

Expert Advice to Prep Teens for Life After High School

Welcome!



Dr. Jay Wile

• Textbook Myths and How to Deal with Them



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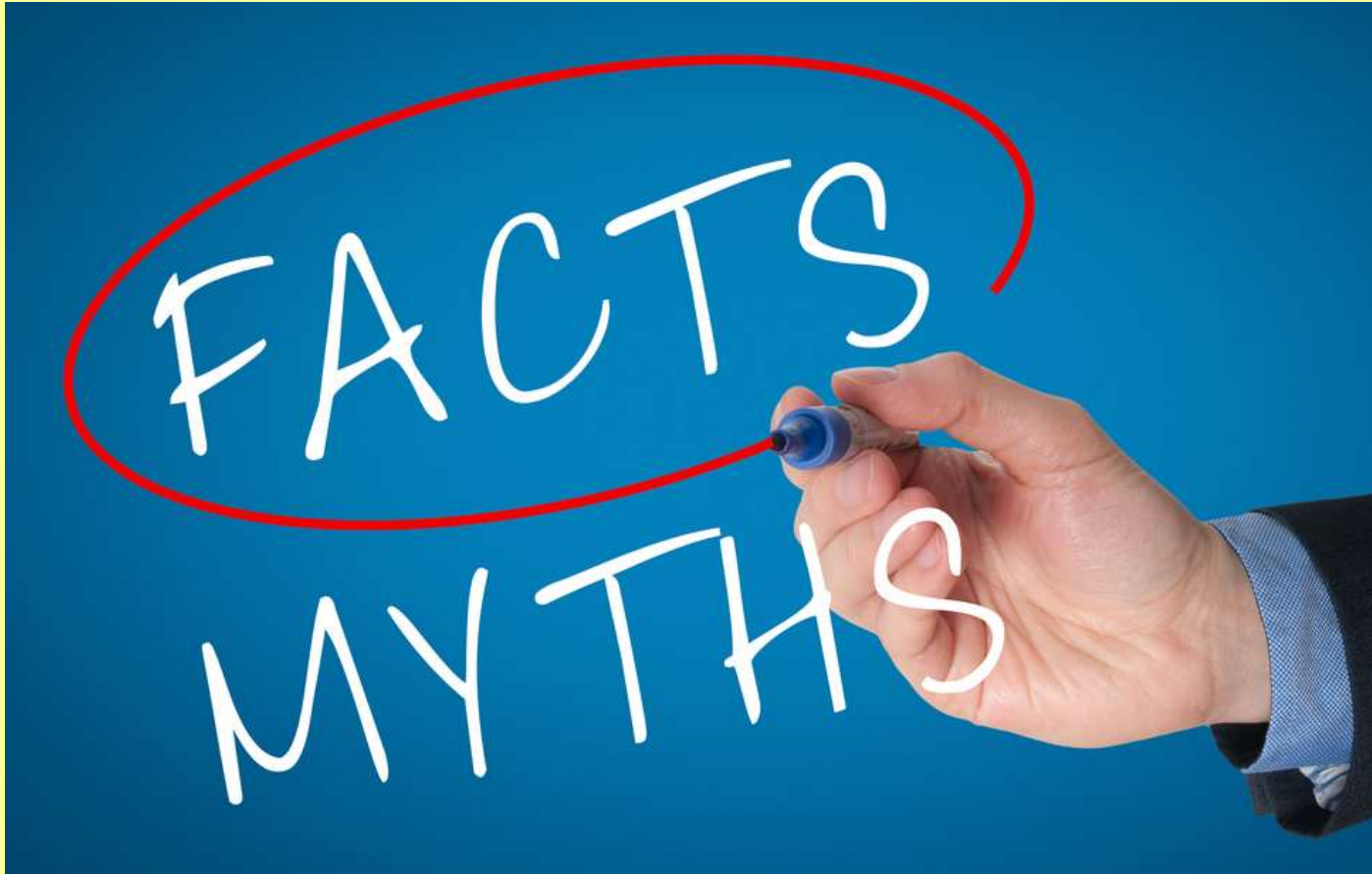


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This statue of Atlas holding up the earth is from the second century AD.



