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SCIENCE TACKLES THE AFTERLIFE

"Witty . . . clever . . . and thoroughly entertaining." —JANET MASLIN, *NEW YORK TIMES*

Mary Roach

author of *STIFF*



## More Praise for Mary Roach and *Spook*

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“Science writing doesn’t get funnier or more human than this.”

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“Ms. Roach’s gift for facetiousness serves her well here. *Spook* is dependably witty, especially when it ventures far into the ether.... And it is populated by vividly evoked oddballs.... Ms. Roach makes herself a wry, enjoyable character throughout the book’s escapades...a clever investigator and a thoroughly entertaining, if skeptical, tour guide.”

—Janet Maslin, *New York Times*

“Funny and smart...since she’s a scientist at heart, she also lasers through the smoke and mirrors.”

—*People*

“First, there’s her wit and stylistic brio. From the clever dedication...to her gift for terse summation...to her genuine humility...Roach is a clear and versatile writer. She has a sharp eye for detail that demonstrates her traditional journalistic skills...but she delivers her findings in ultracontemporary tones.... She has a huge heart, a strong sense of empathy for the oddball, and she’s willing to go to great lengths to find and report stories from the hinterlands of understanding.”

—Floyd Skloot, *Chicago Tribune*

“Roach is a wonderfully vivid writer...[with] a keen eye for the perfect detail, an ear for the zinging quotation and a finely tuned sense of the preposterous.... A celebration of the wide, occasionally crazy spectrum of human pursuit.”

—Kate Zernike, *New York Times Book Review*

“Sly...irreverent...and downright witty.... Roach wields the scientific method and her skeptical mind like surgical tools, cutting away at myth, pseudo-theory and madness until all that remains is fact. In the end, believers and non-believers will be satisfied by Roach’s conclusions.... Reading *Spook* is like attending a lecture by a professor who is equal parts Groucho Marx and Stephen Jay Gould, both enlightening and entertaining. Roach makes learning about anything, be it decomposing bodies or the possibility of a verifiable afterlife, pleasurable.”

—Dorman T. Schindler, *Sunday Denver Post & Rocky Mountain News*

“This is Roach at her best.”

—*San Francisco Magazine*

“A sharp-eyed supernatural history.”

—Cathleen Medwick, *O Magazine*

“Funny, inquisitive and uncowed by experts, she’s the general reader’s ideal emissary to the arcana of

serious science.... Roach's writing has what science has so far failed to find: a divine spark."

—Malcom Jones, *Newsweek*

"Investigative reporting has no lighter, more irreverent spirit than Mary Roach.... What lets *Spook* rise above the dry survey of (mostly inconclusive) scientific investigations it could have been is Mary Roach—her lively and distinctive style, or perhaps more accurately put, her attitude.... Roach is funny, fair-minded, impartial and endlessly curious.... *Spook* is enormous fun."

—David A. Walton, *Pittsburgh Union-Tribune*

"*Spook* is nothing if not amusing. Roach heads into a mire of ghostly and laboratory episodes with robust humor."

—Nora Seton, *Houston Chronicle*

"Oh, had Roach only been my high school science teacher. *Spook* is filled with fascinating characters, wacky experiments, and Roach's accessible scientific reporting paired with comic relief and gentle insight."

—Brooke Gilbert, Amazon.com

"Roach is a self-described skeptic, but one with an open mind, a sense of adventure and a ready quip. All of this makes her an amiable and entertaining guide as she traverses several continents to look for scientific proof for the great beyond."

—Megan Harlan, *San Francisco Chronicle*

"Alas, she doesn't find the answers. But Roach is such a smart and breezy companion that it's enough to watch her realize that in the end she might not need them."

—Karen Valby, *Entertainment Weekly*

"As fascinating and thorough as her research may be, the greater tale lies in the people: The mediums, the mystics, the I-want-to-believers, the scientists, pseudo and for-real. Roach has a genius for portraiture, and she can bring the oddest people to hilarious life without a hint of condescension...her oddball, incandescent personality radiates from her prose."

—Arthur Salm, *San Diego Union Tribune*

"*Spook* is filled with some mind-blowing ideas that will make you glad you've got an open mind."

—Chris Watson, *Santa Cruz Sentinel*

"Roach brings to *Spook* a lightness and a sense of humor that, happily, smooths the morbid edges of the proceedings she describes.... The most refreshing thing about *Spook* is that Roach herself is a skeptic guiding a skeptic's tour.... What evidence she does come across, therefore, becomes all the more compelling."

