

Dealing in futures

Truth is scarier than science fiction.

BY MARK WILLIAMS

Distraction

By Bruce Sterling
432 pages, \$23.95
Bantam Spectra

The Weightless World: Strategies for Managing the Digital Economy

By Diane Coyle
272 pages, \$25
MIT Press

NO FUTURIST can tell you exactly when it'll be time to short Microsoft or how low Internet vendors' margins will go: beyond some possible catastrophe that calls all bets off (say, India and Pakistan blundering into nuclear conflict), most of the future's specifics are too path-dependent to be predictable. But broad extrapolations can hold true. Though Leonardo da Vinci couldn't anticipate frequent-flyer miles, he foresaw flying machines. The writer Arthur C. Clarke didn't know that wireless applications would enable ubiquitous Internet access, but in 1945 he prophesied the telecommunications satellite.

In 1988—during the heyday of President Reagan's Strategic Defense Initiative—Bruce Sterling's *Islands in the Net* conjured a 2023 in which the cold war was a historic footnote comprehensible only to elderly boomers, while nation-states' powers had receded as the global tele-

cosm—the Net—imposed its economic order. At the novel's end, all that remained outside the Net was sub-Saharan Africa, which (except for a South Africa led by a black president) continued to be a wasteland devastated by AIDS, war, starvation, and ecological disaster. Mr. Sterling's 2023, in short, is the one we're on track for.

FREEWARE KILLS

Now Mr. Sterling's latest novel, *Distraction*, asks: what if the Internet smashed our old order, and a new civil society failed to congeal?

Distraction's protagonist is a political campaign manager in 2044 who happens to be—since he's the result of the botched genetic engineering of a Colombian cartel that planned to sell in vitro babies to foster parents in rich countries—weirder and smarter than James Carville. In *Distraction's* America, that's a distinct advantage:



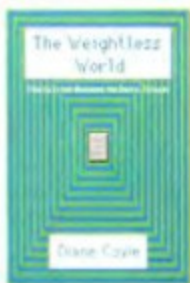
"It had never occurred to the lords of the consumer society that consumerism as a political philosophy might one day manifest the grave systemic instabilities that Communism had....Not only were people broke, but they were taunted to madness by commercials, and pitilessly surveilled by privacy-invading hucksters." Thus, the new president, elected by a resounding 18 percent of voters, awaits the

customary impeachment proceedings. Unpaid U.S. Air Force personnel block freeways with helicopters, exacting contributions for "bake sales." America's latest cold war is with Holland.

Fair enough. But the rationale for all this chaos, unfortunately, is that during a trade war, the Chinese made all English-language intellectual property freely available on the Net, bankrupting the software-based American economy.

Really? Even under its closed-source model, Microsoft makes nearly a third of its profits from licenses to third-party developers; its proprietary code would still bring in profits even if pirated versions of its compiled end product were free. With a model like Marimba's Castanet, alternatively, subscribers pay to receive automatically installed updates of the software. And under the open-source model, developers use free source code to write applications; they make revenues through services and so on. Even if a card-carrying cyberpundit like Mr. Sterling wasn't clear on software's business models, he should have realized that if freeware were all it took, Saddam Hussein would have set up some servers by now.

Nothing Mr. Sterling writes is without interest, but *Distraction* doesn't deliver what he's provided previously—the startling recognition that *this* is how the future really might be. Try *Islands in the Net* instead. Or 1997's *Holy Fire*, in which the medical-industrial complex of the 2080s dominates the global economy, and investors in certain life-extension startups attain riches and extended longevity. *Holy Fire* feels like prophecy: last year Geron biologists



manipulated telomeric DNA—cultured cells that can replicate indefinitely—and repeated the process on human embryonic stem cells in the search for immortal, specialized tissue.

HEAVY THINKING

Diane Coyle's *The Weightless World* presents some interesting propositions. Ms. Coyle derives her weightlessness metaphor from a 1996 speech of Alan Greenspan's, in which the Federal Reserve chairman considered how the world's economic output has shifted from a focus on manufacturing large, heavy things toward making products in which most of the value derives from increased technological expertise. The standard of living in industrialized countries is 20 times higher than a century ago, Ms. Coyle writes, but those countries' combined economic output weighs the same as their 20-times-less-valuable output back then.

We live during a profound re-

structuring. Yet the old Right and the old Left reiterate archaic calls for limits on trade and immigration. In America, health benefits were once tied to the lifetime job; today fewer people have either. Voters everywhere demand more money for health and education while remaining unwilling to reduce entitlements; politicians respond with deficit spending.

Ms. Coyle sees the pileup ahead. *Two-thirds of all the people who ever reached the age of 65 are alive today.* By 2030 seniors will constitute one-third of the industrialized countries' populations; the U.S. federal deficit will become 26 to 37 percent of gross domestic product if entitlements remain unchanged. *The Weightless World* proposes that either the developed countries embrace immigration to achieve adequate replacement populations to support those oldsters, or else invest their pension funds in younger, developing countries so that "profits from the

active work force in the latter will fund the retirement of the former." This is nice, though the problem may be bigger than Ms. Coyle believes.

We are approaching an exponential explosion of biomedicine. If mortal bodies are repairable with new, ever-youthful tissues, *The Weightless World's* claim that seniors will constitute a third of the industrialized population is conservative. What entitlements can citizens expect? And will they meekly accept that the rich get, say, an extra half-century? Should the technologies become available to all (since there's no reason to assume that once developed, they couldn't become routine and affordable), what resources will be required to support populations with such extended life spans? We can now foresee the biggest challenge—or systemic crash—in human history. 🍷

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