bang, physicist Robert Jastrow (former director of NASA’s Institute for Space Studies) has also noted that such a theory is not in conformity with the “religion of science”: “This religious faith of the scientist is violated by the discovery that the world had a beginning under conditions in which the known laws of physics are not valid, and as a product of forces or circumstances we cannot discover.”⁸⁵ Molecular biologist Werner Arber, the Nobel laureate in medicine, further states: “Although a biologist, I must confess I do not understand how life came about. . . . I consider that life only starts at the level of a functional cell. The most primitive cell may require at least several hundred different specific biological macro-molecules. How such already quite complex structures may have come together, remains a mystery to me. The possibility of the existence of a Creator, of God, represents to me a satisfactory solution to this problem.”⁸⁶

Echoing Aquinas and Lewis, Charles Townes, Nobel laureate in physics and inventor of the laser, has remarked: “If one understands the structure of the universe, maybe the purpose of man becomes a little clearer. I think maybe the best answer to that is that somehow, we humans

⁸⁴ John Kenyon, “‘The Heavens Declare the Glory of God’: Interview of Owen Gingerich,” *Christian Herald* (Dec. 1978), 34.

⁸⁵ Robert Jastrow, “Have Astronomers Found God? Theologians Are Delighted that the Astronomical Evidence Leads to a Biblical View of Genesis—but Curiously, Astronomers Are Upset,” *New York Times Magazine*, 25 June 1978, 26.

⁸⁶ Quoted in Henry Margenau and Ray Abraham Varghese, eds., *Cosmos, Bios, Theos: Scientists Reflect on Science, God and the Origin of the Universe, Life and Homo Sapiens* (LaSalle, Ill.: Open Court, 1992), 142.

were created somewhat in the likeness of God. We have free will. We have independence, we can do and create things, and that's amazing."⁸⁷

In his work, C. S. Lewis is profoundly concerned with the rise of scientism and its dehumanization of mankind. A. J. Ayer's naturalism epitomizes what Lewis opposes in his philosophical works *The Abolition of Man*, *Miracles*, *Mere Christianity*; in his novels *That Hideous Strength* and *The Pilgrim's Regress*; and in such essays as "Behind the Scenes," "The Poison of Subjectivism," "Bulverism," "Transposition," and "Is Progress Possible? Willing Slaves of the Welfare State." Yet even Ayer, when asked whether any shortcomings existed in his logical positivism, had to admit, "I suppose the most important of the defects was that nearly all of it was false."⁸⁸ In his work Ayer sought to refute the basis for objectivity with his theory of emotivism, wherein when an individual says "X is good," he is only saying "I like X." But Lewis notes the absurdity of it all, and even Ayer himself apparently understood that the claim that all facts are objective and all values are subjective is itself an assumption. If, according to Ayer, only "factual statements" can have validity, Ayer's theory must also simply then be an article of faith and hence untrue because his view is itself "nonfactual."

This incoherent, radical subjectivism and reductionism are a major target of Lewis's work both because they are inherently contradictory to rational philosophy upon which science rests and because they strip human culture of any basis to oppose barbarism and the destruction of civil society itself: "[A]s soon as we take the final step of reducing our own species to the level of mere Nature, the whole process is stultified, for this time the being who stood to gain and the being who has been sacrificed are one and the same. This is one of the many instances where to carry a principle to what seems its logical conclusion produces absurdity." Pointing out that "[i]t is in Man's power to treat himself as a mere 'natural object' and his judgments of value

⁸⁷ Bonnie Azab Powell, "Explore as Much as We Can: Nobel Prize Winner Charles Townes on Evolution, Intelligent Design, and the Meaning of Life," *U.C. Berkeley News*, 17 June 2005, , available at: http://www.berkeley.edu/news/media/releases/2005/06/17_townes.shtml.

⁸⁸ Quoted in Aeschliman, *The Restitution of Man*, 60.

as raw material for scientific manipulation to alter at will,” Lewis warns: “The real objection is that if man chooses to treat himself as raw material, raw material he will be: not raw material to be manipulated, as he fondly imagined, by himself, but by mere appetite, that is Nature, in the person of his de-humanized Conditioners.” He further outlines the dilemma we must resolve: “Either we are rational spirit obliged forever to obey the absolute values of the *Tao*, or else we are mere nature to be kneaded and cut into new shapes for the pleasures of masters who must, by hypothesis, have no motive but their own ‘natural’ impulses. Only the *Tao* provides a common human law of action which can over-arch rulers and ruled alike. A dogmatic belief in objective value is necessary to the very idea of a rule which is not tyranny or an obedience which is not slavery.” And Lewis rightly observes that this “process which, if not checked, will abolish Man goes on apace among Communists and Democrats no less than among Fascists. The method may (at first) differ in brutality. But many a mild-eyed scientist in pince-nez, many a popular dramatist, many an amateur philosopher in our midst, means in the long run just the same as the Nazi rulers of Germany.” Lewis further warns: “The belief that we can invent ‘ideologies’ at pleasure, and the consequent treatment of mankind as mere specimens, preparations, begins to affect our very language.” He showed that it is elementary to understand that no human being is strictly a material thing, but instead an essence or a soul inhabiting the material world: “While we speak from within the *Tao* we can speak of Man having power over himself in a sense truly analogous to an individual’s self-control. But the moment we step outside and regard the *Tao* as a mere subjective product, this possibility has disappeared.” Finally, “you cannot go on ‘explaining away’ forever: you will find that you have explained explanation itself away. You cannot go on ‘seeing through’ things forever. The whole point of seeing through something is to see something through it. It is good that the window is transparent, because the street or garden beyond it is opaque. How if you saw through the garden too? It is no use trying to ‘see through’

first principles. If you see through everything, then everything is transparent. But a wholly transparent world is an invisible world. To ‘see through’ all things is the same as not to see.”⁸⁹

In short, Lewis understood not only that all propositions including naturalism depend on philosophical principles that are independent of the alleged “whole show” of nature, but also that rational theism is central to both science *and* ethics, exactly as the “common sense” of Aquinas and the Scholastics claimed. An individual human being is therefore an ultimate end and should never be treated as a means.

