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Atheism in Modern Science
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"Intelligent life on a planet comes of age when it first works out the reason for its own existence."[1]

Introduction

"Nowadays nobody bothers [to attack religion], and it is considered in slightly bad taste to even raise the question of God's existence…For us, the educated members of society, the world has become demystified…The result of this demystification is that we have gone beyond atheism to a point where the issue no longer matters in the way it did to earlier generations."[2] Thus John Searle sums up the current academic understanding of the question of God's existence, thanks to the demystifying power of modern science. This self-satisfied view is in sharp contrast to Fr. Cornelio Fabro's assessment in *God in Exile,* "It is time that philosophers [and scientists!] grasp the fact that modern science remains entirely foreign and unrelated to the religious problem, both in its concepts and in its assignments, for the very simple reason that science deals with a field and area specified by material reality, whereas God is the Absolute Spirit and absolutely transcendent."[3] Fabro expresses without equivocation the error made by anyone who claims atheism in the name of science: they have overstepped the legitimate application of the scientific method and trespassed into aspects of reality that are *per se* beyond the reach of empirical experimentation, though not beyond the reach of rational argumentation.

This lack of recognition of the proper object and limitations of the material sciences is rooted in a more fundamental epistemological error, that of positivism- a philosophical position which asserts that only knowledge of phenomena is truth, and equates the laws governing phenomena with the real.[4] In the neo-positivism associated with scientism, there is a rejection of "any remnant of a thing-or-truth-in-itself" and a resolution of truth into "terms of sheer analysis of language and of the verifiability of events."[5] In practice it is the explicit rejection of the value of metaphysics, and an attempt to found all knowledge on direct sensation of the material world

[1] Richard Dawkins, *The Selfish Gene* (Oxford: Oxford University Press, 1989), 1.
[2] John Searle, *Mind, Language, and Society* (Basic Books, 1998), 34-35.
[3] Cornelio Fabro, *God in Exile,* trans. Arthur Gibson (New York: Newman Press, 1968), 1128.
[4] *Ibid.*, 1125.
[5] *Ibid.*

as verified through scientific experiment alone. These errors are not an inherent part of the material sciences, but they are perhaps a perennial temptation against which science must constantly be on guard.

Historical Background

The beginning of modern science is difficult to determine precisely (it has been placed anywhere from the 13th-17th century), but it can be characterized by a shift in focus from the essence of reality as understood through metaphysical speculations to the mechanisms which underlie natural phenomena as conceived within quantified and mathematical models. The discovery of the new world (1492) and the invention of new instruments such as the telescope (c.1608)[6] and the compound microscope (c. 1595)[7] expanded the observable universe, and flooded the academic world with new data, challenging the accepted world-view. The exciting fruits obtained through the astronomical models proposed by Nicholas Copernicus (d. 1543) and the work of the brilliant mathematician Sir Isaac Newton (d.1727) helped stimulate a turn to a physio-mathematical approach to the study of nature and began the development of a science based simultaneously on mathematics, empirical observation and controlled experiment.[8] This new scientific method[9] was particularly fruitful in the fields of physics and engineering, where quantification and materialism are most appropriately applied. But this shift to a mathematical approach carried with it a danger: the crisp clarity and clean simplicity of mathematics became something of a temptation for philosophers mired in a decadent and formalistic Scholasticism and arrogant theology.[10] Seeing the advances made by physics, other fields of research including

[6] Although invented in this year, the telescope was first used to study outer space by Galileo in 1609. Lauren Cox, "Who Invented the Telescope?," accessed February 24, 2018, https://www.space.com/21950-who-invented-the-telescope.html.

[7] Zacharias Jansen, Dutch lens maker. However, it is the Dutch scientist Anton van Leeuwenhoek (1632-1723), who truly pioneered the field of microscopy. He invented a microscope with the magnifying power of 270x. He was the first to see and describe bacteria, yeast plants, and the circulation of blood corpuscles in capillaries. "History of the Microscope" accessed February 24, 2018, http://www.history-of-the-microscope.org/history-of-the-microscope-who-invented-the-microscope.php.

[8] Fabro, 1124.

[9] What is in many ways a 'new science,' considered in terms of its philosophical foundations is actually a return to older trends of thought. In fact, Fabro points out modern science can be "traced back, both in respect of its hypotheses and of its methods, to Greek thought."[9] And even more strongly, "There is not a single theory of modern science, from heliocentrism to evolution, that was not adumbrated and outlined by the Greek genius" (Fabro, 1123).

