

A Review Essay . . .

Bill McKibben. *Falter: Has the Game Begun to Play Itself Out?* New York: Henry Holt, 2019.

We need to do nothing less than change who we are, how we behave, and how we relate to the planet — Ricardo Salvador, The Union of Concerned Scientists

A leading writer, researcher, and activist on climate change, Bill McKibben has delivered a crucially important book. McKibben is painfully aware that the climate denial of recent decades has become “the most consequential lie in human history.” As a consequence, he contends, we humans now face the supreme challenge: having to deal with a failing planetary ecosystem. Time is short, and the rules of engagement come from science. As we’ve been finding out lately, nobody breaks the laws of physics.

Fully three decades ago, McKibben’s *The End of Nature* (1989) offered an early warning about what was then known as “global warming”; today it might best be described as “climate chaos.” Drawing on the work of brilliant climate scientist James Hansen, this first book struck many readers—even many environmentalists—as overly bleak. Sadly, environmental changes since that time have validated McKibben’s prescient concerns.

Nearly a decade ago, McKibben's *Eaarth: Making a Life on a Tough New Planet* (2010), sounded the alarm bells even more loudly, arguing that massive changes were already under way. In a very short time, we've created a new planet we may as well call "Eaarth." He urged readers to understand that our once-familiar planet is now melting, drying, acidifying, flooding, and burning in ways humans had never experienced.

This perspective underlies many scientists' characterization of the current geologic era as the "Anthropocene," "the Age of Humans." Elizabeth Colbert's *The Sixth Extinction: An Unnatural History* (2014) sounds a similar alarm: we humans are now causing the sixth massive extinction in two billion years of evolutionary history—hardly a badge of honor.

As one would expect, McKibben's *Falter: Has the Human Game Begun to Play Itself Out?* summarizes the history of climate awareness, highlighting some of the ineffectual attempts to deal with this overarching issue:

- At the U.N. Conference on Environment and Development (Rio Earth Summit) of 1992, G. H. W. Bush announced that "the American Way of Life is not up for negotiation." Bush made it clear that most Americans had little interest in adapting their high-consumption lifestyles. At several subsequent climate summits, northern versus southern hemisphere polarities also produced impasses. Northern-hemisphere countries (other than the U.S.) urged others to limit their consumption and emissions;

southern-hemisphere nations (plus India and China) responded that “you consumed lots of resources to reach your stage of development; now we deserve our turn.” Some did in fact “take their turn.” In the first decade of this century, India and China built hundreds of coal-fired power plants.

- Five years later, the Kyoto Protocol (1997) represented the first global effort to address climate change. Kyoto set a low bar. It committed signatories to reduce greenhouse gas emissions in about two decades by an average of only 5 percent. But even this modest quota alarmed fossil-fuel executives. Hiring some of the same advertising people who had defended Big Tobacco, the Global Climate Coalition of industry groups spent \$13 million on a massive disinformation campaign. Because of this propaganda, the Clinton/Gore administration never attempted to pursue ratification of the treaty. Our beleaguered planet has not seen another serious effort to negotiate a *binding* climate agreement since 1997.

- At the 2015 Paris climate talks, the world’s governments set a goal of holding temperature increases to 1.5 degrees Celsius and, at the high end, below 2 degrees Celsius. By the fall of 2018, however, the U.N. International Panel of Climate Change (IPCC) reported that “global temperatures might exceed the 1.5 degrees as soon as 2030.” Displaying a sense of humor, McKibben remarks “we will have drawn a line in the sand and then watched a rising tide erase it in a decade and a half.”

CLIMATE CHANGE: JUST A FEW OF THE CONSEQUENCES

As one would expect, McKibben's *Falter* presents evidence of the ever-worsening consequences of climate change. Here are a few "highlights," if that's the right word:

- Ever-worsening droughts in sub-Saharan Africa, central America, and south central Asia are continuing to uproot vast numbers of refugees. "It's widely understood," McKibben points out, "that record drought also helped destabilize Syria, sparking the conflict that sent a million refugees sprawling across Europe and helped poison the politics of the West." The U.N.'s best estimate is that left unchecked, "climate change could produce a billion climate refugees this century."