Victor Reppert has examined in depth Lewis’s “argument from reason” against naturalism in his recent book, *C. S. Lewis’s Dangerous Idea*. As Reppert notes, theism maintains that the universe is rational because God, a rational being, created it. Reason, in the theist view, is on the ground floor of reality. Given that God creates creatures, it is at least possible that God might wish to provide those creatures with some measure of the rationality that God possesses. And human beings reflect God’s rational character by having the capacity to think logically. Suppose we make the further supposition that God has created human beings in such a way that they consist of a soul and a body, or in some other way that permits us to transcend determination by physical laws. We might then be able to say that while the body’s activities are determined . . . by the laws of physics . . . it is possible for human beings, through our souls, to perceive not only the physical activities of the environment, but also logical and mathematical truths that apply throughout all that God has created.”⁹⁰

In critically analyzing all variations of naturalism, Alvin Plantinga has also shown that the existence of God is properly basic epistemically, meaning that it is rational to believe in the existence of God without inferring that God exists from some other belief. But as with Lewis,

⁸⁹ Lewis, *The Abolition of Man*, 71–81.

⁹⁰ Reppert, *C. S. Lewis’s Dangerous Idea*, 50.

Plantinga is also a critical rationalist who maintains that there also exist powerful and positive arguments *for* theism.⁹¹

Reason versus Naturalism

There are three versions of “agent reductionism” in naturalism. The first, *eliminative materialism* or *strong-agent reductionism*, is best articulated by naturalists Paul Churchland and Patricia Churchland and claims that only those mental states that can be precisely located in the physical brain can be true. In this view, all other beliefs and desires are phony and erroneous as “folk psychology.” The second version is *reductive materialism*, which claims that mental states of any type are real but simply reducible to physical states. And the third and most common version, *nonreductive materialism*, claims that all mental states, although not being identical to physical states, are supervenient on and determined by physical ones. (Both of these latter two versions are sometimes referred to as *weak-agent reductionism*.) Yet all versions of naturalism agree that (1) mental states are understood mechanistically (mechanism thesis); (2) the physical order is causally closed (causal closure thesis); and (3) mental states supervene on physical ones (supervening state or supervenience and determination thesis).⁹²

Lewis’s “argument from reason” is the argument from rational inference, or, as Reppert defines it, “The argument from reason first argues that if we are capable of rational inference, then the basic explanation for some events in the universe must be given in terms of reason, not in terms of the blind operation of nature obeying the laws of nature. Only subsequently does this argument attempt to show that theism (or some other mentalistic metaphysical system) best accounts for this explanatory dualism.”⁹³ Some have argued that the existence of abstract propositions that have no temporal properties resolves the problems of naturalism, but if physics is a closed system, such propositions cannot exist independently and affect the world without

⁹¹ Alvin Plantinga, *Warrant and Proper Function* (New York: Oxford University Press, 1993).

⁹² Reppert, *C. S. Lewis’s Dangerous Idea*, 52.

⁹³ *Ibid.*, 53.

some space-time presence. Hence, such a claim is merely an attempt to smuggle back into the picture some form of schizophrenic dualism—in other words, what Lewis shows that the naturalist tries to rule out of existence.

As noted earlier, in his book *Miracles*, Lewis states that if naturalism is true, then everything must be explainable in terms of the “Total System”:

If any one thing exists which is of such a kind that we see in advance the impossibility of ever giving it *that kind* of explanation, then Naturalism would be in ruins. If necessities of thought force us to allow to any one thing any degree of independence from the Total System—if any one thing makes good a claim to be on its own, to be something more than an expression of the character of Nature as a whole—then we have abandoned Naturalism. For Naturalism we mean the doctrine that only Nature—the whole interlocked system exists. And if that were true, every thing and event would, if we knew enough, be explicable without remainder as a necessary product of the system.⁹⁴

Lewis argues that for any mental act, there are two forms of the causal word because or connections that produce thought: connection by “Cause and Effect” and connection by “Ground and Consequent.” The former is exemplified in saying, “Grandfather is ill today *because* he ate lobster yesterday,” thus giving the cause of grandfather’s illness. The latter is shown in saying, “Grandfather must be ill today *because* he hasn’t gotten up yet,” referring not to the cause of his illness, but to evidence of his being ill. As Lewis states, “The one indicates a dynamic connection between events or ‘states of affairs’; the other, a logical relation between beliefs or assertions.”⁹⁵ Although everything in nature is related by cause and effect, the bases for rational inference depend on conclusions of ground-and-consequent relations. Lewis however notes that cause-and-effect accounts of beliefs are used in naturalism to try to prove the absence of any

⁹⁴ Lewis, *Miracles*, 20.

⁹⁵ Lewis, *The Abolition of Man*, 22–23.

ground-and-consequent relations, but in order to have a rational inference, an individual's perception of a ground-and-consequent relation must exist. "Unless our conclusion is the logical conclusion from a ground it will be worthless and could be true only by a fluke. Unless it is the effect of a cause, it cannot occur at all. It looks therefore, as if, in order for a train of thought to have any value, these two systems of connection must apply simultaneously to the same series of mental acts."⁹⁶ In other words, theist dualism is necessarily true. He then asks: "But even if grounds do exist, what exactly have they got to do with the actual occurrence of the belief as a psychological event? If it is an event it must be caused. It must in fact be simply one link in a causal chain which stretches back to the beginning and forward to the end of time. How could such a trifle as lack of logical grounds prevent the belief's occurrence or how could the existence of grounds promote it?"⁹⁷

⁹⁶ Ibid., 23–24.

