

# The Scientism Subforum

Post by "Cassius" of July 20, 2024 at 9:48 AM

I was reorganizing the forum dedicated to comparing Epicurus to non-Epicurean philosophers, and in doing so I assigned names of the respective major players in each group to the title of the forum. For example, I added the name Aristippus to what was formerly the "Epicurus vs Cyreniacs" forum.

When I came to "Scientism" I did not find a suitable name to associate with the term, as it seems to be a largely negative term that few people seemingly would want to identify with. However the following sections of the Wikipedia article as of today (7/20/24) contains some good information about what the controversy is about, so it seems worth memorializing it here in case it were to be for some reason unavailable later:

## Scientism

**Scientism** is the view that [science](#) and the [scientific method](#) are the best or only way to render [truth](#) about the [world](#) and [reality](#).<sup>[1][2]</sup>

While the term was defined originally to mean "methods and attitudes typical of or attributed to natural scientists", some scholars, as well as [political](#) and [religious](#) leaders, have also adopted it as a pejorative term with the meaning "an exaggerated trust in the efficacy of the methods of natural science applied to all areas of investigation (as in [philosophy](#), the [social sciences](#), and the [humanities](#))".<sup>[2][3]</sup>

## Overview

[Francis Bacon](#) has been viewed by some scholars as an early proponent of scientism,<sup>[4]</sup> but this is a modern assertion as Bacon was a devout [Anglican](#), writing in his Essays, "a little philosophy inclineth man's mind to [atheism](#), but depth in philosophy bringeth men's minds about to religion."<sup>[5]</sup>

With respect to the [philosophy of science](#), the term *scientism* frequently implies a critique of the more extreme expressions of [logical positivism](#)<sup>[6][7]</sup> and has been used by social scientists such as [Friedrich Hayek](#),<sup>[8]</sup> philosophers of science such as [Karl Popper](#),<sup>[9]</sup> and philosophers such as [Mary Midgley](#),<sup>[10]</sup> the later [Hilary Putnam](#),<sup>[10][11]</sup> and [Tzvetan Todorov](#)<sup>[12]</sup> to describe (for example) the dogmatic endorsement of scientific methods and the reduction of all [knowledge](#) to only that which is measured or [confirmatory](#).<sup>[13]</sup>

More generally, scientism is often interpreted as science applied "in excess". This use of the term *scientism* has two senses:

- The improper use of science or scientific claims.<sup>[14]</sup> This usage applies equally in contexts where science might not apply,<sup>[15]</sup> such as when the topic is perceived as beyond the scope of [scientific inquiry](#), and in contexts where there is insufficient [empirical evidence](#) to justify a scientific conclusion. It includes an excessive deference to the claims of scientists or an [uncritical](#) eagerness to accept any result described as scientific. This can be a [counterargument](#) to [appeals to scientific authority](#). It can also address attempts to apply natural science methods and claims of certainty to the social sciences, which Friedrich Hayek described in [The Counter-Revolution of Science](#) (1952) as being impossible, because those methods attempt to eliminate the "human factor", while social sciences (including his own topic of [economics](#)) mainly concern the study of [human action](#).
- "The belief that the methods of natural science, or the categories and things recognized in natural science, form the only proper elements in any philosophical or other inquiry",<sup>[16]</sup> or that "science, and only science, describes the world as it is in itself, independent of perspective"<sup>[11]</sup> with a concomitant "elimination of the [psychological](#) [and [spiritual](#)] dimensions of experience".<sup>[17][18]</sup> Tom Sorell provides this definition: "Scientism is a matter of putting too high a value on natural science in comparison with other branches of learning or culture."<sup>[19]</sup> Philosophers such as [Alexander Rosenberg](#) have also adopted "scientism" as a name for the opinion that science is the only reliable source of knowledge.<sup>[20]</sup>

It is also sometimes used to describe the universal applicability of the scientific method, and the opinion that [empirical science](#) constitutes the most authoritative [worldview](#) or the most valuable part of human learning, sometimes to the complete exclusion of other opinions, such as [historical](#), philosophical, economic or cultural opinions. It has been defined as "the view that the characteristic inductive methods of the natural sciences are the only source of genuine [factual knowledge](#) and, in particular, that they alone can yield true knowledge about man and society".<sup>[21]</sup> The term *scientism* is also used by historians, philosophers, and cultural critics to highlight the possible dangers of lapses towards excessive [reductionism](#) with respect to all topics of human knowledge.<sup>[22][23][24][25][26]</sup>

