

Ruling Ourselves with Truth and Grace: Lessons from the Elms

Calvin B. DeWitt

High above Midwestern streets, they formed living gothic arches. With foliage fanning from branching trunks, American Elms stood tall on buttressed trunks, their tough roots resisting the pounding traffic below. Their awesome presence did not last: they were struck down at mid-century. Fungal spores-- airlifted from crown to crown by flying beetles-- germinated on fresh green leaves, worked inward, downward, through vascular tissues, bringing death from crown to root. An epidemic wave of deadwood swept across the landscape, providing ever more habitat for producing spores and bark beetles. Meeting death's wave, we blasted these giants with DDT. Beetles died. Elm leaves glistened and so did drenched lawns below. Washing it from cars and bikes, we blessed DDT! Eventually we lost the battle, but not all was lost. Our gain was new "laboratories of nature" that soon would teach ecology to America. Accompanied by new "ecowords"-- crafted by attaching *eco-* (from the Greek, *oikos*, meaning "house" or "household") to words of old-- these new labs would help make "ecology" a household word.

Journalist Gregg Easterbrook has joined this eco-wordcrafting. Adding the *eco-* prefix to "realism" and "realists" in *A Moment on the Earth: The Good News About Our Environment*, (1995, New York: Viking), he indexes "ecorealism" and "ecorealists" on 74 of this tome's 745 pages. Advocating learning from "laboratories of nature" he tells us that "The founding concept of ecorealism is this: Logic, not sentiment, best serves the interests of nature." To his question, "Love nature?" he answers: "Learn science and speak logic."

"One reason I propose ecorealism," he says, "is to create a language in which environmental protection can be discussed without descending into the oratorical quicksand of instant doomsday on the left and bulldozer apologetics on the right..." (p. xx). Advocating a balanced

view, this *Newsweek* writer calls us to appeal to science and logic. When dealing with our embattled elms he would balance between extremes. "Balance" is what he seeks, and thus makes space for his prominent predecessor, Rachel Carson and her award-winning book, *Silent Spring* (1962, reprinted 1994, Boston: Houghton-Mifflin). Billed on the top line of his dust jacket, this prominent pioneering woman scientist is acknowledged as the first to sound the environmental alert, the one to whom Senator Abraham Ribicoff declared at her congressional appearance in 1963, "Miss Carson, you are the lady who started all this."

Reading the subtitle, "The Coming Age of Optimism" and taken by "The Good News About Our Environment" on the dust jacket, I am ready to approve its contents, sharing his conviction that "Environmentalism, which binds nations to a common concern, will be the best thing that's ever happened to international relations." I put a finger where bibliography and end notes begin, preparing to flip between his text and sources, and see another acknowledgement of Rachel Carson. Noting that "Environmental books contain such a confluence of facts that footnoting every reference would cause the little carrot (sic) marks to take over the pages," Easterbrook says it is "For this reason Rachel Carson did not footnote *Silent Spring*..." Using her model, he excuses himself, saying "for this reason I do not footnote either." "Carson provided a general bibliography and a listing of scientific studies, government reports, and other primary documents," he writes, and "here I do the same."

I reach for my copy of *Silent Spring* and compare, finding his method similar, but with an important difference: Rachel Carson's end notes are cross-referenced to specific page numbers; his are not. Thus I will not be able track linkages between his text and sources as I can for Rachel Carson. Nonetheless, "balance" seems to be Easterbrook's theme, and so I

turn to her index, finding she cites this word only under "balance of nature" just as he does. His predecessor by a third-century writes: "In some quarters nowadays it is fashionable to dismiss the balance of nature as a state of affairs that prevailed in an earlier, simpler world-- a state that has now been so thoroughly upset that we might as well as forget it. Some find this a convenient assumption, but as a chart for a course of action it is highly dangerous. The balance of nature is not the same today as in Pleistocene times, but it is still there: a complex, precise, and highly integrated system of relationships between living things which cannot safely be ignored any more than the law of gravity can be defied with impunity by a man perched on the edge of a cliff. The balance of nature is not a *status quo*; it is fluid, ever shifting, in a constant state of adjustment. ..." (*Silent Spring*, p. 218). (p. 246 in the 1994 edition)

Pretty standard depiction for a biological scientist, I think; the balance of nature is fluid, ever shifting, always adjusting. Consulting Easterbrook on the same topic, I read this: "In the standard depiction of the balance of nature, "balance" means inaction. For immense amounts of time ecospheres hold about the same populations of about the same creatures doing about the same things..." And then, citing his famous predecessor, he writes: "More than any ecological thinker, Rachel Carson popularized the notion of nature as existing mainly in idyllic changelessness for immense periods. This helped Carson highlight her premise that human-caused environmental changes were happening with unprecedented speed" (page 658).