⁹⁷ Ibid., 24–25. In 1947, when the first edition of his book *Miracles* appeared, Lewis debated the analytic philosopher Elizabeth Anscombe, also a Christian theist, at the Oxford Socratic Club. In response, Lewis revised his argument as is featured here, for the second edition of the book, in order to address the Anscombe criticism. In addition, the Socratic Club hosted a re-run of the debate on February 2, 1967, a few years after Lewis's death in 1963 and exactly nineteen years after the first debate, in which Anscombe was pitted against Oxford philosopher John R. Lucas. As philosopher Basil Mitchell, who succeeded Lewis as President of the Socratic Club until its final meeting in 1972, stated, "on that occasion, I think it would be generally agreed, Lucas succeeded in sustaining Lewis' side of the argument. If one were to think in terms of winners or losers, I think maybe that Lucas was the winner on points. . . . Elizabeth and John agreed as to what the original Lewis-Anscombe debate had been about, and Lucas simply maintained that on the substantial issue Lewis was right and that, for the sort of reasons Lewis had put forward, a thoroughly naturalistic philosophy was logically incoherent. And the outcome of that debate was to make it perfectly clear that, at the very least, Lewis' original thesis was an entirely arguable philosophical thesis and as defensible as most philosophical theses are. So there was no warrant for supposing that in the original debate Lewis had been shown to be just hopelessly wrong." See Basil Mitchell in conversation with Andrew Walker, "Reflections on C.S. Lewis, Apologetics and the Moral Tradition" in Andrew Walker and James Patrick (eds.), *A Christian for all Christians* (London: Hodder & Stoughton, 1990) 9-10. More recently, philosophers James Jordan, William Hasker, J.P. Moreland, Richard Purtill, Victor Reppert, and Alvin Plantinga have defended versions of the proof. See James Jordan, "Determinism's Dilemma," *Review of Metaphysics* 23 (1969-1970), 44-66; William Hasker, "The Transcendental Refutation of Determinism," *Southern Journal of Philosophy* 11 (1973), 175-83, and *Metaphysics* (Downer's Grove, Ill.: InterVarsity Press, 1983), and *The Emergent Self* (Ithaca, N.Y.: Cornell University Press, 1999), 58-80; Richard Purtill, *Reason to Believe* (Grand Rapids, Mich.: Eerdmans, 1974, 44-46; J.P. Moreland, "God and the Argument from Mind," in *Scaling the Secular City* (Grand

His answer is, “One thought can cause another not by being, but by being seen to be, a ground for it.” However, this kind of causation is not possible for naturalism. As Reppert states, Events in nature are determined by the previous position of material particles, the laws of physics, and (perhaps) a chance factor. In that situation, according to Lewis, the object that is known determines the positive character of the act of knowing. But in rational inference what we know is a logical connection, and a logical connection is not in any particular spatio-temporal location. . . . Any adequate account of the relation between reasons and causes must provide an account of the role that convincing plays in our cognitive economy. The idea of being convinced by something seems to imply that reasons are playing a causal role.⁹⁸

Furthermore, explanatory exclusion is intrinsic to the naturalist viewpoint by claiming that only naturalist causations can be true. But the ontological commitments of these explanations must be examined. If the only kind of causation in such a view is physical, “there cannot be causal explanations that require non-materialist ontological commitments.”⁹⁹

The Argument from Reason

Victor Reppert breaks down Lewis’s “argument from reason” into six arguments: (1) intentionality, (2) truth, (3) mental causation, (4) psychological relevance of logical laws, (5) unity of consciousness in rational inference, and (6) reliability of our rational faculties. In so doing, he agrees with Lewis that the reasoning process is crucial to the scientific process:

Rapids, Mich.: Baker, 1987), 77-105; Victor Reppert, “The Lewis-Anscombe Controversy: A Discussion of the Issues,” *Christian Scholar’s Review* 19 (September 1989), 32-48; and Plantinga, *Warrant and Proper Function*, 216-237. Anscombe also complimented Lewis’s revised argument for addressing her concerns: see John Beversluis, “Surprised by Freud: A Critical Appraisal of A.N. Wilson’s Biography of C.S. Lewis,” *Christianity and Literature* 41, no. 2 (1992), 179-95; and G.E.M. Anscombe, *Metaphysics and the Philosophy of Mind*, vol. 2 of *The Collected Papers of G.E.M. Anscombe* (Minneapolis, Minn.: University of Minnesota Press, 1981), 224-231.

⁹⁸ Reppert, *C. S. Lewis’s Dangerous Idea*, 67–69.

⁹⁹ *Ibid.*, 69.

If there are no rational inferences, our mental lives are far from what we all suppose them to be. . . . But a lot is implied by the claim that someone has rationally inferred one proposition from another. In particular,

1. States of mind have a relation to the world we call intentionality, or about-ness.
2. Thoughts and beliefs can be either true or false.
3. Human beings can be in the condition of accepting, rejecting or suspending belief about propositions.
4. Logical laws exist.
5. Human beings are capable of apprehending logical laws.
6. The state of accepting the truth of a proposition plays a crucial causal role in the production of other beliefs, and the propositional content of mental states is relevant to the playing of this causal role.
7. The apprehension of logical laws plays a causal role in the acceptance of the conclusion of the argument as true.
8. The same individual entertains thoughts of the premises and then draws the conclusion.
9. Our processes of reasoning provide us with a systematically reliable way of understanding the world around us.¹⁰⁰

1. Argument from Intentionality

If all of reality is strictly physical and the meaning of any word is subjective and not uniquely determined by the physical world, then no word has any set meaning, and concepts and theories then have no content. Following this line of thinking, eliminative materialists such as Willard

¹⁰⁰ Ibid., 72–73.

van Orman Quine claim that there are no beliefs, which of course raises the question: On what basis does Quine hold such a belief? Lewis states the matter thus:

