## **Book Review**

William Souder

On a Farther Shore: The Life and Legacy of Rachel Carson

New York: Crown Publishing, 2012

Reviewed by Howard A. Doughty

Innovation in the public sector, the private sector and even in the personal lives of individuals is a rather meaningless concept in itself, for it begs the deeper question: "Innovation for what?" Change itself, or change merely for the sake of change raise but do not address profound issues of morality and ethics. Change requires us to think about the consequences of innovation and the kind of social relations that particular modifications of our principles and practices are apt to promote. Failure to consider such matters is, I believe, a prelude to nihilism.

Now, of course, not everyone would agree with my premise. Marx and Engels (1848), for instance, well understood the pattern of economic development that he witnessed and its sustaining "bourgeois" morality of which he heartily disapproved. He wrote perceptively about the urge to "constant revolution of production" under industrial capitalism and he sometimes appeared to feel a measure of sadness or, perhaps, sentimental nostalgia for the way of life it shattered on the path to full-bore modernity. He understood that the result of capitalist innovation was the destruction of traditional beliefs and patterns of behaviour: "all that is solid melts into air," he said, and "all that is holy is profaned." Of course, on reflection, Marx also thought that this devastation of tradition was a price worth paying in order to allow capitalism to fulfill its historical role. For Marx, the hideous conditions of the industrial revolution did not betoken nihilism, but a social catharsis that would be redemptive in the end.

Then, about a century later, economists like Joseph A. Schumpeter (1942, pp. 82-85) took a decidedly different view. They embraced the notion of "creative destruction" or, in its milder form, "planned obsolescence." Perpetual change in the name of progress was heralded as a sign of a healthy capitalist economy. Today, the disposable culture is seen nowhere better than in the obsession with the newest sorts of information technology. No sooner is a fashionable new communications technology purchased than it is rendered obsolete by the next flashy toy. And, in all of this frantic and frenetic impulse to skate along the cutting edge of novelty, not only is growth considered good, but so is self-justifying change and its chief motivating factor, greed.

Only when people like Donella and Dennis Meadows used clever computer models to explain that there were actual *Limits to Growth* (1972), when Gregory Bateson spoke of taking the first tentative *Steps to an Ecology of Mind* (1972) proclaiming that both official Communism and official Capitalism were equally "monstrous," when E. F. Schumacher provided a mantra for tree-huggers and aspirant Luddites by announcing that *Small Is Beautiful* (1973) and when Stewart Brand launched his *Whole Earth Catalog* did a forceful "change of consciousness" question and seem momentarily to threaten the robust assumptions of modern economics and the apparent inevitability of technological innovation.

These early, striking symbols of what Charles Reich had hopefully called *The Greening of America* (1970) were not, however, the first of their kind. They did not make the initial foray into the public mind with a coherent expression of an alternative vision of a technologically mediated future in which modern society would fulfill the Biblical injunction to exercise "dominion" over the Earth. They were the second wave of contrarians up against a colossal political economy and an equally tremendous justificatory ideology. Their lineage dates back at least to Mary Shelley's *Frankenstein* and any number of dystopian novels of the nineteenth and early twentieth centuries and, of course, their opposite utopian fictions of the same era. They were nonetheless extraordinary in their ability to interrogate explicitly the "megatrends" our society seemed incapable of keeping under control.

The shiny chrome-plated version of the American Dream was the exaggerated mid-twentieth century version of a faith that had increasingly dominated post-Enlightenment Western culture. It had long dreamed of making the world over in the Faustian image of human ambition, but it took television to bring images of the brave new world into people's homes with total efficiency. Then, when corporate economics and technology were conflated and transformed into entertainment, Walt Disney ushered in Wernher von Braun, the engineering genius behind the Nazi's V-1 and V-2 rockets, to host his monthly excursion to "Tomorrowland." Disney is emblematic of the universalization of consumerism and unfettered material development. In the era of a triumphal Mickey Mouse, it became plain that there was (apart from an occasional "beatnik" and a few ersatz "existentialists") a paucity of cultural sceptics. Instead, the US industrial giant, General Electric, was able to hire the pre-presidential Ronald Reagan to soothingly assure its TV audience of the unlimited prospects and enchanting products awaiting them. A message about the newest washer-drier or electric can opener was presented, and when the newest "labour-saving" device was adequately introduced, this is what Mr. Reagan told the North American audience: "Just remember, folks, at GE, progress is our most important product." Other corporations, both public and private, told us to maximize electricity consumption so as to "live better electrically," and urged us all to seek "better living through chemistry." The future, it seemed, was open, prosperous and irredeemably materialistic.