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**In ancient times, even uneducated sailors
knew the earth is a sphere!**

The Early Church Taught The Earth is a Sphere

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**“And how the Earth and sea
their place should keep; And
when the seasons, in their
circling course, winter and
summer, spring and autumn,
each should come, according to
well ordered plan; out of a
confused heap who didst create
this ordered sphere, and from
the shapeless mass.”**

Clement of Alexandria AD 150 - 215

What About Christopher Columbus?



“The myth that people thought Columbus would sail off the edge of the earth was popularized by Washington Irving (1783-1859). According to respected Columbus biographer Samuel Eliot Morison, Irving's version the story is ‘pure moonshine. Washington Irving, scenting his opportunity for a picturesque and moving scene,’ created a fictitious account of this ‘nonexistent university council’ and ‘let his imagination go completely...the whole story is misleading and mischievous nonsense.’

- Jeffrey Burton Russell, *Inventing the flat earth: Columbus and modern historians*, Praeger Pub 1991, p. 53

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Students at California State University, Fullerton were asked what issue hampered Columbus in getting support for his voyage. 80% said the issue was that the earth was flat.

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Only 1% gave the correct answer: that the scholars of the day knew the earth's circumference was very large (roughly 25,000 miles). As a result, it was thought that no ship could make such a long voyage.

**Where did the idea that the church
taught a flat earth originate?**

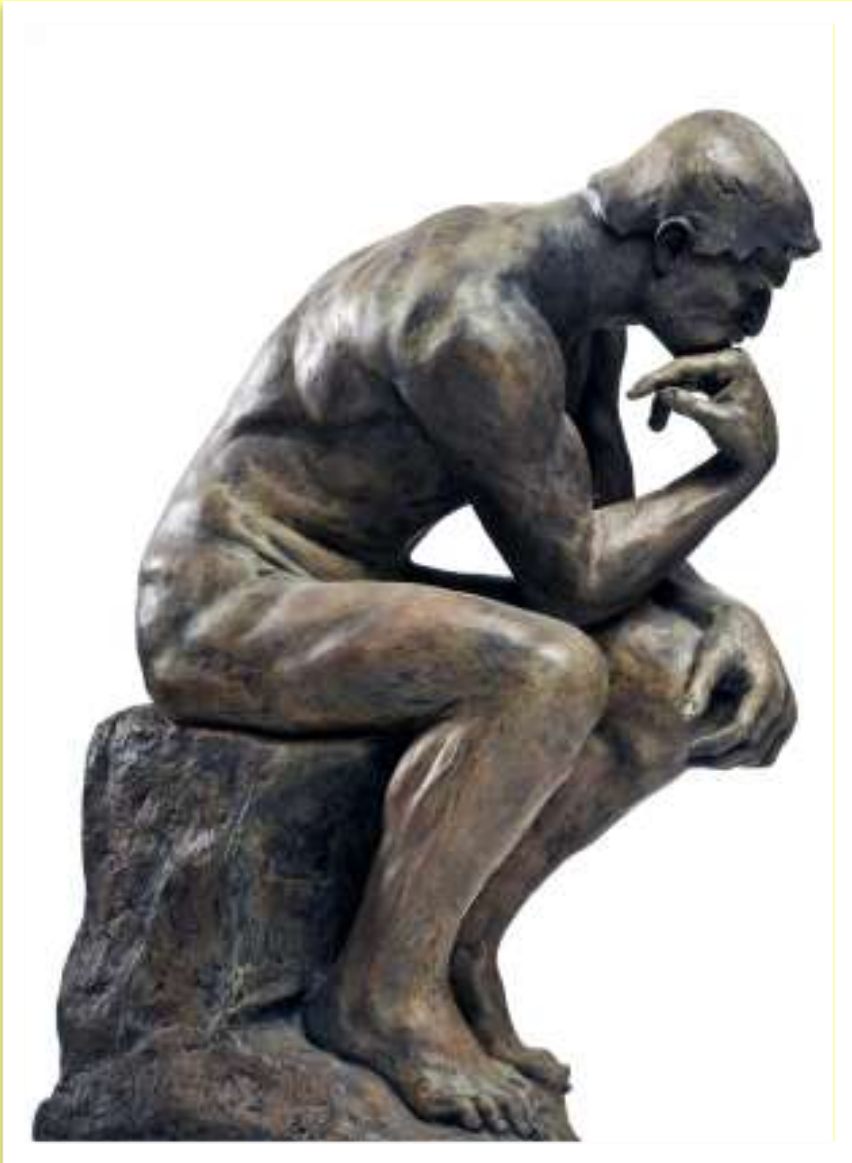
Where did the idea that the church taught a flat earth originate?



