

Technology and Science

by Herb Silverman



Technology is our present and our future. Young people need to and, for the most part, are embracing it. Being tech-savvy is becoming a necessity for job seekers.

Schools must educate students for this reality so they can transition into the work world. And workers need to be able to master new technology, expect frequent updates/changes to software, and learn how to stay on top of those advances.

Technological improvements had usually come about by chance, trial and error, or inspiration. The modern scientific enterprise matured in the Enlightenment and concerned itself primarily with fundamental questions about the natural world. Research and development directed toward immediate technical application arose during the Industrial Revolution and became commonplace in the twentieth century.

Science deals with theories, principles, and laws, while technology deals with products, processes, and designs. Science has helped us gain considerable knowledge of the universe such that we can make accurate predictions on future outcomes. Technology simplifies our work by providing us with products that help us get better results in less time.

A downside to technology is that people can, and often do, filter out opposing points of view, leading to confirmation bias. Another problem is that folks often become obsessed with digital media and can't imagine a social life without it. Too many seem not only unwilling, but functionally unable to be, without media links to the world. Without digital ties, people can feel unconnected even to those who are close by. This sounds to me a lot like an addiction. The one thing I like when I see young folks walking with their heads down and thumbs busily tapping on phones is that they no longer feel the need to have a hand free to smoke tobacco. At least technology is not a lethal addiction like tobacco can be.

Most tech-savvy people understand that the technology they use was created through science, but they may not be interested in learning the underlying science. That's fine with me. Similarly, people feel safe flying on airplanes without knowing the science behind air travel. On the other hand, I think every educated person should have a rudimentary knowledge of science. I sometimes hear intellectuals, even within academe, matter-of-factly say, "I know nothing about science." To me, this is comparable to saying "I can't read or write."

Religious fundamentalists do not accept the parts of science that conflict with their so-called holy books, sometimes referring to science as "anti-religion." For many people, it's easier to ignore science and prepare for an afterlife, while being comfortably clueless about the workings in this life. But in searching for truths science does not try to debunk religious myths, though it often does as a consequence of scientific findings. Much of what we know about the age of the Earth, cosmology, archaeology, biology, and history conflicts with a literal interpretation of the Bible.

Just about all evolution deniers are theists. Even theists who accept evolution try to stick their god somewhere into the process, though biologists would never do that. These religious people are creationists because they believe their god created the universe and life on Earth, but evolution is a completely natural process with no supernatural entity needed. People, however, can acquire technological know-how without questioning supernatural dogma.

Religious people accept some science that improves their quality of life, like antibiotics, television, microwaves, and so forth. Often, they don't know there is basic science behind these conveniences. Antibiotics, for instance, is based on evolution.

If humanity had continued to apply religious belief without solid physical knowledge, how far would we have gotten? History books describe such a period as "The Dark Ages." Fortunately, religion is on the decline in societies that promote science.

The term "elites" arouses a negative feeling in many people, however the word elite is defined. Conservative leaders often attack the elite. Scientists are framed as part of that elite because they have knowledge and expertise that most people don't have. Science deniers often don't want to hear about climate change, vaccines, evolution, or the fossil record. They prefer to believe it's all a gigantic hoax.

I'm hopeful for the future. I think we need to train more people as science popularizers, and that scientists should become more adept at written and verbal communication for the general public. Some of the best science popularizers have been **Albert Einstein, Isaac Asimov, Richard Feynman, Richard Dawkins, Stephen Hawking, Stephen Jay Gould, Carl Sagan, Bill Nye, and Neil deGrasse Tyson**. Through their appealing personalities and convincing evidence, they have shown that it's possible to excite and educate the public about scientific concepts.

Though I'm a leftist, I sometimes hear from leftists with whom I disagree. Here's an example:

"The truth is unique to each of us since we decide individually what we consider to be truth. Every human being is unique and will see the world differently. We construct our own realities."

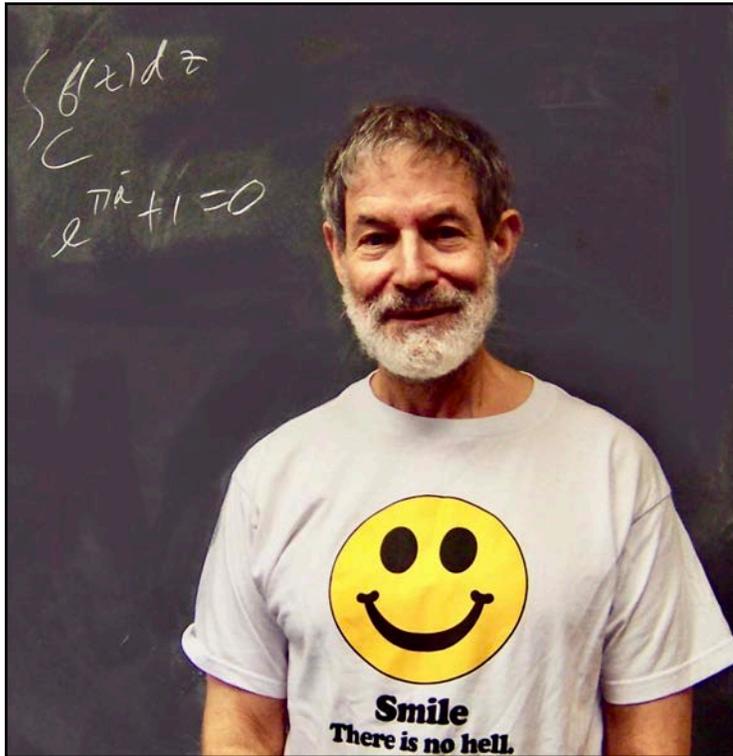
No, truth is different from an opinion, and deciding something is true does not make it so. People can say the Earth is flat, but I accept the scientific evidence that it is not. Here's another example of false reasoning:

