Many of the voices raised in *Prefiguring Cyberculture: An Intellectual History* make sense of the tumult that has followed in the wake of the change the Internet has wrought. A collection of thirty-two essays written by American, Australian, Canadian and European writers, it has a strong opening, a mixed midsection and a climactic finish. It is a work of great power and, in many instances, of great intellectual substance. For those who would find visions of cyberculture to stimulate their minds and the minds of their students, there is plenty in the repast of this book.

It documents Western views on the changes in the world’s societies and cultures that are, have been and may yet be driven by technology. Not surprisingly, there are heavy doses of postmodernism and technological determinism present in this work, analyses of works of science fiction authors as well as the works of some of the great thinkers and writers throughout history, viewed through a wide range of utopian and dystopian oculars.

As one of its editors, Darren Tofts, notes in the introduction, we humans have “a tendency toward change and alteration.” It began when the first neo-human scratched a picture on a rock face to begin the road to literacy and has traversed time to the roots of the information age millennium, in the mid-20th Century. Cyberculture, or as Tofts suggests, the culture created by the existence of the human-computer interface, has created a new creature: a posthuman. This being is
an enmeshing of humanity and technology some have labeled as cyborg, and others as our next evolutionary step. In effect, this book makes 32 attempts to define how posthumans and cyborgs do and will exist within their utterly new world. Whether repelled or fascinated by the possibilities—and the book features authors who represent a full range of that—the visions within provide us a very necessary view over the precipice that technology has created for us.

Prefiguring is an invented word used to describe and predict posthuman construction and adaptation to cyberculture, whereas Tofts describes cyberculture as “a way of becoming through technological means.”(3) It is convincingly argued in this book that cyberculture is so new that it is nascent, still birthing, reconfiguring and self-constructing itself to the change it creates as it grows. Ultimately, it advances the notion that the version of cyberculture we find ourselves within may only be in beta, a work in progress, testing itself on early posthumans who, at once embrace and are repelled by it based upon what they perceive they gain from and lose to it. The book lays out cyberculture’s roots, history and a number of its futures. Divided into four subsections, essayists and visual artists create virtual amphitheaters in which they dissect the popular and academic realms we have created in our minds and literature to conceptualize the environment we have created when we constructed our “thinking” machines.

The seven-part Section 1, “I, Robot: AI, ALife and Cyborgs” begins with a meta-analysis of the philosophical discipline’s schism over the validity of Rene Descartes’ once timeless Cogito, ergo sum. The author, Erik Davis, uses such varied vehicles as virtual reality, cyberspace and the film, “The Matrix,” to show that we do not think ourselves into existence so much as we arrive into “authentic consciousness” by reawakening to ourselves within a process of accepting and rejecting that which we are or are not. In the very next essay, Catherine Waldby explores our ingrained revulsion to cyborgs—half-human, half-machine integrations that, over time, various authors and even inventors have portrayed as either human, machine, monster or hybrid. Her essay uses Mary Shelley’s novel, Frankenstein: Or, the Modern Prometheus as a reference frame to dissect what is human and what is machine, and, building on Davis’ work, what is not human or not machine. The third work in this historic progression of the literary foundations of cyberculture goes where it must: to a biographical analysis of the work of Alan Turing, the English scientist who, in his sadly short life, devised the Turing machine in 1937—a universal calculating machine—and in 1950, the Turing test—a means still used today to evaluate the intelligence within a computer. Turing, it is revealed, was a scientist at once concerned with the fragility and frailty of the human psyche and how closely what we identify as human intelligence might be reproduced within a machine. The last essay in this section is a rather worshipful review of Donna Haraway’s “Manifesto for Cyborgs” written by Zoe Sofoulis. She convincingly stitches quotes and analysis together to depict Haraway’s work as a
must-read for any who would study or even know cyberculture by distancing it from other less far-reaching cyberpunk and cyberfeminist works written at the same time and showing its potential for universal, non-gendered application.

The strength of the essays in Section 2, “Virtuality: Web Worlds and Cyberspaces,” begin with McKenzie Wark’s “Too Real” chapter. Using Ray Bradbury’s story, “The Veldt,” in The Illustrated Man as a contextual backdrop, he makes the distinction between what virtual reality might present or appear to present versus what actually results from its use. In Bradbury’s story, two children use a home-based virtual reality environment to kill their parents and thereby liberate themselves from them. The parents are unable to see their children’s nefarious purpose because they see only the visual manifestations of the virtuality their children created; the children succeeded because they realized the full potential of the machine’s ability to create a new, “real” reality suited to their purpose. Wark’s technological determinist view suggests that we be more like the children of this story and discard our concept of reality and locality within the world and attempt to orient to ourselves as a position within the matrix that cyberculture creates:

[I]t is no longer a question of hierarchy of orders of the real and the less than real…. Rather it is a matter of geometries, of heterogeneous vectors, each composed of alloys of the real and the too real. Geometries of potential relation, the virtual dimension of which offers to free chance from necessity, and open postsocial spaces in which to really dream, and dream really (163).

