

Save the Children (from Apocalyptic Thinking)

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The following is excerpted from Fewer, Richer, Greener: Prospects for Humanity in Age of Abundance (John Wiley & Sons, 2019), Larry Siegel's newly published book. It is available from Amazon via the link on this page.

An old story has a young man coming home from college to visit his father, who asks him, "What have you learned?"

The young man says, "I've just heard the worst news ... and it was in astronomy class. The world is going to end in 5 billion years, when the Sun becomes a supernova."

The father says, "I'm not sure I heard you right. The Sun is going to explode when?"

The son replies, "5 billion years."

The father wipes his forehead and says, "Whew! You had me worried there for a moment. I thought you said 5 million."



The point of the story, of course, is that we can't think sensibly about the very far future. We can barely understand the numbers involved and, if our future is constrained by astrophysics, we surely can't do much about it. What we can do is make sure we don't destroy the near future.

In this book, we have seen how:

- The population explosion is coming to an end, affording an opportunity to solve problems that once seemed intractable.
- The increase in the wealth and well-being of the world is broadening to include traditionally poor societies, which are closing the gap with traditionally rich ones.
- Richer means greener, as resources and technology become available to solve environmental problems that may be daunting but are almost certainly surmountable.

Thus, the future of humanity offers continued and widespread betterment, punctuated by challenges that we have the riches and knowledge to address. Why do so many people fear it?

Apocalyptic thinking seems to be hard-wired into the human mind. Michael Shermer hypothesizes that this is the case for evolutionary reasons:¹

You are a hominid on the plains of Africa 3 million years ago. You hear a rustle in the grass. Is it just the wind or is it a dangerous predator? If you assume it is a predator but it turns out that it is just the wind, you have made what is called a type I error in cognition, also known as a false positive, or believing something is real when it is not. You connected A, the rustle in the grass, to B, a dangerous predator, but no harm.

On the other hand, if you assume that the rustle in the grass is just the wind but it turns out that it is a dangerous predator, you have made a type II error in cognition, also known as a false negative, or believing something is not real when it is.

You failed to connect A to B, and in this case you're lunch.

In other words, we have survived because we assume the worst about our environment until we're proven wrong and the danger goes away. This is not a bad guess about why human history is full of stories about the Apocalypse. Here are some examples:

- The Apocalypse itself, in the New Testament book of Revelation.

- The Mesopotamian epic of Gilgamesh, which is two millennia older than the New Testament
- The end times in Judaism, Islam, Hinduism, and Buddhism.
- Countless prophecies and cults of doom from ancient times to the current day (each time that the world doesn't end, the prophet resets the date of the end of the world).
- A vast body of serious and popular literature, ranging from Mary Shelley's *The Last Man* to the retelling of the Epic of Gilgamesh in *Night of the Living Dead*

Interestingly, these stories usually end with a new beginning, life organized under some other principle, such as the reign of God or various gods, the New Man hypothesized in communism and fascism, and the latest wrinkle: transhumanism.²

This time *is* different. Modern apocalyptic thinking does not usually involve a better place after the old, bad one is destroyed.

All this does not mean we don't have real problems, including a few that could spell the end of human life as we know it. The boy who cried wolf may have done so one too many times to be believable but sometimes there really is a wolf. The closest we came to destroying civilization was on October 27, 1963, not that long ago. The Cuban missile crisis is sometimes thought of as proof that we will always pull back from the brink of destruction.

But it's not proof of anything. Although Kennedy and Khrushchev should be commended for their restraint, it's possible that the person who actually averted a nuclear world war was the brave Soviet submarine commander, Vasili Arkhipov. Unanimity among the three officers in charge of his submarine would have been required to launch a nuclear missile aimed at the United States as a response to what appeared to the officers to be an American attack on the sub; Arkhipov cast the lone vote not to.³ We do know that Fidel Castro wanted to use the weapons against the United States, even if the Soviet Union was using them as a bluffing tactic.⁴

The challenges we face now are far less immediate: climate change, nuclear proliferation, pandemics. *The Bulletin of the Atomic Scientists* notwithstanding, we are not a few minutes away from almost complete destruction. We are getting richer and greener, but we have engineering challenges to overcome. Some of them could be daunting.

In the very, very long run we are, of course, subject to the laws of astrophysics. The Sun will explode. Long before then, the human race will have evolved into something unrecognizably different or will have disappeared for other reasons. I cannot fathom the next billion or even the next million years. The next thousand are hard enough to grasp. The next few hundred are probably the most that we can think about sensibly. Let's put our aspirations and fears within that frame.



Let's not teach our children that apocalyptic thinking is right thinking. It has always been wrong as a forecast, and it will continue to be wrong. Some young people are angry with their parents for bringing them into the world. We should stop terrifying them into not wanting to be alive. We should stop frightening them into not wanting to procreate. That is child mistreatment. We should be ashamed that we – some of us, anyway – have led our children to think this way.

We should, instead, teach them how to identify and solve problems. Specifically, they need to learn how to tell real problems from illusions and chimeras, and how to distinguish problems that can be solved from difficulties we're simply going to have to live with.

We should explain that apocalyptic thinking is a neural mistake based on our need to survive in a cruelly hostile environment that doesn't exist anymore. We are descended, over billions of years, from animal ancestors that could not craft an environment friendly to their own needs. We are not that species. To an extent unprecedented in the history of life on Earth, we can control our fate.

Most of all, let's teach them to enjoy and celebrate life, their own and that of future generations. The mind, the body, and the spirit (I do not know what the spirit is, but the word does seem to have some meaning) are our primary gifts from Nature. The others are the natural world, each other, and the works we humans have created and preserved over time.

Let us ask our children to respect the past and embrace the future, not with fear, but with courage and the desire to right what might be wrong with it.

Remind our children that they are members of the only species that can do any of these things.

As Shakespeare said, what a piece of work is man.

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References

Shermer, Michael. 2011. "The End Is Always Nigh in the Human Mind" *New Scientist* (June 1).

¹ Shermer (2011).

² Transhumanism is a philosophy that suggests the human race can direct its own evolution into a superior species that incorporates massive computational power and artificial intelligence into its biological existence. Aspects of transhumanism, with its emphasis on life extension and, according to some adherents, immortality, are reminiscent of traditional religions.

³ It could be argued, based on this story, that Arkhipov, not Churchill, Hitler, Mao, Roosevelt, Gavrilo Princip, or Einstein, was the most influential person of the twentieth century. (Princip was the man who started World War I, and indirectly World War II as well, by assassinating Archduke Franz Ferdinand of Austria and his wife.)

⁴ Something similar happened again in 1983, when Stanislav Petrov, an officer of the Soviet Air Defense Forces, disobeyed an order to launch a retaliatory strike against the United States after it was falsely believed, due to warnings from a nuclear early-warning system, that the United States had attacked. This incident occurred in the wake of the shooting down of Korean Air Lines flight 007, a passenger airliner traveling from the United States, over Soviet airspace.