We are compelled to admit between the thoughts of a terrestrial astronomer and the behavior of matter several light-years away that particular relation we call truth. But this relation has no meaning at all if we try to make it exist between the matter of the star and the astronomer's brain, considered as a lump of matter. The brain may be in all sorts of relations to the star no doubt: it is in a spatial relation, and a time relation, and a quantitative relation. But to talk of one bit of matter being about another bit of matter seems to me to be nonsense.¹⁰¹

Hence as Reppert notes:

1. If naturalism is true, then there is no fact of the matter as to what someone's thought or statement is about.
2. But there are facts about what someone's thought is about. (Implied by the existence of rational inference.)
3. Therefore, naturalism is false.¹⁰²

2. Argument from Truth

As noted earlier, eliminative materialists Paul Churchland and Patricia Churchland believe that if you cannot precisely identify in the brain the actual location of a belief, it does not exist. They well understand that the logical implication of their view is to deny the idea of truth itself.

According to Paul Churchland, "If we are ever to understand the dynamics of cognitive activity, therefore, we may have to reconceive our basic unit of cognition as something other than the sentence or proposition, and reconceive its virtue as something other than truth. . . . The notion of truth, after all, is but the central element in a clutch of descriptive and normative theories (folk

¹⁰¹ Lewis, "De Futilitate," 64.

¹⁰² Reppert, *C. S. Lewis's Dangerous Idea*, 75.

psychology, folk epistemology, folk semantics, classical logic), and we can expect conceptual progress here as elsewhere.”¹⁰³

Patricia Churchland explains their view from a strictly biological perspective:

Boiled down to essentials, a nervous system enables the organism to succeed in the four F’s: feeding, fleeing, fighting and reproducing. The principle [*sic*] chore of nervous systems is to get the body parts where they should be in order that the organism may survive. . . . Improvements in sensorimotor control confer an evolutionary advantage: a fancier style of representing is advantageous *so long as it is geared to the organism’s way of life and enhances the organism’s chances for survival*. Truth, whatever that is, takes the hindmost.¹⁰⁴

To the Churchlands, nothing in the brain can be true or false, good or bad, just or unjust, and if such notions appear, they should be discarded immediately. The result of this line of thinking is an epistemic relativism, making reason and thus science itself impossible. But in the very act of presenting their view, they, in effect, refute themselves.

Hence, Reppert finds:

1. If naturalism is true, then no states of the person can be either true or false.
2. Some states of the person can be true or false. (Implied by the existence of rational inference.)
3. Therefore, naturalism is false.¹⁰⁵

3. Argument from Mental Causation

Mental causation appears essential for the existence of rational inference—not just as causal events, but regarding the content of such events. But if all causation is strictly physical, how can

¹⁰³ Paul M. Churchland, “On the Ontological Status of Observables,” in *A Neurocomputational Perspective: The Nature of Mind and the Structure of Science* (Cambridge, Mass.: MIT Press, Bradford, 1990), 150–51, quoted in Reppert, *C. S. Lewis’s Dangerous Idea*, 76.

¹⁰⁴ Patricia S. Churchland, “Epistemology in the Age of Neuroscience,” *Journal of Philosophy* 84 (Oct. 1987), 548.

¹⁰⁵ Reppert, *C. S. Lewis’s Dangerous Idea*, 77.

this be? The usual nonreductive materialist answer is “anomalous monism,” as developed by Donald Davidson, in which mental states can be defined by intentionality that somehow does not correspond to any material thing. This form of dualism tries to avoid the obvious problem of physical determinism by trying to say that although the mind may not be materially separate from the brain, its operations cannot be propositionally caused by other mental states. However, Davidson, in trying to describe mental events, cannot use any propositional content as reason for his theory. As Jaegwon Kim notes, “Davidson’s anomalous monism fails to do justice to psychophysical causation in which the mental qua mental has any real causal role to play. . . . Its causal powers are wholly determined by the physical description of characteristic that holds for it. For it is under its physical description that it may be subsumed under a causal law.”¹⁰⁶

Mental causation is thus crucial for rational inference because of its content. Here, Reppert concludes:

1. If naturalism is true, then no event can cause another event in virtue of its propositional content.
2. But some events do cause other events in virtue of their propositional content.
(Implied by the existence of rational inference.)
3. Therefore, naturalism is false.¹⁰⁷

4. Argument from the Psychological Relevance of Logical Laws

How can naturalism account for the laws of logic and our knowledge of them? Such laws, including the law of noncontradiction, are not physical because to be true they would have to exist everywhere (even in a vacuum) regarding what might be true or not throughout the universe. They would in effect have to be nonphysical, nontemporal, and nonspatial. But how can they be so in the physicalist view of knowledge, which limits causal factors between the

¹⁰⁶ Jaegwon Kim, “Epiphenomenal and Supervenient Causation,” in *Supervenience and Mind: Selected Philosophical Essays* (Cambridge: Cambridge University Press, 1991), p. 106, quoted in Reppert, *C. S. Lewis’s Dangerous Idea*, 80–81.

¹⁰⁷ Reppert, *C. S. Lewis’s Dangerous Idea*, 80.

brain and objects? As Aristotle showed, if the laws of logic do not really exist (on their own), then we cannot make such a claim. If the laws of logic are purely subjective, then there are no true or false statements, and no declarations are possible, and we are unable to say anything. Reppert notes that “[t]he reality of logical laws cannot be denied without self-refutation. If logical laws exist, they must have something to do with the actual occurrence of belief as a psychological event.” Hence, naturalism contradicts the very laws that it depends on for its own existence as a theory.¹⁰⁸

So Reppert concludes:

1. If naturalism is true, then logical laws either do not exist or are irrelevant to the formation of beliefs.
2. But logical laws are relevant to the formation of beliefs. (Implied by the existence of rational inference.)
3. Therefore, naturalism is false.¹⁰⁹

5. Argument from the Unity of Consciousness in Rational Inference

When inferences are made, what part of the brain is doing what? If strict physicalism is true, each momentary step of inferences would be a different physical event, but what connects all events into a single mental act? What accounts for this “binding” that produces the awareness of the premises, the conclusion, and the logical process connecting them? For a computer to be correct, the correct inference is in our mind, not in the computer’s perception. The “binding problem” thus involves the following situation: “I, a single and unified self, remember, decide, philosophize, and experience pain. And I am aware of doing all of this at the same time. Given that this is the way things seem to be, neuroscientists undertake to discover a single spot where the brain binds together all of the soulish events into a unified whole. What is important to

¹⁰⁸ Ibid., 81–82.