Scott McQwire follows this vision with the essay we’ve all been looking for that definitively analyzes the fantasy cyberculture William Gibson created on his manual typewriter in Neuromancer (Ace, 1984) against what we now know to be true about the Net and how it has affects our new posthuman culture. Instead of bringing his analysis to an overarching conclusion, he calls for our participation in the debate over the continuing changes “increasing penetration of media technology into the fabric of everyday life…” have created. (177)

Section 3, “Visible Unrealities: Artists Statements,” contains some of the book’s most startling revelations dealing with posthuman futures, if for no other reason than their inclusion as a visual interpretive counterpoint to the textual illustrations that both precede and follow their appearance. These visions are, at once awesome, shocking, ethereal and denigrating.

As we climb into the cockpit, grab hold of the stick, tread on the pedals and shove the throttle forward, Char Davies’ illustration darkly chides us with her vision of wilderness to turn our eyes from the runway and horizon ahead, for the moment, and remember the woods, the brittle sounds of leaves underfoot, the smell of mists
on a pond and the sight of raindrops as they dollop its surface. “VR may well further the destructive trajectory Heidigger signposted…and prove to be the nemesis of nature.” (192-193)

In contrast, Jon McCormack presents a rendering of a biological network, suggesting that a “virtual nature will have to be the aesthetic equal of its organic counterpart.” Whatever our machines might create, these products, beings or environs will possess a measure of what he calls “naturedness,” flawed only by “human limitations. Will the beauty to be ever equal the beauty been?” (198-199)

The section concludes with three startling cyborgian visions. Patricia Piccinini challenges the scientific community’s commodification of life in pursuit of advancement with a photo-illustration of an engineered mouse on the shoulder of a supermodel. Her work indicts science with the charge that nature, artifice and beauty have all become synonymous with intellectual property. Stelarc celebrates the melding of his body to the Net and the oneness of his avatar with himself. His work depicts his body as a grotesque host for technology; it is “inhabited, stirred, startled and caressed by remote promptings of other bodies in other places.” Lastly, the work entitled VNS Matrix presents a static visual song of a feminine (a)sexual cyborg aimed at “…debunking the masculinist myths which alienate women from technologies.” (202-207)

Back to the realm of the written word, the book takes an analytical turn with “Futuropolis: Postmillenial Speculations,” in which several essayists grapple with utopian and dystopian cyberculture futures. Margaret Wertheim’s opening sally suggests that utopian visions of cyberspace’s promise foundered on the rocks of capitalism. “In an age where the market has replaced the temple as the epicenter of our social landscape…and when material wealth has been invested with near-reverential status, it was, no doubt, naïve to imagine that cyberspace could provide a more ‘pure’ foundation for our dreams.” (225) Bruce Mazlish writes a fascinating biographical analysis on the Victorian era writer, Samuel Butler, and his satirical commentary on Darwinian evolution. He suggests that Butler, a deeply religious and yet conflicted thinker, was years before his time when he wrote that “machines were a new, and possibly advanced, species.”(239)

Wending his way through Arthur C. Clarke’s non-fiction futurist work, Profiles of the Future, Russell Blackford writes a compelling review of this author’s varied utopian visions of a technology-governed world. In the next essay, Toffler-basher Richard A. Slaughter attempts to discredit the visions of the future that Future Shock (1970) delivered with a healthy dose of hindsight, denouncing individual efforts at paradigmatic revolution in favor of more collective ones.
In perhaps the most intellectually athletic and speculative work in this volume, Damien Broderick writes about “The Spike,” an endpoint—or as is described in this work, “a singularity” in computer science. Conceived by science fiction author and mathematician Vernor Vinge, it posits that technological novelty will exceed our imaginations, sometime between 2030 and 2100. In effect, the Spike creates a wall in time, where windows once were, after which no speculation on future societies or directions based on current realities will have any basis or relevance. We can see or speculate about the future until this point, and no further. Broderick creates outcomes based on the whether or not the Spike becomes reality: “No Spike, because the sky is falling…Things go to hell and if we don’t die, we’ll wish we had.” He then considers six futures that might occur between now and the time the Spike actually does occur: “Increasing computer power will lead to human-scale AI and then will swiftly self-bootstrap to incomprehensible superintelligence…Research and development in genomics…will lead to new, ‘wet’ biotechnology, lifespan extension and ultimately to transhuman enhancements.” Lastly, he considers a single, self-determinist future: “The singularity happens when we go out and make it happen.” In the end, Broderick speculates the Spike will occur sooner, rather than later within Vinge’s window and wonders who, if anyone, can ever know what will happen.

The final essay by Mark Dery engages in an intellectual archeological expedition to discern the roots and paths of our techno-culture through one of the larger networks and institutions of our time, the airline industry. Looking at such diverse indices as aging terminals, departure lounges and variations in seating between first and economy class flights, he finds a truth: that technology’s early promises never seem to meet our expectations. And yet technological advancement is fueled largely by our inherent distrust in its ability to do what it was billed to do. The next new thing serves to overcome our distrust, but in the bargain, creates new insecurity, which in turn creates the next new thing. It can be a vicious cycle in which hindsight obsoletes our vision before it arrives.

Taken together, the 32 visions published here are less of a book and more of a manual—a user’s manual—for people whose careers and life expectancies will carry them forward into this millennium. It’s a manual that allows us to participate in the beta test of cyberculture in which we now live. It tells us from whence it came, what it has created and what might lie in the future…to a point.

Works Cited


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