



www.abundantworldinstitute.com

After Shock—The world's foremost futurists reflect on 50 years of Future Shock—and look ahead to the next 50

CONTACT: John Schroeter
719.684.5658 | john@technicacuriosa.com

n 1970, futurists Alvin and Heidi Toffler were thrust upon the world stage by the publication of their international bestseller, *Future Shock*—the title describing a condition whose characteristic "shattering stress and disorientation" would inevitably be brought about by "too much change in too short a period of time."

Whether the Tofflers' warnings about the acceleration of technological and social change have proved prophetic or apocryphal, their insights were—and continue to be—potent catalysts for contemplating our probable, possible, and preferred versions of the future. Indeed, in the end, we will realize either the world we fear to imagine or the world we dare to dream.

Dare, then, to journey into all these potential futures, guided by the extraordinary insights of the world's foremost thought leaders who in the pages of **After Shock** collectively chart the course to an abundant future for all.

Marking the **50-year anniversary of Future Shock**, the compendium of essays comprising this landmark volume offers surprising reflections on the classic text, as well as presents remarkable—if not startling—views of the future through the very unique lenses of more than 100 thought-leading futurists spanning Ray Kurzweil to Lord Martin Rees, and featuring a foreword by Deb Westphal, Chairman of the Board of Toffler Associates.

■ Publication Date: February 4, 2020

■ ISBN Print: 978-0-9997364-4-9 ■ ISBN eBook: 978-0-9997364-5-6

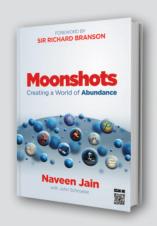
■ \$32.00 Hardcover

About the Editor

John Schroeter is Executive Director at **Abundant World**Institute™. Comprising a society of the world's foremost technologists, futurists, and entrepreneurs, Abundant World Institute is a social enterprise dedicated to transforming global challenges into massive opportunities in essential areas of tremendous human consequence: energy, healthcare, education, and the environment.

Schroeter is also co-author of the award-winning book

Moonshots—Creating a World of Abundance, with Naveen Jain and Sir Richard Branson, and editor of After Shock, observing the 50 year anniversary of Alvin and Heidi Toffler's Future Shock. He is the publisher of the iconic Popular Electronics, Mechanix Illustrated, and Popular Astronomy magazines, hosted at TechnicaCuriosa.com.



n After Shock, we discover that the future is indeed a big tent, beneath which radical ideas compete for mindshare and dominance. Prepare to be inspired, challenged, surprised, amazed—and even a little disturbed—by this collection of provocative essays that explore territories that even science fiction writers have yet to imagine. The following excerpts provide just a taste of the many insights and observations that promise to make After Shock one of the most consequential books of 2020.

On the future of work

"Today, you are competing against the best of global human resources; tomorrow, you will also be competing against the best of artificial resources."

—Anders Sörman-Nilsson

"Optimists say that each extra mouth brings two hands and a brain. But it's the geopolitical stresses that are most worrying. Sub-Saharan Africa can't escape poverty as the Asian tigers did by undercutting Western wages—robots can now do that."—*Martin Rees*

"Those who worry that advances in technology will be bad for people because it will eliminate jobs have always puzzled me. More productivity is *always* good for all people, and if that isn't true, then we should lobby to require everyone to work with one arm tied behind their back." —*Byron Reese*

On whether technological progress is good for us

"Why were we doing this to ourselves? Why would intelligent people allow themselves to create a world so at odds with their own personal health and well-being? Why weren't we taking hold of the wheel and steering ourselves in a smarter direction? The Tofflers' prescription, that we needed to halt runaway acceleration, made sense to me then. So, why weren't we doing this? The answer is that, short of a global catastrophe, progress is unstoppable." — Richard Yonck

"Social systems, like any complex system, have delays built into them; it takes time for a new technological diffusion to manifest its unanticipated consequences."—*Rodrigo Nieto-Gómez*

"There are signs that we are failing to protect our neurodiversity, to avoid ethnic and gendered stereotyping. The naive idea that technology will always help us rapidly hits the crash test of reality."—*Andra Keay*

"If technology is a 'better mousetrap' that could cause massive societal shock, it may also be the origin of a better mouse. New technologies that present challenges often foster the solutions to the challenges they create."

