

Philosophy: The Lynchpin of Scientism

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ABSTRACT: *The intellectual legacies of Bacon and Descartes, as well as the Newtonian scientific tradition undoubtedly brought about an era of natural scientific research anchoring its ideal on objectivity that led to scientism. This hyper-belief in science and the subjugation of philosophy (and other sources of knowledge) has given rise to a complex scenario and gap, created by the inability of science to address other cosmic issues including metaphysical ones. The hegemony of science which mostly derives from the dominance of science in economic and social fields owing to its technological progress and advancements, has created problems that threaten man and morality. The issue is, is science still interested in the good of man if his existence and morality are jeopardized? Is the claim for the sole mantle of rationality by scientism, and the equation of science with reason itself still valid, given the multifarious irrational scientific productions against life like abortion pills, weapons of mass destruction, etc? Has science solved and answered all problems? Is it a perfect discipline and the only source of knowledge? It is against this backdrop that this paper, through expository and critical analysis unveiled the ambiguity, complexity, and illogicality of this scientific claim for superiority (scientism), concluding that science is not superior, and not the only way of knowing reality, but mainly engages itself in proffering solutions to the hydra-headed problems of the physical world which is a part in a whole. Philosophy still reigns supreme and goes deeper to guide and checkmate the excesses of science in order to strike a balance, and unravel metaphysical realities that are beyond the scope of science.*

KEY WORDS: philosophy, scientism, science, man, universe.

INTRODUCTION

Science is as old as humanity, and a total or partial dismissal of the importance of science to humanity tantamounts to a crime against truth, the obvious, or human efforts and ingenuity. Better nutrition and medicine have been made possible today through science, which invariably extend

man's life span. The World Health Organisation noted that substantial global progress has been made in reducing child deaths since 1990, which is realizable through scientific advancements. Additionally, science has made the emergence of technologies like computers, the Internet, cars, airplanes, etc., possible, and not just limited to the study of the natural world, disease, or human lifespans. There are many new scientific discoveries and innovations, such as artificial intelligence, space exploration, DNA, sequencing, etc.

However, it is highly disheartening that this same science which initially aimed at ushering in an era of peace and prosperity, has on the contrary, led to greater violence, sorrow, tension, new diseases, environmental crisis, etc. That which has been a boon to mankind has finally proved to be a bane. Moral issues are daily ignored owing to scientific inventions that aid in engagements in promiscuous acts leaving the social fabric of the society being broken thereby abandoning the society in crisis.

Based on the discoveries and advancements recorded by science, scientists have been poised towards boasting for supremacy over all other ways of understanding the universe, with the strong belief that science is the sure way of knowing the world and all in it. They relegate other sources of knowledge about the universe like philosophy and religion to the background as inauthentic. It was Peter Atkins who, in his 1995 essay titled, "Science as Truth" unequivocally asserts the universal competence of science, with the position that science is the best procedure yet discovered for exposing fundamental truths about the world. This is scientism. It initially aimed to be pejorative but later gained ground as a thing of honour by the proponents.

However, this paper aimed to challenge and prove to scientists and future scientists alike, (students and scholars inclusive) that science is never superior to all other sources of knowledge with particular reference to philosophy (even religion), and by implication, academic humility should be the watchword as knowledge is still at the evolutionary stage, and no discipline knows it all. All disciplines have made some reasonable contributions to the body knowledge in varying forms and ways. In the same vein, that discipline which claims to know it all and yet fails to solve some raging problems, endangers and jeopardizes the entire human race through some inventions is questionable. It fails the test for supremacy and should be redirected.

Following this trajectory, science has derailed and is not superior. Their claim has pushed them into "the thingification" of man (subjection of man to the level of a thing) through their inventions (abortions, missiles, etc.) which philosophy checkmates because man is no longer seen as a being with body and soul composites. Philosophy takes this lofty position. And, as science is unable to unravel metaphysical entities, even some physical realities like the unidentified flying objects (UFO), the Bermuda Triangle, the stars, the sun, etc., which still remain at the realm of mysteries, where lies its supremacy? Its claims are therefore bogus, illogical, and devoid of rational base, given its extremities and errors that shouldn't have been the case. Thanks to the superiority of

philosophy, the 'Queen of all the Sciences', for serving as a gadfly in guarding against the excesses of science and pointing out its imperfections which it never considered in making their irrational claims.

Brief Overview of Science and Scientism

For clarity purposes, a little highlight will be made here about science, owing to its well-known nature and usefulness. More attention will be paid to scientism which is the crux of the matter based on its new claims for supremacy over all other ways of understanding and interpreting reality.