¹⁰⁹ Reppert, *C. S. Lewis’s Dangerous Idea*, 82.

recognize is that neuroscientists would not seek to find this spot, if it were not for our Augustinian first-person experience of ourselves.”¹¹⁰

Reppert concludes:

1. If naturalism is true, then there is no single metaphysically unified entity that accepts the premises, perceives the logical connection between them, and draws the conclusion.

2. But there is a single metaphysically unified entity that accepts the premises, perceives the logical connection between them, and draws the conclusion.

(Implied by the existence of rational inference.)

3. Therefore, naturalism is false.¹¹¹

6. Argument from the Reliability of Our Rational Faculties

Alvin Plantinga has examined in depth the reliability (warrant) of human reasoning to be true or not. In his book *Warrant and Proper Function*, he shows that “naturalism in epistemology can flourish only in the context of supernaturalism in metaphysics.”¹¹² For example, in examining the work of John Bieglow and Robert Pargetter in claiming that an organ or system has proper function (produces outcomes that are true) solely based on the survival-enhancing propensity in a naturalist habitat, he finds that “any analysis of proper function erected on the basis of their account of biological function will be circular. This is because the account relies upon the notion of the natural habitat of an organ or system; but in specifying what the natural habitat of an organ or system is, Bieglow and Pargetter employ concepts that patently involve the notion of proper function.”¹¹³ Plantinga shows that

¹¹⁰ Stewart Goetz, “Review of Nancy Murphy et al., *Whatever Happened to the Soul*,” *Philosophia Christi* 1, no. 2 (1999), 127, quoted in *ibid.*, 84.

¹¹¹ Reppert, *C. S. Lewis’s Dangerous Idea*, 84.

¹¹² Plantinga, *Warrant and Proper Function*, 194.

¹¹³ *Ibid.*, 206.

from a theistic perspective, it could be true that many subsystems of our cognitive and affective systems have functions, and function properly, not because their functioning in that way promotes survival, but because it serves other ends: the possibility of a certain sort of knowledge, or of morality, or loyalty, or love, or a grasp of beauty, or something else. It is therefore obviously possible that such a system have a function that confers no survival-enhancing propensity at all. Indeed, it could be that its functioning properly should put its owners at something of a disadvantage with respect to survival. Since this state of affairs is clearly possible, it is possible that a thing [may] have a function (and function properly) even if that way of functioning confers no sep upon its owner. This proposal fails as a naturalistic analysis of proper function, and fails resoundingly.¹¹⁴

He further notes the following:

If you are dead certain naturalism is true, you will have to accept the cost, not only of rejecting this account of warrant, but of rejecting the very idea of proper function. A high price, no doubt—but no more than what a serious naturalist exacts. But, suppose, on the other hand, you are convinced (as most of us are) that there really is such a thing as warrant and really are (for natural organisms) such things as proper function, damage, design, dysfunction, and all the rest. You think there really are these things and are unwilling merely to take the functionalist stance: then if you also think there is no naturalistic analysis of these notions, what you have is a powerful argument against naturalism. Given the plausible

¹¹⁴ Ibid., 209.

alternatives, what you have, more specifically, is a powerful theistic argument; indeed, what you have is a version of Thomas Aquinas's Fifth Way.¹¹⁵

Plantinga notes that there is hence "no naturalistic explanation or analysis of proper function. . . . the way to be a naturalist in epistemology is to be a supernaturalist in ontology."¹¹⁶

According to Aquinas,

The fifth way is taken from the governance of the world. We see that things which lack knowledge, such a natural bodies, act for an end, and this is evident from their acting always, or nearly always, in the same way, so as to obtain the best results. Hence it is plain that they achieve their end, not fortuitously, but designedly. Now whatever lacks knowledge cannot move towards an end, unless it be directed by some being endowed with knowledge and intelligence; as the arrow is directed by the archer. Therefore some intelligent being exists by whom all natural things are directed to their end; and this being we call God.¹¹⁷

In considering the naturalism of Richard Dawkins, which excludes belief in an "intelligent being" or acknowledgment of a constructing intelligence, Plantinga also states: "If our cognitive faculties have originated as Dawkins thinks, then their ultimate purpose or function (if they have a purpose or function) will be something like survival (of individual, species, gene, or genotype); but then it seems initially doubtful that among their functions—ultimate, proximate, or otherwise—would be the production of true beliefs."¹¹⁸

Regarding Patricia Churchland's claim that the principal function of the human brain's evolution is to enable the organism to move appropriately, Plantinga points out that the "purpose, then (the 'chore' says Churchland) of our cognitive faculties is not that of producing true or

¹¹⁵ Ibid., 214.

¹¹⁶ Ibid., 215.

¹¹⁷ Thomas Aquinas, *Summa Theologiae*, I, Q. 2, a. 3, quoted in Plantinga, *Warrant and Proper Function*, 214.

