BOOKS AND ARTS · 28 MAY 2019

World of addiction, zen cosmology, and the impending aquacalypse: Books in brief

Barbara Kiser reviews five of the week's best science picks.



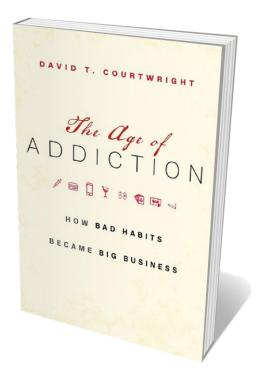




The Age of Addiction

David T. Courtwright Belknap (2019)

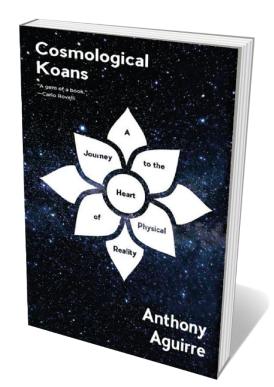
Opioids, processed foods, social-media apps: we navigate an addictive environment rife with products that target neural pathways involved in emotion and appetite. In this incisive medical history, David Courtwright traces the evolution of "limbic capitalism" from prehistory. Meshing psychology, culture, socio-economics and urbanization, it's a story deeply entangled in slavery, corruption and profiteering. Although reform has proved complex, Courtwright posits a solution: an alliance of progressives and traditionalists aimed at combating excess through policy, taxation and public education.



Cosmological Koans

Anthony Aguirre W. W. Norton (2019)

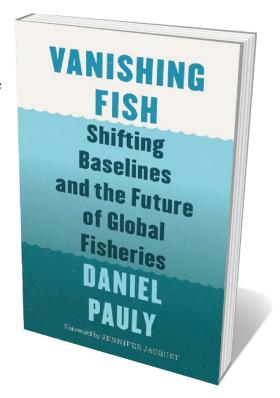
Cosmologist Anthony Aguirre explores the nature of the physical Universe through an intriguing medium — the koan, that paradoxical riddle of Zen Buddhist teaching. Aguirre uses the approach playfully, to explore the "strange hinterland" between the realities of cosmic structure and our individual perception of them. But whereas his discussions of time, space, motion, forces and the quantum are eloquent, the addition of a second framing device — a fictional journey from Enlightenment Italy to China — often obscures rather than clarifies these chewy cosmological concepts and theories.



Vanishing Fish

Daniel Pauly Greystone (2019)

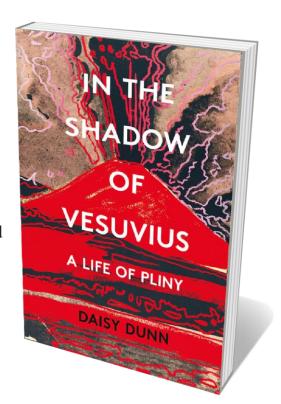
In 1995, marine biologist Daniel Pauly coined the term 'shifting baselines' to describe perceptions of environmental degradation: what is viewed as pristine today would strike our ancestors as damaged. In these trenchant essays, Pauly trains that lens on fisheries, revealing a global 'aquacalypse'. A "toxic triad" of under-reported catches, overfishing and deflected blame drives the crisis, he argues, complicated by issues such as the fishmeal industry, which absorbs a quarter of the global catch. If current subsidies were redirected to sustainable ends, he avers, the worst outcomes might be avoided.



In the Shadow of Vesuvius

Daisy Dunn William Collins (2019)

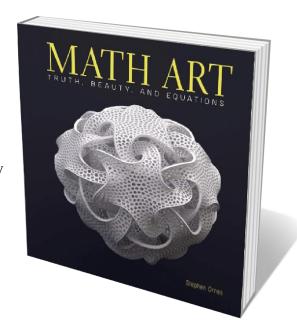
On 24 August in ad 79, the Roman aristocrat Pliny the Younger witnessed a "cloud, both strange and enormous in appearance" above the Bay of Naples. The eruption of Vesuvius engulfed cities, including Pompeii, and killed his uncle, the renowned admiral and natural historian Pliny the Elder. Daisy Dunn's nuanced biography breathes new life into the younger Pliny, revealing his uncle's scientific and philosophical influence on his own evolution into poet, magistrate, senator, curator of drains and prolific letter writer. An evocative portrait of Renaissance men before the Renaissance



Math Art

Stephen Ornes Sterling (2019)

The elusive elegance of mathematics might seem inaccessible to those who don't speak the language — but some artists brilliantly bridge the gap. And in this visually sumptuous, intellectually compelling study, science writer Stephen Ornes has tapped that community for a virtual maths-art gallery. Here are *Self-Similar Surface* by Robert Fathauer, a ruffled homage to rotational and mirror symmetry; Anita Chowdry's sculptural 'steampunk' harmonograph, *Iron Genie*; the glowing fractal 'portrait' *Buddhabrot* by Melinda Green — and much more. Mathematics made manifest, and beautifully.



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