Science, which originated from the Latin word "Scientia", meaning "knowledge", is any system of knowledge that is concerned with the physical world and its phenomena and that entails unbiased observations and systematic experimentation. It generally, deals with a pursuit of knowledge encompassing general truths or the operations of fundamental laws. The major objectives of science are to understand the functional role of nature and explain it in a complete form, provision of knowledge of the laws of nature after experimental verification, and the control of through the application of experimental results carried out through keen observation. It is evident that the concerns of science are with the physical world, but some secularists decided to go further than that through the extension of the purview of science more than just being a limited practice. They adopted and upheld a complete science-oriented philosophy known as scientism.

It is interesting to note that the modesty with which the practitioners of science operate has been appealing, and they are specialists in their various domains than most people. They tend to be hesitant in the expression of authoritative opinions outside of their circumscribed domains of expertise. In *The Folly of Scientism*, written by Austine L. Hughes, he sees this as an attractive attitude that is in sharp contrast to the arrogance being exhibited by the positivist philosophers who claimed for science and its practitioners a broad authority with which many practising scientists themselves were uncomfortable.

The pertinent question now is, what actually is scientism? It is nothing but the broad-based belief that the assumptions and methods of research of the physical and natural sciences are equally appropriate (or even essential) to all other disciplines, including philosophy, the humanities, and the social sciences. It anchors on the belief that the superiority of natural science outweighs all other interpretations of life, and that the procedures of natural science form the only proper elements in any philosophical (or other) inquiry. It emanated from Empiricism and is akin to Positivism.

It proposes an exaggerated trust in the efficacy of the methods of natural science which should be applied to all areas of investigation. The proponents of Scientism are of the view that the boundaries of science could and should be expanded to encompass all that has not been previously

understood as science. In its most extreme form, Scientism is a position that science has no boundaries, and that in due time all human problems as well as all aspects of human endeavor will be dealt with and only solved by science.

On the emergence of this new idea, Eric Voegeline stated that the origins of Scientism as an intellectual movement are discernible from as early as the second half of the sixteenth century, accompanying the rise of modern mathematics and physics. The advancement of "new science" ignited an elation with far-reaching consequences which through the centuries have had a wider coverage. This elation and fascination with the new science metamorphosed into pure rejection and sheer neglect for the things of the spirit (spiritual realities) or the religious order of the soul. The movement culminated in the nineteenth century in an autocratic prohibition of posing questions with a metaphysical nature by scientists or scientific thinkers. This movement has not been operational without some principles or assumptions. One of their principles is the assumption that the mathematized science of natural phenomena is a model science to which all other sciences ought to conform. Secondly, they maintain that all beings are accessible to the methods of the sciences of phenomena. Lastly, all reality that is not accessible to sciences of phenomena is either irrelevant or, in the more radical form of dogma, illusionary according to them.

Most importantly, scientism has the strong view that science confers genuine knowledge to humanity. Epistemologically, scientism has two forms, strong and weak scientism. In the former (strong scientism), the only path to knowledge is science, while in the latter (weak scientism), the best path to knowledge is science. Scholars like Richard Dawkins, Lawrence Krauss, and Peter Atkins seem to propagate strong scientism, affirming that the major questions of life relating to the meaning, purpose, and significance of humankind can be well answered by science. It downplays the belief that genuine knowledge could come from moral, aesthetic, and religious sources and experiences.

The two major assumptions of strong scientism are metaphysical (relating to reality), and epistemological (relating to knowledge). The metaphysical aspect of its assumption is that the only sole reality is the physical universe. The epistemological aspects lay emphasis on the fact that the only and sure way of verifying truth claims about reality is science. Unscientific beliefs are therefore meaningless or false. Their foundational question has been: 'Can you prove it scientifically?' This approach renders superfluous all knowledge that comes from morality, religion and aesthetics which should not be the case.

Problems Created by Scientism

Apparently, science has been highly useful and beneficial to man which has been enhanced through series of scientific discoveries and advancements. But this same science has done much harm to man. It aims to better the condition of man yet harms man, putting him in a complex situation in countless ways, equally making the role of science complicated.

However, this harmful role of science to man puts its scientific claims for superiority to question. Is scientism defensible given all the aberrations and imperfections of science? The rejection of philosophy and religion by scientism is secularist move to dethrone the divine on the one hand and creating a limit to what the human mind can comprehend, like metaphysical realities. Though science came up with the Big bang theory in order to explain the origin of the world, it is still lame in understanding fully the mysteries in the world. Religion and philosophy which have been relegated to the background by scientism are the only better means of explaining and understanding the mysteries of the world. Even articulations of conducts and norms for peaceful human co-existence have been made possible through religion and philosophy.