— Jason Schenker

On coping with change

"The world is at war between people who like change and people who don't like change. This war is everywhere, on every continent, in every government, in every industry, in every home." —*Po Bronson*

"My 90-year-old mother streams Doris Day songs on her Echo speaker with just a verbal command. In sum, we manage a multitude of changes on our own terms."—*Cindy Frewen*

"The impact of future shock on human behavior has perhaps been less dire than Toffler suggested it might be, possibly serving as testimony to our adaptability and resilience as a species. But there are clearly some cracks in the foundation."—*Bill Diamond*

On living in a post-truth world

"Thanks to the internet, we have plenty of resources that *should* allow us to instantly debunk any half-truth or anyone peddling half-truths. Fact-checking is at our fingertips. Despite this easy access to information, somehow people continue to be easily and deeply manipulated on a daily basis."

—Rohit Bhargava

"What happens to facts, information, knowledge, and history when seeing is no longer believing, and we literally cannot trust our senses anymore? Toffler conceived of information becoming kinetic in this manner, and in the space of half a century we have witnessed the shift to information becoming not only hyperkinetic, but also ephemeral. By extrapolation, facts, information, knowledge, and history could become increasingly perishable, and the current catchphrase, 'a post-fact society' may live up to that moniker." — Tanya Accone

On the future of human folly

"The irony is that our scientific triumphs over the 50 years since the publication of *Future Shock* continue to be subverted by our own human cravings, folly, hubris, and evolutionary hardwiring. We are still a long way from achieving Toffler's grandest rose-colored aspiration, that the 'super-industrial revolution' could "erase hunger, disease, ignorance and brutality." —*Rich Sax*

"I'm not saying that there won't be new bubbles and crashes, or that any of these individual firms will survive, or that our central bankers and elites won't continue to print fiat money and attempt to extract value faster than our machines can create it. Human greed and shortsightedness are perennial." — John M. Smart

On the future of what we value

"Not everything we truly value and need as a society and a planet can be measured in terms of pure profit and loss. And not every step we take may actually be progress."—*Anne Lise Kjaer*

"I see future shock as one outcome of a broken economic system that produces miraculous technology but fails to prioritize fundamental human needs and values." —*Alisha Bhagat*

"In 1970 we were disturbed that companies built in guaranteed obsolescence. We complained about having to buy new products every few years. Today we welcome obsolescence." —*Michael Tomczyk*

On the future of society

"It took our species more than 200,000 years to invent science, so we are not born with 'science in our genes.' Instead, our genetic urges are to form cultures, create stories that give us a sense of meaning, and help pass on to future generations our cultures' ways to live."—Alan Kay

"Societies undergo phase change as well. During the process our institutions change form, obey different rules, and employ different methods and tools. Human intuition, based on past experience, often fails us when we encounter new forms." —*Bill Davidow*

"Many of the world's problems are, in fact, caused by slowing down, rather than speeding up. The rate of population growth has been slowing for almost 30 years; economic growth has been slowing for more than 50 years, and productivity growth for much of that time; even the rate of digital innovation is slowing, in the face of mature and saturated markets and the end of Moore's Law. Of the big generational drivers of change, only the rate of environmental change is accelerating, catastrophically." —Andrew Curry

"Life expectancy is dropping again in many parts of the developed world. Diseases once considered eradicated have reappeared. Community cohesion is at its lowest ebb in generations. We are soft, fat, miserable, and angry."—*Nell Watson*

