Neal Stephenson

BY JESSICA TEISCH

In Neal Stephenson's latest novel *Seveneves* (reviewed on page 44), the moon explodes and threatens to render Earth uninhabitable. A herculean effort by nations around the globe ensures the survival of humanity in outer space via a "Cloud Ark." But 5,000 years later and multiple new populations now 3 billion strong, the space pioneers travel back to the great unknown: Earth, whose own survivors have had their share of troubles.

Stephenson first conceived of this epic story of annihilation and survival around 2004, while working at Blue Origin, a privately funded aerospace company set up by Amazon founder Jeff Bezos. "The kernel around which the story nucleated was the space debris problem," he told Tor.com. While considering "the possibility that [space debris] might … become an impenetrable ceiling only a hundred or so miles above our heads" on Earth, Stephenson also tells a story rich in descriptions of space travel, orbital mechanics, genetics, chemistry, sociology, and mining.

Never one to think small or adhere to a single genre, Stephenson, born in Maryland in 1959 to a family of engineers and scientists, crafts novels powered by grand world building, gripping action sequences, well-developed characters, and profound ideas. Although Stephenson came a little late to the game to be considered one of the Internet's genuine prophets, like William Gibson, his dozen-plus novels have established him as a first-rate writer of science and speculative fiction, cyberpunk, and historical fiction, all rich with ideas that have presaged today's modern technological developments.

"Despite all the high-tech frippery, there's something old-fashioned about Stephenson's work. He cares as much about telling good stories as he does about farming out cool ideas," wrote *New York Times*'s Dwight Garner. Always embracing complexity, Stephenson populates his novels—from his breakthrough novel *Snow Crash* (1992) to the more recent *Reamde* (2011)—with concepts from mathematics, cryptography, computers, philosophy, history of science, memetics, Sumerian mythology, economics, robotics, nanotechnology, robotics, and the virtual world.

Although his first novel, the academic satire *The Big U* (1984), didn't garner much attention, Stephenson's third, *Snow Crash*, a cyberpunk classic, envisioned aspects of a virtual world well before its time. Three years later, *The Diamond Age or, A Young Lady's Illustrated Primer*, an intricate, highly stylized novel set in various locations in the South China Sea, introduced many of today's real-world technical advancements. "Sometimes when you're reading Neal Stephenson, he doesn't just seem like one of the best novelists writing in English right now; he seems like the only one. No other author embeds characters in an authentically contemporary Web of technological connections the way Stephenson does," wrote *Time*'s Lev Grossman.

Stephenson is as much a thinker as a doer: In 2010, he and Greg Bear published *The Mongoliad*, which was originally released in a serialized format online. In 2014, he was hired as Chief Futurist by the Google-funded Magic Leap, a company developing a form of augmented reality resembling technologies Stephenson has described in his work. He writes in the morning, and in the afternoon he … tinkers.

Yet while Stephenson is forward thinking, his work explores the myriad connections between past and present in novels that revel in examining big ideas on improbably massive scales. The Baroque Cycle, for example, an ambitious series whose three installments total more than 2,500 pages, begins in Restoration England.

"People like big stories," Stephenson told the *Verge*. "You get unmatched bang for the buck writing stories. The bang in this case is being able to plant a big universe and a lot of powerful images inside a reader's head. The buck in this case is that there's one person working alone without needing any special tools. That's not going to change. They may be delivered in different ways, on e-readers or whatever, but they will be around for a long time."

