

Scientism and the Dogmatics of Modernity

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"The damage of scientism is done ♦ the insane have succeeded in locking the sane in the asylum. From this asylum no physical escape is possible. As a consequence of the interlocking science and social power, the political tentacles of scientistic civilization reach into every nook and corner of an industrialized society, and with increasing effectiveness stretch over the whole globe. There exist only differences, though very important ones, in the various regions of the global asylum with regard to the possibility of personal escape into the freedom of the spirit. What is left is hope--but hope should not obscure the realistic insight that we who are living today shall never experience freedom of spirit in society. ♦1 [1] --Eric Voegelin

Eric Voegelin's sobering analysis of scientism is by no means the only of its kind, yet it reflects an all too silent position in the current climate of dogmatomachies. Modernity has the distinction of bringing about great progress in material wealth, medicine, and technology. The Enlightenment brought a newfound zeal for science along with a utopianism that left man bounded only by his imagination. Advances in the natural sciences brought about immediate tangible benefits to the masses. Yet, we need not look far in the past to find horrendous atrocities. The same technology that provided so much comfort could, in the wrong hands, conveniently be used to exterminate millions. And this is what happened in the 20th century as tens of millions lost their lives at the hands of their own governments! In light of the holocaust, nuclear warfare, the gulags, and bloody civil wars, can we really ascribe progress to modernity? Has the zeal for physical health caused us to neglect our spiritual well being? Voegelin's harsh

1 [1] Voegelin, Eric. *The English Quest for the Concrete*. Volume 24 of the Collected Works of Eric Voegelin: History of Political Ideas Volume VI: *Revolution and the New Science*. ed. Barry Cooper. University of Missouri Press , Columbia 1998 pp.214-215

critique of modernity, and more specifically of scientism, highlights perhaps the key crisis of our age. In this essay, we will explore the origins of scientism and show how it has directly affected the political realm. Furthermore, we will show how scientism extends beyond the West, noting its manifestation in 20th century China . Finally, we will explore possible solutions to the problem. Is hope all we have or has the situation improved since Voegelin's dire assessment over half a century ago?

What is Scientism?

Before delving further into the matter, we must delineate the key features of scientism. Scientism refers to the intellectual movement that places primacy on the methods of the natural sciences. It can be characterized as a pseudo-religion or a form of idolatry (termed scientolatry by D.R.G. Owen) since its adherents express a dogmatic faith in the power of science. As Voegelin notes, "Science becomes an idol that will magically cure the evils of existence and transform the nature of man."² [2] The very name of science commands respect and all other forms of knowledge, if they are to be considered legitimate, must show their "scientific" character. To the extent that the methods of the natural sciences are employed, knowledge is considered objective and valid. Everything else is relegated to the realm of opinion and disregarded as unscientific. This includes all metaphysical speculation and the core of classical philosophy since "whatever is not deduced from the phenomena is to be called an hypothesis; and hypotheses, whether metaphysical or physical, whether of occult qualities or mechanical, have no place in experimental philosophy"³ [3] . Under this assumption, God becomes a mere hypothesis and thus has no place in philosophical discourse.⁴ [4] As Voegelin points out, mere philosophical disagreements over what constitutes knowledge or science are not particularly harmful until they become socially realized. The danger of scientism is that it has become

2 [2] Ibid p.208

3 [3] Ibid p.194

4 [4] Ibid p.183

directly connected to political power. "The advancement of the science for which Newton is the great, representative genius has profoundly affected the political and economic structure of the Western world.❖5 [5] Indeed, Voegelin cites the advancement of science after 1700 as the "most important single factor in changing the structure of power and wealth on the global scene.❖6 [6] Now, that we have noted some of the key features of scientism let us look at the origins of the movement.

