

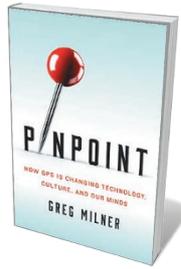
sistema, as the standard Library of Congress transliteration would render it — although various systems are used inconsistently throughout the book). The full name is a mouthful: “All-State Automated System for the Gathering and Processing of Information for the Accounting, Planning, and Governance of the National Economy, USSR”. Beginning in 1962, Glushkov spent 25 years trying to mobilize support for his network from his Institute of Cybernetics in Kiev, which created a rich set of cultural resources, including a model constitution, passport and cartoons depicting the land of “Cybertonia”. Peters reproduces these in plentiful images and descriptions, chronicling their utopian spirit and demonstrating the need for engineers in all times to let off steam through flights of fancy. But the project was never realized.

It is difficult to glean all the technical specifics from the material that Peters mobilizes from archives, interviews and declassified CIA reports. Some proposals look like cloud computing or tablets, but it would be anachronistic to interpret them in that way (and Peters doesn't). The idea was to use real-time processing to connect economic inputs and outputs, rendering the planned economy both functional and adaptive. We cannot even be sure that Glushkov's plans would have worked. What we do know is that the failure was not caused by a scarcity of personal computers, because OGAS was meant to link factory mainframes. Nor was it ideology: cybernetics, as Peters readably recounts, was well suited to Soviet ideological preferences in materialism and planning. To discover the roots of the issue, Peters invokes the cybernetic concept of heterarchy, which he defines as “complex networks with multiple conflicting regimes of evaluation in operation at the same time”; he then uses this to explore the heterogeneity of approaches to networking.

Perhaps predictably, OGAS's demise was death by a thousand paper cuts. Documents were misfiled, meetings were missed, the military and the statistical ministries disagreed about who would benefit. Peters's provocative thesis is that “The capitalists behaved like socialists while the socialists behaved like capitalists.” The US Internet was the result of state subsidies and benevolent paternalism; the Soviet attempt foundered on entrepreneurial infighting. (Elsewhere, Peters puts the culprit down as cost, although how costs were tabulated was in itself a bureaucratic conundrum.) There is no dramatic climax to *How Not to Network a Nation*. Non-existent technologies end with a whimper, but even whimpers can tell you something. ■

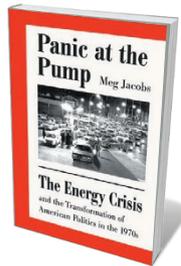
Michael D. Gordin is Rosengarten Professor of Modern and Contemporary History at Princeton University in New Jersey. His most recent book is *Scientific Babel*. e-mail: mgordin@princeton.edu

Books in brief



Pinpoint: How GPS is Changing Technology, Culture, and Our Minds
Greg Milner W. W. NORTON (2016)

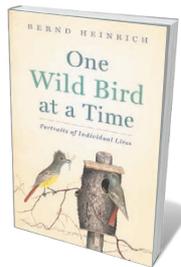
It is key to the Internet's operation, is deployed in seismology and climate-change research — and can lead drivers into seriously tight spots. The multisatellite Global Positioning System (GPS), reveals journalist Greg Milner in this assured technological history, is a risk-laden ubiquity that has profoundly changed society. He traces its conceptual and practical roots from early Polynesian navigational acumen through cold-war US prototypes to today's system, kick-started by Bradford Parkinson. Milner delves, too, into the cognitive impacts of reliance on GPS, and ethical issues around data misuse.



Panic at the Pump: The Energy Crisis and the Transformation of American Politics in the 1970s

Meg Jacobs HILL AND WANG (2016)

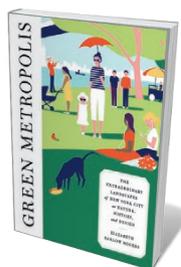
In 1973, 'oil shock' engulfed the United States as the Organization of Arab Petroleum Exporting Countries embargoed exports. Historian Meg Jacobs incisively chronicles the ensuing policy war, as the Nixon administration and free-marketeers called for deregulation of the market, and the left (including Henry 'Scoop' Jackson, Democratic senator for Washington) pushed for alternative energy. That battle, Jacobs argues, reverberates in fracking and climate-change policy today, and offers lessons for the transition to a fossil-free future.



One Wild Bird at a Time: Portraits of Individual Lives

Bernd Heinrich HOUGHTON MIFFLIN HARCOURT (2016)

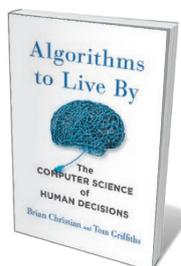
Biologist Bernd Heinrich's cabin in the Maine woods is a “live-in bird blind” engineered for year-round observation, and his engrossing scientific memoir lets us in on the ornithological action. Here are northern yellow-shafted flickers nesting in a wall cavity (Heinrich estimates it takes 21,600 ants to fledge one nestling); an avian soundtrack veering from the cackling of a barred owl to the “tinkles, whistles, twitters, growls, and squawks” of a common starling; and a woodcock bursting into rocket-like flight. Step by finely attuned step, we learn, with Heinrich, “one wild bird at a time”.



Green Metropolis: The Extraordinary Landscapes of New York City as Nature, History, and Design

Elizabeth Barlow Rogers KNOPF (2016)

New York may seem the archetypal cityscape, but nature thrums through this concrete jungle. So reports landscape preservationist Elizabeth Barlow Rogers in her erudite study of seven of the city's green spaces. Summoning geology, biology and history, Barlow witnesses stridulating 17-year cicadas at Staten Island's High Rock Nature Center, walks through the 14.5-hectare “self-generating wildwood” of Central Park's Ramble, strolls the evocative garden promenade of reclaimed rail spur the High Line, and more.



Algorithms to Live By: The Computer Science of Human Decisions
Brian Christian and Tom Griffiths HENRY HOLT (2016)

When do you cut short a house search? How do you schedule a day's worth of tasks? Meshing psychology with computational models, writer Brian Christian and cognitive scientist Tom Griffiths argue that algorithms are ace tools for solving the pressing conundrums that litter life. Far from being narrowly prescriptive, their algorithmic fixes (such as the 37% rule, otherwise known as the secretary problem) are forgiving — not least, in showing how messiness can sometimes be an optimal choice. [Barbara Kiser](#)