Here, then, are a few of Stephenson's big stories.
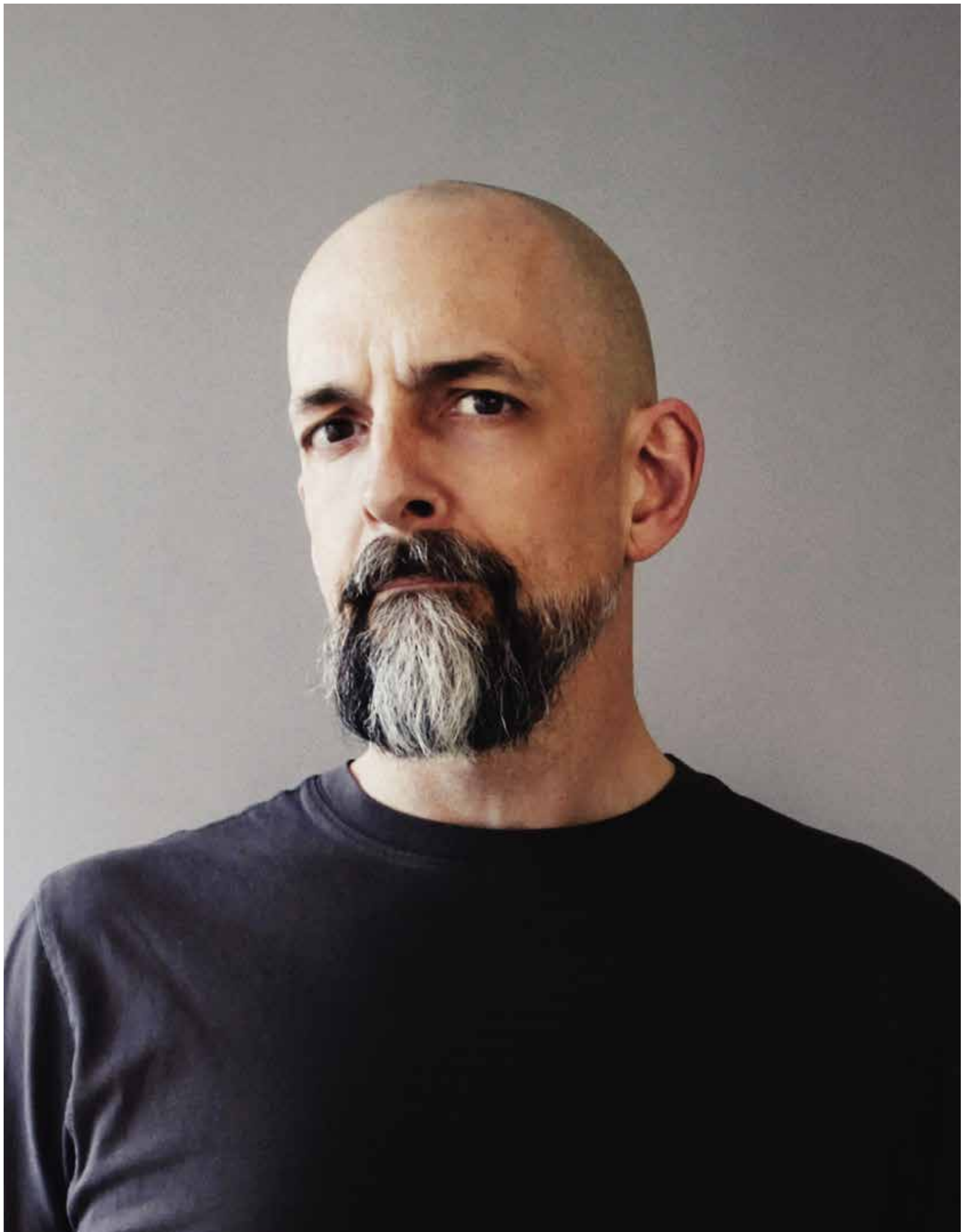
THE BREAKTHROUGH NOVEL
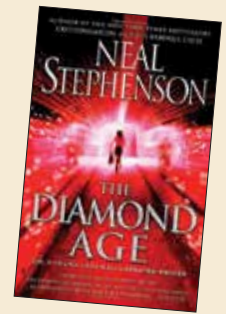
Snow Crash (1992)

✦ TIME MAGAZINE'S BEST 100 NOVELS

Stephenson's third novel, a swashbuckling fantasy that critics described as a cross between William Gibson's *Neuromancer* and Thomas Pynchon's *Vineland*, established him in the first rank of science fiction and cyberpunk writers. Like the author's later novels, *Snow Crash* covers multiple fields and interests: linguistics, philosophy, cryptography, archaeology, religion, computer science, history, and more. Exuberant, even ostentatious in its vision of the future through the lens of the early 1990s, the novel predicts technology that has become commonplace two decades later, including small, powerful cell phones that resemble the smartphones of today, Google Earth, and DRM. And all this just before the Internet as we know it got off the ground!