Origins of Scientism

An adequate study of the origins of scientism would require a much longer exposition, but we can highlight some of the main influences in order to get at the foundation of the movement. Francis Bacon's *Novum Organum* (1620) can arguably be considered the founding document of the "new science.❖7 [7] The implication of the work is that the method outlined therein can be applied to *all* human knowledge.⁸ [8] Bacon was perhaps the first philosopher to explicitly suggest that society could be advanced through science. He openly called for the joining of political power and science. *New Atlantis* was the direct result of Bacon's optimism in the unlimited power of science. According to Bacon, man can subdue nature, but only after first submitting to it and understanding it.⁹ [9] In his utopia, inventors are given god-like status. As

5 [5] Ibid p.205

6 [6] Ibid p.206

7 [7] Hayek, F.A. *The Counter-Revolution of Science: Studies on the Abuse of Reason*. 2nd edition. Liberty Press, Indianapolis 1979. Hayek refers to Bacon as the lord chancellor and prototype of the "demagogue of science.❖ p.21

8 [8] White, Howard. *Francis Bacon*. From *The History of Political Philosophy*. ed. Strauss and Cropsey, 2nd edition. University of Chicago Press 1973 p.343

9 [9] Ibid p.342

Howard White notes, "the ancient suspicion of technological process is replaced by something like *faith* in technological progress."¹⁰ [10] In stark contrast to the ancients, Bacon refused to outline the greatest human good. He thought that scientific progress would eventually allow man to imagine what he might be capable of accomplishing, but any attempt to do so before such progress would be futile.¹¹ [11] By framing the issue thusly, Bacon essentially advocates scientific advancement as the human good, at least in the short term, since it is what will allow humans to eventually realize their greatest good.

A few other points about Bacon's philosophy are worth mentioning. Bacon rejects a cyclical view of history. Instead, history represents progress so that Bacon's own age is greater than that of antiquity.¹² [12] Baconian science would pave the way for the perfect society, represented in *New Atlantis*. The utopia found in *New Atlantis* is a technological paradise, which is guided by the principles of the new science. As White notes, it is *transhistorical* and not subject to decay.¹³ [13] It is universal in character and not subject to the evils of previous human societies. Bacon's utopianism and dogmatic faith in the power of science helped form the foundation of the scientific creed.

While Bacon undoubtedly helped pave the way for the scientific revolution, the scientific attitude did not truly become prevalent in Western society until Newton's emergence. The idea

¹⁰ [10] Ibid p.343

¹¹ [11] Ibid p.344

¹² [12] Ibid p.344

¹³ [13] Ibid p.350

of absolute space had important philosophical and political consequences. As Voegelin states, "the attribution of "absoluteness" to the new science expresses the will of finding an absolute orientation of human existence through intramundane experience, and the correlate to this new will is the unwillingness to orient existence through openness toward transcendental reality."¹⁴ [14] He points to a rational, utilitarian core that promotes technology and wealth, but seeks to delegitimize any forms of knowledge that do not promote practical utility. This rational-utilitarian influence is "expanding in our civilization so strongly that the social realization of other values is noticeably weak."¹⁵ [15] The dominion over our physical world is extrapolated to social structures. Our social environment can be controlled using the same principles of natural science, or so the argument goes. Let us turn to a few examples to show how this scientific attitude was formulated in light of Newton 's influence.

Henri de Saint-Simon, writing in the wake of the French Revolution, was hoping to re-unify society under the auspices of science. He praised the "positive sciences" and thought that the science of man should follow suite. Saint-Simon's proposed society would be led by the great "Council of Newton", consisting of twenty-one scholars and presided over by the mathematician who had received the most votes.¹⁶ [16] The Council would serve as "the representatives of God on earth, who would deprive the pope, cardinals, the bishops, and the priests of their office because they do not understand the divine science which God has entrusted

¹⁴ [14] Voegelin p.210

¹⁵ [15] Ibid pg.207

¹⁶ [16] F.A. Hayek. p.219

to them and which some day will again turn earth into paradise.❖17 [17] And what happens to those who do not go along with Saint Simon's plan? "Anybody who does not obey the orders will be treated by the others as a quadruped.❖18 [18] This is because "the law of human progress guides and dominates all; men are only its instruments.❖19 [19]

To say that Saint-Simon rejected the tenets of liberalism would be an understatement. Diversity, especially in ideologies, would only lead to civil strife as in the French Revolution. Saint-Simon notes, "the vague and metaphysical idea of liberty❖impedes the action of the masses on the individual❖and is contrary to the development of civilization and to the organization of a well-ordered system.❖20 [20] Individual liberty must give way to collective necessity, especially if the desired ideological uniformity is to be achieved. Saint-Simon recognized the utility of religion in bringing about this uniformity, but the old forms of Christianity would no longer be sufficient. All religion had to be brought in line with "positive science❖ to be considered legitimate. While he generally rejected the teachings of Christian doctrine, he found worth in the institutional structure of the Church. The scientists were to organize themselves along the lines of the Catholic clergy and direct the education of the masses. Furthermore, they should "elect a scientific pope, employ excommunication for crimes against

