

ecosystem services.

Grand narratives, which smack of the old economic thinking, are not the goal of Banerjee and Duflo. The authors do, however, need to articulate their approach in narrative terms, or they will struggle to be heard. As Bowmaker demonstrates, US presidents want to hear happy endings, rather than sit through a menu of options communicated seminar-style. Harry Truman is reported to have said that he preferred one-handed economists, because he didn't like hearing "on the other hand". Barack Obama was an exception, making decisions after hearing arguments pro and con.

"There is strength in numbers and robustness in diversity."

Sadly, neither *Arguing with Zombies* nor *Good Economics for Hard Times* tackles in depth what I feel is the defining challenge for newer generations of economic policy advisers. That is, how to mitigate the risks of expert-shopping by policymakers. If researchers with fringe ideas continue to validate untested theories, yet more zombies will invade the corridors of power.

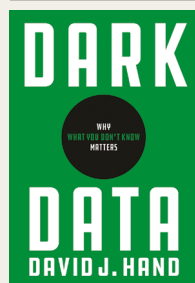
This happens to scientific advisers, too – although perhaps less often. In the 1990s, governments with significant oil and gas interests joined the powerful fossil-fuel industry lobby in seeking experts who could cast doubt on human influence on climate change. The consensus view of the Intergovernmental Panel on Climate Change – backed as it was by a huge number of heavyweight researchers – was essential in preventing such dubious ideas from penetrating the mainstream (although it has not stopped Trump's withdrawal from the 2015 Paris climate agreement).

Economists need to organize similarly across different schools of thought – and to include development economics as well as ecological and environmental economics and feminist economics. There is strength in numbers and robustness in diversity. That can go some way towards curbing the unworkable concepts that continue to emerge.

As these three thoughtful, timely books demonstrate in their own ways, a space has opened up for new ideas in economics at a time of widespread inequality, social and cultural schisms, and environmental crisis. That is an opportunity to avoid another 50 years of theories that inform the highest levels of policy as if evidence didn't matter.

Ehsan Masood is Editorials editor and bureau chief for the Middle East and Africa at *Nature* in London. His latest book is *The Great Invention: The Story of GDP and the Making and Unmaking of the Modern World*.

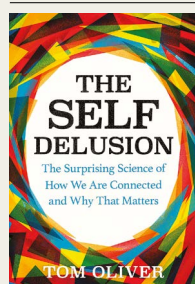
Books in brief



Dark Data

David J. Hand Princeton Univ. Press (2020)

We are deluged with billions of bytes of data, yet much crucial information goes unseen and unreported. So reveals statistician David Hand in this penetrating study of missing ('dark') data and its impacts on decisions – skewing stats, enabling fraud, embedding inequity and triggering preventable catastrophes. Advocating "data science judo", Hand offers expert training, from recognizing when facts are being cherry-picked to designing randomized trials. A book illuminating shadowed corners in science, medicine and policy.



The Self Delusion

Tom Oliver Weidenfeld & Nicolson (2020)

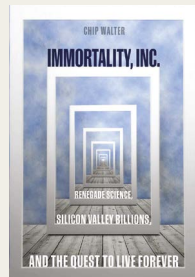
Humans are less discrete entities than mash-ups of microbiota and shifting beliefs, declares ecologist Tom Oliver in this rich, intriguing book. We are, he shows, so interfused with the environment that all life might be seen as a web of genes, and all minds a web of memes. Oliver reframes the self as a fleeting union of molecules, a target for manipulation by parasites, a cooperative co-creator who is also destroying the biosphere. But by recognizing our connectedness, he argues, we enable needed societal and environmental change.



Uncanny Valley

Anna Wiener Farrar, Straus and Giroux (2020)

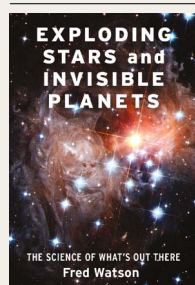
Start-ups have long been seen as a geek-driven, idealistic antidote to corporate culture. Anna Wiener's unsettling memoir may muddy that image. In 2013, a 20-something Wiener was drawn to the digital economy of California's Silicon Valley. Soon enough she recognized it as a reckless, male-dominated world of barely regulated surveillance. She witnessed the boom in online abuse and political trolling from the inside, and the growing inequity in San Francisco fuelled by venture capitalists. An acute eye on a dystopia in the making.



Immortality, Inc.

Chip Walter National Geographic (2020)

Extreme longevity might seem a seductive concept to some. To a handful of prominent researchers, it's an experimental goal. Venturing into that rarefied world, journalist Chip Walter interviewed stars such as biotechnologist J. Craig Venter and X Prize founder Peter Diamandis. Their eventful stories are woven through Walter's tour of biotech research centres Calico and Celularity, and fields from cryopreservation to regeneration. Results remain broadly inconclusive, but this witty look at 'curing' death is worth the ride.



Exploding Stars and Invisible Planets

Fred Watson Columbia Univ. Press (2020)

Astronomer Fred Watson is a science communicator par excellence. Here, with infectious enthusiasm, he plunges the reader into the science on sky-watching and space observation. Kicking off with a nuanced discussion of twilight – covering everything from crepuscular rays to the 'green flash' – he moves on to meteor showers, the potential contamination of the Solar System's ice moons by earthly microbes, the mystery of a hypothesized Planet Nine and the real origins of the Moon. **Barbara Kiser**