latter network was expanding to universities around the country. Dear compares them to “two televisions permanently tuned to different channels”. But the difference was deeper. PLATO was never meant to communicate with other computer systems; it was just connecting terminals across phone lines. And therein lies the fundamental problem with Dear’s thesis. Unlike ARPANET, PLATO was not designed to be a seed that sprouted into a tree of networked computing. Rather, it was a single branch that grew in the wrong direction, and subsequently withered.

So, even as PLATO attracted growing interest for its capacity to connect users, licensing company Control Data Corporation stuck stubbornly to the original educational goals. And PLATO’s designers remained fixated on ‘dumb terminals’ hooked up to a mainframe computer — the ultimate digital dead end. By contrast, engineers at the influential technology-innovation lab Xerox PARC in Palo Alto, California, believed that the future lay in desktop computers. In hindsight, the rejection of personal computing by PLATO’s proponents is maddening, Dear points out. He quotes William Norris, head of Control Data Corporation, as saying, “We found the proliferations of Apples and IBMs a roadblock to PLATO.”

Although it’s hard to accept Dear’s contention that PLATO was a jet in a Wright-brothers scenario, his prodigious research makes this book a worthy addition to the history of computer science. The narrative suffers from extended quotes at times, but the story shines through — a fascinating tale of missed opportunities and blind spots. PLATO lumbered along, ignoring the “coming freight train known as the micro-computer revolution” that would overtake mainframes and leave graphics terminals choking in the dust.

Dear also rightly bemoans the failure of teaching machines: online education today focuses on less interactive approaches, such as massive open online courses, or MOOCs, which are far from Skinner’s vision of immediate feedback. As Dear writes: “The field of educational technology, largely ignorant of its own history, seems eternally condemned to repeat itself.”

Yet when, in 2015, administrators of NovaNET (as PLATO was rechristened) prepared to take the network offline for good, the users who stayed up late to experience its final moments weren’t there for educational reasons. This was an online community of nostalgics. The digital future was always right there in front of them, glowing orange, if only PLATO’s creators had grasped it. ■

Sharon Weinberger is an executive editor at Foreign Policy, and the author of *The Imagineers of War*.
e-mail: sharonweinberger@gmail.com

Books in brief

A New Map of Wonders: A Journey in Search of Modern Marvels Caspar Henderson GRANTA (2017)

In his *Book of Barely Imagined Beings* (Granta, 2012), Caspar Henderson crafted a recherché bestiary for the twenty-first century. Here he mines the cosmos for other wondrous phenomena, from light to transformative technologies. We veer from Saturn’s moon Enceladus — spraying water into space through cracks in its ice sheath — to the human embryo, which at 18 days resembles “a tiny jam sandwich”. Strung through Henderson’s virtuosic meditations on such marvels is an exploration of felt wonder — those moments when, as Plato put it, “philosophy begins”.

A Different Kind of Animal: How Culture Transformed Our Species Robert Boyd PRINCETON UNIVERSITY PRESS (2017)

By 10,000 years ago, *Homo sapiens* had surged into almost every corner of Earth, barring Antarctica and a number of islands. What explains that unique dominance? In this lucid, well-argued treatise, anthropologist Robert Boyd avers that we are “culture-saturated creatures”, and that it is culturally transmitted knowledge that sets us apart and explains our dramatic range of behaviours, from rampant violence to great feats of cooperation. Philosopher Kim Sterelny, evolutionary anthropologist Ruth Mace and others provide considered and spirited counter-arguments.

The Water Will Come

Jeff Goodell LITTLE, BROWN (2017)

Humanity’s “fossil fuel party” is ending in tears: damage from sea-level rise alone could cost US\$100 trillion by 2100. So notes Jeff Goodell in his cogent reportage on a world going under, from the Maldives to NASA’s Kennedy Space Center in Cape Canaveral, Florida. Goodell visits imperilled communities in hurricane alleys; joins climatologists studying Greenland’s disintegrating Jakobshavn Glacier; and muses over the planned “Big U” wall to protect lower Manhattan in New York City. To adapt, he concludes, two things are needed: a halt to fossil-fuel burning and a mass move to higher ground.

My House of Sky: The Life of J. A. Baker

Hetty Saunders LITTLE TOLLER (2017)

J. A. Baker’s *The Peregrine* (1967) was a watershed in British nature writing, so it’s astounding that Hetty Saunders is the first to train binoculars on the man himself. This outwardly unassuming amateur, she reveals, was not just a stylist of piercing originality. Baker’s mid-century field observations of raptor populations driven down by pesticide use offer rare insight into both human destructiveness and the power of nature in the liminal estuarine landscapes near London. This beauty of a book is as much paean to those bleak reaches as to the hawk-like mind that explored them.

Where the Wild Coffee Grows

Jeff Koehler BLOOMSBURY (2017)

Blearily sipping a morning espresso? Jeff Koehler’s scientific and anthropological chronicle will lend context to your cup. Exploring the origins of *Coffea arabica* in the rain-drenched highland forests of southern Ethiopia — notably Kafa — Koehler interweaves narratives on botanist Carl Linnaeus, centuries of coffee trading and today’s barista boom. With Latin America’s crops at risk from a lack of genetic diversity, the wild Arabica now protected in Kafa’s biosphere reserve may just, Koehler argues, save our ‘daily grind’. **Barbara Kiser**