

Scientistic Chronicles



Exploring the limits, if any,
of the scientific enterprise

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2. Spelling Out Scientism, A-Z



[John Shook](#)

Friends of religion or spirituality are heard to cry “Scientism!” on occasion. Cultural opponents to scientific or technological strides have used “Scientism!” as a clarion call for resistance as well. Quieter voices have been asking, “Is scientism what I think it is?” The label of scientism may be irretrievably lost to rhetoric and polemic, but it does involve science, which deserves far better. Let us try to speak to this thing called scientism.

The guardians of sanctity and the prophets of doom make it pretty clear what it is they are trying to protect. It’s ultimately about some traditional folkway, somebody’s comfortable status, or some group’s rigid conviction. Eloquence abounds when such a righteous cause is to be praised. Scientism, we simply are supposed to see, is precisely that very bad thing which is threatening such a very good thing. And scientism should shut up and go away, and let us keep on doing things the way we like.

The critics of scientism apparently don’t compare notes among themselves, to see if they could agree with each other about what this “scientism” is. Nevertheless, it has acquired a pejorative stench in certain areas of public discourse. One just mentions it, to arouse distaste among one’s audience, to win every argument for one’s side. “Socialism” can work this way in some parts of

the land, or “Darwinism.” It apparently doesn’t matter whether you, or anybody, can precisely say what this dreaded “scientism” would be.

Scientism-haters are sometimes heard to contradict each other, too. Is scientific knowledge good, or evil, or both? For example, an fMRI image taken of a person’s brain while meditating will garner praise from one religionist happy about a scientific “confirmation” of mysticism in the brain, while another religionist will take alarm about this scientific “reduction” of religiosity to the brain. Which is it?

I’ve never heard a clear definition or consistent position on “scientism” taken by the religious, or the spiritual, or the protectors of whatever is so good and holy about cultural matters. Then again, the scientific world, or the secular world, hasn’t displayed any unity about scientism either. Should friends of science accept the “scientism” charge and defend what others think of as intrusive science? Or should friends of science deny the charge and defend a humbly limited role for it?

This dilemma over “scientism” has similarly arisen for other science-friendly terms, such as “naturalism.” During my sojourns throughout the pro-science and secular world, I have often heard people announce how they don’t accept naturalism, although they make it clear how they aren’t into supernaturalism. These are often the same people who would sternly deny that their rejection of god is “atheism.” What’s in a name? Words truly matter, even while sweetly spoken, when they are used as labels on people.

Atheism might be included among the insinuations aroused by that harsh verdict of “scientism” delivered by the stern protectors of The Good. However, the religious are hardly the only ones eager to cast the first “scientism” stone at the latest breakout of enthusiasm over a scientific or technological breakthrough. Virulent condemnations of scientism can sweep through secular sectors, too. The loudest critics of scientism all sound pretty sure that plenty of science-worship has been going on, to the detriment of society and civilization.

What is really up there, inscribed on that high altar to science? Let’s take it from A to Z:

A. There is a thing called “science” with its own characteristic features distinctive enough to distinguish it from other human practices.

B. Plenty of knowledge about a subject can be gained by practical trial-and-

error, but scientific knowledge of that subject is more reliable and valuable.

C. If there are people believing that something is true, but a science confirms that it can't be so, then those people don't really know.

D. There is a specifiable "scientific method" that possesses some definable core or essential steps, used by all genuine sciences.

E. There is no subject matter or kind of reality, or any field of experience and endeavor, that isn't amenable to inquiry by scientific method.

F. Even if there is no singular "scientific method," the methodologies used by scientists are universally applicable to anything that can be observed or can have empirical consequences.

G. Any explanation that hasn't been tested (or can't be tested) by scientific method(s) is no explanation at all and mustn't be believed with any confidence.

H. Whatever people may think they know, they don't really know unless some science or another among the social, life, or physical sciences can come along and approve that knowledge.