“The myth that a flat earth was part of Christian doctrine in the Middle Ages appears to have originated with Sir Francis Bacon (1561 – 1626), who wrongly claimed that geographers had been put on trial for impiety after asserting the contrary.”

-Dr. James Hannam, *The Genesis of Science*, Regnery Publishing 2011, p. 28

How Did The Myth Become Popular?



How Did The Myth Become Popular?



Most textbook authors don't rely on primary or secondary sources. They just repeat what other authors have said. In addition, it fits into our cultural stereotype of ancient people being ignorant and stupid.

The Myth of Blue Blood



“The various body organs have used up the oxygen in this blood, so the returning venous blood is blue.”

- Louis R. Caplan, *Stroke*, Accessible Publishing Systems 2008, p. 40

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“Oxygen is extracted (removed from) the haemoglobin when the blood reaches the organs and cells. Red cells without oxygen look dark blue.”

Clive Handler and Gerry Coghlan, *Pulmonary Arterial Hypertension*, Oxford University Press 2010, p. 19

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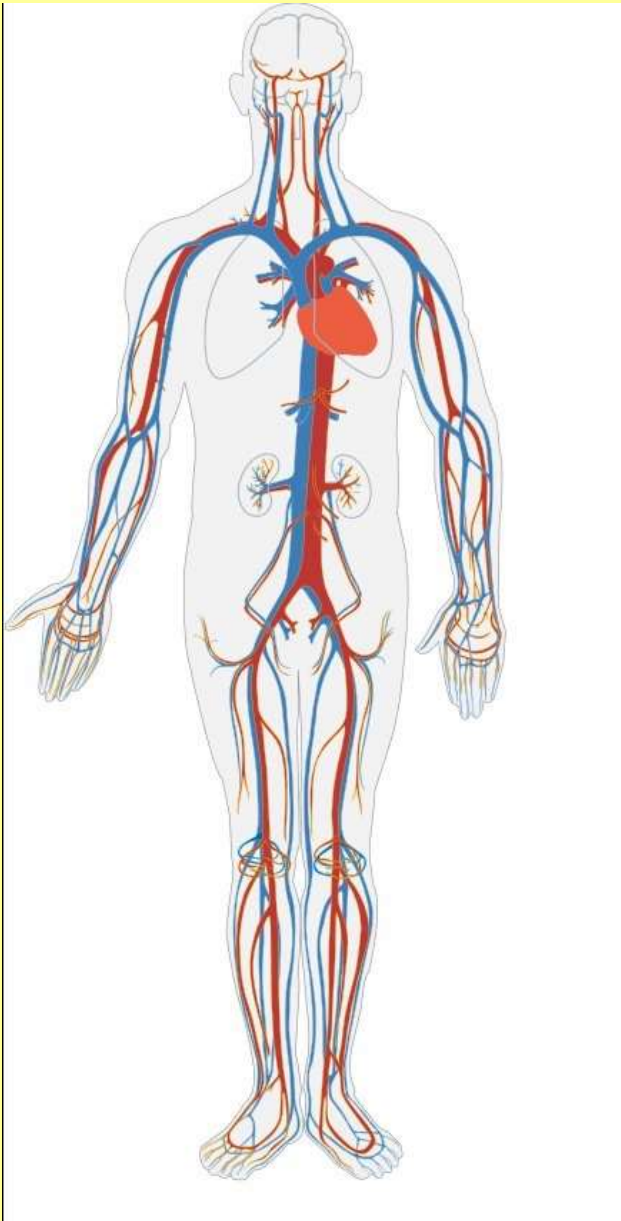
There is no ounce of truth to this. Oxygen-rich blood is bright red, while oxygen-poor blood is dark red.

