

Popular science author Steven Pinker explores rationale behind irrational thinking at ASU event

By Dolores Tropiano, ASU News

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Popular science author Steven Pinker returned to Arizona State University's Tempe campus on Feb. 7 for a rational talk about irrational thinking.

More than 200 people filled Marston Exploration Theater to hear the Harvard professor's lecture, titled "Rationality: What It Is, Why It Seems Scarce, Why It Matters," which is also the title of his latest book. In it, Pinker examines the role of rationality in individual and societal progress and why he says it often seems absent from today's discussions.

"Human rationality poses a puzzle," Pinker said. "On the one hand ... we have walked on the moon ... dated the origin of the cosmos ... and discovered the mysteries of life and of mind.

"At the same time, a majority of Americans think that astrology is very, sort of, scientific, and after consuming fake news many believed that Yoko Ono had an affair with Hillary Clinton."

"This is the paradox I attempted to make sense of in my book," added the cognitive psychologist and public intellectual.

Pinker's talk was part of the [Beyond Annual Lecture series](#), which invites scientists or philosophers of international standing to offer reflective accounts of their work and interests that speculate a bit "beyond" their normal comfort zone. The events are free and open to the public.

Pinker also visited ASU in 2018 for the School of Civic and Economic Thought and Leadership's [free speech series](#).

The lecture was hosted by [ASU's Beyond Center](#), which is devoted to confronting the really big questions of science and philosophy. The center tackles subjects as diverse as time travel, the colonization of Mars, multiple universes and more.

Rational reasoning

Pinker, one of Time magazine's "100 Most Influential People in the World," defined rationality as "the use of knowledge to attain goals."

He pondered many questions during his lecture, including: Why do we fail to take advantage of the powerful tools of reasoning our best thinkers have discovered over the millennia: logic, critical thinking, probability and more?

Pinker is considered one of the world's leading authorities on language and the mind. His popular books include "The Stuff of Thought," "The Blank Slate" and "The Language Instinct." He believes that humans are rational animals that are subject to cognitive illusions.

The professor explained the rationale behind many thought processes — as well as the fallacies that he believes accompany them — including motivated reasoning.

"Rationality is always in service of a goal," he said. " ... Sometimes the goal to which people deploy their rational faculties is to win an argument in which the stakes matter."

He quoted journalist Upton Sinclair, who said, "It is difficult to get a man to understand something when his salary depends upon his not understanding it."

The Johnstone Family Professor of Psychology at Harvard discussed the influence of deeply rooted folk intuitions — intuitive ways of analyzing the world that served our ancestors well until we developed modern science and mathematics.

One example is essentialism — that is, "living things contain an invisible essence or power that gives them their form and their abilities," he said.

From there it is a another short step to conclude that diseases are caused by some kind of adulteration of your essence by some foreign contaminant, he explained.

"This gives rise to resistance to vaccines, which are as old as vaccines themselves. ... It makes people receptive to quack cures like purging, bloodletting."

Guardrails for rationality

Pinker also talked about science literacy, saying that people who don't believe in vaccines or climate change scored just as high as those who do.

"In the tests of scientific literacy, in terms of the people who deny the scientific consensus on a number of issues are no more ignorant, no more illiterate than people who accept it," he said.

"I have been vaccinated against COVID-19 a half a dozen times, but if you ask me how it works I'll say, 'Something, something antibodies, something something the immune system.' Basically, I have to trust the people in the white coats.

"In fact, a lot of people who accept the scientific consensus on global warming are kind of clueless about how it actually happens. ... Basically the difference is political ideology, not scientific literacy."