I. However the sciences may develop and undergo paradigm shifts, science itself is reflexively competent to fully understand how it works best without assistance from any other humanistic or philosophical field.

J. Whatever the sciences may acknowledge to be happening and have existence cannot be amended or overruled by any other field of experience or intellectual discipline.

K. Nothing can be happening unless empirical consequences and entities/forces/laws trackable by one science or another are somehow involved.

L. A thing isn't independently real unless it can be theoretically confirmed, presently or in the future, by one science or another.

M. A thing can't have any reality unless it can be theoretically confirmed by one of the biological or natural sciences.

N. A thing has no reality at all unless its existence is required by a theory of a single natural science enjoying the widest universality (physics). [1]

O. A subject matter that seems to have little or nothing to do with a natural science hasn't been well-understood until natural scientists have reviewed and commented on it.

P. A thing cannot have value unless its existence has been scientifically confirmed and some science(s) can agree that it has some value, for an individual or an aggregate of individuals.

Q. There is no form of human relationship or type of social organization that cannot be understood and improved by the application of scientific inquiry and reformed by scientific knowledge.

R. There is no worldview that cannot be improved by the infusion of scientific knowledge and the replacement of non-scientific ideas.

S. No worldview has serious legitimacy unless it agrees with the natural sciences that humanity has no special place, purpose, or destiny.

T. No virtue, moral norm, or ethical principle has serious legitimacy unless it has been confirmed by, or derived from, scientific knowledge about humanity and reality.

U. Cultural folkways or social institutions that rely on ideas/values about matters which no science can accept as knowable, ethical, and real should be eliminated or at least marginalized.

V. A highly worthy life is one guided by a scientific outlook on the world.

W. The worthiest culture for humanity is the one technologically controlled by the scientific worldview.

X. The most thoroughly scientific culture should displace and marginalize all other cultures across humanity.

Y. The supremely scientific culture should eliminate all rival cultures and control the destiny of humanity. [\[2\]](#)

Z. The supremely scientific culture should control the course of humanity as well as all posthuman sentient forms of life, including AI life forms, that may arise from humanity.

I suppose one meta-scientific view should be added: There is something clearly definable as “scientism.” Admirers of both scientism and meta-scientism may survey this list and fail to find just what scientism should mean. I’ve no quarrel with them, because the point of this list isn’t to identify what scientism truly means, or to list everything that has ever been defended in the name of scientism. I would be greatly pleased, however, if defenders of science, and especially those who are willing to answer to charges of scientism, would at least

be specific about what they are defending and what they aren't.

Critics launching charges of "scientism," despite their vagueness, often hint at some of these views, and even manage to hit upon one, sometimes inadvertently. The most careful of critics are worth the attention when they do precisely explain the kind of scientism that troubles them, and why it darkens their dreams. As for the rest of the critics, they would help everyone by explaining exactly where they are dipping their spoon into this alphabet soup of scientism.

It would be even more helpful, and hence probably too much to ask, if scientism's critics would explain how they think they are going to refute scientism. The obvious way is to directly challenge science, and prove that science can't know what it thinks it does. Few critics of scientism trouble themselves with that task nowadays. They often don't comprehend the objectionable science in the first place, and they are too proud or busy to learn. And their admiration for some non-scientific doctrine or another may be too embarrassing to defend in public.

Instead, the preferred strategy, involving the least amount of preparation, goes something like this. First, throw down a challenge against some monstrous form of scientism. Second, only attack a weak version of scientism, as if hard knocks against mild scientism are sure to bring down the towering version.

Here's a good example. It is depressingly common nowadays for a pundit to shrilly warn against Scientism S or Scientism T, and "refute" that dreaded scientism by declaring that, as any educated person should know, Scientism A or Scientism D can't be true. Bruising a meeker scientism in order to chase away the stronger one appears to run counter to common sense. Still, this strategy is applied so frequently that the anti-scientism crowd's fondness for it must have a basis somewhere. Perhaps lingering mirages from postmodernist droughts of anti-science still haze their minds. If only there was no such thing as "science"! If only no one had to take any scientist's knowledge seriously! But the fact is: if you want your anti-scientism to be taken seriously, please take science more seriously first.

