

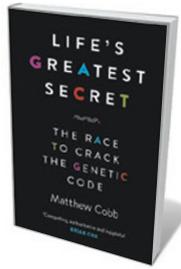
Tailliant enrolled in a one-week glaciology course. He has since worked through CEDHA to identify glaciers using satellite imagery, and to conduct observations in mining regions. He strives to pinpoint glacier ‘hotspots’, where protection is lacking or mining claims or roads are a threat. Lower-level Argentinian courts have twice ruled to uphold the glacier law.

Although it is informative on Argentina’s environmental policy, Tailliant’s book misses the mark on some of the science — especially when compared to glaciology texts or books such as Mariana Gosnell’s *Ice* (Univ. Chicago Press, 2007) and Mark Bowen’s *Thin Ice* (Henry Holt, 2005). When it discusses glaciers as water sources, the book does not precisely quantify the contributions of glacier runoff to downstream water supplies. It suggests that all glacial ice translates directly into water for human consumption, which exaggerates glacial input and runs contrary to studies that reveal that glaciers contribute up to 30% of downstream water in Peru and 27% in Bolivia, with sharp variations between dry and wet seasons. Nor does Tailliant explain how groundwater, precipitation and land-use practices influence hydrology in glacierized watersheds. The book’s claim that perennial snow is the same thing as a glacier, and reference to “glaciers” that are only 3 metres thick (and therefore lack internal ice deformation, a defining characteristic) will raise eyebrows among glaciologists. When referring to diminishing glacier runoff in the Himalayas, the book cites treehugger.com — and at other points, Wikipedia.

Tailliant argues that glacial contributions to hydrology are the basis for the glacier-protection law. But we do not know what proportion of Argentina’s downstream water they supply, during what season, or how that varies from glacier to sea. Without quantifying or fully explaining these contributions, the law and this book seem motivated by cultural values about endangered ice, rather than by scientific data. This tension is one that I have analysed before and that has been tackled by authors including Julie Cruikshank in *Do Glaciers Listen?* (Univ. British Columbia Press, 2005) and Eric Wilson in *The Spiritual History of Ice* (Palgrave Macmillan, 2009). Environmental laws, including those on glacier protection, evolve in the fraught national-to-global context of competing agendas, from the corporate to the governmental to that of environmental activists. As such, they frequently speak for, rather than with, local residents — who, as Tailliant himself argues, have a human right to glaciers. ■

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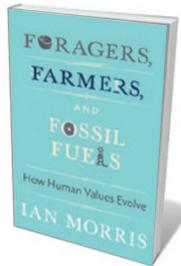
Books in brief



Life's Greatest Secret: The Race to Crack the Genetic Code

Matthew Cobb PROFILE (2015)

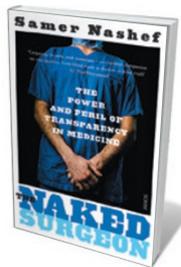
James Watson’s *The Double Helix* (Athenaeum, 1968) and Horace Judson’s *The Eighth Day of Creation* (Touchstone, 1979) are classics on the 1953 discovery of DNA’s structure, and the research that consolidated it. Zoologist Matthew Cobb richly recontextualizes the tale, tracing the interplay between biology, chemistry and physics that led to and amplified the breakthrough. This is a lucid explication of the science and the stories of key players, from X-ray crystallographer Rosalind Franklin and physicist Max Delbrück to Oswald Avery, who linked DNA to genes, and information theorist Claude Shannon.



Foragers, Farmers, and Fossil Fuels: How Human Values Evolve

Ian Morris PRINCETON UNIVERSITY PRESS (2015)

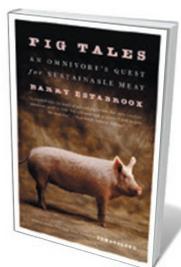
Energy capture — as a “brute material force” — shapes human values, argues archaeologist Ian Morris in this global-scale study of cultural variation. Looking at modes of capture from hunting and gathering to the agricultural and industrial revolutions, he avers that each determines population size, social organization and values. Now, writes Morris, our globalized society faces a “Malthusian collapse” — and a lurch towards new values — driven by nuclear weapons, climate change and digitization. With contributions from writer Margaret Atwood, sinologist Jonathan Spence and others.



The Naked Surgeon

Samer Nashef SCRIBE (2015)

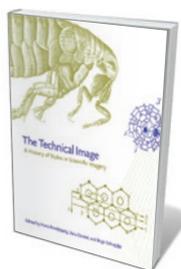
UK consultant cardiac surgeon Samer Nashef joins the swelling ranks of medics who have penned frank inside stories. Piquant detail abounds: operating on the heart, for instance, involves “twisting it, pressing on it, and sometimes turning it upside down”. But it is Nashef’s long study of risk that injects nuance. It began in 1977, when he discovered that arterial surgeons were responsible for the worst outcomes in a sample of abdominal aortic aneurysm operations. Such failures have, he shows, driven quality measurement in medicine, including his own heart-surgery risk model, EuroSCORE.



Pig Tales: An Omnivore’s Quest for Sustainable Meat

Barry Estabrook W. W. NORTON (2015)

Cheap pork should give us pause, writer Barry Estabrook argues in this cogent, level-headed investigation of the pig as raised and researched. The animal is one of the most intelligent ever domesticated, yet some 97 million in the United States are packed into reeking factory farms, with widespread ‘crating’ of pregnant sows. Yet as Estabrook reveals, humane, state-of-the-art husbandry is within our grasp and ultimately more profitable. He introduces an impressive group of animal scientists, farmers and pigs, from computer-savvy lab piglets to havoc-wreaking feral hogs.



The Technical Image: A History of Styles in Scientific Imagery

Editors Horst Bredekamp, Vera Dünkel and Birgit Schneider UNIVERSITY OF CHICAGO PRESS (2015)

This multidisciplinary study trains an art historian’s eye on historical scientific imagery. Editors Horst Bredekamp, Vera Dünkel and Birgit Schneider draw on research from the Humboldt University of Berlin and a range of haunting images. They show that an iconic 1896 radiograph of a hand by X-ray discoverer Wilhelm Röntgen prompted both rhapsodies over a “photography of the invisible” and frustration among medics struggling to use such images for diagnosis. **Barbara Kiser**