—Priva Jain, *Salon*

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“Short of the Ultimate Trip (the one with the light and the pearly gates), it’s about as entertaining journey out of the realm of the living as anybody could want.”

—Donna Bowman, *The Onion*

“Her biting wit is omnipresent from the start.... This is one fantastically enjoyable book.”

—curledup.co

“For all Roach’s skeptical and often hilarious accounts, she is an eager volunteer and ready to accept evidence if evidence there be.... Throughout, she is critical and witty [and] truly deft handling of the (mostly) daft.”

—Kirkus Review

“She has done it again.... [Roach] now presents an equally smart, quirky, hilarious look at whether there is a soul that survives our physical demise. Roach perfectly balances her skepticism and her boundless curiosity with a sincere desire to know.... An original who can enliven any subject with wit, keen reporting and a sly intelligence.”

—Publishers Weekly

“Roach is dogged in her approach.... Gripping...Roach’s witty asides liven up an already interesting and unusual read.”

—Booklist

“Science writer Mary Roach’s wit and flair for vivid storytelling...have earned her a loyal readership and her new book will only cement it.”

—Ruminator Review

“It’s a fabulous read, both a comic and a serious investigation of the history of séances, medium spirits and discarnate voices.... All of a sudden, with *Spook*, the field of the paranormal is bust-a-gunny.... *Spook* is a comic romp through a mix of history and the current practices of a particular culture.”

—Monica Drake, *Sunday Oregonian*

“Roach’s humorous scoffings will make even the most adamantly-believing readers chuckle.... No matter what you believe, pick up a copy of *Spook*.”

—Vail Treadwell

“*Spook* is a hilarious look at misadventures in paranormal research.... In the sharp-witted world of Mary Roach, the answer is inconsequential. The interesting part is the question itself—and the eccentric characters doing the asking.... Surreal, fascinating, at times absurd and always hilarious, Mary Roach may not reveal the street address of our final destination, but in *Spook* she makes it sound less like a morgue and more like a comedy club.”





# SPOOK

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*Gulp! Adventures on the Alimentary Canal*

*Packing for Mars: The Curious Science of Life in the Void*

*Bonk: The Curious Coupling of Science and Sex*

*Stiff: The Curious Lives of Human Cadavers*



# **SPOOK**

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## **Science Tackles the Afterlife**

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**Images in this book are not displayed owing to permissive issues.**

**Mary Roach**



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**FOR MY PARENTS,  
WHEREVER THEY ARE OR AREN'T**

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## Introduction

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**M**Y MOTHER worked hard to instill faith in me. She sent me to catechism classes. She bought me nun paper dolls, as though the meager fun of swapping a Carmelite wimple for a Benedictine chest bib might inspire a taste for devotion. Most memorably, she read me the Bible. Every night at bedtime, she'd plow through a chapter or two, handing over the book at appropriate moments to show me the color reproductions of parables and miracles. The crumbling walls of Jericho. Jesus walking atop stormy seas with palms upturned. The raising of Lazarus—depicted in my mother's Bible as a sort of Boris Karloff knockoff, wrapped in mummy's rags and rising stiffly from the waist. I could not believe these things had happened, because another god, the god who wore lab glasses and knew how to use a slide rule, wanted to know how, scientifically speaking, these things could be possible. Faith did not take, because science kept putting it on the spot. Did the horns make the walls fall, or did there happen to be an earthquake while the priests were trumpeting? Was it possible Jesus was making use of an offshore atoll, the tops of which sometimes lie just inches below the water's surface? Was Lazarus a simple case of premature entombment? I wasn't saying these things didn't happen. I was just saying I'd feel better with some proof.

Of course, science doesn't dependably deliver truths. It is as fallible as the men and women who undertake it. Science has the answer to every question that can be asked. However, science reserves the right to change that answer should additional data become available. Science first betrayed me in the early eighties, when I learned that brontosaurus had lived in a sere, rocky desert setting. The junior science books of my childhood had shown brontosaurus hip-deep in brackish waters, swamp greens dangling from the sides of their mouths. They'd shown tyrannosaurs standing erect as socialites and lumbering Godzilla-slow, when in reality, we were later told, they had sprinted like roadrunners, back flat and tail aloft. Science has had us buying into the therapeutic benefits of bloodletting, of treating melancholy with arsenic and epilepsy with goose droppings. It's not all that much different today: Hormone replacement therapy went from miracle to scourge literally overnight. Fats wore the Demon Nutrient mantle for fifteen years, then without warning passed it to carbohydrates. I used to write a short column called "Second Opinion," for which I scanned the medical literature, looking for studies that documented, say, the health benefits of charred meat or the deleterious effects of aloe on wound-healing. It was never hard to fill it.

