inefficiencies that stop businesses reaching their potential. He gives the example of McKesson, a drug and medical-supply distributor that used its archives of product and shipping data to create a supply-chain model. That led to a billion-dollar decrease in inventories and a sizeable jump in efficiency, showing, as Lohr says, "data really being used to ... make better decisions, ones that trump best guesses and gut feel, experience and intuition".

Alas, *Data-ism* is very much a conventional business book, full of anecdotes, mini-profiles and aphorisms that grow ever less compelling, however well they would go over at a TEDx talk. Lohr's journalistic instincts often seem to betray him. He is unimpressed with the massive data-collecting and consumer-profiling of information giant Acxiom, yet bowled over by a seemingly conventional personality-horoscope program that snaffled up Twitter feeds, and, for 81% of subjects, "pretty much matched the results of their formal tests for personality type, basic values, and needs".

Neither Borgman nor Lohr truly grapples with the immensity of the big-data story. At its core, big data is not primarily a business or research revolution, but a social one. In the past decade, we have allowed machines to act as intermediaries in almost every aspect of our existence. When we communicate with friends, entertain ourselves, drive, exercise, go to the doctor, read a book — a computer transmitting data is there. We leave behind a vast cloud of bits and bytes.

Bruce Schneier, a security analyst known for designing the Blowfish block-cipher algorithm — a fast and flexible method of encrypting data — grasps this revolution's true dimensions. In Data and Goliath, he describes how our relationships with government, corporations and each other are transformed by ordinary, once-ephemeral human interactions being stored in digital media. The seemingly meaningless, incidental bits of data that we shed are turning the concept of privacy into an archaism, despite half-hearted (and doomed) regulations to protect "personally identifiable information". As sciencefiction pioneer Isaac Asimov wrote some 30 years ago: "Things just seem secret because people don't remember. If you can recall every remark, every comment, every stray word made to you or in your hearing and consider them all in combination, you find that everyone gives himself away in everything."

Schneier paints a picture of the big-data revolution that is dark, but compelling; one in which the conveniences of our digitized world have devalued privacy. Interest in privacy has dropped by 50% over the past decade — at least according to Google Trends. ■

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# **Books** in brief



#### Women After All: Sex, Evolution, and the End of Male Supremacy

Melvin Konner W. W. NORTON (2015)
The mammalian body plan is basically female, and maleness is a syndrome. So declares anthropologist Melvin Konner in this biologically based study (although recent research points to complexities; see Nature 518, 288–291; 2015). Positing that women are more altruistic and pragmatic — and so are best-equipped for the future — Konner mines evolution and anthropology to probe gender identities in the light of biology, sexual conflict across species

and more. The provocative scenarios he lays out include a man-free

world where women reproduce using DNA from other women's eggs.



#### The Last Unicorn: A Search for One of Earth's Rarest Creatures

William deBuys LITTLE, BROWN (2015)

Discovered in 1992, the saola (*Pseudoryx nghetinhensis*) is one of the rarest large mammals, a beautiful ruminant found in the mountains between Laos and Vietnam. In 2011, nature writer William deBuys and field biologist William Robichaud set out to gauge poaching pressures on the saola. DeBuys' account of destitute villages and endangered animals left to die in snares is a familiar narrative of conservation in poor countries. But, like Peter Matthiessen's 1978 *The Snow Leopard* (Viking), this is less an homage to an iconic species than a meditation on our compulsion to harry and hem in the wild.



### The Powerhouse: Inside the Invention of a Battery to Save the World Steve LeVine VIKING (2015)

Journalist Steve LeVine's chronicle of the race to develop a rechargeable lithium-ion electric-car battery makes for a propulsive techno-saga. The action centres on the Argonne National Laboratory outside Chicago, Illinois, where an international group led by engineer Jeff Chamberlain worked on the knotty physics. LeVine interweaves the geopolitical jostling of the US lab and others in Asia, climaxing with Argonne's 2012 win of more than US\$120 million to build the 'Hub' — a powerhouse intended to create a sustainable battery industry.



## Energy Revolution: The Physics and the Promise of Efficient Technology

Mara Prentiss Harvard University Press (2015)

In this crisp, evidence-based treatise, physicist Mara Prentiss makes a remarkable assertion: that solar and wind power could supply 100% of average US energy needs for the next 50 years. Prentiss argues that a transition to renewables is probable, given that energy revolutions are a historical norm. She stacks up reams of salient data, such as the fact that US energy use per capita has remained steady since 1965, thanks to increasing fuel efficiency. Although optimistic, her analyses of energy sources, combinations, conservation and storage compel.



### House Guests, House Pests: A Natural History of Animals in the Home Richard Jones BLOOMSBURY (2015)

Urban nature lovers relish the sight of birds or hedgehogs in their gardens. "Something odd, though, happens at the back door," notes Richard Jones — and that is zero tolerance for wild unbidden guests, from tapestry moths to rats. Jones, a fellow of the Royal Entomological Society, is a learned guide to this alarming panoply of intruders, from the bacon beetle (*Dermestes lardarius*), a vagrant of old-fashioned larders, to the noisy edible dormouse (*Glis glis*), which can infest the attics of rural houses. Barbara Kiser