[10] Fabro, 1124.

philosophy desired to share in the "happy insight of modern science…[and] exact science thus became the paradigm of knowing."[11] Fabro notes that the major modern philosophers (Descartes, Malebranche, Spinoza, Pascal, Leibniz, Kant) were at the same time "outstanding practitioners of science" and they were explicitly determined to save philosophy by *adapting it to the criteria of science*.[12] This captivation with the exactitude proper to physics and mathematics would contribute to the depreciation of metaphysics and subsequent overvaluation of scientific theories.

Another new attitude that arose with modern science and distinguished it from previous concepts of knowledge was the shift from the speculative study of nature to the manipulation or harnessing of natural laws through the practical application of scientific theory. In the development of technology, modern science was able to revolutionarily change almost every aspect of human life in the span of a few hundred years, something, they like to point out, speculative philosophy was unable to accomplish given several millennia.[13] "Man in science feels himself to be at the center of operations and even feels himself to be the pivot of truth."[14] This quick success and sense of power again led to an over-estimation of the capacities of the exact sciences, and contributed to an unfortunate neglect of metaphysical truths which otherwise might have grounded man in his proper context in relation to reality. C.S. Lewis describes the distinction between 'philosophical wisdom' and the new scientific attitude: "For the wise men of old the cardinal problem had been how to conform the soul to reality, and the solution had been knowledge, self-discipline, and virtue. For…applied science…the problem is how to subdue reality to the wishes of men: the solution is a technique."[15] This fundamental difference in values explains in part some of the antagonism (and disdain) felt by scientists towards philosophy.

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[11] *Ibid.*.
[12] *Ibid.* Emphasis added.
[13] *Ibid.*, 1125.
[14] *Ibid.*, 1124.
[15] C.S. Lewis, *The Abolition of Man* (New York: Harper Collins Publisher, 1944), 77. The full quote of C.S. Lewis is even more condemning: "There is something which unites magic and applied science while separating both from the 'wisdom' of earlier ages. For the wise men of old the cardinal problem had been how to conform the soul to reality, and the solution had been knowledge, self-discipline, and virtue. For magic and applied science alike the problem is how to subdue reality to the wishes of men: the solution is a technique; and both in the practice of this technique, are ready to do things hitherto regarded as disgusting and impious- such as digging up and mutilating the dead…It might be going too far to say that the modern scientific movement was tainted from its birth: but I think it would be true to say that it was born in an unhealthy neighborhood and at an inauspicious hour. Its triumphs may have been too rapid and purchased at too high a price: reconsideration, and something like repentance, may be required."

Francis Bacon (d.1626) explicitly asserts that the undue focus on impractical metaphysical speculation retarded the advent and development of the (useful) empirical sciences.[16]

Atheistic Theories in Modern Science

Unlike some of the modern trends of philosophical thought, modern science is not inherently atheistic, nor is it incompatible with Thomistic metaphysics. In fact, the valid use of the scientific method, its own specific "rendering present physical reality" through experimentation[17] and the application of new instruments has opened up new and exciting possibilities of a structural link between science and philosophy.[18] However, there is a growing number of vocal and explicitly atheistic academics who claim scientific advances have eliminated the need for God, or have undermined the traditional demonstrations for his existence.[19] The majority of these arguments are based on the premise that belief in the existence of God is superfluous- science can give a rational and empirical explanation of every facet of reality (or it will be able to do so one day). Applying the law of parsimony (Ockham's razor) as a heuristic guide, they assert that an atheistic view is the simplest, sufficient account of observable reality, and is thus better supported by scientific evidence.[20] The underlying assumption is that the necessity of God's existence is based purely on ignorance of the true explanations for natural phenomena. As scientific knowledge advances, belief in God will become unnecessary. Note that this basic premise completely denies any need for metaphysical truths and makes science and faith inherently incompatible.

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[16] Étienne Gilson, *From Aristotle to Darwin and Back Again* (San Francisco: Ignatius Press, 1971), 29. In Bacon's own words: "for the handling of final causes, mixed with the rest in physical inquiries, hath intercepted the severe and diligent inquiry of all real and physical causes, and given men the occasion to stay upon these satisfactory and specious causes, to the great arrest and prejudice of farther discovery."