The novel starts in the 21st century, in a Los Angeles no longer part of the United States. The country—run by corporate franchises, such as "Mr. Lee's Greater Hong Kong," "New South Africa," and the "American Mafia"—is beset by drug traffickers, violent criminals, and mercenary armies. Amid this anarcho-capitalism, Hiro Protagonist, a hacker, a pizza delivery boy, a stringer for the privatized CIA, and, in the Metaverse (a world that can be accessed through any computer) a samurai swordfighter, gets wind of a drug called Snow Crash that travels both biologically and informationally. When his best friend ODs, Hiro races against time to save him and the world from infocalypse—but not before entering ancient Sumeria, the Metaverse, and, of course, Reality. "This is cyberpunk as it ought to be, and almost never is," noted David Barrett of the *New Scientist*. With a complex plot, intellectual ideas, and ingenious explanation for how the virus comes about, *Snow Crash* remains a cyberpunk classic.

THE NEO-VICTORIAN NOVEL

The Diamond Age

Or, a Young Lady's Illustrated Primer (1995)

✦ HUGO AWARD
✦ LOCUS AWARD

In this surreal novel of the future and coming-of-age tale, Victorian ideals and morals have been reinstated in a society replete with political intrigue and nanotechnological wonders such as matter compilers, which represent a democratic form of organization. "Stephenson churns through possible subcultures, cutting-edge technologies, and political speculations like a ferret in a blender," noted Richard Gehr of the *Village Voice*. If the novel sometimes rambles and grows overly complicated, Stephenson's world-building skills, where different cultural groups vie for standing, are nothing short of extraordinary.

Nanotechnologist John Percival Hackworth, a New Atlantean from coastal China who has adopted the manners of Victorian Britain, accepts an assignment to design an interactive device titled *A Young Lady's Illustrated Primer*, intended to shape and maintain the values of the dominant social class. When he creates an illicit copy of the book for his daughter, the primer falls into the hands of a four-year-old street urchin named Nell, who lives in a lowland slum near Shanghai. With the adaptive device, Nell learns how to survive and think for herself (she also picks up on manners and martial arts). When Hackworth's duplicity is discovered, his social capital falls as Nell's rises—and his quest and Nell's lead them to a subversive information network that just may decode and reprogram the future of humanity.
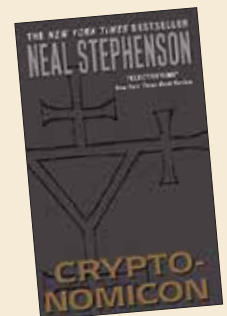
THE WORLD WAR II NOVEL

Cryptonomicon (1999)

✦ LOCUS AWARD
✦ PROMETHEUS AWARD

Running more than 900 pages, *Cryptonomicon* is "brain candy for bitheads" (*New York Times*). The first of his novels to take place during World War II, when the Allies were struggling to break the Nazis' Enigma Code, it employs labyrinthine plots and subplots and dozens of major characters to explore everything—from code breaking to Bach, gold, U-boats, cryogenics, Internet start-ups, and modern-day computing. "Pound for pound, it's every bit as unrelenting an entertainment as *Snow Crash* was," wrote Julian Dibbell of the *Village Voice*, "and just as deftly timed to the latest turning point in fin de millennium technological history. … What cyberculture needs right now is not another science-fiction novel but its first great historical novel, and *Cryptonomicon* is it: an intimate genealogical portrait of the 20th century's computer geeks, great and small, and of the technosocial landscape they have more and less knowingly shaped."

The novel opens at Princeton University in 1941, when young navy official and mathematical genius Lawrence Pritchard Waterhouse learns about cryptography from computer pioneer Alan Turing. As war beckons, Turing is dispatched to Bletchley Park to break the fabled German Enigma cipher. Waterhouse is drafted into the secretive De-

tachment 2702 where, along with the help of the iconoclastic marine sergeant Bobby Shaftoe, he attempts to keep the Nazis in the dark about the Allied forces' success in breaking the code. Fast forward to the 1990s, when Lawrence's hacker grandson, Randy, tries to establish a data haven in Southeast Asia, away from the peering eyes of Big Brother. The thread linking the two eras is a code intercepted by the Allies during the war, but complications ensue when characters and information from the past reappear.

