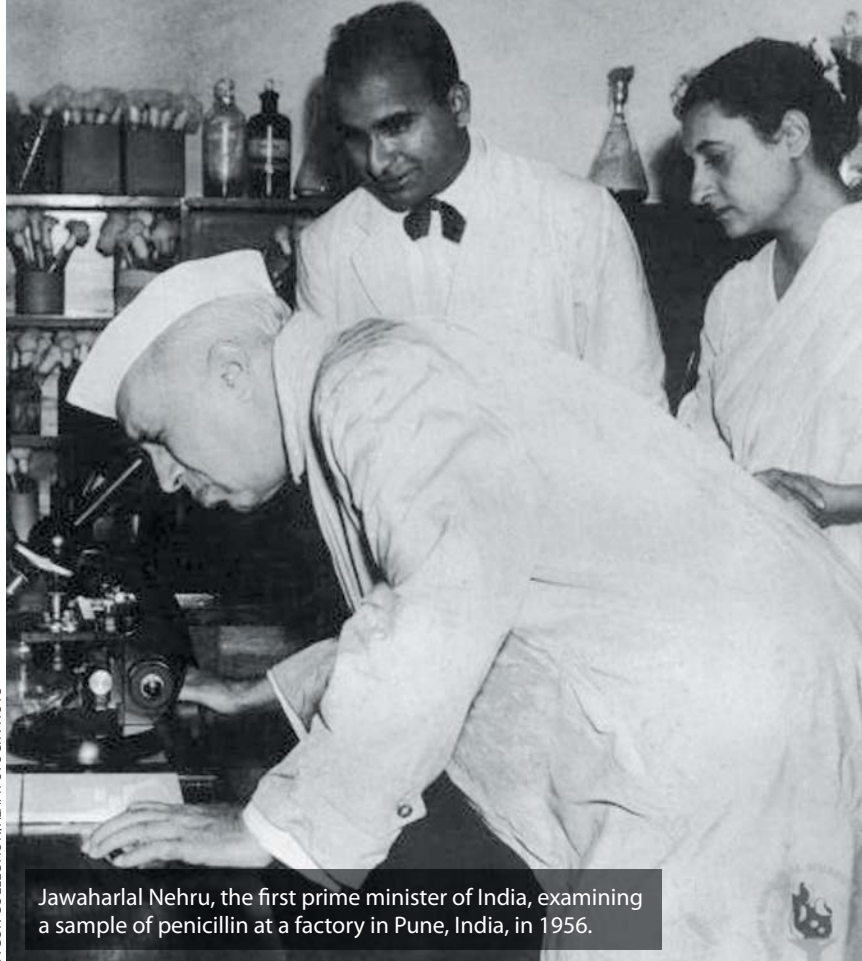




Jawaharlal Nehru, the first prime minister of India, examining a sample of penicillin at a factory in Pune, India, in 1956.

Searching for religion in the laboratory

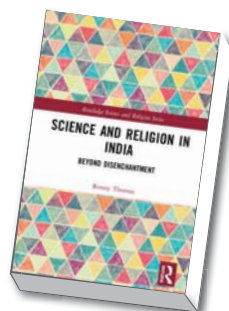
Science and religion are categories that are too big for the responsible historian, philosopher, or sociologist to use. They are lazy terms: When invoked, they almost always presume what they purport to explain. That is why surveys of, say, physicians and their views of God are rarely rewarding. Their conclusions are written into their questions from the get-go.

And yet, people in the world today often invoke the divide—sometimes expressed as conflict, sometimes as complement—between science and religion. Despite our critical scruples, we cannot ignore that those categories are in fact used by people to organize their daily lives. And despite the significant body of scholarship now devoted to explaining the history of disputes about the relationship between science and religion, we lack clear accounts of how people actually use those terms to navigate the world today.

Enter Renny Thomas. His brief book *Science and Religion in India: Beyond Dis-*

Science and Religion in India
Beyond Disenchantment

Renny Thomas
Routledge, 2021.
\$160.00



enchantment has a bold claim: to rethink conventional narratives of the relationship between science and religion. Thomas's novel contribution is to study how religion is practiced in the laboratory. Rather than searching for religion in the places we are trained to look for it—such as mosques, temples, and churches—Thomas followed scientists around an elite scientific research institute in Bangalore, India, and asked them probing questions about God, belief, and devotion every step of the way.

The book builds on historical studies of science in colonial and postcolonial India as well as scholarship in the field of science and technology studies. It brings together the well-known labora-

tory studies of the sociologist-cum-philosopher Bruno Latour with the work of Ashis Nandy and Shiv Visvanathan, two social theorists whose writings about science in modern India have wide applicability for the rest of the world.

India is an important site to test standard narratives of science and religion, not because it is unlike other nations, but precisely because it shares so much in common with them. The assertion in the preamble of the Indian constitution that India is a “secular” nation did not do away with religion, just as religion has not disappeared from the rest of the globe. In India—as elsewhere—it is best to see religion as a part of modern life rather than a stubborn holdover from the premodern past.

Still, science has a marked place in India, which makes a study of science and religion there particularly valuable. Jawaharlal Nehru, the first prime minister of India, gave science a central place in the building of a new Indian nation-state. A responsibility “to develop the scientific temper” was written into the constitution, and a cadre of scientists and engineers took on the responsibility of constructing a modern India that would be distinguished from the past by science.