Flawed as it is, science remains the most solid god I've got. And so I decided to turn to it, to see what it had to say on the topic of life after death. Because I know what religion says, and it perplexes me. It doesn't deliver a single, coherent, scientifically sensible or provable scenario. Religion says that your soul goes to heaven or possibly to a seven-tiered garden, or that your soul is reincarnated into a new body, or that you lie around in your coffin clothes until the Second Coming. And, of course, only one of these can be true. Which means that for millions of people, religion will turn out to have been a bum steer as regards the hereafter. Science seemed the better bet.

For the most part, science has this to say: Yeah, *right*. If there were a soul, an etheric disembodied you that can live on, independent of your brain, we scientists would know about it. In the words of the late Francis Crick, codiscoverer of the structure of DNA and author of *The Astonishing Hypothesis: The Scientific Search for the Soul*, "You, your joys and your sorrows, your memories and

your ambitions, your sense of personal identity and free will, are in fact no more than the behavior of a vast assembly of nerve cells and their associated molecules.”

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But can you *prove* that, Dr. Crick? If not, then it's no more good to me than the proclamations of God in the Old Testament. It's just the opinion, however learned, of one more white-haired, all-knowing geezer. What I'm after is proof. Or evidence, anyway—evidence that some form of disembodied consciousness persists when the body closes up shop. Or doesn't persist.

Proof is a tremendously comforting thing. When I was little, I used to worry that one day, without warning, the invisible forces that held me to the earth were going to conk out, and that I would drift up into space like a party balloon, rising and rising until I froze or exploded or suffocated or all three at once. Then I learned about gravity, the dependable pull of the very large upon the very small. I learned that it had been scientifically proven to exist, and I no longer worried about floating away. I worried instead about blackheads and whether Pat Stone dreamed of me and other dilemmas for which science could provide no succor.

It would be especially comforting to believe that I have the answer to the question, What happens when we die? Does the light just go out and that's that—the million-year nap? Or will some part of my personality, my me-ness, persist? What will that feel like? What will I do all day? Is there a place to plug in my laptop?

Most of the projects that I will be covering have been—or are being—undertaken by science. By that I mean people doing research using scientific methods, preferably at respected universities or institutions. Technology gets a shot, as does the law. I'm not interested in philosophical debates on the soul (probably because I can't understand them). Nor am I going to be relating anecdotal accounts of personal spiritual experiences. Anecdotes are interesting, occasionally riveting, but never are they proof. On the other hand, this is not a debunking book. Skeptics and debunkers provide a needed service in this area, but their work more or less assumes an outcome. I'm trying hard not to make assumptions, not to have an agenda.

Simply put, this is a book for people who would like very much to believe in a soul and in an afterlife for it to hang around in, but who have trouble accepting these things on faith. It's a giggly, random, utterly earthbound assault on our most ponderous unanswered question. It's spirituality treated like crop science. If you found this book in the New Age section of your local bookstore, it would be grossly misshelved, and you should put it down at once. If you found it while browsing Gardening, or Boats & Ships, it was also misshelved, but you might enjoy it anyway.

**AUGUST 6, 1978**, was a Sunday, the Feast of the Transfiguration. It was evening, and Pope Paul VI lay dying in his bedroom. With him was his doctor and two of his secretaries, Monsignor Pasquale Macchi and Father John Magee. At 9:40 p.m., following a massive heart attack, His Holiness expired. At that very moment, the alarm clock on his bedside table rang out. Accounts of this episode refer to the timepiece as the Pope's "beloved Polish alarm clock." He bought it in Warsaw in 1924 and carried it with him in his travels from then on. He seemed to be fond of it in the way that farmers are fond of old, slow-moving dogs, or children of their blankets. Every day, including the day he died, the alarm was set for 6:30 a.m.

I first came upon this story in a gullible and breathless compilation of supposed evidence for the afterlife. I don't recall the book's title (though the title of the chapter about spirit communication—"Intercourse with the Dead"—seems to have stayed with me). The book presented the story of the pontiff's noisy passing as proof that some vestige of His Holiness's spirit influenced the papal

clockworks— as it departed the body. *Pontiff*, a popular biography of Paul VI, relates the tale with similar cheesy dramatics: “At that precise moment the ancient alarm clock, which had rung at six thirty that morning and which had not been rewound or reset, begins to shrill...”