In time, there would be an environmental reaction to this high-octane philistinism, but before *The Whole Earth Catalog* and before the founding of Greenpeace, there was a crucial moment in the evolution of thought about the economy and the environment. It was the publication of Rachel Carson's *Silent Spring*, a remarkable warning to our species about how we were destroying the natural environment and, therefore, ultimately ourselves. According to *New York Times* writer, Elizabeth Royte (2012, September 14), it was one of the "gloomiest books ever written." In retrospect, it seems comparatively mild: for a series of real "downers," I urge people to read James Howard Kunstler's *The Long Emergency* (2005) and ongoing his weekly blog, indecorously entitled "Clusterfuck Nation," which is available at <a href="http://kunstler.com/blog/">http://kunstler.com/blog/</a>>. Nonetheless, *Silent Spring* marked a significant bump in the road to the highway to the future.

Silent Spring appeared in 1962. Western confidence in technology had been rattled a little by the recent devastation caused by the drug thalidomide. It went to print in the year of the Cuban Missile Crisis, when the world came closer to a nuclear holocaust than at any time before or since. People were generally jittery and, although ecological consciousness was low and faith in technological innovation was still relatively high, Ms. Carson's focus on the toxic effects of the pesticide dichlorodiphenyl-trichloroethane (DDT) at least temporarily shook a complacent public out of its smug

assumptions concerning the benign effects of human ingenuity—especially when the chemical in question had such apparent success in protecting crops and wiping out hideous insect-borne diseases.

To mark the fiftieth anniversary of the publication of *Silent Spring*, William Souder has presented us with an important biography of Ms. Carson which performs several tasks. It tells us a good deal about her personal and profession life, her achievements, and her struggles as one of the most honoured and also one of the most vilified women of her generation. Souder sees her in context. He gives a compelling account of what it was like to live and work as a scientist in the 1950s, and he also helps us to refocus on the overarching problem of our time: not war, not tyranny, not poverty and not bigotry, but the transcendent question of whether we will continue to befoul our planet and eventually make human and many other complex life forms unsustainable. Though much has changed, some essentials remain the same.

In its day, *Silent Spring* not only raised environmental awareness, but it also had long-standing practical consequences. Apart from banning DDT in the USA in 1992 and globally in 2004 (except for limited non-agricultural use in combating malaria), the book has been credited with promoting the creation of the American Environmental Protection Agency (EPA)—the federal regulator which is said by business leaders to be the demonic scourge of private enterprise and the number one job killer in the United States of America. It has inspired a range of government and non-governmental organizations to press for measures from stricter controls on industrial waste to building wildlife sanctuaries. It has acknowledged and unacknowledged links to contemporary eco-activists (and especially eco-feminists). It sparked "green technology." It has made it mandatory for coal producers to spend millions making commercials claiming to produce "clean energy" and the petroleum industry to do likewise attacking the EPA and, by implication, President Obama. Most recently, the Cato Institute, a right-wing "think tank," has published its own book entitled *Silent Spring at 50: The False Crisis of Rachel Carson*. The denial, like financial support for the tobacco industry and Monsanto's campaign to ban compulsory labeling of genetically modified foods, continues

Silent Spring had international effects as well. It ignited the flame that eventually enlightened at least some of us about the unintended global consequences of human industrial and technological practices, which are now widely understood to render parts of the world uninhabitable and much of the rest toxic to any reasonable quality of human life, to say nothing of the destruction of biodiversity. Think expanding deserts; think shrinking polar ice; think the extinction of plant and animal species at a rate unknown since a large chunk of interplanetary rubbish whacked the Yucatan Peninsula about sixty million years ago, wiped out most of the dinosaurs and gave some furry little mammals some *lebensraum* with which to evolve into ... us.