- The world's oceans have been absorbing much of the heat buildup from the greenhouse effect, but hardly without costs and consequences. Australia's Great Barrier Reef, the largest living structure on Earth, has suffered extensive damage from warmer temperatures. To present the magnitude of this die-off, McKibben humanizes the loss by rendering the anguish of local people who cherish the Reef.

- As everyone is painfully aware, in recent summers extreme heat waves have stressed vast swaths of the northern hemisphere, sparking enormously destructive fires. McKibben explains how super-intense "flames create their own weather systems, spinning tornadoes of fire into the air, filling

the sky with pyro-cumulous clouds that blast the ground with lightning to start new fires.” In November of 2018, “a place called Paradise literally became Hell in a half an hour.”

- Greatly increased heat is also melting the ice and permafrost of Alaska, Canada, and Russia. The effects will surely be disastrous, and not only because of sea-level rise. “Hidden ice, locked beneath the soils of the Arctic, is now starting to melt fast, too, and as the permafrost thaws, microbes convert some of the frozen organic material into methane and carbon dioxide, which cause yet more warming” In a self-reinforcing (“runaway”) feedback loop, the more the permafrost melts, the more will melt, releasing still more greenhouse gases. Given the vast amount of permafrost and the unusual ability of methane to trap heat, the results could exceed the catastrophic.

- Less well-known is the contraction of human living space due to rising water and increasing heat. “Our earth is large but is finite, and we’re beginning to lose parts of it.” These include not only low-lying communities near sea coasts but others on the fringes of expanding deserts. As McKibben perceptively observes, the worlds of many people shrink as they are forced to huddle around an air conditioner. From now on human life “will be [more] cramped; . . . the size of the board on which we’re playing the game is going to get considerably smaller, and this may be the single most remarkable fact of our time on earth.”

PROBLEMATIC TENDENCIES OF THE HUMAN MIND

As in his earlier books, McKibben underscores the limitations of human responses to dangers. Our hereditary inheritance leads us to react to *immediate* threats—the saber-toothed tiger snarling from behind a rock—but not to a more distant threat such as climate change. After all, the beast is not stalking us at the moment “and in thirty years maybe there’ll be an app to deal with snarling tigers.’ It’s easy to make fun of this kind of reaction, but in fact it’s how almost all of us react.”

McKibben also reminds us of the limits to human perception. Blind spots have kept us humans from seeing the slow but inexorable changes taking place in nature. Few of us notice that sea levels are rising, the robins are arriving earlier in the spring, or that the Cedars of Lebanon—the celebrated forests of Antiquity—are gradually slipping toward death and possible extinction.

Most importantly, McKibben confronts us with our own subtle but equally pervasive denialism: whether or not we see ourselves as climate believers or as climate deniers, “deep in our hearts we think it will happen somewhere else, at less fortunate places like Miami or one of those islands where sea levels are rising.” Or “at some other time,” meaning after we’re gone. If we include the related psychological device of minimalization, we’re all involved in denial. True, it does reduce anxiety, but at what cost?

More than in previous books, McKibben considers climate-change in relation to the threat technology now poses to our essential humanity. Drawing on interviews with corporate executives, McKibben perceives that some leaders of a technocratic society see the climate crisis not only as an opportunity to pursue new oil and gas exploration, but for more genetic engineering, robotics, and artificial intelligence (AI). “Innovation” is so often assumed to mean only *technological* innovation; what about new and creative ways to achieve racial harmony or prevent wars?

THE SEDUCTIVE APPEAL OF NEW TECHNOLOGIES

Throughout this new book, McKibben demonstrates a deepening understanding of the psychological tendencies that enable development of new digital technologies. These are promoted as high-status, trendy, “labor-saving” or “profit making.” Seldom are the side effects discussed because they are simply not known at the time of the buy-in.

McKibben is concerned that today “the new scale of our technological reach amplifies our power in extraordinary ways: much of the book will be devoted to examining the godlike powers that come with rapid increases in computing speed, everything from human genetic engineering to artificial intelligence.” These days we’re not doing very well as humans—and would probably do even worse by impersonating gods.