There is a little method to the anti-scientism crowd's antics. Although each view on this alphabetic scientism list has some relationship with neighboring views, they aren't simply re-statements of each other. Logically, it is the case that one of these views can be correct but the others needn't be. You could accept any single view, or any subset of these views, and withhold assent from the rest

without contradicting yourself. From a practical standpoint, however, accepting the scientism of one letter while denying most or all of the earlier letters is very hard to justify.

That is why scientism is usually taken to be based on prior acceptance of one or another sort of naturalism. Most of these letters, especially A through V, do coincide with various positions taken by paradigmatic naturalists over the past two centuries. If some consistent subset were selected out, there is a fair chance that a self-proclaimed naturalist has staunchly defended just that subset as the genuine kind of naturalism. A naturalist typically accepts one letter, along with most of the previous ones in the series. For example, many naturalists accept G, and hence they can endorse E or F, along with A, B, and C, and possibly D. A naturalist who endorses K or L probably endorses most of the preceding letters. Some famous naturalists agreed with only a small subset of these views, and stridently disagreed with each other over which subset is acceptable.

Interestingly, Scientism N may represent the farthest that naturalists may go. N is a serious sort of scientism, to be sure, but at this point naturalism and scientism could part ways. Although Scientism R and Scientism S may be tempting for strict naturalists, Scientism T might go too far. Strict naturalists may not want to get involved with evaluating normative matters, or even admitting normative matters into the strictly naturalistic worldview. The strong Scientisms U through Z wouldn't be stridently defended by a thinker feeling more comfortable with broad relativism, narrow subjectivism, emotivism, egoism, or outright nihilism.

It just isn't the case that the staunchest promoters of strong Scientism would have to all be among the strictest of naturalists. However, 'looser' naturalists, able to easily situate knowledge about values, morals, and ethics amongst the sciences, would be in a position to apply that "web of belief" to the common plight of humanity. Scientism can be for the strong of heart, as well as the strong of mind.

What have we been able to spell out about scientism? If alphabet soup isn't to your taste, maybe this whole exercise seems like a waste of time. Perhaps you wish that those degenerating culture wars weren't prolonged by pointless disputes over something like "scientism." Scientism is just one of those throwaway political words, you might be thinking, wielded for polemical puncturing while lacking any substantive force.

Maybe so. Still, there are real ideas and serious positions on this alphabetic list.

No matter what labels they get, they do spell trouble for those valiantly defending the ways of yesterday. How will those seeking a better tomorrow signal where they want to go?

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[1] A defender of M but not N would hold that some kinds of biological matters will never be reducible without remainder to chemistry/physics. It may be the absence of a bridging law, or it may be about teleological explanation. Lots of matters involving consciousness or attentive reasoning, for example, may at last get their natural place with brain functionality, but they could remain invisible and unreal to physics. John Dewey affirms M but rejects N. As do I. The fault line between M and N is the one of the greatest, sharply dividing naturalists over the past 200 years, and I don't foresee how it will vanish. N makes far vaster philosophical claims than just M.

[2] W affirms worthiness to some scientific culture but it does not authorize displacement of rivals. E.g., we admire our American culture, but we shouldn't impose it on other continents.

X endorses the complete domination of the most scientific culture over all other cultures around now. E.g., the most radical scientific culture we can imagine now should promptly be used to assimilate or degenerate all other lesser cultures around the whole world. Other cultures would be reduced to Amish-like status on reservations.

Y approves of radical monoculture — utter and final assimilation of all humanity into the most radical scientific culture possible.

There are huge ethical differences between W, X, Y, and Z — and these options sharply divide pro-scientism radicals already. Transhumanists are bitterly

divided among them right now, and between that foursome and weaker options.