Whoa! I carefully consult Rachel Carson again, comparing. Easterbrook compels me to challenge his claim. I re-examine her statement and next search carefully through *Silent Spring* page by page. I consult her books, *By the Edge of the Sea*, and *The Sea Around Us*, finding to confirm Easterbrook. On the contrary, much confirms the opposite. Easterbrook has inverted

Rachel Carson's message. He has made this professional biologist say the opposite of what she writes and inverts what has been long-established in zoology.

Inspired by the dust jacket, disturbed by this inversion, I am compelled by Easterbrook to ask the question that looms over his massive work: Why does he make this woman say the opposite of what she writes? Troubled by his inadequate citation of sources, I read the first endnote for each chapter. "My file of enviro quotes is heavy enough to provide ballast for an ocean steamer," he writes. "Yet often in this book I paraphrase ecological sentiment rather than quote a specific person" (Footnote 1, page 708). At this point a small Erratum card falls from his book which reads: "Please note, on page 382, that the Environmental Defense Fund has not accepted any payment for its advice to McDonalds and Johnson & Johnson, as the text incorrectly states... and EDF has not received payment from Prudential."

I am apprehensive now, wondering. Why should the passage cited on the Erratum card have been written wrongly to begin with? Why should he "paraphrase ecological sentiment" rather than quote specific people? Why should he invert Rachel Carson? Is Easterbrook an "ecorealist" who would "Learn science and speak logic?" Will his book demonstrate how to model the integrity he espouses?

My reading unfortunately, finds that the reservations he engendered are well-founded. His great collage of material makes credible his claim that his "file of enviro quotes" is massive. But his job, while impressive in scope, is not finished; he has neither digested nor integrated what he has engulfed; he has not sifted and winnowed for the truth. He has not been gracious to those seekers who have gone before. Casting his gloomy frown on people who don't smile

about environmental matters, he scowls at "commentators" that "continue to read from a script of instant doomsday." Yet he asks for "optimism." While telling us "It's time we began reading from a new script, one that reconciles the ideals of environmentalism with the observed facts of the natural world" (p. xvi), he often fails to practice what he advocates.

Of course, we must agree with him that we must learn from the "laboratory of nature." No doubt, in the case of dying elms, he would invite us to enter through their gothic arches into the "natural laboratory" of trees, robins, and lawns. There we would learn robins as worm-eaters and fruit-eaters: hopping, tilting their heads, thrusting beaks into soil, tugging and pulling worms from burrows, pecking them repeatedly and working them down their gullets; perching in shrubs, feeding on beak-sized berries. With no interest in birdseed, robins would teach us that lawns and shrubs are their feeding places-- not bird feeders.

Easterbrook looks at robins too, but before looking through his eyes, we can profitably enter one of those new "natural laboratories under the elms"-- the 185-acre Michigan State University campus. It was "quite by chance" writes Rachel Carson, in *Silent Spring*, that John Mehner chose to do research on robins there in 1954. Before concern was raised about DDT, he conservatively estimated 370 adult robins on campus. When this number declined the next year, he and Professor George Wallace found this coincident with extensive spraying of DDT against Dutch Elm Disease. Rachel Carson tells us that "A key piece to the jigsaw puzzle of the doomed robins" was published in 1958 by Dr. Roy Barker in the *Journal of Wildlife Management*. In it he showed how robins are linked to elm-spraying via earthworms: "The trees are sprayed in the spring... and often again in July... In autumn the leaves fall to the ground, accumulate in sodden layers, and begin the slow process of becoming one with the

soil. In this they are aided by the toil of earthworms, who feed in the leaf litter, for elm leaves are among their favorite foods..." And thus worms, and robins, also consume DDT. While every robin nest observed by Mehner in 1954 produced young, by the end of June, 1957, he found "only one young robin." In 1962 only two or three dozen robins were present.

