



NEW IDEAS

Science, religious tolerance and freedom of expression

JACK T. TREVORS^a, MILTON H. SAIER, JR.^b

a: School of Environmental Sciences, University of Guelph, Ontario (Canada)

b: University of California, La Jolla, San Diego (USA)

In this article we offer a perspective on the immense number of problems and challenges confronting humanity in our common biosphere. As our human population grows and urbanization increases globally, billions of humans with diverse beliefs and opinions are living in large urban areas without the basic needs of life. The way forward in our biosphere is not violence and disrespect. It is working to maintain and improve our common biosphere and solve our common global problems. Religion and religious believers will need science, so humans can survive and sustain our biosphere.

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Science not only uses the scientific method to discover new knowledge but also requires peer review, debates, conferences and freedom of expression to communicate the results of science. The freedom to communicate knowledge and opinions that vary from other researchers is central to science progressing in ways that can benefit humanity. Knowledge is always increasing and results can be interpreted differently by different scientists. Scientists can also use science discoveries differently. Central to this entire process is the ability to debate, communicate, rethink and revise ideas, generate hypotheses, conduct experiments and generate knowledge in a non-violent, non-racial, respectful manner. This moves scientific knowledge ahead, and in doing so contributes to humanity and a better understanding of our common biosphere, the universe and the sanctity of life. The freedom to express opinions and support them with observations and experimentation is central to scientific progress.

It is also recognized that science is shaped by environmental, political, military, industrial, economic and sociological events occurring at the time that science is being conducted. However, scientists conducting their research using the scientific method correctly should not make assumptions, but rely on observations and experimentation. It can also be argued that scientist do

make some assumptions similar to a belief system. This is not the correct use of the scientific method.

Knowledge advances both fractionally and in quantum jumps depending on the significance of the discoveries (Trevors and Masson, 2010). However, the most valuable asset that humans have is their imagination. A period of scientific discovery often commences when an anomaly occurs such as an event that does not meet expectations (Kuhn, 1962). After the recognition stage follows a period where scientists may try to make the anomaly fit known laws and knowledge paradigms. The last stage in revolutionary scientific discovery is adjusting and adapting to the anomaly event and assimilating it into the knowledge base. As proposed by Kuhn (1962), this paradigm shift may be the most important step in the discovery process, as adoption of new knowledge makes scientists look at established knowledge in a new perspective. As a result, new discoveries may occur.

According to Horgan (1996), his End-of Science stance is based on the concept that central laws of nature are understood and future science will produce fractional returns as they make advances within the context of our known, currently defined universe. The more revolutionary science of today, what he designates 'ironic sci-

ence', is speculative and sometimes untestable. This is in contrast to Kuhn's idea that science will advance because once a new paradigm is introduced and the anomaly understood, a new wave of clarity and ideas occur unveiling new avenues or possibilities that lay before us (Kuhn, 1962).

Religion is not a means of enquiry like science. Religion is a belief system. Religious rights are protected under the constitutions of numerous democratic countries. Freedom of expression without racial or otherwise illegal activities is also protected under most constitution rights. Generally, in democratic countries freedom of expression is given a higher legal priority than religious beliefs. This is the only legal and rationale way that a democratic constitution can be enforced as some people do not believe in any supernatural God and most countries have citizens with diverse religious beliefs.

What can religion learn from science? It can learn that debate is a necessary part of a religion? It can also learn that religion has to evolve to include diverse opinions. This is all done in a respectful, non-violent manner. Religious people can also learn there are many people who are atheists or agnostics and they have a right to express the opinion that religious people are incorrect to believe in a supernatural being, and that you cannot prove a supernatural being exists or does not exist. The atheists and agnostics being in the minority also recognize and respect that religious people are entitled to their particular belief system. This is simply respect for other humans.

There is no justification for violence and threats. The atheists, agnostics and people of moderate but often different religious beliefs are required to protect the rights of the people who disagree with them. And the extreme religious people are also responsible for protecting the rights of the people who they disagree with. This is mutual respect for the sanctity of humans and life. The equation is equal. Each group protects the rights of others, even if they are in complete disagreement. Why is this not the situation? Some people are certain they have been offended and that they are correct in their judgment. But these people must protect the rights

of the persons who they feel are responsible for this. They must protect basic human freedom of speech in a non-violent manner. Basic human rights also include the right to simply say there is no supernatural being. And the atheists and agnostics must protect the rights of those who believe in a sacred being. Violence is not necessary to accomplish these tasks. Religions must modernize and evolve to serve the good of all humanity not just the religious belief system that one belongs to. If there is a God, God gave humans a mind to use and that includes questioning the existence of a God. Why is this so difficult to do? Is it because religion may teach people to be intolerant and to simply believe. Some people with extreme religious views do not respect the diversity of ideas, faiths and opinions that make up our human population. Tolerance is not their interest. Control and power is their interest.

With the immense number of problems and challenges (Trevors, 2010; Trevors and Saier, 2010) confronting humanity in our common biosphere, tolerance of other humans must be globally accepted if we are to solve our common global problems. Examples of these common problems are human population growth, transportation, food production and distribution, infectious diseases, energy use and conservation and alternate energy supplies. Religious intolerance will make these problems difficult to manage in a common biosphere with an increasing human population. Science can teach religion to modernize, debate, be inclusive and protect and defend the rights of people who have opinions opposed to your own. If this cannot be accomplished, the future of humanity is endangered.

Lastly, religious beliefs have to be taught. It is apparent that some humans are not teaching them correctly. They are teaching intolerance not tolerance. And humans who have no religious beliefs have difficulty understanding why a minority in a taught belief system wants to be intolerant and even violent while at the same time pronouncing they are protecting their religion. And remember, if you do not like the religion you have been taught, ignore it, denounce it or seek another religion. These are all fundamental human rights, but only in democracies where the state and religion have been separated and

freedom of expression is more important than religious beliefs. We are all borne into a human racial group that we have no control over. Religion is a matter of choice, and believing or not believing.

People should not be offensive to other people, including their religious beliefs. Religion should be more positive and more tolerant so it can evolve to meet the needs of present and future generations. However, religious people must also be accepting that some people have no religious beliefs and hence religion is not a scared issue to them. Atheists and agnostics are often viewed as a minority, doomed to hell. Both viewpoints can be accommodated without violence if both groups are respectful and tolerant of each other. As our human population grows and urbanization increases globally, billions of humans with diverse beliefs and opinions are living in large urban areas without the basic needs of life. The way forward in our biosphere is not violence and disrespect. It is working to maintain and improve our common biosphere and solve our common global problems. There is little doubt that the future of science will impact personally and globally in areas such as medicine, genomics, environmental change, computing, agriculture and food security, energy, communications and biotechnology as some

examples. Religion and religious believers will need science so humans can survive and sustain our biosphere.

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Corresponding Authors:

J. T. Trevors
School of Environmental Sciences
University of Guelph, ON, Canada, N1G 2W1
E-mail: jtrevors@uoguelph.ca

M. H. Saier, Jr.
University of California
San Diego, La Jolla, CA, USA, 92093-0116
E-mail: msaiier@ucsd.edu
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