The Myth Persists for Two Reasons

1. The myth is deeply ingrained in our collective consciousness and is often passed down from generation to generation.

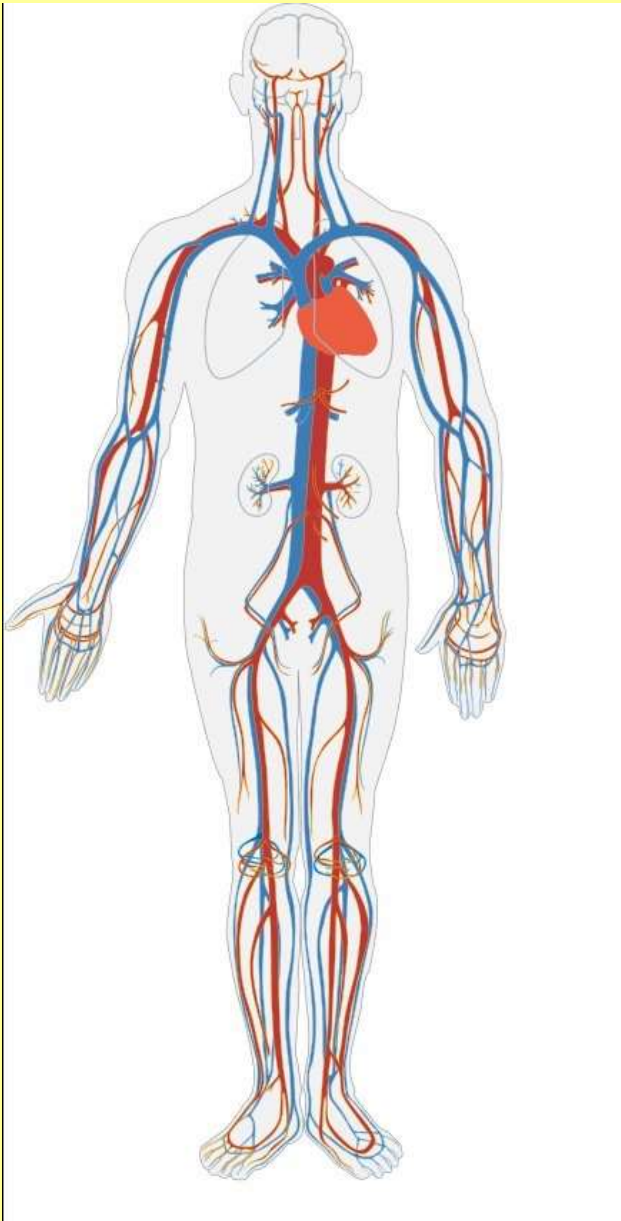
2. The myth is often used to explain complex phenomena in a simple and easy-to-understand way, making it appealing to a wide audience.

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When you look at your veins through your skin, they appear blue due to your skin distorting the color.

The First Thanksgiving



**There is No Reference to This In
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The only reference is in a letter from Edward Winslow:

“In his letter—the main purpose of which was to convince the investors that they weren’t throwing their money away—Winslow described the houses the Pilgrims had built, listed the crops they had planted, and emphasized the success they had been blessed with. To underscore the latter, he added five sentences describing the abundance they now enjoyed.”

Dr. Robert Tracy McKenzie, *First Thanksgiving*, 2013

Here Is What We *Actually* Know

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“Our harvest being gotten in, our Governor sent four men on fowling; that so we might, after a more special manner, rejoice together, after we had gathered the fruit of our labours. They four, in one day, killed as much fowl as, with a little help besides, served the Company almost a week. At which time, amongst other recreations, we exercised our Arms; many of the Indians coming amongst us. And amongst the rest, their greatest King, Massasoyt, with some ninety men; whom, for three days, we entertained and feasted. And they went out, and killed five deer: which they brought to the Plantation; and bestowed on our Governor, and upon the Captain, and others.”

- Winslow's Letter

The Concept of God is Incompatible with Science

Science is the study of the natural world, and the natural world is governed by natural laws. The concept of God, as a supernatural being, is incompatible with the scientific method, which requires that all claims be testable and falsifiable.