¹¹⁸ Plantinga, *Warrant and Proper Function*, 218.

versimilitudinous beliefs, but instead that of contributing to survival by getting the body parts in the right place.” As a result, Churchland’s naturalism “gives us reason to doubt two things; (a) that a *purpose* of our cognitive systems is that of serving us with true beliefs, and (b) that they *do*, in fact, furnish us with mostly true beliefs.”¹¹⁹

Meanwhile, naturalists Popper and Quine differ. Popper claims that because mankind has evolved and survived, we can be fairly confident that our propositions regarding the world have been largely true. Quine goes even further to say that “[i]f people’s innate spacing of qualities is a gene-linked trait, then the spacing that has made for the most successful inductions will have tended to predominate through natural selection. Creatures inveterately wrong in their inductions have a pathetic but praiseworthy tendency to die before reproducing their kind.”¹²⁰

Such enthusiasm for naturalism far surpasses that of Darwin who himself harbored reasonable doubts about matters of the mind (“Darwin’s Doubt”): “[T]he horrid doubt always arises whether the convictions of man’s mind, which has been developed from the mind of the lower animals, are of any value or at all trustworthy. Would anyone trust in the convictions of a monkey’s mind, if there are any convictions in such a mind?”¹²¹

Hence, Plantinga points out that Quine and Popper appear to be on one side, whereas Darwin and Churchland are on the other: the former believe that naturalism gives no doubt that mental systems can produce largely true beliefs; the latter believe that naturalism gives us reason to assume the opposite.¹²² Stephen Stich goes even further in questioning Quine and Popper, arguing that there is no reason that natural selection will inevitably have the *opportunity* to select for optimal design. As Plantinga notes regarding Stich’s point, “A truly optimal system—one

¹¹⁹ *Ibid.*, 218.

¹²⁰ W. V. O. Quine, “Natural Kinds,” in *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969), 126.

¹²¹ Charles Darwin, “Letter to William Graham Down, July 3, 1881,” in *The Life and Letters of Charles Darwin*, edited by Francis Darwin (London: John Murray, Albermarle, 1887), 1: 315–16.

¹²² Plantinga, *Warrant and Proper Function*, 219.

with the positive trait but without the negative—may never show up, or may show up too late to fit with the current development of the organism. . . . What Stich shows is that it is perfectly possible both that we and our cognitive faculties have evolved in the ways approved by current evolutionary theory, and that those cognitive faculties are not reliable.”¹²³ Others have also commented on what appears to be the “miraculousness” of human cognitive abilities, indicating one of the central problems in naturalism. Erwin Schrödinger notes that the fact that human beings are able to discover the laws of nature is “a miracle that may well be beyond human understanding.”¹²⁴ Similarly, Eugene Wigner states that “[t]he enormous usefulness of mathematics in the natural sciences is something bordering on the mysterious, and there is no rational explanation for it. . . . It is difficult to avoid the impression that a miracle confronts us here, quite comparable in its striking nature to the miracle that the human mind can string a thousand arguments together without getting itself into contradictions, or to the two miracles of the existence of laws of nature and of the human mind’s capacity to divine them.”¹²⁵

Thus, echoing Lewis’s critique of naturalism, Plantinga explains the following regarding the connection made between naturalism and evolution and offers a way out of the hole dug in making this connection:

Once I come to doubt the reliability of my cognitive faculties, I can’t properly try to allay that doubt by producing an argument; for in so doing I rely on the very faculties I am doubting. The conjunction of evolution with naturalism gives its adherents a reason for doubting that our beliefs are mostly true; perhaps they are mostly wildly mistaken. But then it won’t help to *argue* that they can’t be wildly mistaken; for the very reason for mistrusting our cognitive faculties generally will

¹²³ Ibid., 221–22.

¹²⁴ Erwin Schrodinger, *What Is Life?* (Cambridge: Cambridge University Press, 1945), 31.

¹²⁵ Eugene Wigner, “The Unreasonable Effectiveness of Mathematics in the Natural Sciences,” *Communications on Pure and Applied Mathematics* 13 (February 1960), 2, 7, quoted in Plantinga, *Warrant and Proper Function*, 232.

be a reason for mistrusting the faculties generating the beliefs involved in the argument. . . . The conclusion to be drawn, therefore, is that the conjunction of naturalism with evolutionary theory is self-defeating: it provides for itself an undefeated defeater. Evolution, therefore, presents naturalism with an undefeated defeater. But if naturalism is true, so is evolution. Naturalism, therefore, is unacceptable. The traditional theist, on the other hand, isn't forced into that appalling loop. On this point his set of beliefs is stable. . . . [W]e see that naturalistic epistemology flourishes best in the garden of supernaturalistic metaphysics. Naturalistic epistemology conjoined with naturalistic metaphysics leads via evolution to skepticism or to violation of canons of rationality; conjoined with theism it does not. The naturalistic epistemology should therefore prefer theism to metaphysical naturalism.¹²⁶

Hence, regarding the issue of the reliability of our rational faculties, Reppert concludes:

1. If naturalism is true, then we should expect our faculties not to be reliable indicators of the non-apparent character of the world.
2. But our faculties do reliably reveal the non-apparent character of the world.
(Implied by the existence of rational inference.)
3. Therefore, naturalism is false.¹²⁷

As discussed earlier, for the naturalist, human agency does not really exist because all human action is caused by the nonintentional physical world. The strong-agent reductionist version of naturalism (eliminativism) denies any form of agency, including any form of intentionality, and weak-agent reductionism posits an eliminative reductionism only for biological natural selection, but not regarding intentionality, for which it admits a separate existence. However, strong-agent reductionism cannot be adopted without undermining the

¹²⁶ Plantinga, *Warrant and Proper Function*, 235–37.

¹²⁷ Reppert, *C. S. Lewis's Dangerous Idea*, 85.

enterprise of science itself; for this reason, most philosophical naturalists disregard it. As a result, weak-agent reductionism (usually in the form of functionalism) is more popular (as in the work of Dennett) in which the case for naturalized agency is attempted.