In Peter Hebblethwaite’s *Paul VI: The First Modern Pope* we find a different take on the proceedings. In the morning of his last day, the Pope is sleeping. He awakes and asks the time and is told it’s 11 a.m. “Paul opens his eyes and looks at his Polish alarm clock: it shows 10:45. ‘Look,’ he says, ‘my little old clock is as tired as me.’ Macchi tries to wind it up but confuses the alarm with the winder.” By this version, the alarm went off at the moment the Pope died because Monsignor Macchi had accidentally set it for that moment.

I am inclined to side with Hebblethwaite, because (a) his book is studiously footnoted and (b) Hebblethwaite doesn’t gild his renderings of papal life. For instance, we have the scene in the final chapter wherein Pope Paul VI is lying in bed watching TV. Not only is the earth’s highest-ranking Catholic, the Holy of Holies, watching a B-grade western, he is having trouble following it. Hebblethwaite quotes Father Magee, who was there at the time: “Paul VI did not understand anything about the plot, and he asked me every so often, ‘Who is the good guy? Who is the bad guy?’ He became enthusiastic only when there were scenes of horses.” Hebblethwaite tells it like it is.

Just to be certain, I decided to track down the man who either did or didn’t mess with the winder Pasquale Macchi. I called up the U.S. Conference of Catholic Bishops, the American mouthpiece of the Catholic Church, and was put through to the organization’s then librarian, Anne LeVeque. Anne is an accommodating wellspring of Catholic-related trivia, including the stupendously odd fact that freshly dead popes are struck thrice on the forehead with a special silver hammer. LeVeque knew someone in the organization who had spoken with a group of priests who had met with Macchi shortly after Paul VI’s death, and she gave me his number. He agreed to tell me the story, but he would not reveal his name. “I’m better as your Deep Throat,” he said, forever linking in my head the U.S. Conference of Catholic Bishops with porn movies, a link they really and truly don’t need.

Deep Throat confirmed the basic story. “It was described to me as not instantaneous, but more of a five, four, three, two, one...and the alarm went off.” He was told that despite what others had said, the clock had not been set for the time at which Paul died. “The feeling,” he said, “was that what it suggested was the departure of Paul VI’s soul from his body.” Then he looked up Macchi’s address for me, in what he called the Pontifical Phone Book. I wanted to ask if it included a Pontifical Yellow Pages, with pontifical upholstery cleaners and pontifical escort services, but managed not to.

Macchi is a retired archbishop now. With the help of a friend’s friend from Italy, I drafted a note asking about the alarm clock incident. Archbishop Macchi wrote back promptly and courteously, addressing me as “Gentle Scholar,” despite my having addressed him as Your Eminence (suggesting mere cardinalhood) when in fact he is either a Your Excellency or a Your Grace, depending on whose etiquette book you consult. (Your Holiness, reserved for the Pope himself, trumps all, except possibly in my hometown anyway, Your San Francisco Giants.) Macchi included a copy of his own biography of Paul VI, with a bookmark at page 363. “In the morning of that day,” he wrote, “having noticed that the clock was stopped, I wanted to wind it up and inadvertently I had moved the alarm hand setting to 9:40 p.m.” Deep Throat’s deep throats, it seems, had led him astray.

Annoyingly, I came across yet a third version of the alarm clock incident, this one by a priest with a grudge against Paul VI. This man held that the clock story had been fabricated by the Vatican as evidence for a false time of death, part of an effort to cover up some breach of papal duty that would have made the Pope seem impious.

The moral of the story is that proof is an elusive quarry, and all the more so when you are trying to prove an intangible. Even had I managed to establish that the alarm clock had indeed gone off for no obvious mechanical reason at the moment the pontiff died, it wouldn’t have proved that his

departing soul had triggered it. But I couldn't even get the clock to stand and deliver.

~~The deeper you investigate a topic like this, the harder it becomes to stand on unshifting ground~~

In my experience, the most staunchly held views are based on ignorance or accepted dogma, not carefully considered accumulations of facts. The more you expose the intricacies and realities of the situation, the less clear-cut things become.

And also, I hold, the more interesting. Will I find the evidence I'm looking for? We'll just see. But I promise you a diverting journey, wherever it is we end up.



- [\*Still Songs: Music In and Around the Poetry of Paul Celan here\*](#)
- [\*\*Last Day on Earth: A Portrait of the NIU School Shooter here\*\*](#)
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