

a global model for ‘innovation districts.’ The book also provides simple explanations of basic technical concepts, such as analogue versus digital, and packet switching.

As a contribution to understanding of the digital revolution, however, *The Innovators* suffers from the same limitations that currently vex academic computing history: it is too white, male and insular. Aside from a nod to British computing pioneer Alan Turing, largely missing here are the stories of innovation beyond the United States — as are reflections on how non-digital games and alternative media might have shaped the design of digital technologies or the sense of what they might be used to achieve.

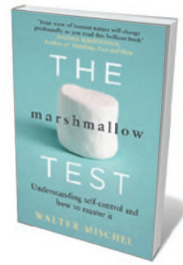
Questions about gender in particular demand further discussion. Isaacson begins and ends with Lovelace, whose “love of both poetry and math”, which primed her to see beauty in a computing machine, frames his assertions about the interconnectedness of art and science. Early chapters mention the contributions of female programming pioneers, including the six-woman ENIAC programming team. Yet after that, women mostly drop out of the action, and we encounter stories of how an early sales brochure for Atari games featured a woman in a sheer nightgown, hired “from the topless bar down the street”, or how Licklider routinely slipped photos of beautiful women into colleagues’ presentations.

Did female innovators remain in this hostile environment, forgotten to history? Did they find it so intolerable that they left? Both stories would be instructive today in light of widely recognized gender problems in US technology firms, as well as in Isaacson’s ambition to “explore the social and cultural forces that provide the atmosphere for innovation”.

The weakest aspect of the book is Isaacson’s attempt to link the arts to innovation, which he never quite backs up. Yet scholars have already shown the value in that view, and discussions about STEAM (science, technology, engineering, arts and mathematics), rather than STEM, are rife in educational institutions. The Massachusetts Institute of Technology in Cambridge — my employer — demands that science and engineering undergraduates take one-quarter of their courses in the arts, humanities or social sciences, on the basis of their recognized relevance to students’ work. Isaacson’s gift for digesting scholarly materials and making them accessible would have been well applied here, beyond the borders of computing history, to make the case for a multidisciplinary education. ■

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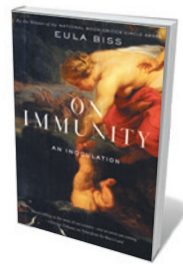
## Books in brief



### The Marshmallow Test: Understanding Self-control and How To Master It

Walter Mischel BANTAM (2014)

In our go-faster era, extreme impulsivity — from trolling to air rage — seems to be on the rise. So it is an apt moment for psychologist Walter Mischel to recap his much-cited “marshmallow test”, which examines children’s capacity for delaying gratification as an indicator of emotional balance in maturity. Mischel takes us beyond the experiment into deep research on “delay ability”, his formulation of “hot” and “cool” cognition, speculation on the role of genetics, and the implications of his work for public policy.



### On Immunity: An Inoculation

Eula Biss GRAYWOLF (2014)

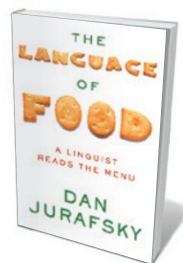
Our long and intimate coexistence with viruses is less battle than balancing act, avers essayist Eula Biss. In this quietly impassioned call for responsible childhood immunization, Biss explores the currents of humanity’s uneasy relationship with these microscopic hordes, interweaving science, myth and history with her own fraught parental experience. The word inoculate was originally used to describe plant grafting, she notes. Now, it signifies grafting disease “to the rootstock of the body”. As Biss reminds us, immunization must be effectively communal, “a garden that we tend together”.



### The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma

Bessel van der Kolk VIKING ADULT (2014)

War zones may be nearer than you think, as the 25% of US citizens raised with alcoholic relatives might attest. Psychiatrist Bessel van der Kolk argues, moreover, that severe trauma is “encoded in the viscera” and demands tailored approaches that enable people to experience deep relief from rage and helplessness. In a narrative packed with decades of findings and case studies, he traces the evolution of treatments from the ‘chemical coshes’ of the 1970s to neurofeedback, mindfulness and other nuanced techniques.



### The Language of Food: A Linguist Reads the Menu

Dan Jurafsky W. W. NORTON (2014)

When Dan Jurafsky enters a restaurant, menu scribes beware: this linguist will pick at the wording even as he savours (or deplores) the dish. In his study probing how foods and their names co-evolved, Jurafsky crafts a gastronomic atlas. We discover how Peruvian ceviche and vinegary British fish and chips can be traced back to *sikbāj*, a sweet-and-sour stew from sixth-century Persia. We marvel at how a fermented-fish sauce from southern China is the progenitor of all-American ketchup. And we find an unexpected chemical connection between ice cream and fireworks. Deliciously erudite.



### The Imaginary App

Edited by Paul D. Miller and Svitlana Matviyenko MIT PRESS (2014)

Are mobile apps an “oscillator between the imaginary and the realised”, or “charming junkware”? Multimedia artist Paul D. Miller (also known as DJ Spooky, That Subliminal Kid) and media scholar Svitlana Matviyenko explore this vaporous realm with contributors including Björk collaborator Scott Snibbe. The theory-laced result is for the digital devotee, but the authors’ apps, real and speculative, can be great fun; the optical illusion in Anna Munster’s Transparent Screen app, for instance, allows you to “text and walk without fear”. **Barbara Kiser**