However, such an approach is caught in a dilemma: either Mother Nature as natural selection is unable to generate intentionality, or Mother Nature does have some form of “mind-first” intentionality, which precludes a materialist explanation. We also have to ask, How could the concept of Mother Nature herself come about without outside intentionality? As Angus Menuge notes, “if what is fictional about Mother Nature is her intentionality and if our intentionality derives from hers, then . . . it follows that our intentionality is fictional. But it is incoherent to claim that fictional intentionality is what enables us to construct a fiction of Mother Nature, since fictional entities do not exist.”¹²⁸ Again, we return to Aquinas’s Fifth Way, in which some agency exists prior to and higher in power than human agency, which is contingent; to deny such an explanation a priori is unscientific.

Naturalism and the Abolition of Self

Dawkins and Dennett admit that a strictly genetic account of cognition is not sufficient, and they in turn supplement their theory with “memes,” the conceptual and linguistic structures of cultural evolution. Yet Dawkins notes that such a theory *still* cannot account for consciousness, and Dennett claims that there is *no single place* in the brain where everything “comes together.”¹²⁹ One of the key problems facing such naturalists is that even with the theory of memes, they cannot account for the coordination process of the human brain—the psychological integration of theoretical reasoning. Because such naturalists cannot explain the existence of the individual mind, they thus have had little choice but to deny the existence of the self itself, which they incredibly do. But again, as Lewis has shown, to claim that individuals have no viewpoints is to

¹²⁸ Angus Menuge, *Agents under Fire: Materialism and the Rationality of Science* (Lanham, Md.: Rowman and Littlefield, 2004), 81.

¹²⁹ Cited in *ibid.*, 132.

present a thought only possible by having a point of view. In short, the denial of intentional states is incoherent.

For example, according to naturalist Susan Blackmore, “Each illusory self is a construct of the memetic world in which it successfully competes. Each selfplex gives rise to ordinary human consciousness based on the false idea that there is something inside who is in charge.”¹³⁰ Dawkins further postulates an “evolutionary process of genes and memes playing itself endlessly out—and no one watching.”¹³¹ In reply, evolutionary biologist Richard Lewontin argues that the atomistic view of selfish genes and memes is just another version of the same reductionist, mechanistic view of physics in which all causation stems from the behavior of particular particles, a view thoroughly discredited by Werner Heisenberg and others. In addition, Lewontin points out that “it takes more than DNA to make a living organism. . . . A living organism at any moment in its life is the unique consequence of a developmental history that results from the interaction of and determination by internal and external forces. . . . Organisms do not find the world in which they develop. They make it. Reciprocally, the internal forces are not autonomous but act in response to the external.”¹³²

In his refutation of the “meme” argument, Angus Menuge notes that *something* still has to put the memes together in a coherent fashion to produce a conclusion or an action:

Who we are and how we think is not simply a consequence of the combination of our genes. . . . Likewise, the combination of memes does not suffice to explain the coherent patterns of human thought. A coalition of atomistic, memorable units provides no basis for practical or theoretical reasoning. Humans can see certain thoughts and desires as reasons for further action or thought. However, memes are discrete units and are blind to their own and each other’s existence. Memes are

¹³⁰ Susan Blackmore, *The Meme Machine* (Oxford: Oxford University Press, 1999), 236.

¹³¹ Richard Dawkins, *The Selfish Gene*, rev. ed. (Oxford: Oxford University Press, 1989), 19–20.

¹³² Richard Lewontin, *Biology as Ideology: The Doctrine of DNA* (New York: HarperCollins, 1993), 63.

not self-interpreting, nor are they able to interpret other memes. Consequently, a meme cannot see itself or another meme as a reason for some other action or thought. What is clearly required is an external interpreter of these memes. On pain of regress, this cannot simply be another meme or memeplex. The interpretive self cannot be reduced to a selfplex.¹³³

An individual's reasons for action or thought are not discrete, unrelated factors, Menuge points out, but instead are intricately coordinated and show interconnected compatibility. It is clear "that human reasoning does require our thoughts to come together in one place and that it does require those thoughts to be well matched. There is no reason to think this will happen if our genes create independent processing modules, implementing separate drafts, or if memes are independent cultural atoms infesting our brains."¹³⁴ The only way to picture our thoughts coming together is thus to conjecture a "self": "our thoughts, experiences, and actions are synthesized and interpreted in a way best explained by positing an enduring unitary self of precisely the kind that Darwinian psychology denies."¹³⁵

Menuge further shows how science has to be much more than is considered in the restrictive naturalist view: "naturalism also implies theoretical instrumentalism, the view that scientific theories are merely useful computational devices: the output of these devices mirrors observable phenomena, but the theoretical models may be thoroughly fictional. Granted theoretical instrumentalism, one has no reason to think that science is a reliable means of discovering the truth about the fundamental categories in the universe."¹³⁶ In his view, "naturalism leads to the unwelcome conclusion that science has no authority to tell us what kinds of things belong in our ontology."¹³⁷

¹³³ Menuge, *Agents under Fire*, 135.

¹³⁴ *Ibid.*, 138.

¹³⁵ *Ibid.*, 144.

¹³⁶ *Ibid.*, 151.

¹³⁷ *Ibid.*

Naturalism, and perhaps current science in general, deny consciousness. Functionalist psychologist Jerry Fodor indicates that “Nobody has the slightest idea how anything material could be conscious. Nobody even knows what it would be like to have the slightest idea of how anything material could be conscious.”¹³⁸ And cognitive psychologist and philosopher Ned Block maintains that “[w]e have no conception of our physical or functional nature that allows us to understand how it could explain our subjective experience. . . . In the case of consciousness we have nothing—zilch—worthy of being called a research program, nor are there any substantive proposals about how to go about starting one. Researchers are stumped.”¹³⁹

Even when scientists do look into consciousness, they attempt to reduce it to its physical parts. Yet the neurologist and brain surgeon Wilder Penfield, who tried “to prove that ‘brain mechanisms account for the mind,’” finally had to conclude that “it will always be quite impossible to explain the mind on the basis of neuronal action within the brain, and because it seems to me that the mind develops and matures independently throughout an individual’s life as though it were a continuing element . . . I am forced to choose the proposition that our being is to be explained on the basis of two fundamental elements, material and immaterial, physical and metaphysical.”¹⁴⁰

Yes, there may develop important research into the nature of consciousness. But if such efforts change the subject from conscious experience to a mechanized process such an input-output analysis, consciousness will *not* be explained, but instead incoherently explained away.