17 [17] Ibid p.219

18 [18] Ibid p.222

19 [19] Ibid p.243

20 [20] Ibid p.249

the ideology, and institute a Newtonian form of baptism.❖21 [21] Thus, we can see the far-reaching implications of the scientistic attitude. It's not merely enough to promote science as a good for society; instead, it becomes *the* good and political, economic, and even religious institutions must reflect its principles.

Saint-Simon's influence likely would not have been as great if not for the help of his pupil, Auguste Comte. Comte was a more systematic thinker and was able to more eloquently formulate the arguments of his mentor. While Comte eventually broke with Saint-Simon, his influence remained strong. It is in Comte's works that we get a glimpse of the "positive science of man"❖ that Saint-Simon had initially called for. Positivism serves as perhaps the most influential strand of scientism. Comte is acknowledged as the founder of positivism and like his predecessor, had aims far beyond the reach of mere science. As Leszek Kolakowski notes, it was "a grandiose project for universal reform encompassing not only the sciences but all spheres of life.❖22 [22] Once he began to gain supporters, Comte's doctrine began to resemble religious works23 [23] . The new spiritual organization that he wished to bring into society would no longer have its basis in Judeo-Christian thought. In its place was a new dogma of science. As Kolakowski states, "the organic and rational society of the future must be based on science: the principles of its organization will be scientifically elaborated, and all its members

21 [21] Lyon, Peyton V. "Saint-Simon and the Origins of Scientism and Historicism."❖ The Canadian Journal of Economics and Political Science, Vol. 27, No.1 (1961) p.62

22 [22] Kolakowski, Leszek. *The Alienation of Reason: A History of Positivist Thought*. Trans Norbert Guterman. Anchor Books, New York . 1969 pg. 48

23 [23] Ironically, Comte had cited Saint-Simon's religious overtures as the reason for disassociating himself from his mentor. See Hayek p.256

must adopt scientific modes of thinking.²⁴ [24] Comte, like Bacon and especially Saint-Simon, posits a telos of history in which each era brings about a new, better phase of intellectual development. For him, positive science is the pinnacle of that development. As we can readily see, he does not merely endorse science, but rather sees it as a necessary historical development towards the perfection of society. In Comte's ideal society, religion and traditional values give way to science and everyone *must* subscribe to the new dogma. We can extrapolate the practical consequences of not subscribing to the new dogma through the historical examples of the 20th century. The gulag and concentration camps were filled with individuals who did not subscribe to or "fit" the preferred dogmas. Comte's famous Law of the Three States exemplifies this idea.²⁵ [25] As noted, Comte found a telos in intellectual development as dictated by history. The first stage, or theological stage, is the most primitive. It is seen as incomplete, but necessary in the development of knowledge. The mind searches for supernatural causes to natural phenomena within this state. The second stage can be deemed metaphysical. It is within this stage, that the mind begins to search for single, unified explanations for phenomena. For instance, the concept of "mother nature" or a single divinity comes into focus.

The third and most radical stage is that of positivism. In this state, the primary questions of the previous two are not answered, but instead, are ignored completely. All metaphysical questions are deemed meaningless and seen as mere verbal confusion.²⁶ [26] Man can no longer ask the Question, that is, anything regarding his origins or nature. Knowledge is equated

24 [24] Kolakowski pg.50

25 [25] Ibid pg.51

26 [26] Ibid pg.51

with practical utility. Matters that do not deal directly with observable phenomena have no utility and therefore, no place within Comte's positivist utopia. Furthermore, the individual is seen as a construct with society being the true reality. Comte likens mankind to organisms, with set structures and functions. He completely ignores the emotions, rights, and thoughts of the individual as he thinks that science can unite all in an integration of religion and knowledge. Comte posits that we only need to popularize positivism and the result will be the "emancipation of Reason, which leads directly to the end of history.²⁷ [27] Comte's new religion of "Humanity" takes the place of Christianity. He models his religion of science after the structure of Catholicism, even going as far as to name each month after a saint of the positive religion!²⁸ [28] Comte argues for a "stop" history and a utopian society based on positive science. Ironically, Comte was critical of past utopian works, but refused to acknowledge the utopian aspects of his own thought. He seemed to assume that the guise of scientific objectivity would validate his claims. With Comte, we truly begin to see the potential dangers of a dogmatic system of science. Yet, scientism's greatest mark had not yet been made in the political realm; that task would be left to Karl Marx.