For [social theorists](#) practising the tradition of [Max Weber](#), such as [Jürgen Habermas](#) and [Max Horkheimer](#), the concept of scientism relates significantly to the philosophy of [positivism](#), but also to the cultural [rationalization](#) for modern [Western civilization](#).<sup>[13][27]</sup> [Ernesto Sabato](#), [physicist](#) and [essayist](#), wrote in his 1951 essay *Hombres y engranajes* ("Man and mechanism") of the "superstition of science" as the most contradictory of all [superstitions](#),<sup>[28]</sup> since this would be the "superstition that one should not be *superstitious*". He wrote: "science had become a new magic and the man in the street believed in it the more the less he understood it".<sup>[28]</sup>

## Definitions

Reviewing the references to scientism in the works of contemporary scholars in 2003, Gregory R. Peterson<sup>[29]</sup> detected two main general themes:

- It is used to criticize a totalizing opinion of science as if it were capable of describing *all* reality and knowledge, or as if it were the *only* true method to acquire knowledge about reality and the nature of things;
- It is used, often pejoratively, [\[30\]](#)[\[31\]](#)[\[32\]](#) to denote violations by which the theories and methods of one (scientific) discipline are applied inappropriately to another (scientific or non-scientific) discipline and its domain. An example of this second usage is to term as scientism any attempt to claim science as the only or primary source of human values (a traditional domain of [ethics](#)) or as the source of [meaning](#) and purpose (a traditional domain of [religion](#) and related [worldviews](#)).

The term *scientism* was popularized by [F. A. Hayek](#), who defined it in 1942 as the "slavish imitation of the method and language of Science".[\[33\]](#)

[Mathematician Alexander Grothendieck](#), in his 1971 essay "The New Universal Church", characterized scientism as a religion-like ideology that advocates scientific [reductionism](#), scientific [authoritarianism](#), political [technocracy](#) and technological salvation, while denying the [epistemological](#) validity of feelings and experiences such as love, emotion, beauty and fulfillment.[\[34\]](#) He predicted that "in coming years, the chief political dividing line will fall less and less among the traditional division between 'right' and 'left', but increasingly between the adherents of scientism, who advocate '[technological progress](#) at any price', and their opponents, i.e., roughly speaking, those who regard the enhancement of life, in all its richness and variety, as being the supreme value".[\[34\]](#)

[E. F. Schumacher](#), in his *A Guide for the Perplexed* (1977), criticized scientism as an impoverished [world view](#) confined solely to what can be counted, measured and weighed. "The architects of the modern worldview, notably [Galileo](#) and [Descartes](#), assumed that those things that could be weighed, measured, and counted were more true than those that could not be quantified. If it couldn't be counted, in other words, it didn't count."[\[35\]](#)

In 1979, Karl Popper defined scientism as "the aping of what is widely mistaken for the method of science".[\[36\]](#)

In 2003, [Mikael Stenmark](#) proposed the expression *scientific expansionism* as a synonym of scientism.[\[37\]](#) In the *Encyclopedia of Science and Religion*, he wrote that, while the [doctrines](#) that are described as scientism have many possible forms and varying degrees of ambition, they share the idea that the boundaries of science (that is, typically the natural sciences) could and should be expanded so that something that has not been previously considered as a subject pertinent to science can now be understood as part of science (usually with science becoming the sole or the main arbiter regarding this area or dimension).[\[37\]](#) According to Stenmark, the strongest form of scientism states that science does not have any boundaries and that all human problems and all aspects of human endeavor, with due time, will be dealt with and solved by science alone.[\[37\]](#) This idea has also been termed the [myth of progress](#).[\[38\]](#)

Intellectual historian [T. J. Jackson Lears](#) argued in 2013 that there has been a recent reemergence of "nineteenth-century positivist faith that a reified 'science' has discovered (or is

about to discover) all the important truths about human life. Precise measurement and rigorous calculation, in this view, are the basis for finally settling enduring [metaphysical](#) and [moral](#) controversies." Lears specifically identified Harvard psychologist [Steven Pinker](#)'s work as falling in this category.<sup>[39]</sup> Philosophers [John N. Gray](#) and [Thomas Nagel](#) have made similar criticisms against popular works by moral psychologist [Jonathan Haidt](#), atheist author [Sam Harris](#), and writer [Malcolm Gladwell](#).<sup>[40][41][42]</sup>