To complement the book, William Souder has also made a 22-minute video presentation that is available on-line at <a href="http://milkweed.org/blog/readings/on-a-farther-shore-william-souder/">http://milkweed.org/blog/readings/on-a-farther-shore-william-souder/</a>. It does not adequately substitute for reading the entire volume, but it may be considered an audio-visual appetizer to whet the appetite for a more complete written meal. He opens with this statement: "Rachel Carson is the founder of the environmental movement. At least I think that's a good shorthand way to think about what she did." It's a forgivable exaggeration.

In *On a Farther Shore*, Souder ranges widely over Ms. Carson's talents and preoccupations. Although *Silent Spring* is now deemed to be her most notable contribution to modern culture, the

author reminds us that she had been a best-selling writer long before her battle against the unrestricted use of DDT and related poisons. Her working life with the U. S. Fish and Wildlife Service was mainly focused on writing government pamphlets and reports, but she emerged from relative obscurity with the publication of *The Sea Around Us* (1951), a passionate paean to the Earth's oceans which secured a place on the *New York Times Best-Seller List* for thirty-nine weeks. It also won her a National Book Award, an honour she shared with poet Marianne Moore and novelist James Jones, whose *From Here to Eternity* narrowly defeated Herman Wouk's *The Caine Mutiny* and J. D. Salinger's *The Catcher in the Rye* in the contest for the best novel of the year. The royalties she garnered allowed her to quit her day-job and to devote herself fully to research and writing. A decade later, the result was *Silent Spring*.

Other aspects of Carson's life—her responsibilities as a family caregiver and her somewhat complicated love life—are interesting enough, but it is her role as an author-activist that forms the basis of her public legacy. It is, of course, difficult to appreciate completely how unusual Ms. Carson's work and all too brief life was. She succumbed to breast cancer just two years after *Silent Spring* made her an object of adulation by nascent environmentalists and of virulent denunciation by corporate apologists at the time.

In the pre-Internet world, when a simple exchange of correspondence among international scientists might require weeks through the normal postal system, long-distance telephone calls were prohibitively expensive, books took months to find an audience and there was an absence of the kind of instant celebrity (and rapid return to anonymity) that gives contemporary public intellectuals and advocates a somewhat tenuous shelf-life, Rachel Carson captured the public imagination in a way that is seldom seen today. A frequently repeated story, for example, mentions that President John F. Kennedy had only to mention "Miss Carson's book" and everyone knew instantly what he was talking about. Now, there are few who could hope to dominate discussion as much or for as long as she managed to do. Currently, information overload and the fragmentation of the print, broadcast and social media make such circumstances unlikely—if, that is, a president or a presidential candidate could be expected to read or to mention any book at all. Nevertheless, Carson's story makes it possible to think seriously about the role of the extraordinary individual in promoting social awareness and social change. And it is worth a moment to reflect on how this happened then and how different communications are now.

In Rachel Carson's case, the putative villain was DDT in particular, but it also included the entire class of synthetic pesticides. DDT, we should recall, had been synthesized in 1874, but seemed to have little scientific or commercial value until Paul Müller discovered that it killed insects. It almost immediately became a standard weapon in the war against malaria, typhus and similar diseases. The discovery won Müller the Nobel Prize for Medicine in 1939 and, after World War II, the substance could be found in widespread agricultural use from massive corporate farming operations to small family gardens and even pantry shelves. Like others of a certain age, I recall my parents cheerfully tossing it by the handful on back-yard vegetables and on fruit trees. Rachel Carson almost single-handedly put an end to that and started something much larger as well.

Writing in *The Christian Science Monitor*, Emily Cataneo (2012) described Carson's influence in somewhat unflattering terms: "the idea called conservation died and rose again in a pessimistic, partisan incarnation known as environmentalism, which hinged on a central idea: mankind must be

saved from itself. The writer who precipitated that transformation was Rachel Carson." On this view, conservation in the style of Teddy Roosevelt or, more seriously, John James Audubon was fine. Creating national, state and local parks was OK, or even America's "best idea" according to documentary film maker Ken Burns. Making conservancy into a "political" issue and setting up adversarial relations with major business enterprises and sluggish government administrators was, however, apparently impolite. People such as Rachel Carson, it was commonly agreed, may have had a point but, by interrupting the natural flow of business, they were becoming unmanageable militants who were going too far.