The lack of reverence and fear for the divine (God) and sacred things by science have led to many problems for man. Science has indulged in negative advancements like the production of artificial human beings and products that promote sexual promiscuity, and anti-life ones like abortion pills that end human life.

Another problem is the issue of conflicts, endless wars and hostilities among peoples and nations of the world. The world witnessed the potential power of atomic energy on the 6th of August, 1945, when America dropped the first atomic bomb in the Japanese city of Hiroshima and the second one in the city of Nagasaki on the 9th of August, same year, which led to the loss of many lives. The survivors are still suffering its aftermath. More destructive and sophisticated ones have been produced. There are stockpiles of biological and chemical weapons of mass destruction in many countries currently. Biosciences that are meant to better the condition of man are diverted for the production of disease germs for use in battlefields.

Currently, since February 2022, Russia has been in endless war with Ukrain over what could be peacefully settled, and many lives have been wasted through shellings, missiles and bombs. Russia's scientific claims for superiority as a world power in possession of superior ammunitions, nuclear armaments and weapons of mass destruction are among the things spurring them on to insist in the war. But things have not worked out well for them as they planned, having lost many soldiers, weapons and their ground in some places in Ukraine. This is science harming man; creature killing the creator. The new mantra of life that should have been "Live and Let Live" is dropped.

Scientific knowledge is expected to be value-neutral. Science should rediscover what is known as the scientific spirit as the importance of the spirit outweighs the technique, as well as the knowledge or operational method of activity. This is where philosophy for instance, and religion play important roles. Advancements in science is good but they should be geared towards the good of man in the world.

"Thingification" of man by science (making man a thing) should not be the case. Man is a religious being (homo religiosus), and an image of the God (imago dei), and not just a being in the world like other beings. He needs special attention and treatment because he is composed of body and soul. This spiritual (soul) component is unknown to science which generates their undue treatments of man as deemed fit to them. Scientism has therefore diverted the vision of science from being a boon to man to being a bane to him which philosophy aims to put in check. Perhaps, this important function of philosophy as a gadfly may have been the reason why it is discrediting philosophy in order to go on unchecked by any other discipline and maintain its empty superiority claims.

The Persistent Impact and Role of Philosophy

It should be noted that what gave impetus to scientism was the positivist tradition in philosophy, through their denial of validity to any area of human knowledge which is outside natural science. Some recent advocates of scientism deny that philosophy has any useful role thereby unveiling some conceptual confusions that are detectable through philosophical reflections. They currently claim the sole mantle of rationality, always making an undue equation of reason with science. But is it not rationally antithetical to reason to arrogate to science what it can never venture into, or has done what it demonstrably did not? Positions like these create endless problems unless nipped in the bud.

In a 2007 book written by James Ladyman, Don Ross, and David Spurrett, titled "Every Thing Must Go: Metaphysics Naturalized," the authors are in total defence of scientism, arguing that the only kind of metaphysics that can contribute to objective knowledge is only that based on contemporary science, thereby making a rejection of philosophers' a priori intuitions, common sense or simplifications of science. The point is, before saying this, did he ask himself if science can investigate unseen realities? If no, does it mean that there are no unseen and untestable realities? If they exist, such as the soul and spirits, where lies the credibility of science in making such claims?

Carl Sagan, American astronomer and Director of the Laboratory for planetary studies and David Duncan Professor of Astronomy and Space Science at Cornell University, who played a leading role in the Mariner, Viking and Voyager expeditions to the planets made a remarkable statement always referred to by scientists. In the introductory segment of his 1980 book titled Cosmos, he said that because science is inseparable from the rest of the human endeavour, it cannot be discussed without making contact, sometimes glancing, sometimes head-on, with a number of social, political, religious and philosophical issues. In the first chapter of the same book he noted thus:

The Cosmos is all that is or ever was or ever will be... The size and age of the Cosmos are beyond ordinary human understanding... Lost somewhat between immensity and eternity is our tiny planetary home. In a cosmic perspective, most human concerns seem insignificant, even petty... In

the last few millenia we have made the most astonishing and expected discoveries about the Cosmos and our place within it, explorations that are exhilarating to consider. They remind us that humans have evolved to wonder, that understanding is a joy, that knowledge is pre-requisite to survival. I believe our future depends on how well we know this Cosmos in which we float like a mote of dust in the morning sky.