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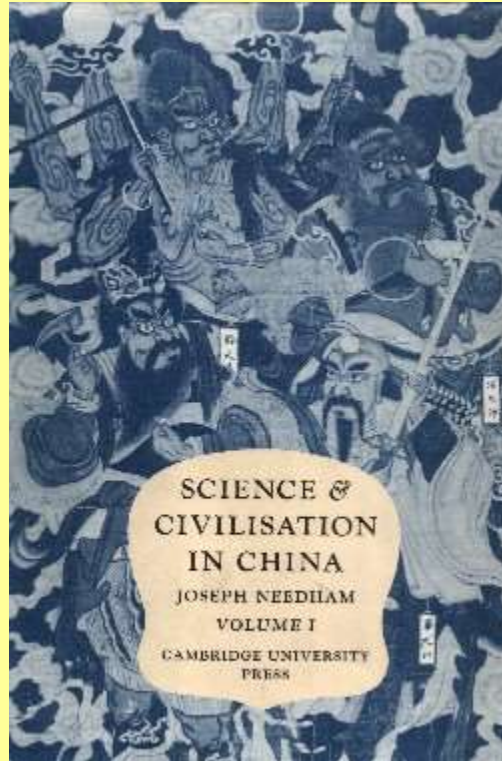
“It follows that science is incompatible with religion. Why is this? It is because once you attribute any particular event to a supernatural agent, a proposition that cannot be disproven by observation or experiment, then science becomes both irrelevant and impossible.” - Dr. John Ellis in *How Science Works*

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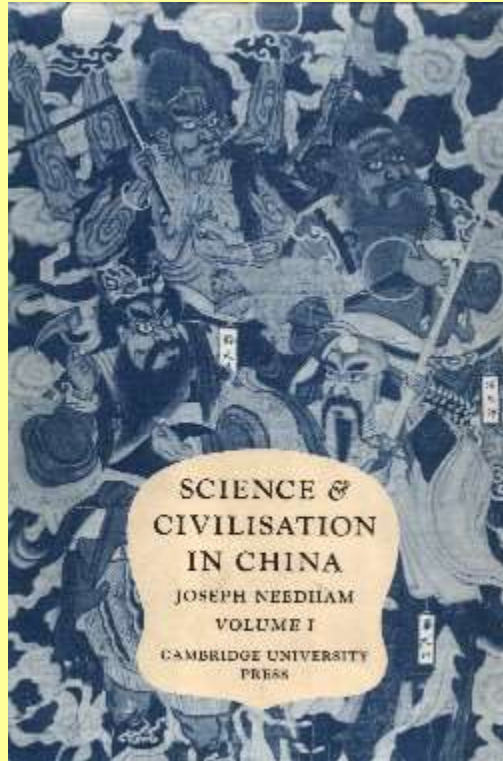
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In 1938, Dr. Joseph Needham asked a famous question: “Why was China overtaken by the west in science and technology, even though ancient China was advanced compared to ancient Europe?”



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It was named one of the 100 Best Nonfiction books of the 20th century by the Modern Library Board.

He Gave Three Answers

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The first two dealt with Chinese law and bureaucracy. This is his third reason:

“...the autochthonous idea of a supreme being, though certainly present from the earliest times, soon lost the qualities of personality and creativity. The development of the concept of precisely formulated abstract laws capable, because of the rationality of the Author of Nature, of being deciphered and re-stated, did not therefore occur.”

Many Scientific Breakthroughs Occurred Because of Scientists' Christian Faith

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Nicolaus Copernicus put the sun at the center of the universe specifically because the geocentric model was too messy, and he said that this went against the nature of God, who is the “the Best and Most Orderly Workman”

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- 2. Don't dismiss a "fact" out-of-hand because a textbook says something different.**
3. When you run across something in a textbook (or college class) that contradicts what you have learned, be willing to look into it. (maybe not right away, but sometime)

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Websites with a “.edu” extension. These are usually university (or high school) websites.

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In fact, I cannot find a single study that says this. The most recent study I have found say they each use about 16,000 words per day on average.

[Matthias R. Mehl, *et al.*, "Are Women Really More Talkative Than Men?," *Science* 317: 82, 2007]

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**Be willing to question
much of what you
learned. That's part of
what college is all about!**

Questions?



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**Thank you
for Joining Us!**



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