Like her or not, Carson emerges in Cataneo's judgement as the stuff of heroic historical narrative. In setting Carson against DDT and in favour of bird's eggs, the stage was prepared for a momentous battle. Humming the tune of Joni Mitchell's special plea ("Give me spots on my apples, but leave me the birds and the bees ... please."), it is possible to see Carson as a quixotic figure taking aim at the chemical companies and others, but it is also possible to portray her as an arch-villain herself—an environmental extremist who justly earned the condemnation of a sizable part of public opinion. Her critics called her naïve. They belittled her qualifications. She was, it was repeatedly said, not a "real" practicing scientist, but merely a science writer with only a Master's Degree in Zoology (not even in the more prestigious field of Biochemistry, which presumably might have given her more credibility, but not as much as if she had a Ph.D.). As such, she was seen at best as a semi-skilled amateur, an inexpert journalist and a person whose ill-formed opinions were consequently lethal.

Rachel Carson had not only attempted to undermine one of the sustaining myths of corporate capitalism, but she took special aim at one of the most powerful sectors of the US economy. From the outset, the virtues of DDT were trumpeted, and Rachel Carson was called a "communist" whose real agenda was to destroy the American free enterprise system. The language anticipates Canadian Prime Minister Stephen Harper's later claim that global warming is an illusion manufactured by a socialist conspiracy (CBC, 2007, January 30), and his more recent insistence that environmentalists concerned about the exploitation of the Alberta tar sands are nothing but foreign-financed fanatics (Cox, 2012, September 6). It also foreshadowed science fiction writer Michael Crichton, who brought us twenty-seven major fictional works including *Jurassic Park* and the global-warmingdenial novel *State of Fear*, and who famously declared that, by successfully urging the banning of DDT, Ms. Carson "killed more people than Hitler" (Souder, 2012, September 4).

William Souder effectively counters these arguments by pointing out that Rachel Carson *never* urged the complete elimination of DDT, and that it is preposterous to blame her for "the deaths of millions of Africans." Such critics, he avers, "are clueless about the content of *Silent Spring*," and he deplores organizations such as The American Enterprise Institute, The Competitive Enterprise Institute and other "research" foundations for ideologizing the debate and misrepresenting Ms. Carson's position in the interest of making cheap rhetorical points. In the resulting contests of wit and of will—whether the topic be clear-cut lumbering, habitat destruction for endangered species, hydraulic fracturing ("fracking"), nuclear power generation, strip mining or any other human activity that alters some important aspect of the biosphere—heated and sometimes plainly irrational claims and counter-claims are frequently made.

A useful exercise, therefore, would be to assess the *real* role of "heroic" innovation, by which I mean some particularly important step taken by an exceptional individual or group that sets society

or some significant element in it on a dramatically new course, changing not only behaviour and belief but circumstances as well. A pertinent phrasing of this question has been raised in the main title of a book by this journal's editor and publisher Eleanor Glor (2003): *Is Innovation a Question of Will or Circumstance?* My answer, both in general terms and in the case of Rachel Carson, is this: "It is both, but not equally." In the absence of the necessary and sufficient circumstances, individual will or even the collective enthusiasm of a group are unlikely to compel a change for which the times are not right; however, in the absence of exceptional leadership, opportune historical circumstances alone do not necessarily produce innovation.

The first proposition is pretty firm. Making changes that are inappropriate for a particular culture at a particular time assure the innovator a life of perpetual anonymity or, in Edward Thompson's fine phrase, "the enormous condescension of posterity." On the other hand, in the absence of Mr. Darwin, someone else would surely have come up with the essence of his theory of random mutation and natural selection in the mid-nineteenth century (in fact, someone did, and his name was Alfred Russel Wallace). Likewise, in the absence of Mr. Einstein, someone else would surely have clambered up upon the shoulders of various giants and fashioned the formula E=mc² sometime in the early twentieth century. So, it is inconceivable to me that a parallel of Ms. Carson's contribution to environmentalism would not have been made by someone else at about the same time (though the prompt might not have been an analysis of the ecological effects of DDT). This is not to minimize her importance or individual merits, but only to avoid the temptation of attributing change, Hegellike, to world-historical individuals—they are like impressive white caps upon a windy sea that gain our attention because of their visible beauty and power, which draw our attention away from the mightier forces below.