"The breakdown in traditional relationships was inevitable, termed by the Tofflers as 'adhocracy,' as family units break apart and scatter, following ever less reliable jobs and companies. This transience, in turn, drove the processes of individuation and shaping of new identities, groups, and subcultures—all documented in *Future Shock*—and continues to drive the polarization and 'identity politics' of today. —*Hazel Henderson*

"Why is technology, tolerance, critical thinking, and general awareness of reality increasing at a seemingly exponential rate? What is tugging on us from the future, where we can presume that the evolution of consciousness is exponentially greater?" —*Klee Irwin*

On the future of democracy

"Anticipatory democracy can and should help us, individually and collectively, understand what might happen, explore and invent positive options, clarify our values, and develop shared visions and goals."

—Clem Bezold

"The greatest trick of the Enlightenment has not been 'humanism' per se, or even freedom of speech, but the deliberate dispersal of power into units small enough that they might compete and hold each other accountable, while preventing any cabal of cheaters to gain obligate power."

—David Brin

On a future of transhumanism

"The transhumanist age is upon us, driven by the nearly exponentially evolving microchip. And it's about to get weird for humans. Our species may not even resemble mammals by the 22nd century." —*Zoltan Istvan*

"We'll be able to upload any skill or sensation or knowledge base in seconds from the 'cloud' to the brain. We'll bypass Google search and prestidigitory thumbs on our smartphones and become super-broadband extensions of our marvelous new Musk machines. With all of us lining up for the implants like queues of potheads outside newly legal cannabis dispensaries, we'll experience a new kind of blinkered bliss. The future will divide the world between potheads blissing out and Neuralink chipheads blissing in. If you don't find that sufficiently shocking as a future, perhaps you are a jaded nerd yourself, washed up on the shores of change." —George Gilder

On the future of healthcare

"My field, biomedical gerontology, is a curiosity as regards change, because its defining goal is to maintain youth in chronological old age: in other words, to develop technology that will prevent a change that naturally occurs, rather than to bring about a change that does not."—Aubrey de Grey

"Health reform experts have very little to show for all their work on cost-containment, so it's worth pondering how much better off American health care would be today if they had adopted Toffler's focus on health care delivery rather than health care finance." — Jeffrey Bauer

"The healthcare system is really a *sickness* system: it is inherently incentivized against the interests of the patient. Most people believe that the healthcare system is broken. It is not broken. It is doing exactly what it was designed to do: enrich its stakeholders. And we wonder why our medical costs are so high! But high medical costs are also a *symptom* of a problem."—*Naveen Jain*

On the legacy of Future Shock & the Tofflers

"Future Shock's 50th anniversary is the perfect occasion to ... return the meaning of future shock to that of an invitation to look more deeply into what the future holds. A good place to begin is by recognizing that this is the 50th anniversary of the book, but not the idea."—Paul Saffo

"What made the Tofflers unique was that they were interested in EVERY-THING and allowed facts to teach them. They did not approach new situations with a preset interpretation into which they had to squeeze the facts. Instead, they gathered facts and observations, and then allowed a plausible hypothesis to evolve as driven or suggested by their various wide-ranging observations."—Newt Gingrich

On the future of learning

"We can awaken our educational system from its 'silence about tomorrow' by charging students with the responsibility for thinking about the future, for the simple reason that they are going to spend the rest of their lives there. In other words, if they are going to be the ones who imagine, invent, create, and safeguard the future, they must first begin by thinking about it."

— Tach Uldrich

"This is the paradox of success. While certain methods of thinking and doing may have brought you success in the past, it's almost certain they won't reliably bring you success in the future. The key is to recognize the signals and break through before it's too late. Your once-successful strategies can cause your downfall. The challenge is to make the adjustments and adapt, not get caught in the past." —Barry O'Reilly

"This habit of unsticking your mind is incredibly important. It's the basis of all creativity and personal reinvention. To create something new, or make any kind of change, you have to be able to imagine how things can be different:"—Jane McGonigal

"In a world of accelerating disruption driven by exponential technological change, reacting quickly has less strategic value every year. It is now an imperative to learn a new competency—how to accurately anticipate the future." —Daniel Burrus

