In death, Tesla's cult status has only grown. The SI unit of magnetic-field strength is named after him. Two electric-car companies bear his first and last name. The Tesla flame has been kept alight by biographies, documentaries, movies (one with actor and filmmaker Orson Welles, another with musician David Bowie) and even an opera. Fans, it seems, are drawn as much by his inventiveness as by his wilder ideas — such as using Earth and its atmosphere to wirelessly conduct electricity around the globe.

His is a story of an eccentric genius that each age retells in its own image. The latest biopic *Tesla*, directed by Michael Almereyda, is released this week.

The film exploits jarring gimmicks. In an early scene, Tesla (played by Ethan Hawke) and Edison (Kyle MacLachlan), splatter ice cream on each other's suits during a heated argument. The frame freezes, and Tesla's friend Anne Morgan (Eve Hewson), the daughter of fabled financier J. P. Morgan, tells us that this fight never happened. Becoming the on-screen narrator, Morgan breaks the fourth wall to say that googling 'Nikola Tesla' gets 34 million search results — evidence, she assures us, that Tesla is famous, although not quite as famous as his arch-enemy Edison, who has 64 million results. "Twice as many as Tesla," she adds, glancing at the camera.

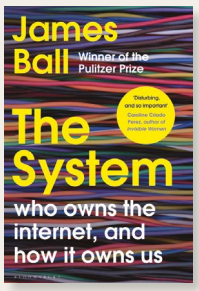
Thumping dance music underscores a party thrown by French actress Sarah Bernhardt (Rebecca Dayan). Edison consults a smartphone while the narrator speculates on what the rivals could have achieved together. Painted backdrops depict scenes such as the Colorado setting of Tesla's experiments with artificial lightning and wireless transmission. The cherry on top of this misbegotten cake is Hawke's rendition, in faux-Slavic accent, of the song 'Everybody Wants To Rule the World' by the 1980s band Tears for Fears.

Perhaps Almereyda's point is that Tesla was the Steve Jobs of his time — a testy, workaholic visionary and showman who disrupted his age with beautiful ideas that caught Wall Street's eye. But it is an unconvincing comparison: unlike Jobs, Tesla had no innovation factory to realize his wizardry at scale.

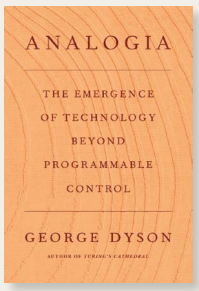
The film skirts some more interesting and less-explored aspects of his personal relationships, described in the 2013 biography *Tesla* by historian Bernard Carlson. For instance, Tesla was capable of pettiness in intellectual-property disputes — including those he had won, as in the case of the induction motor. Some have speculated that Tesla and Edison might both have missed out on a Nobel prize because the committee was turned off by their squabbles. Perhaps an ice-cream fight would have been the least of it.

Davide Castelvecchi is a senior reporter for *Nature* in London.

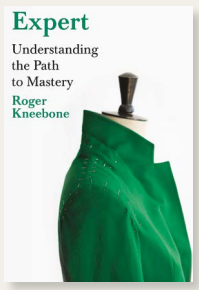
Books in brief



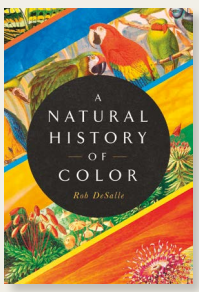
The System
James Ball *Bloomsbury* (2020)
Journalist James Ball was part of the award-winning team that covered US National Security Agency online surveillance for newspaper *The Guardian*. His incisive insider study on who owns the Internet draws on programmers, executives, whistle-blowers and academics to describe how the Internet's leading companies — Amazon, Apple, Facebook and Google — are "engines running along the railway lines set out by the internet's very structure". He argues that, like railways, the Internet must become subject to competition law for the good of society.



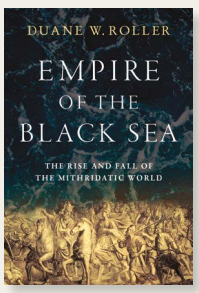
Analogia
George Dyson *Farrar, Straus and Giroux* (2020)
Philosopher Bertrand Russell supposedly asked: is the world a bucket of molasses or of sand? In other words, is nature analogue or digital — or both? This problem fascinates historian of technology George Dyson. His engaging, if digressive, meditation ponders how nature's coding is digital for intergenerational instructions in DNA, but analogue, in brains and nervous systems, for real-time operations. "The next revolution", he predicts, "will be the coalescence of programmable machines into systems beyond programmable control."



Expert
Roger Kneebone *Viking* (2020)
"The greater the expertise, the less you notice it," writes Roger Kneebone in his vividly practical analysis. Once a consultant surgeon, then a family doctor, he is now a university researcher investigating what experts in diverse fields can learn from one another. He cites a riverbank walk with an angler friend, silently spotting a swarm of invisible fish from surface ripples, shadows, the sun's glint and flies' patterns. He worries that scientific expertise will diminish because student teaching is now too dependent on watching scientists online.



A Natural History of Color
Rob DeSalle and Hans Bachor *Pegasus* (2020)
Mantis shrimp eyes probably contain 16 visual pigments, compared with 3 for humans. These allow the shrimp to communicate using dazzling reflected displays of polarized and other light. By contrast, avant-garde artist Neil Harbisson, born without colour vision, has an antenna implanted in his skull to let him 'hear' colours, even beyond the human visual spectrum. Biologist Rob DeSalle and physicist Hans Bachor illuminate many such fascinating facts in their study of colour, accompanying an American Museum of Natural History exhibition.



Empire of the Black Sea
Duane W. Roller *Oxford Univ. Press* (2020)
Mithridates VI, last king of Pontos, ruled most of the Black Sea coast, clashed with the Roman empire and was defeated in 66 BC. Roman statesman Cicero called him "the greatest king since Alexander". Classicist Duane Roller agrees, and notes that the famously polyglot Mithridates intensified his lifelong study of poison and antidotes before his suicide in 63 BC. But Roller resurrects much more than a single king in his pioneering history, the first ever English-language analysis of the entire Mithridates dynasty. **By Andrew Robinson**