Marxist Scientism

We need not delve into the intricacies of Marxist thought to show its scientific character. Marx, like Saint-Simon and Comte, posited that society was moving towards its perfection. Although Marx criticized Saint-Simon as being a "utopian socialist", his own vision for the

²⁷ [27] Ibid pg.61

²⁸ [28] Ibid pg.61

future was equally optimistic.²⁹ [29] His classless realm of freedom represented the perfection of man. This final state would be characterized by peace and would require no government whatsoever. Another important similarity between Marx, Comte, and Saint-Simon is the prohibition of questioning. For Saint-Simon, man is merely an instrument and has no choice but to follow the law of human progress. For Comte, positivist man has abandoned all metaphysical questions and Marx explicitly prohibits socialist man from asking questions about his origins, telling a potential interlocutor, "Do not think, do not question me."³⁰ [30] The main difference between Marx's brand of scientism and that of Comte, Bacon, and Saint-Simon, is that Marxism became socially relevant. Where Saint-Simon and Comte both failed in gaining the ears of powerful politicians, Marx succeeded.

Marxism proved to be the most powerful and destructive ideology of the 20th century. The Bolshevik revolution provided the first opportunity for Marxism to flourish. The rise and fall of the Soviet empire has been well documented, as has the general failure of Marxist regimes in the 20th century. However, the motivating factors behind Marxism have remained prevalent and it is those that we must be concerned with. Neo-Marxist ideology has many variants, but it is still firmly based on scientific principles. The desire for a perfect society remains, as does the thought that it can be brought about through human action. Furthermore, Marxist principles are almost always framed as "scientific."³¹ The means have become somewhat more flexible and some principles of capitalism have even been embraced; yet the ends have remained. The

²⁹ [29] Lyon p.57

³⁰ [30] Voegelin, Eric. *Science, Politics, and Gnosticism*. ed. Sandoz. ISI Books, Wilmington 2004 p.10p.19

question we must ask is why Marxist principles have not been completely abandoned in light of Marxism's apparent failure in the 20th century? To get at this question, let us look at China , a country that was directly affected by Marxism in the last century.

Scientism in 20th Century China

As noted, scientism may have originated in the West, but its effects have not been limited to it. This becomes apparent in the case of China . While Western scholars turned their attention to its manifestation in the Soviet Union , Marxism had a strong influence in China --an effect that can still be felt today. Naturally, the Marxism found in China was not the same as that found in the Soviet Union , but the core features remained in tact. The dream of a communist utopia was just as present in China as it was in the Soviet Union . The communists, let by Mao, won power in 1949 and held a firm grip on Chinese politics for the next quarter of a century. Mao took painstaking measures to ensure ideological uniformity and strictly forbade anything that might jeopardize it. The disastrous Great Leap Forward showed how dangerous Marxist utopianism could be as Mao tried to transform the economy from agrarian to industrialized.³¹ [31] Not surprisingly, the result was not as Mao had envisioned and millions suffered as a result. The Cultural Revolution proved to be equally as disastrous and served to alienate most within China from Maoism, and traditional Marxist ideology. However, the end of Mao's reign did not result in the abandonment of scientistic principles.