Our newest "laboratory of nature" taught us about transfer of biocides in food chains. It would also teach us that DDT is concentrated each step up the food chain by a factor of 10 or so. Thus, Rachel Carson wrote, (p. 118): "Like the robin, another American bird seems to be on the verge of extinction. This is the national symbol, the eagle." Easterbrook reacts to this by saying, "When she put these words on paper in 1962, the robin was the most common bird in North America." Without telling the extent of the death of American Robins and other birds, and neglecting the fact that our most prolific bird was the English Sparrow, he opines, (p. 80) "The notion that the most prolific avian was about to fall extinct was the most eye-catching assertion in *Silent Spring* and brought the book considerable publicity. The prediction never reached the general zone of true." And then, neglecting her reference to the Bald Eagle and overlooking what we know of robin feeding habits, he proclaims, "The robin remains ubiquitous at backyard feeders."

Making us wonder why he thinks robins feed at birdfeeders, he stretches his credibility further by suggesting that biologist Rachel Carson was worried about the extinction of earthworms. He tells us that she believed that "Once the earthworm, a key friendly species, fell extinct from excess spraying of poisons, the food chain of songbirds would be destroyed forever. The next year there would come a silent spring" (p. 80, 1994). Immediately he casts judgement on the words he imposes on her, exclaiming, "A dismal scenario indeed." Exploring Rachel Carson's

book, I found nothing to support his contention. Earthworms were never endangered. Contrary to what Easterbrook makes her say, zoologist Rachel Carson was a pioneer teacher of what now is widely known-- bioconcentration of fat-soluble biocides as food is passed upwards in the food chain. "We spray our elms and the following springs are silent of robin song, not because we sprayed the robins directly but because the poison traveled, step by step, through the now familiar elm leaf-earthworm-robin cycle. These are matters of record, observable, part of the visible world around us." (p. 189). "Doing science" and "speaking logic," this learned zoologist notes that "One of the most sinister features of DDT and related chemicals is the way they are passed from one organism to another through all the links of the food chains" (p. 22), giving us the example of how hay containing 7 to 8 parts per million DDT, fed to cows, may lead to butter with up to 65 parts per million DDT. Her point is that organisms higher in the food chain, like the Bald Eagle, are at greater risk.

Easterbrook presses his attempted destruction further by inverting Rachel Carson's premise in *Silent Spring*. She had compiled all instances of verified poisoning and describes all of them happening in an *imaginary* town, warning that "this imagined tragedy may easily become stark reality we all shall know." "We stand now where two roads diverge," she writes in her book's final chapter (p. 277ff), "But unlike the roads in Robert Frost's poem, they are not equally fair. The road we have long been traveling is deceptively easy, a smooth superhighway on which we progress with great speed, but at its end lies disaster. The other fork of the road-- the one 'less travelled by' offers our last, our only chance to reach a destination that assures the preservation of our earth. The choice after all, is ours to make." She is not predicting a silent spring; she is sounding a warning. She wants people to "learn science"-- to gain an ecological understanding that will allow them to choose their path. Her premise is this: if we are provided with the

necessary knowledge, if we as citizens are given the "right to know," (p. 278) we will be able to choose the path we should take.

But Easterbrook invents another premise and impresses it upon her. "As an ecocritic, I find it marvelous that the premise of *Silent Spring* turned out to be unfulfilled," he writes. "Society heeded Carson's warning, enacted the necessary reforms (like bans on bioaccumulative pesticides such as DDT and chlordane), and realized such a prompt environmental gain that the day of reckoning Carson foresaw never arrived... Therefore Rachel Carson performed an important public service by being wrong" (p. 82-3).

Failing to recognize the human obligation to prophecy when danger lurks, and failing to acknowledge the purpose of prophecy-- a purpose known from the time of Ezekiel (Ezekiel 33:1-9)-- Easterbrook chooses to ignore Rachel Carson's message, as he also fails to notice that robins do not come to feeders. Rachel Carson, as Moses did for ancient Israel (Deuteronomy 30:15-20), announces that we stand at a choice point-- where two roads diverge. Failing to see her plea for "our right to know" as prerequisite to "learning science" and "speaking logic," Easterbrook would have us somehow straddle both roads on a path he would call "optimism."