THE HISTORICAL FICTION SERIES

The Baroque Cycle

Set mostly in Early Modern Europe between the Restoration Stuart Monarchy and the start of the 18th century, this series merges historical fiction, the history of science (in particular cryptology and numismatics), and science fiction. It was initially published in three books, then republished as eight; in some sense, it serves as a precursor to *Cryptonomicon.*

"This period is fascinating because so much was going on," Stephenson told the *Guardian,* "and so much of it was brilliant and dramatic. The Turks at the gates of Vienna, the Barbary Corsairs and other sorts of pirates, gold-galleons on the Spanish Main, the court of Louis XIV at Versailles, the invention of modern science and finance, the Mogul Empire in Hindustan—all of this was happening at one time. I don't think there was any other period of history to compare with it." Covering nearly 2,500 pages, The Baroque Cycle explores the establishment of the scientific method, the development of technology and economic systems, and the era's grappling with those new systems.

The picaresque and technical *Quicksilver* (2003; ✦ ARTHUR C. CLARKE AWARD) takes place mainly between the Restoration in 1660 and the Glorious Revolution of 1688. "At its core is a political message: that the values of the Enlightenment were hard-earned and need defence; that freedom of speech and study are unutterably precious," wrote Charles Shaar Murray of the *Independent.* Dense and witty, *Quicksilver* reintroduces Enoch Root, the alchemist from *Cryptonomicon;* Puritan scientist Daniel Waterhouse, Isaac Newton's pal who seeks knowledge; con artist and soldier Jack Shaftoe ("King of the Vagabonds" and ancestor of a *Cryptonomicon* character); and Eliza, a resourceful young English woman who has escaped from a Turkish harem.

The second volume, *The Confusion* (✦ LOCUS AWARD; ★★★ Sept/Oct 2004), is an old-fashioned love story wrapped in a dense treatise on the scientific and financial developments of the 17th century. After Jack Shaftoe leads a team of galley slaves in the theft of Spanish silver, they embark on an eventful, circuitous journey from Egypt to England. Meanwhile, Eliza, now the Countess de la Zeur, navigates her way through Louis XIV's court to protect her illegitimate son.

In *The System of the World* (✦ LOCUS AWARD, PROMETHEUS AWARD; ★★★★ Nov/Dec 2004), a "system of the world" emerges, based on a new idea of power—economic, scientific, and mechanical. At the center of this scientific revolution lies the aging natural philosopher Daniel Waterhouse. After founding the Massachusetts Bay Colony of Technologickal Arts, he returns to London in 1714 to settle a debate between two friends, Sir Isaac Newton, Master of the Royal Mint, and Gottfried Wilhelm von Leibniz, who can't agree on who invented calculus. Even more important, England's royal government, its economy, the future of science, and a legendary stash of gold are at stake. More than a few complicating characters and situations impede Waterhouse's search for truth and reason.
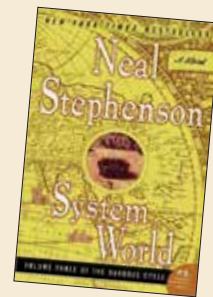
THE MOST ACCESSIBLE NOVEL

Reamde (2011)

In *Reamde*, his most accessible book to date (though it still weighs in at 980 pages), Stephenson turns to Bourne-style cyberthriller conventions in a relatively straightforward tale of greed, deception, and terrorist intent. "At base," noted Michael Berry of the *San Francisco Chronicle,* "*Reamde* is an entertainment, an enormous, giddily complex one. There's no telling what Stephenson might be planning for his next novel, but now's the time to dive into a first-rate intellectual thriller without fear of being overwhelmed by its virtuosity."

Richard Forthrast earned a great deal of money in "international commerce" (read "pot smuggling") between Canada and the United States. Now he's gone straight, creating the world's most popular online role-playing game, T'Rain, replete with shoot-'em-up scenarios and "gold farmers"—Chinese teenagers, mostly, who do virtual tasks for real money. When Forthrast's adoptive niece, Zula, a talented programmer, becomes unwittingly involved in a stolen-data scheme—thanks to the eponymous virus, a transposition of the common phishing subject line README—Richard can save her, but only through an act of betrayal. Hackers, intensely "real" virtual worlds, Russian gangsters, terrorists, the CIA and MI6, and more guns than a Texas flea market—*Reamde* is part thriller, part commentary on the world-behind-the-world (★★★★ SELECTION Nov/Dec 2011). ■