[17] Fabro, 1128.

[18] Fabro notes that part of the difficultly in coordinating a proper relationship between science and philosophy is that "for Scholasticism (St. Thomas included), philosophy had no direct link with science, but aimed rather at instituting relations with theology and with revealed faith" (Fabro, 1125).

[19] Edward Feser, *The Last Superstition* (Indiana: St. Augustine Press, 2008), 3. See for example, Sam Harris *The End of Faith: Religion, Terror, and the Future of Reason* (2005); Daniel Dennett, *Breaking the Spell: Religion as a Natural Phenomenon* (2007); Richard Dawkins, *The God Delusion* (2008); and Christopher Hitchens, *God is not Great: How Religion Poisons Everything* (2009).

[20] *Ibid.*,80.

Fundamental Philosophical Errors behind the Atheism in Modern Science

These assertions, far from being scientifically proven 'discoveries' based on new empirical data, are actually conclusions based on *a priori* philosophical positions through which the data (reality) is being arbitrarily restricted. No matter how minutely and technically science understands the material and efficient causes that produce natural phenomena, there will always remain questions that lie outside the scope of empirical investigation: *what* is the phenomena? *why* is nature? *how* is the totality, or any being at all? And these are just questions about material nature! Left unaccounted for, and implicitly or explicitly denied, are all the most critical realities such as the spiritual human soul, freedom, and the problem of God.[21] The conflict between "secular science" and religion is not really a scientific or theological issue at all, but is rather a question of a choice between "two rival philosophical worldviews."[22] The philosophical positions underlying atheistic science are very difficult to coherently support and often end up destroying the very foundations of knowledge and science itself.

Perhaps one of the most pernicious errors found among modern thought is the assertion that only scientific knowledge is rational and the subsequent relegation of non-empirical truths to the 'unscientific' realm of subjective opinion. This scientism is a direct result of the gnoseological errors of positivism and empiricism. These errors are not inherent to the scientific method itself, but comes to science from early modern and enlightenment thinkers. As C.S. Lewis puts it "It might be going too far to say that the modern scientific movement was tainted from its birth: but I think it would be true to say that it was born in an unhealthy neighborhood and at an inauspicious hour."[23] Scientism is an inherently contradictory position, since it is not itself a scientifically provable assertion; it is thus a philosophical statement claiming there is no such thing as philosophical truth.[24] It also destroys the possibility of certainty in knowledge, since it denies the existence of self-evident principles. Self-evident principles are by definition indemonstrable, and thus would not be considered 'scientifically proven.' However, if there are

[21] It is not that science should study these topics, or that they must be explicit parts of scientific theories. But the scientific field should acknowledge that these realities exist and that other sciences are necessary in order to study and examine these aspects.
[22] Feser, 12.
[23] Lewis, 78.
[24] Feser, 84.

no self-evident principles there would be an infinite regress of truths founded on truths and ultimately no real foundation of knowledge and certainty.[25]

Materialism is another philosophical error often associated with scientific theories. Like positivism, it is very difficult to formulate in a coherent way, and when followed to its final consequences it destroys any intelligibility and thus meaningful knowledge of the material universe. One vocal proponent of an extreme form of materialism is biologist Richard Dawkins, who reduces living organisms to merely accidental amalgamations of molecules, caused by the efficient activity of self-replicating DNA. Dawkins states clearly in *The Selfish Gene* "The argument of this book is that we, and all other animals, are machines created by our genes"[26] and further on, "I prefer to think of the body as a colony of genes…Nowadays the intricate mutual co-evolution of genes has proceeded to such an extent that the communal nature of an individual survival machine is virtually unrecognizable. Indeed many biologists do not recognize it, and will disagree with me."[27] This reductionism is arbitrary, ignoring the substantial unity displayed by organisms, and it leaves unexplained the ordered properties of the DNA itself. Even though in the year 2000, the Human Genome Project successfully sequenced the entire genome of the *Drosophila Melanogaster* (fruitfly), the words written 300 years earlier by St. Thomas are still valid: "Our manner of knowing is so weak no philosopher could perfectly investigate the nature of even one little fly."[28]