The unforeseen consequences of technology are hardly a new concern, of course. To illustrate the human tendency to become infatuated with new technology, McKibben might have referenced the Greek myth of Icarus, son of Daedalus, the craftsman who created the first waxen wings. Once aloft, Icarus became intoxicated by the heady feeling of freedom and soared ever closer to the sun. Just as his father had warned, the wax on the wings melted. Icarus plunged to his death. Often working from similarly profound myths, the great Greek tragedians illustrated the dangers of arrogance and the crucial importance of self-knowledge. Without it, they warned, even the most gifted of mortals will take a similarly great fall.

While McKibben asserts the importance of recognizing our species-specific blind spots, his special concern is that computer-enabled technologies such as genetic engineering, artificial intelligence (AI), and robotics could replace us, the fully human beings: “The human game we’ve been playing has no rules and no end, but it does come with two logical imperatives. The first is to keep it going, and the second is to keep it human.” To illustrate these concerns, McKibben could have pointed to Stanley Kubrick’s classic *2001: A Space Odyssey*. In this film classic, Hal the computer famously commandeers the human voyage of discovery.

Especially in high-tech societies, concerns with losing control of “the human project”—or even with diminishing our essential humanity—are hardly to be ignored. But on a planet where nearly half the human race

lacks sufficient food and water, these concerns may ignore the daily concrete realities of a truly global crisis.

McKibben's new book is surely pertinent when it encourages Americans to consider how, beyond their infatuation with high tech, their characteristic mentality is also contributing to a global crisis. *Falter* is especially timely when it shines a light into the dark recesses of the American mind.

AMERICAN CAPITALISM AND THE CULT OF AYN RAND

McKibben asserts that given American history, our attitudes toward wealth and consumption are contributing to climate problems. In colonial New England, Puritan religious doctrine taught that America was “the Shining City of the Hill” and that the remarkable “wealth created was a sign of moral superiority.” Even today, we Americans tend to believe that ours is a “nation under God” and that those who are “successful” are also morally upstanding. “In fact, however, our achievement was less the result of noble character, or even of constant willingness to oppress others, than it was of pure windfall.”

McKibben is hardly the first to point out that although their European ancestors colonized a continent offering enormous natural resources, Americans have tended to trumpet economic success as indicating moral superiority. Many Americans have tended to conveniently deny not only

the genocide that provided free land, but the slavery, indentured servitude, and mass immigration that delivered free or low-cost labor. The country's minimally-constrained capitalism is "a particularly rapacious variant," one that has long contributed to social, economic, and environmental problems.

Laissez-faire capitalism, McKibben notes, has led to a new "sense of what it means to be a person." Human solidarity has, especially for the more powerful among us, been replaced by what many Americans have called "rugged individualism." Given this ideology, it's no wonder that many continue to exalt competition over cooperation. To explore the effects of this characteristically American brand of capitalism, McKibben devotes a chapter to its most prominent proponent, ultra-conservative writer Ayn Rand.

As McKibben shows, Rand's libertarian version of hyper-individualistic American capitalism has been far more influential than most progressives would suppose. According to Rand, "Government is bad. Selfishness is good. Watch out for yourself. Solidarity is a trap. Taxes are theft." "There's nothing of any importance in life—except how you do your work . . . It's the measure of all human value."

For many of us, Ayn Rand has been a bad joke, a third-rate novelist who appealed mainly to conservative ideologues. This appraisal, however, vastly

underestimates her importance. McKibben shows that then and now, her adherents have included many prominent powerbrokers. One of her admirers was Ronald Reagan, who nominated another admirer, Alan Greenspan, to head the Federal Reserve Bank. After joining Rand's circle in his twenties, Greenspan would become "the avatar of neoliberalism" and "a chief architect of the world economy."

Attempting to defend Rand, Greenspan evoked Social Darwinism, the belief that Darwin's "survival of the fittest" also applies to human societies. Greenspan claimed that "creative individuals of undeviating purpose and rationality achieve joy and fulfillment. Parasites who persistently avoid either purpose or reason perish, as they should." In other words, the rich deserve to be rich and the poor deserve to be poor. After guiding U.S. fiscal policy at the Federal Reserve for 19 years, Greenspan continues to sing the praises of Ayn Rand.

