



NEW IDEAS

Mysticism and Science: Two Products of the Human Imagination

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We examine that both science and religion were original products of the human imagination. However, the approaches taken to develop these two explanations of life, were entirely different. The precepts of evolution are well established through the scientific method. This approach has led to the accumulation of immense amounts of evidence for biological evolution, and much scientific progress has been made to understand the pathways taken for the appearance of organisms and their macromolecular constituents. The existence of spiritual beings has not and presumably cannot be documented via a scientific approach, no more than a fairy tale or a myth. However, science, education and knowledge coupled to proper actions are exactly what are needed to make the correct decisions so as to preserve and improve our common, shared biosphere which is currently confronted with two immense problems: human population growth and climate change.

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Two incredibly profound ideas from the minds of *Homo sapiens* are The Theory of Evolution, representative of the pursuit of knowledge through empirical science and deductive reasoning, and the creation of supernatural beings such as God(s), devils and angels. The latter are representative of conjectural hypotheses without experimental examination. This was the earlier approach to social structure from a time when science was essentially non-existent. In many religions, Gods were believed to have contributed to the creation of our world and the biosphere. However, it is important to note that by no means all religions profess that creation of the world involved the contribution of supernatural beings. The lack of coherence in origin of the world postulates among the 10,000 different religions of primitive people (including current populations), argues that the postulates put forth by all of the religions merely represent untested, and often untestable hypotheses. Even today, after so many attempts, there is still no basis in science for the existence of supernatural entities. As a consequence of an absence of evidence, religious people are taught that to believe without question is virtuous, and to question or

distrust a religious principle is directly responsible for misery, exclusion from heaven and entry into hell - hell both in a supposed after life and on Earth during the present life. The common Hebrew belief that God was a wrathful god, is a reflection of this religious stance, although in more recent centuries, this wrathful God of the Hebrews has evolved into a more benevolent Christian God. It is worth noting that the evolution of religion, like that of languages, is much more rapid than the evolution of species which takes hundreds of thousands to millions of years.

We wish to re-emphasize that both science and religion were original products of the human imagination. However, the approaches taken to develop these two approaches to life, were entirely different. The precepts of Evolution are well established through exercise of the scientific method. This approach has led to the accumulation of immense amounts of evidence for biological evolution. The efforts of thousands of biologists over many decades has resulted in the general acceptance of evolution as the third law of biology. All living organisms on the Earth today are the products of evolutionary change from the last universal common ancestor (LUCA).

From a global perspective, evolutionary thought has impacted humankind in hundreds of ways, allowing the integration of thousands of details into a conceptual picture that allows the human brain to make sense out of chaos - all of the biological details discovered over the years.

The precept of evolution has guided biological investigations successfully for the past two centuries, showing, for example, that processes in one organism are shared by many others with the degrees of similarity being inversely related to the phylogenetic distances of the biological macromolecules (proteins and nucleic acids) that are used as an accurate measure of organismal relatedness. It is because of this approach that scientists can say with confidence that all primates are more closely related to each other than they are to other groups of animals, and that all plants or fungi are similarly more closely related to each other than they are to other types of organisms. If mistakes in science are made, as they usually are when establishing the principles of scientific thought, then empiricism will discover and correct these mistakes. Thus, science is a slow and inaccurate process that continuously approaches the truth via experimentation.

This empirical approach to knowledge can be contrasted with the religious approach. The latter equates virtue with acceptance of a creed presented by parents and religious leaders to the child. Some religious leaders claim divine knowledge or powers which must be accepted by the followers. Religion does not accept the value of personal thought, mental creativity and empirical science; these are suspicious approaches to life. In fact, the existence of spiritual beings has not and presumably cannot be documented via a scientific approach, no more than a fairy tale or myth. It should come as no surprise that evidence for any mistaken detail of nature has not been forthcoming. Religion is outside the realm of science, and vice versa. Oscar Wilde said: "Religions die when they are proved true. Science is the record of dead religions". For regardless of whether a religious postulate is proven true or false, it no longer belongs to religion; it has entered the realm of scientific knowledge. Moreover, these approaches to knowledge are valid across the entire spectrum of human activi-

ties. Hence the development of disciplines such as biological evolution, psychology and sociology. It is no mistake that no university discipline deals with creation in the traditional religious sense. It is not a consequence of the views of the scientists who seek truth through empiricism; it is because there is no evidence to promote religious beliefs. Thus, there is no convincing evidence for the existence of supernatural entities. People simply believe in such beings or they don't. No rational, logical, intelligent thought is required.