A careful look at these statements reveal some facts on the illogicalities in the claims of scientism. Why must science still be discussed by making contact with religious and philosophical issues if they are not important? If the Cosmos is only that which exists, why is it still mysterious and not yet fully conquered and understood by science? Why is our planetary home still lost somewhat between immensity and eternity? Is eternity within the purview of science or philosophy? These show a bit of their illogicalities. Also, is science a perfect enterprise, when patients still die in the best hospitals in the world after spending huge sum of money to save their lives? Is all the medical apparatus produced by scientists not supposed to save those lives? Why must people still die in plane crash after all their claims to have conquered all? Has it any explanation for the death of man or other animals and organisms? There are uncountable things that are beyond the scope and understanding of science which necessitates science to wear a garb of humility.

Moreover, the multifarious paradigm shifts in the history of science are eloquent testimonies to the fact that science is an imperfect enterprise. This is given the fact that paradigms are replaced by new ones when the old paradigm is not able to solve some puzzles and problems. This inability to solve such is a clear sign of failure and imperfections, yet they claim to be superior.

Most importantly, man as a being in the world is the most important of all the creatures made by his creator. And as such, "the thingification" of man by science (making man a thing) should not be the case. Man is a religious being (*homo religiosus*), and an image of the God (*imago dei*), and not just a being in the world like other beings. He needs special attention and treatment because he is composed of body and soul. This spiritual (soul) component is unknown to science which generates their undue treatments of man as deemed fit to them. Scientism has therefore diverted the vision of science from being a boon to man to being a bane to him which philosophy aims to put in check. Perhaps, this important function of philosophy as a gadfly may have been the reason why it is discrediting philosophy in order to go on unchecked by any other discipline and maintain its empty superiority claims. Man remains the controller of the world and should be allowed to remain such by science. This should be a regulatory paradigm for science.

On the Refutation of the Supremacist Claims of Scientism and the Superiority of Philosophy

The bogus claims of Scientism regarding its supremacy over all other sources of knowledge have been faulted by this paper through some references to their varying failures in solving some little problems plaguing the human race. This paper is therefore a challenge to scientists and future scientist as well as students and scholars alike, who harbour such thoughts and ideas. Let them

scholarly prove the supremacy of science over all other sources of knowledge, with particular reference to philosophy (even religion), where their barrels of attack have been channeled.

That philosophy still reigns supreme despite all the attacks levelled against it is a fact. It was Alexander Spirkin, who, in his book titled, "Dialectical Materialism" made this important remark and said that:

Every major scientific discovery is at the same time a step forward in the development of the philosophical world-view and methodology. Philosophical statements are based on sets of facts studied by the sciences and also on the system of propositions, principles, concepts and laws discovered through the generalisation of these facts. The achievements of the specialised sciences are summed up in philosophical statements. Euclidian geometry, the mechanics of Galileo and Newton, which have influenced men's minds for centuries, were great achievements of human reason which played 'a significant role in forming world-views and methodology. And what an intellectual revolution was produced by Copernicus' heliocentric system, which changed the whole conception of the structure of the universe, or by Darwin's theory of evolution, which had a profound impact on biological science in general and our whole conception of man's place in nature. Mendeleev's brilliant system of chemical elements deepened our understanding of the structure of matter. Einstein's theory of relativity changed our notion of the relationship between matter, motion, space and time. Quantum mechanics revealed hitherto unknown world of microparticles of matter.

This excerpt from the work of Spirkin solidifies the fact that science is not superior to philosophy but a prolongation of the philosophic enterprise. A student can not claim to be superior to the teacher because the teacher made him/her what he/she has become. Spirkin further stated thus:

If we trace the whole history of natural and social science, we cannot fail to notice that scientists in their specific researches, in constructing hypotheses and theories have constantly applied, sometimes unconsciously, world-views and methodological principles, categories and logical systems evolved by philosophers and absorbed by scientists in the process of their training and self-education. All scientists who think in terms of theory constantly speak of this with a deep feeling of gratitude both in their works and at regional and international conferences and congresses. To artificially isolate the specialised sciences from philosophy amounts to condemning scientists to finding for themselves world-view and methodological guidelines for their researches. Ignorance of philosophical culture is bound to have a negative effect on any general theoretical conclusions from a given set of scientific facts. One cannot achieve any real theoretical comprehension, particularly of the global problems of a specialised science, without a broad grasp of inter-disciplinary and philosophical views. The specialised scientists who ignore philosophical problems sometimes turn out to be in thrall to completely obsolete or makeshift philosophical ideas without even knowing it themselves. The desire to ignore philosophy is particularly characteristic of such a trend in bourgeois thought as positivism, whose advocates have claimed that science has no need of philosophy. Their ill-considered principle is that "science is in itself philosophy". They

work on the assumption that scientific knowledge has developed widely enough to provide answers to all philosophical problems without resorting to any actual philosophical system.