"To be intellectually honest, you can't prove the non-existence of God any more than the existence. Therefore, there is a certain amount of 'faith' in both positions."

I do not understand how someone can profess “faith” (belief without evidence) in things that are shown by science to be demonstrably false. We can’t prove or disprove the existence of the Flying Spaghetti Monster, but I would not say there is a certain amount of “faith” taken in both positions. Under certain circumstances, I’m comfortable concluding that an absence of evidence is evidence of absence.

Some on the left with whom I disagree also support homeopathy, are anti-vaxxers, and anti-GMO. A few consider science and mathematics to be anti-feminist and representative of patriarchal oppression because science and mathematics are not subjective or open to interpretation and different ways of thinking. I’ve also heard complaints that science is not democratic. This is true! As **Anatole France** said, “If 50 million people say a foolish thing, it is still a foolish thing.”

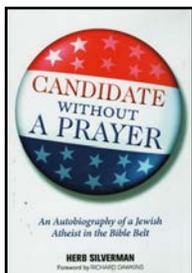
Call me undemocratic, but I think this is the bottom line: Opinions of the uninformed shouldn’t count. You can feel free to disagree, but be prepared to show me the evidence.



Pictured above is **Herb Silverman**. He is a regular contributor to *The Freethought Society News*. His past submissions can be found at the following Freethought Society website page:

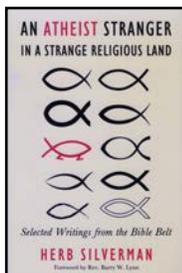
<https://www.ftsociety.org/herb-silverman-articles/>

Silverman is the author of two books, *Candidate Without a Prayer* and *An Atheist Stranger in a Strange Religious Land*. Both books are online and bookstores.



Silverman welcomes communication from readers. Contact him at the following email address:

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A Tribute to Alan B. Palmer

(excerpts from the *News Journal* obituary)



Alan B. Palmer was born in Syracuse, New York in 1934. He received his BA and a PhD from Syracuse University. He served in the United States Army as a Soldier-Scientist at the Army Chemical Center in Edgewater, Maryland.

In 1963 Palmer joined the DuPont Company. In his 28-year career with DuPont he held supervisory and management positions in research, technical service, manufacturing, sales, safety, health, and environ-

mental concerns. Upon retirement Palmer consulted in the environmental field with DuPont.

In 1959 Palmer married **Yvonne Matoushek** of Poyntelle, Pennsylvania and they reached the 50-year anniversary mark in 2009. Unfortunately, she succumbed to multiple sclerosis that same year. He subsequently married **Linda Mahan** of West Chester, Pennsylvania in 2010. Mahan predeceased him in 2015.

Palmer enjoyed reading, birding, travel, and the performing arts — particularly symphonic music, opera and ballet. He was a subscriber to the Pennsylvania/Philadelphia Ballet for over 25 years. He was also an early supporter of the BalletX company and was proud of their accomplishments over the past 17 years.

In addition, he supported many nonprofit organizations in the fields of women’s health and safety, inner city childhood development, and conservation. Palmer was an active secular humanist supporting the Center for Inquiry, Freedom from Religion Foundation, and Americans United for Separation of Church and State. Palmer was a Life Member of the Freethought Society (FS).

Margaret Downey a longtime friend to Palmer, said that some of her favorite memories of Palmer include his participation in the grand openings of Friggatriskaidekaphobia Treatment Centers, his attendance at **Robert Green Ingersoll**-themed events, and his unwavering support of the FS *The Tree of Knowledge* display.

Sally Flynn, a board member of FS and friend to Palmer said, “Al and I first met as counter-protesters at the Planned Parenthood clinic in West Chester. He was very creative and helped design our ‘I AM PRO CHOICE’ signs.” She also recalled that Palmer attended a large atheist rally in Washington, D.C. dressed as Uncle Sam. “The crowd loved it,” she noted.

He loved playing bridge with his core group of friends but also promoted evenings at the ballet and orchestra, tailgating at the Hagley Fireworks, dining at his favorite restaurant San Nicola, and enjoying birds and nature.

Palmer died at his home in West Chester on October 5, 2022. He leaves behind no survivors but many very special friends who will miss his kindness, generosity, and unparalleled enthusiasm for life.

Palmer left his body to Humanity Gifts Registry for research or teaching use. He was an example to all of us as a life well lived in reason, kindness, and fairness. □