¹³⁸ Jerry A. Fodor, “The Big Idea: Can There Be a Science of the Mind?” *Times Literary Supplement*, 3 July 1992, 5.

¹³⁹ Ned Block, “Consciousness,” in *A Companion to the Philosophy of Mind*, edited by Sam Guttenplan (Oxford: Blackwell, 1994), 221.

¹⁴⁰ Aeschliman, *The Restitution of Man*, 21.

Conclusion

For the naturalist to deny the phenomena of the “argument from reason” is to deny the possibility of science itself, including economic science. As Lewis and others have shown, the existence of rational inference cannot be explained in terms of purely materialistic causes.

Even positivist A. J. Ayer’s own naturalist view admits that we must understand something regarding our thoughts that we are yet to think, and we are “obliged to admit that there are some truths about the world which we can know independently of experience; even though we cannot conceivably observe that all objects have them. And we shall have to accept it as a mysterious inexplicable fact that our thought has this power to reveal to us authoritatively the nature of objects that we have never observed.”¹⁴¹

Lewis examines the “argument from reason” according to intrinsic probability. If one believes in the “uniformity of nature” or “an innate sense of the fitness of things,” and if naturalism were true, then there is no basis to know if the “innate sense” is true or not because it is simply the product of the quest for survival. But if theism is true, then “our repugnance to disorder is derived from nature’s creator and ours.” Hence, Lewis agrees with Stark and Whitehead that science arose because of the Christian theistic beliefs of the original scientists: “Men became scientific because they expected Law in Nature, and they expected Law in Nature because they believed in a Legislator. . . . Try to make Nature absolute and you find that her uniformity is not even probable.”¹⁴²

For scientists to achieve what they have, they have needed belief to examine the physical. As Reppert also discusses, “[Arthur James Balfour] argued that with respect to our belief in an objective, independent external world, several scientific convictions have contributed to the success of the scientific enterprise. . . . These scientific convictions, Balfour maintained, are not

¹⁴¹ A. J. Ayers, *Truth and Logic*, 2d ed. (New York: Dover, 1936), 73.

¹⁴² Lewis, *The Abolition of Man*, 159–69.

based on the physical evidence. Rather, they are the outworking of convictions that scientists brought to their investigation of the natural world.”¹⁴³

The work of Plantinga is especially perceptive here,¹⁴⁴ and Reppert argues for the important connection between belief and trust in our own thoughts: “if theism is true, then these beliefs make a good deal more sense. Belief in the reliability of our belief-producing mechanisms makes sense on theistic assumptions, but not on naturalistic assumptions.”¹⁴⁵

As a result, we have a clear teleological explanation that we know from “common sense” what uniquely makes the scientific enterprise, including economics (via methodological individualism), possible. The naturalistic explanations that work for falling rocks and drifting continents do *not* work for consciousness and reasoning. As a result, a theistic dualist view is essential in order to make sense of reality.

C. S. Lewis argues convincingly that dualism is crucial and that humans have intentionality from God:

[The theist] is not committed to the view that reason is a comparatively recent development molded by a process of selection which can select only the biologically useful. For him reason—the reason of God—is older than Nature, and from it the orderliness of Nature, which alone enables us to know her, is derived. For him, the human mind in the act of knowing is illuminated by the Divine mind. It is set free, in the measure required, from the huge nexus of non-rational causation; free from this to be determined by the truth known. And the

¹⁴³ Reppert, *C. S. Lewis's Dangerous Idea*, 99. Arthur James Balfour, *Theism and Humanism* (New York: Hodder and Stoughton, 1915), 149–268.

¹⁴⁴ See also Alvin Plantinga, *Warranted Christian Belief* (New York: Oxford University Press, 2000), 227–40.

¹⁴⁵ Reppert, *C. S. Lewis's Dangerous Idea*, 100.

preliminary processes within Nature which led up to this liberation, if there were any, were designed to do so.¹⁴⁶

According to Robert Koons, “By definition, the laws and fundamental structure of nature pervade nature. Anything that causes these laws to be simple, anything that imposes a consistent aesthetic upon them, must be supernatural.”¹⁴⁷

The problem with naturalism regarding reasoning is *not* just that we do not know the physical explanation for reason. Naturalism itself provides a reason to believe that reasoning should not exist even though its existence cannot be denied without undermining science from which naturalism is supported.

C. S. Lewis clearly understood that reason, free will, and individual choice are not illusions; they are intrinsic and objective truths, nonnegotiable presuppositions, upon which human inquiry and science, truth and civilization rest. And such understanding necessitates a theistic dualism of both a material and immaterial, natural and supernatural, physical and metaphysical reality. In this regard, economics and other forms of science, historically developed only as a result of the Christian insights into this dualism, and to deny the metaphysical basis for science, including the methodological individualism of economics, is to make science itself unintelligible and impossible. Lewis’s “argument for reason” is hence essential and correct, and naturalism (along with its consequent scientism and methodological collectivism) is an erroneous and self-contradictory view that fails, and moreover breeds untruths that have led historically to repeated human folly and unspeakable horrors.

¹⁴⁶ Lewis, *The Abolition of Man*, 34–35.

¹⁴⁷ Robert Koons, “The Incompatibility of Naturalism and Scientific Realism,” in *Naturalism: A Critical Analysis*, edited by William Lane Craig and J. P. Moreland (London: Routledge, 2000), 49–63.