

SCIENCE

The Demons of Darkness Will Eat Men, and Other Solar Eclipse Myths

By JONAH ENGEL BROMWICH



An annular eclipse as seen from Arizona in 2012. Many ancient civilizations saw eclipses as bad omens.

Stan Honda/Agence France-Presse — Getty Image

We understand the cosmic calculus that leads to solar eclipses like the one that will enchant many Americans on Monday.

But even for the most jaded skygazers, a solar eclipse can provoke a visceral sense of wonder that the phenomenon provoked long before it was understood.

Here's a glimpse at the way that populations around the world understood solar eclipses, and used them to reinforce cultural norms and values.



Residents of Shanxi Province in China watching the solar eclipse there in 2009.
Reuters

An aberration

“This is something wrong. We’ve got to figure out what.”

That, said Dr. David Dearborn, an astrophysicist at Lawrence Livermore National Laboratory in Livermore, Calif., was frequently the response of ancient civilizations to the onset of a solar eclipse, particularly when they were unaware that the phenomenon would occur.

“If you were the Greeks, before they came to have an understanding of eclipses, you might think it was a bad omen, something the gods were telling you you had done wrong,” he said. “If you were the Chinese, you thought dragons were eating the sun.”

“If you read the ‘Anglo-Saxon Chronicle’ — which is a really boring read — but if you scan through it, you’ll find lots of instances of eclipses, all related to other bad things,” he added.

Anthony Aveni, a cultural astronomer and the author of the 2017 book “In the Shadow of the Moon: The Science, Magic and Mystery of Solar Eclipses,” said that in every culture that he was aware of, solar eclipses were seen as cosmic “interruptions.”

For instance, he said, the Arapaho Plains Indians, who saw the celestial bodies as siblings, a brother sun and a sister moon, were alarmed to see that the two were suddenly converging. An obvious question was prompted, Mr. Aveni said: “What are they doing having sex in the sky?”

Understandably, the eclipse was thought by many cultures to herald the apocalypse. Susan Milbrath, the curator of Latin American art and archaeology at the Florida Museum of Natural History, provided a list of those who believed that solar eclipses could signal end times.

The Ch’orti’, indigenous Mayas, believed “an eclipse of the sun that lasts more than a day will bring the end of the world, and the spirits of the dead will come to life and eat those on earth,” she wrote in an email, drawing on her book, “Star Gods of the Maya: Astronomy in Art, Folklore, and Calendars.”

Other Mayas including the Yucatec and the Lacandón associated eclipses with total destruction, she said. The Lacandón, who still live in what is now the Mexican state Chiapas, expected that the earth would split and that jaguars would emerge “and eat most of the people.”



An eclipse watcher in Athens in 2006. Ancient Greeks believed eclipses were the gods’ way of “telling you you had done wrong,” one expert said.
Maria Marogianni/European Pressphoto Agency

The Florentine Codex, an ethnographic study of 16th-century Aztecs in Mexico, described a solar eclipse in particularly vivid terms:

There were a tumult, and disorder. All were disquieted, unnerved, frightened. Then there was weeping. The commonfolk raised a cup, lifting their voices, making a great din, calling out shrieking. People of light complexion were slain as sacrifices; captives were killed. All offered their blood. They drew straws through the lobes of their ears, which had been pierced. And in all the temples there was the singing of fitting chants; there was an uproar; there were war cries. It was thus said: "If the eclipse of the sun is complete it will be dark forever. The demons of darkness will come down. They will eat men!"

In the below video, Dr. E. C. Krupp, the director of the Griffith Observatory in Los Angeles, relates some other early beliefs about the solar eclipse.

<https://youtu.be/jfGwJW8x2so>

Biting, eating, swallowing

Laura Danly, an astrophysicist and the curator of the Griffith Observatory, was one of many researchers who pointed out how commonly people interpreted solar eclipses as the sun being eaten by some horrible creature.

"It's a natural thing to think if you've ever seen one," Dr. Danly said. "The moon literally looks like it's taking a bite out of the sun until it consumes it completely."

Since the sun always reappears, she said, "some throwing up or regurgitation is often a part of the story as well."