Some humans deny that evolution occurs and remain steadfastly rooted in their belief of a supernatural God as the creator. These people also embrace the concept of eternal life and other views maintained by their religions. They believe because that's what they were taught by their parents and teachers, and they have not learned to question commonly held views. Such people want to believe in spiritualism, and in some cases, it provides comfort. How nice to believe that an all powerful supernatural being can assist them, just as long as they believe in and follow their religious doctrines. Is this a reflection of individual freewill, or is it a product of imposed views - brainwashing that becomes incorporated into an unshakable belief system? It might be claimed that anyone with firm religious beliefs has lost control over free will; such a person is a slave to falsehood. In fact, in many splinter social and religious groups in larger societies and countries, freewill does not exist. Beliefs are imposed upon children at very young ages, from ages that predate the abilities of these children to reason. Political leaders who disregard individual free will and want adherence to a doctrine too often do not believe what they teach, but they recognize that by suppressing the powers of reason, their chances of gaining or retaining power and wealth are improved. Thus, in many societies and religious sects, one needs only to believe in the accepted doctrines, and questions are not allowed. "You shall obey". And if you don't, the consequences can be harsh.

The good news is that in many countries, constitutions exist where one can choose to believe in science, reason and humanistic views. Free-will and free thought are legal and encouraged

as part of the educational process. Such people have a tremendous advantage over the religiously trained members of society. It is more natural for them to be creative in the sciences, in the humanities, and in all walks of life. They are more likely to be able to solve their own personal problems, taking all factors - personal, social, and environmental into account when making important decisions. If one is not taught to develop his or her own mental thought processes as a child, then to become a competent scientist or artist, logic must be learned later in life. The value and satisfaction gained by living creative lifestyles and pursuing original thought are even today undervalued in our modern societies. No one who values acceptance of an ancient doctrine will find it easy to seek truth empirically. Such people have already come to value the easy road of acceptance. They will never develop past the innocent stages of early childhood.

Problems sometimes arise when believers in supernatural entities and rationalists simply cannot engineer a society where peaceful co-existence is the norm. In fact, conflicts are more common between two groups of similar religious faith than between believers and secular rationalists. Thus, while secularism is becoming more widespread in well educated tolerant cultures, such as those in Europe and parts of Asia, there is still a long way we must go before we can consider our societies to be enlightened. It seems eminently clear, that if young children are brainwashed into becoming convinced of supernatural deities, they are more likely to proceed through life without the capability to make logical decisions that affect themselves, their families and their world. Strict adherence to a belief system can therefore be considered to be a form of child abuse. As adults, they may come to believe and maybe even feel comfortable in the belief that their supernatural world is real. That is all they have to console themselves with. And in democratic countries, the right to child indoctrination is guaranteed by the constitutions of most democratic countries!

The secularist relies on rational, logical thinking, and such a person often chooses to use his or her imagination for creative purposes rather than imagining details of supernatural Gods, devils and angels. For such people, God need not be a

part or product of their imaginations. After all, these entities were taught dogmatically, stifling the child's own developing powers of imagination. Some folks will argue that young people need something to believe in, a moral compass, a traditional way of life, in a complex and what may appear to be a random universe. Otherwise, it is claimed, these people will be lost. It has been argued that without religion, such people will attain only despair, having no purpose in life. The counter arguments are very simple. Why not use rational, logical thinking and the human imagination to ensure quality of life for everyone on the planet? Why not attempt to achieve a stable sustainable human population that does not destroy our common biosphere? Why do humans have to believe in supernatural beings when they can believe in themselves and their own creative abilities? Since when are the sanctity of life, humans helping humans and preserving our common biosphere not enough? Why add in a supernatural entity and powers that are simply a fictitious product of the human imagination? It is irrationality at its pinnacle. It may have been useful to comfort people thousands of years ago in the pre-scientific era, before we came to understand how to systematically investigate our world using scientific approaches. And yet, the scientific method has been long in the developmental stage. After all, our ancestors learned tool making and the use of fire; they developed more comprehensive language, and they learned to explore and take advantage of their environments. They and their accomplishments led the way to the modern era of scientific inquiry. Their imaginations, problem-solving skills, evolving communication skills and physical strength kept some of them alive and successfully reproductive. We are their evolutionary products. We share their genetic code, and, to a lesser degree, the genetic codes of all living organisms on Earth. These have developed via natural selection and reproduction. Darwin got it right.

In this century, with an explosion of valuable scientific knowledge, why do so many human beings still accept supernatural entities and forces? Is this type of belief system an intertwined part of our human evolution? For many humans the answer to this question has been affirmative. For others, however, rational, and logical think-

ing in conjunction with the scientific method has become their basis for reliability, security and knowledge. But, of course, some simply do not think at all. It is of no significance to these later people to understand the world they live in even though we need our best imaginations and problem-solving skills to solve our local, national and international challenges. Science and mysticism are both products of the human imagination. Science has allowed some humans to understand the universe at a profound level. Other have decided that the best way to understand the universe is through supernatural entities.

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