Within the field of neuroscience, the rejection of non-material realities such as beliefs, desires, and other mental phenomena is called "eliminative materialism." According to this theory, since these phenomena do not really exit, they ought to be eliminated from our description of human nature and replaced with concepts derived from neuroscience.[29] Therefore, it would be *false* or scientifically inaccurate to say "I feel nervous about my Thomistic studies paper," since *feeling* and *nervous* are mental states, while what actually exists in reality are only brain processes. Therefore, to speak truthfully I ought to say "My serotonin levels are dropping due to my upcoming Thomistic studies talk." It is important to note that eliminative materialists are not merely pointing out that brain chemistry and other neurological factors underlie and

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[25] Tomas Alvira, Luis Clavell and Tomas Melendo, *Metaphysics* trans. Luis Supan (Manila: Sinag-Tala Publishers, Inc., 1991), 36.
[26] Dawkins, 2.
[27] *Ibid.*, 47.
[28] St. Thomas, *Exposition on the Apostle's Creed,* prologue.
[29] Feser, 229.

influence moods and thoughts. They are saying there is no such thing as mental states: "The mind as we think we know it *does not exist*; there is only the brain. Or rather, not as we 'think' we know it, since there is no such thing as *thinking.* Instead our brains are just wired in such a way that we tend to make noises that sound like 'I think such and such…"[30] Clearly, it is difficult to even express this theory since it undercuts the existence of the subjective person and the very possibility of meaningful communication. This is an extreme position that most scientists would not support. However, it is the inherent consequence of materialism and the denial of formal and final causality. Therefore moderate materialists who still accept the existence of mental states "have sacrificed consistency, though they have thereby preserved their sanity." [31] Note that the denial of the existence of mental states was not *proven* but rather taken for granted. The materialists equate 'understanding the underlying physical components' with 'doing away with the need' for any reality that does not conform to their materialistic theories.

With these examples, the grave danger of positivism and scientism becomes apparent: by its very nature it blinds its follows to its inherent errors. Positivism disparages the wisdom gained by the philosophical sciences, and thus material scientists are left holding philosophical assumptions without having critically assessed their validity. In fact, because they reject metaphysics, many highly intelligent academics lack the tools or methodology to be able to assess their underlying assumptions. As E.A. Burtt points out, "There is an exceedingly subtle and insidious danger in positivism…what kind of metaphysics are you likely to cherish when you sturdily suppose yourself to be free from the abomination? Of course it goes without saying that in this case your metaphysics will be held uncritically because it is unconscious; moreover, it will be passed on to others far more readily than your other notions inasmuch as it will be propagated by insinuation rather than by direct argument."[32] The atheistic conclusions proposed by scientists are full of many erroneous propositions. If these philosophical assumptions were expressed explicitly and taught openly, they would be quickly and easily rejected due to their patent incoherence.

Conclusion

[30] *Ibid.*, 230.
[31] *Ibid.*, 232.
[32] E.A. Burtt, *The Metaphysical Foundations of Modern Physical Science* (Humanities Press, 1952), 228-29 cited in Feser, 84.

Whenever scientists claim to have disproved the existence of God (or made his existence superfluous), the reality of the situation is scientists making philosophical statements, and often they are doing so with poorly examined philosophical assumptions. This fundamental error is unrecognized by the general public, and even by the scientists themselves because part of their underlying assumptions include positivistic errors. A true "modern science rejects and repudiates both positivism with its reduction of the reality of the world to perception and idealism with its conversion of the world into a creation of thought. If there is one disciple the science of our own decade can most easily do without, it is modern philosophy. Its own concepts and methods of rendering present physical reality cannot and must not be those of philosophy."[33] However, from within its own proper sphere, science must admit its own dependence on a realist metaphysics to provide an accurate framework for interpretation.

[33] Fabro, 1128.

Bibliography

Alvira, Tomas; Clavell, Luis; Melendo, Tomas. *Metaphysics* trans. Luis Supan. Manila: Sinag-Tala Publishers, Inc., 1991.

Dawkins, Richard. *The Selfish Gene.* Oxford: Oxford University Press, 1989.

Fabro, Cornelio. *God in Exile,* trans. Arthur Gibson. New York: Newman Press, 1968.

Gilson, Étienne. *From Aristotle to Darwin and Back Again.* San Francisco: Ignatius Press, 1971.

Lewis, C.S. *The Abolition of Man.* New York: Harper Collins Publisher, 1944.

Pinker, Steven. *How the Mind Works.* W.W. Norton & Company, 2009.

Searle, John. *Mind, Language, and Society.* Basic Books, 1998.