"Teaching the future means showing students how to anticipate and influence change in the midst of complexity, uncertainty, and ambiguity. It means abandoning the idea that one should teach the 'right' answer. There is no longer a 'right' answer; it is about finding multiple answers in the midst of rapid change." —*Erica Bol*

"According to a recent Microsoft project that analyzed the evolution of attention span (Gausby, 2015), there was a significant percentage decrease, from 12 to 8 seconds, between 2000 and 2015. This is a problem. Our brains require 10-20 seconds of focused attention to store new information in long-term memory. Shorter attention spans preclude this knowledge capture, yielding learning disabilities." —Carlos Osorio

On our future with AI

"This acknowledgement of AI at the federal level may be too little, too late. Much larger investments are being made by China, South Korea, France, Canada, and many other countries. We are once again playing catch-up, just as we were following Russia's launch of the Sputnik satellite in 1957." — Terry Sejnowsky

"The importance of imagination to humans naturally raises the question of whether intelligent machines can be endowed with similar abilities."

—Sridhar Mahadevan

On the future of the past

"Hindsight is useful when you're looking for patterns, but a familiar past is only ever going to give you predictable ideas, and that's of no real use in our unreasonable, unfamiliar future." —John Sanei

"In the face of an uncertain future, many people may be tempted to retreat to safety. They will do so at the cost of squandering their massive human potential. The future is not a place from which to retreat, but an evolutionary system to *embrace*. Only then can we succeed in creating real value for generations to come." —*Ian Khan*

"Toffler's statement that 'the whole world is a fast-breaking story' seems almost quaint when compared to today. To think of life 50 years ago is to

conjure a time where, on the whole, the pace was slower, life was simpler. We remember a day-to-day without much technology, connectivity, or pressure." —Lisa Bodell

"Those were heady days. Magna cartas, new civilizations, progress, and freedom. Readers of this volume may remember well the bouquet of that old wine: cyber-utopianism, sometimes nuanced and sophisticated, sometimes not so much. Either way, it hasn't aged well."—*Teffrey Eisenach*

On taking responsibility for the future

"The most important question facing humanity is whether we have the collective ability to respond to accelerating change in a world in which short-sighted actions over many decades have created extraordinary challenges for us."—Ross Dawson

On the future of futurism

"At the time they were writing the book, they felt that 'We have no heritage of the future.' They recommended, 'We must begin by making speculation about the future respectable.' How have we done in accepting this philosophy?" —Stanley Rosen

"The central challenge of futures studies, foresight work, and indeed, social and organizational decision-making in general, is to reveal the contours of this unacceptable world and to generate widespread social discussion about feasible alternatives." —*Richard Slaughter*

"This notion extends to imagining alternative futures—based on authentic exploration—that we may or may not desire, and allowing to stand back and ask, 'Is this really the future we want for the next generation?""—Maggie Greyson

"Philanthropy now has not just an opportunity, but a responsibility, to think and act for the long term. The will to do good in the world is no longer good enough. By mainstreaming foresight practice, the sector can make the future a friend, not a foe, in these unquiet, exciting times." —Cat Tully

On what the future needs most

"Empathy and hope are potent healers for future shock. We need a vision worth fighting for. Looking for a cave to hide in is not the solution. Connecting with the suffering of others and directing our energy to serve the vulnerable can help us emerge from fear to pursue a life of heroic leadership. Humanity needs AIR: a future of Abundance, Inclusion, and Regeneration."—Ignacio Peña

"The state of the future will depend much less on the state of technology than the state of the human heart." — John Schroeter

"... these methods serve to shift the narrative, which explains and gives insights to new worlds, allowing seeds of change to flourish. Ultimately, however, any collective is composed of *individuals*. It is we who must change. We are the culture. To these ends, [these methods] can play a vital role in helping individuals manifest the future they wish to see."—Sohail Inayatullah