There *is* a path of optimism of course, but to seek and find it we must "learn science," "speak logic," be "ecological realists" and deliberately and persistently "Choose life." In doing so, Rachel Carson suggests we lay down our arms-- the chemical barrage that is as "crude a weapon as the cave man's club"-- so we better can respect and help sustain "the fabric of life-- a fabric on the one hand delicate and destructible, on the other miraculously tough and resilient, and capable of striking back in unexpected ways" (p.296-7). Clearly, if we choose to join her,

we will take the road 'less travelled by'-- the road of ecological integrity-- and optimism.

Thus, we should take seriously Easterbrook's admonition, "Learn science and speak logic" and we should become "ecological realists." To do so, however, we need to learn science from science. A good start is G. Tyler Miller's textbook, *Environmental Science* (1995, Belmont, CA: Wadsworth) --a readable book that through several editions and two versions has sold over 1 million copies. Easterbrook's book, unfortunately is not the place to learn science; unfortunately, neither is the place to learn logic or ecological realism. Easterbrook of course rightly criticizes prophets who remain gloomy even after people listen and change their ways for the good. The prophet Jonah had that problem when he "fell into a rage" when, because the people had "renounced their evil ways," God did not bring the threatened disaster Jonah prophesied to the people of Nineveh (Jonah 3 and 4). Good prophets not only sound the alarm when it must be sounded, but also rejoice when their warnings move people to a right path and avert disaster.

Unfortunately, Easterbrook submerges the optimism he advocates in confusion and inversion. He buries this advocacy by confusing environmental issues, fusing what is true with what is not, making a pioneering woman prophet say the opposite of what she has written. He fosters discontentment with nature, touting its "natural badness" in his "Case Against Nature" (p. 140ff.), telling us we should be in the business of altering it into something we think it would rather be. While he advocates a positive approach to environmental issues, he fails to instill the optimism and enthusiasm he says he desires for us, controverting his plea with sullenness. And his clever rearrangements and selection of facts and non-facts violate his plea for "learning science" and "speaking logic."

I had hoped for a well-founded optimism when I started my journey with Easterbrook-- an optimism rooted in truth and grace. Environmental optimism is reasonable and necessary. There *are* some hopeful signs that we are learning to live rightly on Earth-- that we are discovering the right path and taking it. But the guarded optimism that is possible today is not served by confusing the questions and the issues before us; neither is it served by confusing needed actions nor ungracious dealing with the truth-seekers among us. Clarity, not confusion, is needed in order to make the proper choice that looms before us.

Easterbrook on his concluding page envisions "our moment on the Earth the juncture at which a profound positive development of history began: the moment when people, machines, and nature began negotiating terms of truce." But his language of war, negotiation, and truce misses the point of the woman prophet he ungratefully disparages. Rachel Carson already has taught us differently, showing us that this war against nature is inevitably a war against ourselves. And it is her gracious optimism, based upon learning science and speaking logic that gets to the ecological realism Easterbrook purports to assert. Encouragingly and realistically, she told us in her April, 1963 appearance on CBS Report, "Now, I truly believe that we in this generation must come to terms with nature, and I think we're challenged as mankind has never been challenged before to prove our maturity and our mastery, not of nature, but of ourselves." We must come to rule ourselves with truth and grace.

The elms no longer arch above us, but the lessons they have taught us, taken seriously, can teach and lead us to mastery of ourselves and to an optimism rooted in science, logic, and the pursuit of truth.

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Mr. Donald Ottenhoff, Associate Editor
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Suite 1405
Chicago, Illinois 60605-1150

Dear Mr. Ottenhoff,

Enclosed is my review essay of Gregg Easterbrook's *A Moment on the Earth: the Coming Age of Environmental Optimism*, as requested in your letter of May 23, as double-spaced hard copy and on 3 1/2 diskette. The diskette has several copies of the same manuscript in the following programs: WordPerfect 6.0 (DEWITT.W60 and DEWITT.BKP), WordPerfect 5.1 (DEWITT.W51), and Standard ASCII (DEWITT.ASC).

I hope the manuscript meets your expectations.

Sincerely yours,

Calvin B. DeWitt

p.s. Please note that my summer address applies from June 1 through August 20, and that my academic year address applies for the remainder of the year (2508 Lalor Road, Oregon, Wisconsin 53575 - phones: 608 222-1139 & 255-0950; fax: 608 255-4228).