Who creates the stubs? It's never fully clear. But we find that Verity's was maliciously crafted to cause misery to humanity. Yet, in it, Donald Trump never became US president, and the United Kingdom's referendum on whether to stay in the European Union was won by Remain. The irony is notable.

But our timeline, we find, has fared no better. Glimpses of a London in the twenty-second century reveal humanity barely surviving after severe political instability, climate change, rising poverty and organized crime. The only reason our species has hung on is that crucial technological advances arrived just in time. Through a peripheral, Verity – in her separate timeline – encounters characters in this future London attempting to steer our world towards a less disastrous outcome.

After this unusual meeting, the action becomes less interesting. Gibson's portrayal of a reality free from Trump and Brexit, yet beset by catastrophe, amounts to little. We occasionally hear about the television appearances of a female president, presumably modelled on Hillary Clinton, which show her as calm and capable in the face of every disaster. When *Agency* was trailed, much was made of this scenario. But despite the big questions it raises, the concept remains underdeveloped in the story.

Overall, however, the narrative is complex and intriguing, even if the cast of dozens – brought together for niche specialisms from designing drones to organizing events – isn't always. Along with Eunice, an exception is Ainsley Lowbeer. I desperately wanted to hear more about this semi-mythical special detective from future London. She owns a self-cloaking car and can make space empty itself around her. And she is the main force behind attempts to orchestrate small changes to other timelines to help stabilize them: for instance, by nudging Eunice to greater agency.

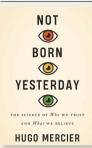
The dialogue is snappy, the technospeak relentless. Although character development is scant, the interaction between humans and advanced technology (such as Verity communing with Eunice through a set of smart glasses) is described in fascinating detail. In fact, *Agency* offers a refreshing variation on the usual limited artificial-intelligence trope.

Eunice has a skill set based on that of an African American naval official, Marlene Miller. She declares herself an independent global citizen, and never bothers to ponder the question of whether she is sentient or not.

All Eunice knows is that she is herself. Most of all, she has agency, the capability to act, and she doesn't waste a moment in doing so throughout. And that is important. Gibson's message seems to be: prepare for the worst, and get technology on your side.

**Liesbeth Venema** is chief editor of *Nature Machine Intelligence*.

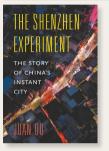
# **Books in brief**



### Not Born Yesterday

Hugo Mercier Princeton Univ. Press (2019)

We're a hard species to dupe, argues cognitive scientist Hugo Mercier in this persuasive study on the science of belief. Drawing on research and historical case studies from the French Revolution to the Nazis, Mercier demonstrates that we have powerful cognitive mechanisms that enable us to weigh up a range of cues. Thus governmental propaganda succeeds by riding on existing opinion, not changing it. And vigilance, not credulity, seems to make false rumours (so often about threats) stick. A bracing book that might make you less gullible about gullibility.



#### The Shenzhen Experiment

Juan Du Harvard Univ. Press (2020)

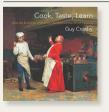
Just 40 years after then-Chinese premier Deng Xiaoping proposed to make Shenzhen a special economic zone, it has become a conurbation of 20 million, a technology hub and a symbol of China's economic transformation. But as urban planner Juan Du shows in this deep dive of a history, the 'instant city' narrative is a myth. Sweeping aside slick origin stories, Du reveals a reality in which Shenzhen's prosperity is driven by oyster fishers, vibrant night markets and the aspirations of millions, not just by the policymakers of Beijing.

## Daniel J. Levitin exter of This Is Your brain on Advice Successful Aging

### Successful Aging

Daniel J. Levitin Dutton (2020)

Neuroscientist Daniel Levitin reveals the 'dreaded' age of 60 to be a developmental stage with specific advantages, and a launchpad for productive elderhood. Looking in turn at the latest neuroscience, behavioural studies and findings on longevity and cognitive enhancement, Levitin delves into the multiple-trace theory of memory, the ageing microbiome, fats and the brain, the impacts of neural implants, and the joys of non-retirement. A clear-eyed, insightful overview of the neurophysiological healthspan.



A Neuroscientist Explores the Power and Potential of Our Lives

### Cook, Taste, Learn

Guy Crosby Columbia Univ. Press (2019)

This chronology of culinary science was part-inspired, nutritionist Guy Crosby tells us, by primatologist Richard Wrangham's theories on how fire and cooking influenced human evolution. Those are contested. Nevertheless, Crosby's historical tour of kitchen physics and chemistry is a sprightly delight. Here are invitations to peer into the architecture of "optimally kneaded dough", goggle at the oldest known recipe (on a 3,750-year-old clay tablet from Babylonia), wonder at a seventeenthcentury pressure cooker and contemplate the terroir of Vidalia onions.



### The True Creator of Everything

Miguel Nicolelis Yale Univ. Press (2020)

The human brain, contends neuroscientist Miguel Nicolelis, is a peerless "organic computing device" that has authored a singular cosmos: human culture, from cave art to robotics. Within a framework he dubs relativistic brain theory, Nicolelis launches a mind-bending journey through neurological evolution, electromagnetism in relation to the brain, brain-machine interfaces and beyond. He warns, however, that our compulsion to monetize, and our addiction to "digital logic", jeopardize our future. **Barbara Kiser**