

Richard Lewontin pointed out in a scathing critique of Jensen's approach in 1970, in times of plenty, height is highly heritable; in a famine, much less so (R. C. Lewontin *Bull. Atom. Sci.* 26, 2–8; 1970). But elsewhere, Plomin, like Jensen, treats heritability wrongly as a property inherent in a trait.

*Blueprint* does depart from much prior hereditarian social science in not explicitly mentioning race — the hot-button issue of many earlier works. It instead looks at class. Plomin uses a data set of mostly white British twins, most of whom attended English grammar schools. Yet, given Plomin's extensive experience and his footnotes, the absence of any explicit mention of race (to disavow it, say, or to allude to intersectionality) is conspicuous.

The most troubling thing about *Blueprint* is its Panglossian DNA determinism. Plomin foresees private, direct-to-consumer companies selling sets of polygenic scores to academic programmes or workplaces. Yet, as this “incurable optimist” assures us, “success and failure — and credit and blame — in overcoming problems should be calibrated relative to genetic strengths and weaknesses”, not environmental ones. All is for the best in this best of brave new worlds.

Plomin likes to say that various components of nurture “matter, but they don't make a difference”. But the benefits of good teaching, of school lunches and breakfasts, of having textbooks and air-conditioning and heating and plumbing have been established irrefutably. And they actually are causal: we know why stable blood sugar improves mental concentration. Yet Plomin dismisses such effects as “unsystematic and unstable, so there's not much we can do about them”.

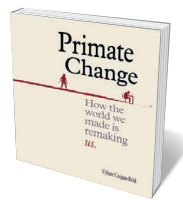
Ultimately, if unintentionally, *Blueprint* is a road map for regressive social policy. Nothing here seems overtly hostile, to schoolchildren or anyone else. But Plomin's argument provides live ammunition for those who would abandon proven methods of improving academic achievement among socio-economically deprived children. His utopia is a forensic world, dictated by polygenic algorithms and the whims of those who know how to use them. People would be defined at birth by their DNA. Expectations would be set, and opportunities, resources and experiences would be doled out — and withheld — a priori, before anyone has had a chance to show their mettle.

To paraphrase Lewontin in his 1970 critique of Jensen's argument, Plomin has made it pretty clear what kind of world he wants.

I oppose him. ■

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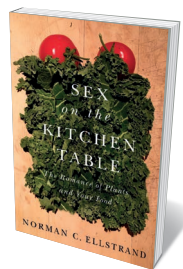
## Books in brief



### Primate Change: How the World We Made Is Remaking Us

Vybarr Cregan-Reid OCTOPUS (2018)

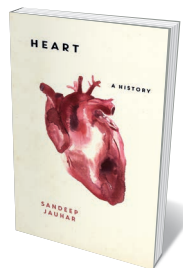
Nature and nurture commingle to fascinating effect in this study of how the environment humans have so thoroughly altered is altering us physiologically. Humanities scholar Vybarr Cregan-Reid ventures from the African forest apes of 20 million years ago to the rise of *Homo sapiens* and the impacts of successive revolutions — agricultural, industrial, urban and digital — on our anatomy. Our grossly sedentary, technologically dominated, polluted present, he argues, constitutes a collective assault on bodies unevolved to cope, leading to ‘mismatch’ conditions such as myopia and obesity.



### Sex on the Kitchen Table

Norman C. Ellstrand UNIVERSITY OF CHICAGO PRESS (2018)

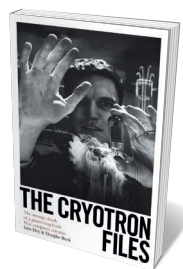
The sex life of an avocado might seem anything but lurid. Geneticist Norman Ellstrand, however, reveals it as a riot of romantic yearning and ‘sex switching’. In his foray into the nexus of food, science and plant reproduction, we enter that alternative universe in which olives and quinces are really vehicles for seeds, the tomato (the ‘love apple’ of yore) is self-fertile and cultivated bananas are female-sterile. You'll become reacquainted with the pistil, and wonder at the sugar beet's rise “from a cascade of geopolitical incidents”. Nutrition might never seem the same again.



### Heart: A History

Sandeep Jauhar ONEWORLD (2018)

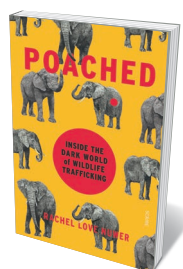
Cardiologist Sandeep Jauhar's exploration of that marvellous muscle, the heart, meshes cutting-edge science, memoir and history. He pictures a cadaver's heart as “a squat volcano tipped on its side”. He extols physician William Harvey's great 1628 treatise *On the Motion of the Heart and Blood in Animals*. He records the troubled dawn of open-heart surgery, pioneered by experimentalists such as C. Walton Lillehei in the 1950s. And he recounts with raw immediacy his mother's death from cardiac arrest. A moving narrative echoing to the beat of “this organ, prime mover and citadel”.



### The Cryotron Files

Iain Dey and Douglas Buck ICON (2018)

This extraordinary chapter in the annals of cold-war science is both thrilleresque and tragic. At its centre is Dudley Buck, a gifted electrical engineer and US government agent whose prototype microchip, the Cryotron, was key to a covert scheme to create the first supercomputers. As journalist Iain Dey and Buck's son Douglas reveal, Buck and his colleague Louis Ridenour, a physicist, died suddenly in 1959, after a visit from high-level Soviet researchers. Any discussion of Soviet contact-poison hits is speculative; what is not is Buck's substantial contribution to modern computer science.



### Poached

Rachel Love Nuwer DACAPO (2018)

From the hacked corpses of bull elephants in Botswana to fast-declining pangolin populations, wildlife trafficking is an ongoing threat to conservation gains. Rachel Nuwer, a conservation biologist turned science journalist, traces at first hand the front lines across the globe in her hard-hitting, wince-inducing report. Examining the forces driving demand, the trade itself and countermeasures, she takes us from Africa's killing fields to the corridors of regulatory behemoths, and finds gleams of hope in Chad's National Elephant Action Plan and pangolin rescue efforts in Vietnam. [Barbara Kiser](#)