Nor were Reagan and Greenspan the only prominent followers. Supreme Court Justice Clarence Thomas once insisted that his staff watch the film of Rand's *The Fountainhead*; he remains a great admirer. Ditto for billionaires Charles and David Koch, well known for setting up institutions to defend the wealthy; they've founded and financed front groups such as Americans for Prosperity. David's Koch's Foundation is now a sponsor of the PBS "News Hour."

Other devotees of Rand include some of the most powerful men in the world. Rex Tillerson, former president of ExxonMobil and former secretary of state, is also great admirer. Another is former Congressman Mike Pompeo, who “received more money from the Koch brothers than any other member of the House. Now Trump’s secretary of state, Pompeo sponsored legislation to kill tax credits for wind power, saying ‘it should compete on its own,’ which is particularly unfunny given the vast federal subsidies for fossil fuels.” Trump himself has called Rand’s *Atlas Shrugged* his “favorite book.” One of Trump’s confidants has revealed that Rand’s books “pretty well capture the mindset of the president and his men.”

McKibben also points to the regressive attitudes toward nature promoted by Rand and her hyper-capitalist acolytes. Citing a key passage from *The Fountainhead*, he illustrates the crass utilitarianism that infects much of industrial capitalism. McKibben presents Rand’s protagonist, the architect Howard Roark, casting his gaze on nature: “He looked at a tree. To be split and made into rafters.” Roark also conveys his belief that “the creator’s concern is the conquest of nature.” The stinging irony is that yes, we humans have been trying to “conquer nature” since the advent of agriculture—and now the “conquered” planet is looking less and less livable for us.

Useful as McKibben’s discussion of hyper-capitalism is, it does omit some key contradictions of all capitalism, not just the Randian strain. Its

fundamental assumptions, found in almost any Econ 101 text, are that infinite growth can continue on a finite planet, and that polluting byproducts can be dumped into the air and water as “externals”—with the public paying for the cleanup, assuming one is even possible.

Dyed deep in the American grain, a capitalist mentality exalting acquisition, consumption, status, and selfishness has led to significant societal and environmental consequences. By validating unchecked private enterprise regardless of their consequences, such conceptions make it all the more difficult to put the brakes on runaway overproduction and overconsumption. Effective collaborative action is always difficult, but an ethos of individualistic selfishness makes urgently-needed cooperative action all the more difficult. The result is a near-complete absence of democratic decisions about the plight of technology, humanity, and the planet.

McKibben is clearly not among those who view China as “the main obstacle to international progress” on climate issues. Yet he is well aware how, even in a nominally-communist country, leaders fail to consider the consequences of massive development until air pollution becomes intolerable. Whether under traditional capitalism or state capitalism, the God is economic *growth*, whatever the costs. One can only hope the Chinese will not ignore the 2018 the NASA-sponsored Human Nature and Dynamics (HANDY) report, which concludes that “global industrial

civilization could collapse in coming decades due to unsustainable resource exploitation and increasingly unequal wealth distribution.”

Demonstrating his keen sense of metaphor, McKibben sees humanity as trapped on a runaway train. The passengers find themselves in a race against time to somehow slow it down. Alarms that once could be dismissed as background noise have reached a deafening volume. “The hope we must now nourish is that the sheer extremity of the moment will evoke fresh responses from unexpected places.” For him, the climate crisis does seem to be generating new insights, some of which are expressed here. Along with Einstein, he understands that “we cannot solve our problems with the same thinking we used when we created them.”

Continuing not just his speaking and writing but also his attempts to curtail the flow of capital into fossil-fuel projects, McKibben is both a public intellectual and an activist. Equally importantly, he lives close to nature and loves it deeply. Early on in the book he affirms his hope: “I want those who pick up this volume to know that its author lives in a state of engagement, not despair. If I didn’t, I wouldn’t have bothered writing what follows.” Among the many books currently appearing on the climate crisis, none is more important than *Falter*.

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