At the same time, religious reformers asserted that Hinduism contained the metaphysical core of modern science. And today, discussions of science and religion remain common fare in public intellectual life in India. Thomas did not go to one of India's largest scientific research institutes looking for religion. Rather, religion found him: While he was conducting fieldwork at the institute, the International Society for Krishna Consciousness parked a mobile “science and religion library” on the campus.

Laboratories produce many different things—including papers, theories, and new particles. But they also produce new types of people. And those people are sometimes religious. *Science and Religion in India* shows the particular types of religious individuals produced within Indian laboratories. The book is at its best when it allows the scientists Thomas interviewed to speak for themselves. Those scientists develop distinct strategies to theorize the place of religion and science in their lives. If they shy away from employing the dichotomy of science and religion, those scientists often

think through different binaries: For example, they might classify some activities as cultural but not religious, others as spiritual but not religious, and still others as religious but not superstitious.

Although *Science and Religion in India* does an admirable job of breaking down binaries, it falters when talking about “the West,” which becomes the sort of monolith that Thomas otherwise seeks to dismantle. Take, for instance, the discussion of atheism among Indian scientists, which forms the most exciting chapter in the book. Thomas states that “the Western understanding of atheism as a philosophy of godlessness and anti-religious sentiment does not apply in the Indian context.” He argues that while a figure like Richard Dawkins is often invoked by Indian scientists, very few of them are actually like Dawkins.

But even if there is a fundamental difference between Dawkins and most Indian scientists, the famed biologist should be seen in India the same as he is in Europe or America: as one resource among many that scientists can choose to invoke or ignore in styling their beliefs and practices. (Nobody is really like Dawkins, but his 2006 book *The God Delusion*, it should be noted, has been translated into Tamil and Bengali, and the English edition is readily available in Indian airports and bookstores.) Western atheism is in turn a term that can be—and is—invoked or dismissed by Indian scientists. It is better left as a category used by the scientists themselves rather than one used by scholars to analyze their actions.

That minor quibble, however, should not detract from Thomas’s accomplishment. *Science and Religion in India* joins a growing set of recent books that explore the modernity of both science and religion in contemporary India: Dwaipayan Banerjee’s *Enduring Cancer: Life, Death, and Diagnosis in Delhi* (2020), Ajantha Subramanian’s *The Caste of Merit: Engineering Education in India* (2019), and Banu Subramaniam’s *Holy Science: The Biopolitics of Hindu Nationalism* (2019). They help us see the surprising ways people in the world wrestle with the imperfect categories—such as science and religion, tradition and modernity, East and West—that are humanity’s collective inheritance.

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NEW BOOKS & MEDIA

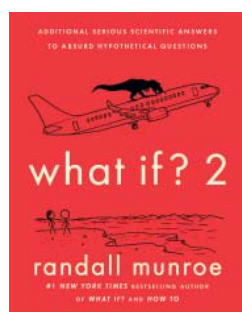
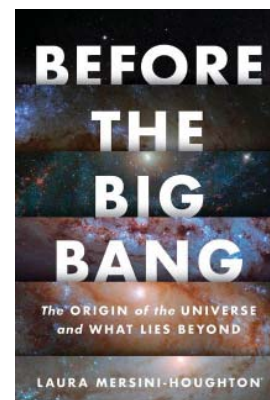
Before the Big Bang

The Origin of the Universe and What Lies Beyond

Laura Mersini-Houghton
Mariner Books, 2022. \$27.99

Inspired by quantum entanglement and wormholes—the latter of which they clumsily explain with a pen running through a paper folded in half—Marvel blockbuster films have helped familiarize the public with the concept of the multiverse. Although it might seem like science fiction, the notion of a multiverse is central to Laura Mersini-Houghton’s *Before the Big Bang*, as is her fondness of what she calls the “freedom to think for [herself].” Laying out questions about the universe’s origins through a series of personal stories, she argues that the multiverse theory is testable. Readers will likely be impressed by the intimacy with which Mersini-Houghton shares memories of her childhood in Albania, which laid the groundwork for her approach to the multiverse theory.

—GD



What If? 2

Additional Serious Scientific Answers to Absurd Hypothetical Questions

Randall Munroe
Riverhead Books, 2022. \$30.00

A sequel to 2014’s *What If?* by Randall Munroe, author of the popular Web comic *xkcd*, Munroe’s latest book continues to address the multifarious questions posed by followers of his *What If?* blog. Using the latest scientific research and his trademark wit, Munroe responds to head-scratchers like the following: If a firefighter’s pole could be built from the Moon to Earth, how long would it take to slide down it? How many Wint-O-Green Life Savers are needed to create a lightning bolt? If everyone opened their fridge or freezer at the same time, would that lower the air temperature? Munroe’s simplistic, stick-figure-style illustrations enhance the amusing and informative text.

—CC

Pentagons and Pentagrams

An Illustrated History

Eli Maor; ill. Eugen Jost
Princeton U. Press, 2022. \$24.95

An entire book about two simple shapes? The thought of reading nearly 200 pages about pentagons and pentagrams might seem like the recipe for a snoozer, but Eli Maor’s new book, illustrated by Eugen Jost, is anything but boring. Geometry buffs will enjoy Maor’s beautiful annotations to Euclid’s proof of the construction of a regular pentagon. But Maor also delves into the cultural history of the pentagon, which has a special place in most societies because our hands have five fingers. Most medieval fortresses, for example, were built in the shape of a pentagon because the five-sided construction encloses a space larger than a square of equivalent perimeter while also reducing the “dead zones” at the corners where attackers could shelter from defenders’ fire.

—RD PT