31 [31] Hua, Shiping. *Scientism and Humanism: Two Cultures in Post-Mao China (1978-1989)*. State University of New York Press, New York 1995. p.42

Considering the apparent failure of Marxism and the fact that China lacks the scientific tradition of the West, what factors can account for the prevalence of the scientific attitude in contemporary China ? Chinese scholar, Shiping Hua, points to three main factors:

" 1) Scientism inherits the Confucian cultural and intellectual tradition which has a holistic approach. All aspects of social consciousness are regarded as an inseparable whole. This intellectual holistic notion is also linked to the monistic political orientation in the Chinese culture where only one legitimate source of truth is recognized. Scientism is also in line with the utopianism embodied in the Chinese tradition. 2) It is a psychological response to what is termed voluntarism and ethic-purism as demonstrated during the Cultural Revolution. 3) It is a practical response to the socioeconomic problems encountered by the Chinese people after the Cultural Revolution.❖32 [32]

Aside from the pragmatic reasons that Hua asserts, there is a deeper issue that is worth noting. There is a spiritual void in Chinese society that has continued to exist in spite of the drastic changes in institutional forms. That void was filled by Mao's version of Marxism in the middle of the century and has been filled with a technological/materialistic scientism since.

Although there was a definite move away from Marxist ideology after Deng's reforms, the underlying spiritual disorder persisted and simply has taken a different (but equally dangerous) form. China has opened up dramatically in matters of economics, but the accompanying social reforms have not occurred. The move has been made away from communist economic principles and China 's economy more closely resembles that of its Western, liberal counterparts. Yet, the social freedoms experienced in the West have not made their way to China . As Hu Shi noted nearly a century ago:

32 [32] Ibid p.33

"During the last thirty years or so there is a name which has acquired an incomparable position of respect in China ; no one, whether informed or ignorant, conservative or progressive, dares openly slight or jeer at it. The name is Science. The worth of this almost nationwide worship is another question. But we can at least say that ever since the beginning of the reformist tendencies (1890) in China , there is not a single person who calls himself a modern man and yet dares openly to belittle Science.❖33 [33]

Here, we can recall Voegelin's words about the rational, utilitarian core of scientism. This core promotes technology and wealth, but seeks to delegitimize any forms of knowledge that do not promote practical utility. Religion is included as an "illegitimate❖ form of knowledge and liberty of conscience in China is all but unknown. Most Christian churches are underground and those who do not worship at an officially sanctioned Church are subject to imprisonment. Why is this the case? There are various reasons, but the most important is that Christianity confers dignity upon the individual. Once individuals realize that liberty is God-given and that each individual is created *imago dei*, the days of authoritarian collectivization are over. Religious freedom would serve to undermine the very foundation of the political order in China and the authorities realize this.

China has yet to allow the civil liberties that would allow for a widespread spiritual awakening. Chinese Enlightenment has consisted mostly of imported Western science, but that has not been balanced by equal attention to the Western philosophical tradition. It can be argued that Marxism never took hold in the United States because of its Protestant, Christian tradition. The key feature of this tradition is that it confers dignity upon the individual and stresses the importance of individual resistance. More importantly, it places limits on politics. The summum

bonum is not to be found in this life, but in communion with God in the next life. The political realm can be of use, but it is not supposed to be the source of human happiness. This is in stark contrast to the unlimited aims of politics in the Marxist tradition and in all societies based on scientific principles. Scientism claims unlimited power for human action, so long as the proper methods are utilized. Furthermore, the approach is radically immanent, meaning that perfection can happen in this life. Most importantly, the individual is treated as a means to political ends. The one child policy, which limits most urban families to one baby, serves as a prime example of the Chinese government's prioritization of pragmatic politics over individual rights. The policy has been ongoing for twenty-eight years and has led to countless abortions. Female babies are especially vulnerable as male heirs are preferred.³⁴ [34] This, along with the aforementioned ban on non-official Christian churches, serves as a sobering reminder that basic political liberties have not found their way into China .

So is the situation just as hopeless in China as Voegelin had insisted was the case in the West over half a century ago? The fact that the Chinese people continue to suffer at the hands of their government is troubling. However, not many would have predicted the economic reforms and it seems likely that more trade will lead to continued exposure to Western traditions, including Christianity and classical philosophy. Yet, hope for China cannot rest upon other societies. The Chinese people must demand the freedoms that they have been continually denied to them and have to shape their political structures in a way that also incorporates Chinese tradition. In short, there is no magical cure to the spiritual disease that underlies the scientific attitude. Hope is

34 [34] Taken from a recent article on MSN entitled "China Bans Insensitive Birth Slogans" found at <http://www.msnbc.msn.com/id/20135338/> August 5th, 2007

indeed a necessary requirement in breaking the hold of scientism, but without accompanying action, all hope will be in vain.