Such speculation, however, need not detain is for long. The fact remains that many of Rachel Carson's celebrants and not a few of her detractors believe, as H. Patricia Hynes nicely put it, that "*Silent Spring* altered the balance of power in the world. No one since would be able to sell pollution as the necessary underside of progress so easily or uncritically."

The question now is this: Since corporate interests, enabled by misguided or uninformed politicians, are currently "selling pollution" at a greater rate than Rachel Carson faced a half-century ago, are we at risk of succumbing to social amnesia once again? In order to take concrete measures to halt ecological collapse and to alter our collective behaviour to promote optimal biodiversity and terrestrial habitability, must we await a newer and darker Jeremiah—perhaps someone inspired by Bill Kunstler or Bill McKibben, author of Eaarth: Making a Life on a Tough New Planet (2010) and The Global Warming Reader (2011) respectively? Or will global environmental degradation make such a guiding light unnecessary, for the circumstances will eventually be too obvious for neoliberal ideologists, official education, the mass media and their corporate supporters to deny? Perhaps remembering Rachel Carson for what she was, no more but certainly no less, will remind a few of us about the real issues before us. Who knows? Maybe the necessarily leadership has already packed and has departed from some park or a city square which the Occupy Movement held a year or so ago. Perhaps it is now entering programs in Biochemistry or Political Economy or even Philosophy. Perhaps it will soon acquire the wisdom, expertise and political acument to energize a movement that is simultaneously well-intentioned, well-informed and, in some sense, populist. I'd like to think so. If not, much more than a generation or two from now may be too late. If not, Rachel Carson's legacy may be tragically short-lived.

## **About the Author:**

*Howard A. Doughty* is a Professor in the Faculty of Applied Arts and Health Sciences at Seneca College in Toronto, Canada. He is the book review editor of *The Innovation Journal* and of *The College Quarterly*. He is widely published in the areas of political economy and postsecondary education. Howard can be reached at howard\_doughty@post.com.

## References

Bateson, G. 1972. Steps to an Ecology of Mind. New York: Ballantine.

Carson, R. 1951. The Sea Around Us. New York: Oxford University Press.

Cataneo, E. 2012, September 11. "On a farther shore," *Christian Science Monitor*. Retrieved September 30, 2012 from csmonitor.com/Books/Book-Reviews/2012/0911/On-a-Farther-Shore

Cox, B. 2012, September 6. "Mr. Harper, dissent is vital to democracy." *The Globe and Mail*. Retrieved September 6, 2012, from http://m.theglobeandmail.com/commentary/mr-harper-dissent-is-vital-to-democracy/article552157/?service=mobile.

Glor, E. 2003. Is Innovation a Question of Will or Circumstance? Ottawa: The Innovation Journal.

Kunstler, W. 2005. *The Long Emergency: Surviving the Converging Catastrophes of the Twenty-First Century.* New York: Grove/Atlantic.

Marx, K. and F. Engels. 1848. *The Communist Manifesto*. Retrieved May 1, 2012 from www.marxists.org/archive/marx/works/download/pdf/Manifesto.pdf.

McKibben, W. 2010. Eaarth: Making a Life on a Tough New Planet. New York: Henry Holt.

McKibben, W. Ed. 2011. The Global Warming Reader. New York: OR Books.

Meadows D. D. L. Meadows, J. Randers and W. Behrens III. *The Limits to Growth*. New York: Universe Books.

Reich, C. 1970. The Greening of America. New York: Bantam.

Royte, E. 2012, September 14. "The Poisoned Earth." *The New York Times*. Retrieved September 18, 2012 from http://www.nytimes.com/2012/09/16/books/review/on-a-farther-shore-by-william-souder.html?pagewanted=all.

Schumacher, E. 1973. *Small Is Beautiful*. London: Blond and Briggs. Retrieved August 6, 2012 from http://ebookbrowse.com/schumacher-1973-small-is-beautiful-pdf-d275258604.

Souder, W. 2012. "Rachel Carson didn't kill millions." *Slate*, September 4. Retrieved September 12, 2012 from:

www.slate.com/articles/health\_and\_science/science/2012/09/silent\_spring\_turns\_50\_biographer\_william\_souder\_clears\_up\_myths\_about\_rachel\_carson\_.html.