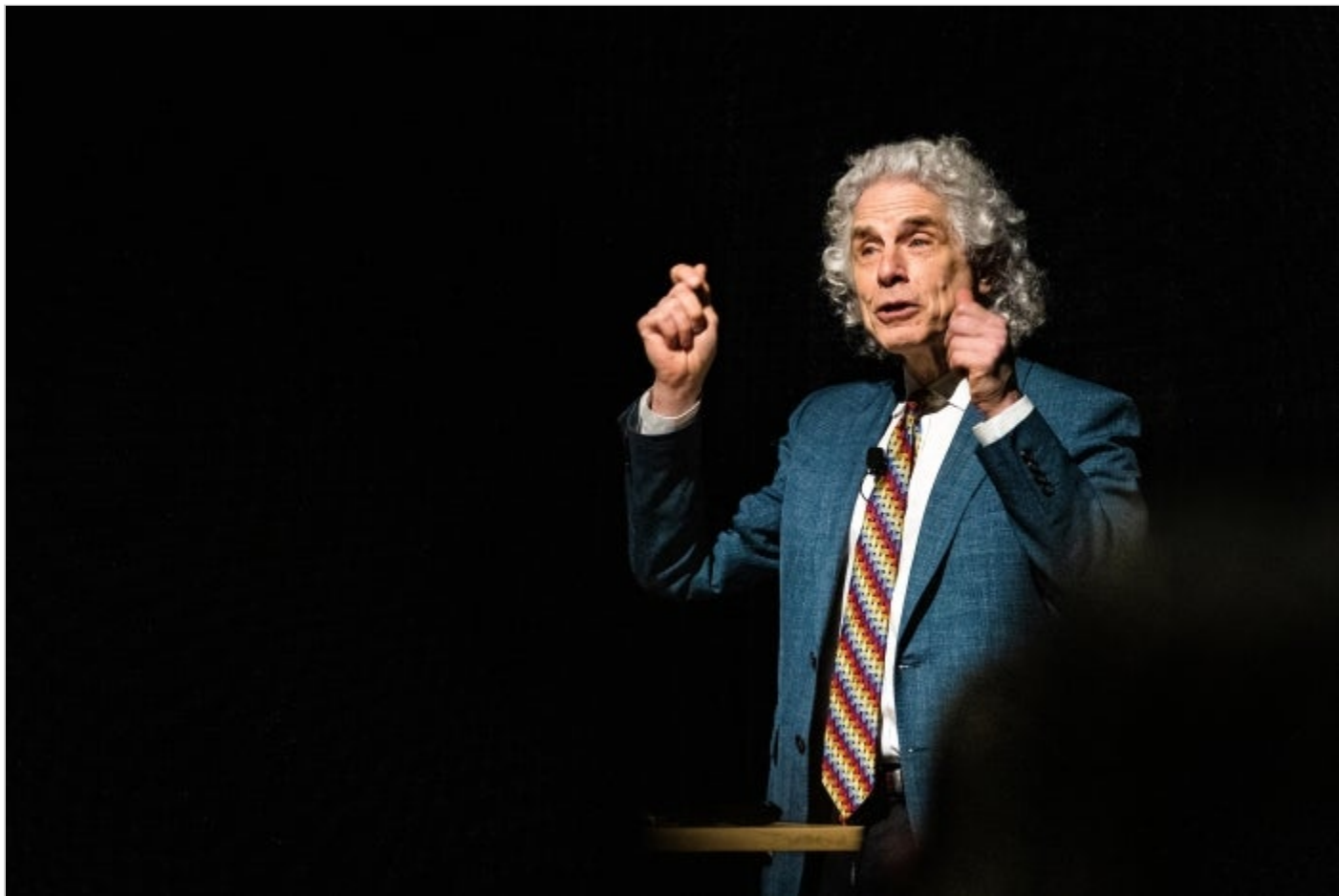
Pinker said it's important to trust people or groups with a given expertise — such as scientists, historians, journalists and record keepers.

"Many people who do believe scientific consensus do so because they trust the institutions that promote those beliefs," he said. "We're all very bad at noticing biases in our own thinking. We're much better at thinking up the biases in someone else's thinking.

"So, we have a community of people that could exercise free speech, that can criticize one another's hypotheses. That holds out some hope that we can be collectively more rational than any of us as individuals."

This story originally appeared on [ASU News](#).

Main image



Steven Pinker, the Johnstone Family Professor of Psychology at Harvard University, delivers the 2025 Beyond Annual Lecture on Friday, Feb. 7, at Marston Exploration Theater on the Tempe campus. Photo by Charlie Leight/ASU News