

## Books & arts

Warraich explores biases including the ugly colonial history of opioids, and the racist notion that Black people have thicker skin than white people (a survey shows that this idea persisted very recently; K. M. Hoffman *et al. Proc. Natl Acad. Sci. USA* **113**, 4296–4301; 2016). He reports the finding that physicians are five times less likely to prescribe opioids to Black children with acute appendicitis than to white children with the condition. A section on gender explores the history of pain management during childbirth, including the misogynist and white-supremacist origins of the natural-childbirth movement, and a rousing endorsement of the epidural. In general, women (including trans women taking oestrogen) experience more pain than men, and are more sensitive to it. Even female rodents tend to experience more pain than male ones.

### Empathy and acceptance

Warraich eventually comes to the origins and current state of the US opioid epidemic. He gives an overview of how the Sackler family ran Purdue Pharma, which made opioids including OxyContin and generated huge wealth by expanding the range of conditions for which they were prescribed.

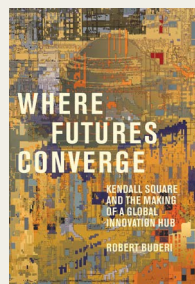
An extensive body of research shows that opioids don't work for chronic pain, except in the case of cancer, Warraich writes. He breezes through ketamine and cannabis in three pages, and concludes that no drugs are effective at treating chronic pain. It is really all in our heads, he contends – but not dismissively. The only treatments that do work, he says, tackle the mental dimension: providers' empathy, hypnotherapy, the placebo effect, exercise, and acceptance and commitment therapy. The latter is a practical form of cognitive behavioural therapy that involves accepting difficult feelings, with empathy for oneself.

This conclusion seems overly rosy. Exercise is “entirely safe” for people with chronic pain, Warraich writes – it brought him relief, although it was excruciating at first. But exercise is not like a pill. A person has to find the right kind, which might take trial and error, along with guidance from the right physical therapist or trainer, which costs money and time and requires access. It's going to take a lot to roll that out to one-fifth of the world's population. I yearned to hear about the daily lives of people with diverse types of chronic pain who have used the approaches Warraich lauds.

Pain resists easy categorization. It has a vast array of causes, in a vast array of bodies and minds. The assurance that whole categories of treatments will or won't work for everyone is puzzling for a book that calls on the medical system to treat pain in a more contextualized and personalized way.

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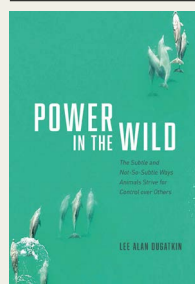
## Books in brief



### Where Futures Converge

Robert Buderer *MIT Press* (2022)

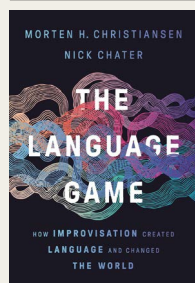
Kendall Square in Cambridge, Massachusetts, has been dubbed “the most innovative square mile on earth”. Neighbouring the Massachusetts Institute of Technology, it is a centre for life-sciences companies, tech firms and start-ups, from Moderna to IBM. One building with a history including the first long-distance telephone call now houses almost 70 biomedical start-ups. Entrepreneur and Kendall Square inhabitant Robert Buderer considers the area's past, present and future by interviewing local notables.



### Power in the Wild

Lee Alan Dugatkin *Univ. Chicago Press* (2022)

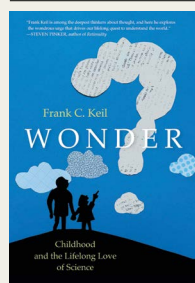
While visiting a wolf research park in Austria, animal behaviourist Lee Dugatkin was startled to see one male sitting on top of another, clamping its snout in its jaws. The park's director assured him there was no harm involved, only a display of power. This theme defines Dugatkin's engaging book, which is based on the work of many scientists with a huge range of animals from around the world, including baboons, dolphins, mongooses and ravens. “Power pervades every aspect of the social lives of animals,” he says.



### The Language Game

Morten H. Christiansen & Nick Chater *Basic* (2022)

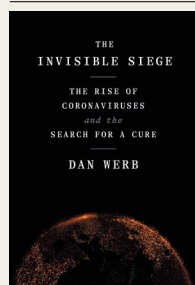
Charles Darwin noted in 1871: “The survival and preservation of certain favoured words in the struggle for existence is natural selection.” But he did not claim that humans evolved a specific biological capacity for language, say cognitive scientists Morten Christiansen and Nick Chater in their study spanning continents and millennia. They argue that language speaking has no genetic basis. Languages evolve too quickly for genes (or computers) to keep up – through cultural evolution, as speakers play verbal charades.



### Wonder

Frank C. Keil *MIT Press* (2022)

Psychologist Frank Keil opens with his children asking about small fossils found near their house. “We are intrinsically driven to wonder about the world and to address those wonders.” How to perpetuate wonder – and respect for science – in adulthood is the heart of his appealing book. He recalls anthropologist Margaret Mead's observation in Papua New Guinea: children explained how a roped canoe had drifted away overnight because its rocking loosened the knot; adults invoked moral and supernatural causes.



### The Invisible Siege

Dan Werb *Crown* (2022)

To blame a Chinese laboratory leak for SARS-CoV-2 is like blaming a fire department for blazes caused by climate change, remarks epidemiologist Dan Werb. The real reason has to be the accelerating emergence of human pathogens because of the globalized world's drive for expansion. Coronavirus specialist Ralph Baric, the focus of Werb's well-informed, powerfully written study of the pandemic, agrees, despite his personal reservations about China's refusal to share more data. **Andrew Robinson**