The pertinent question now is, where lies the supremacy of science? It is so glaring that a closer look at this second citation from Spirkin unveiled the empty and illogical claims of scientism. It should therefore be noted that the cunning nature of philosophy is hidden in the fact that any form of contempt for it, or its rejection is a kind of philosophy in itself. To get rid of philosophy tantamounts to ridding oneself of all convictions which is highly impossible. This is so because philosophy is essentially the regulative nucleus of the theoretically-minded individual.

Furthermore, philosophy somehow takes its revenge on those who willingly dissociate themselves from it. This could be seen among some scientists who upheld the positions of crude empiricism and scorned philosophy, thereby ending up in mysticism. Attempts and calls for freedom from any philosophical assumptions are signs of intellectual weakness and narrowness. Even among the positivists, those who denied philosophy in words actually propagated the flawed philosophy of agnosticism and rejected any possibility of knowing the laws of existence, especially those concerned with the development of the society. This type of philosophy is totally misguided and also socially harmful. In reality scientists use the overall results developed by mankind's cognitive activity mainly enshrined in the philosophical categories absorbed by all.

According to Arran Gare, the importance of natural philosophy as the whole or major part of metaphysics was unveiled in the twentieth century by some historians of science, starting with their investigation of the seventeenth century scientific revolution. He listed some of these historians of science like Émile Meyerson, Ernst Cassirer, Gaston Bachelard, Edwin A. Burtt, Alexandre Koyré, Karl Popper, Michael Polanyi, Norwood Russell Hanson, Stephen Toulmin, Thomas Kuhn, Imré Lakatos, and Paul Feyerabend. They were so prominent among the historians of science and historical-oriented philosophers of science who were highly involved in the refutation of the claims of the empiricists, positivists, and logical positivists who had arrogantly defined science in opposition to metaphysics. The works of these historians of science demonstrated the essential role of natural philosophy to science contrary to the positions of the logical positivists.

Arran Gare also noted that:

These historians–philosophers also exposed the characterizations of subsequent science by empiricists, positivists, and logical positivists, essentially, the bucket image of science (as Karl Popper called it) according to which science accumulates certain knowledge by engaging in empirical investigation rather than speculation, to be fallacious. Most of what are now recognized as the most important advances in science have been shown to be the result of theoretical work and, more fundamentally, work in natural philosophy struggling with theoretical and philosophical problems, using imaginative thought experiments rather than empirical work. Far from science

leaving metaphysics behind, what defines genuine science is the effort to advance our comprehension of the world in terms of some well worked-out philosophy of nature; that is, a metaphysical doctrine.

This quotation from Gare unveils the lofty position occupied by philosophy and the illogicality of the supremacist claims of scientism aimed at rubbing shoulder with philosophy, that is its mother. But, not minding their claims, science can never be equated with philosophy, owing to its strong foundational structure. It could be likened to a strong edifice that can never be reduced to rubbles in spite of all attempts aimed at its destruction.

Most importantly, philosophy as a mother, has continued to spearhead the road to global harmony through its attempts to checkmate the excesses of science exemplified in their productions of nuclear armaments, anti-life products (abortion pills, etc.), propagation of sexual immoralities through pornographic pictures, etc. These are contrary to ethical principles (which philosophy condemns). Knowledge should be for the good of man and not the contrary. That discipline that should claim to be superior to all other disciplines ought to be an all-rounder, and should found wanting in terms of working for the good of the human race, because one of the essences of knowledge is to better the human person. Science (scientism) should continue to learn from philosophy and address some of these issues and others not mentioned before coming up with their claims.

CONCLUSION

This paper has succeeded in pointing out some reasons why philosophy serves as a lynchpin to scientism which has made many empty, bogus and illogical claims of superiority over all other ways or sources of knowledge. Scientism proposes an exaggerated trust in the efficacy of the methods of natural science which should be applied to all areas of investigation. It could be seen as a scientific worldview that encompasses natural explanations for all phenomena, which debunks supernatural and paranormal speculations and takes up Empiricism and reason as the twin pillars upon which an Age of Science will be built. But it never fully utilizes this reason it claims to be one of its pillars, but engages in irrationalities as reason for its operations leading to many problems for man. Philosophy fully boast of and operates with reason in all its endeavours which science should learn and embrace.

Science is not superior to philosophy (and other sources of knowledge) but remains one of the ways of knowing and understanding the physical world, and other empirical realities apart from the metaphysical ones.

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