

## CHAPTER FOUR    **The Triumph of Optimism**

**T**he path to Julian Simon and Paul Ehrlich's bet led through the intellectual jousting of scholarly journals and newspaper op-ed pages. Simon and Ehrlich clashed in print directly for the first time in the summer of 1980. In the June issue of *Science*, Simon launched a blistering attack on environmental doomsayers. He opened the article by debunking a *Newsweek* and United Nations story that more than a hundred thousand West Africans had died of hunger caused by drought between 1968 and 1973. In fact, only a small fraction of that number had died as a result of the drought. Exaggerated statistics were an all-too-common tool of manipulation, Simon argued: bad news about population growth, resources, and the environment "published widely in the face of contradictory evidence." Simon similarly questioned estimates that arable land was disappearing. Rather than more farmers working smaller plots of land to eke out subsistence, Simon said, fewer farmers produced more food and fed more people than ever before, particularly in higher-income, industrialized countries.<sup>1</sup>

At the center of his attack, Simon put Ehrlich's *Population*

*Bomb* and other warnings of population-driven famine. Ehrlich had suggested in his book that limited food supplies might necessitate compulsory population control and a form of national triage that would cut desperate countries off from food aid. Yet, Simon pointed out, food supply had increased 25 percent during the previous quarter century. Farmers in the United States in 1980 worried about “disaster from too much food.” Deaths from famine globally had decreased since World War II.

Simon also slammed the idea—popularized by *The Limits to Growth*—that natural resources are finite and humanity approached ecological limits. This “apparently self-evident proposition,” Simon wrote, was actually “downright misleading.” Energy was “getting more plentiful,” not scarcer. Using the example of copper, Simon made his own extreme claims about mineral resource abundance. He rejected the idea that copper supplies would ever run out. More copper could be made from other metals, he said. “Even the total weight of the earth is not a theoretical limit to the amount of copper that might be available to earthlings in the future. Only the total weight of the universe . . . would be such a theoretical limit.” With these claims about the infinitude of available copper verging on alchemy, Simon pushed his ideology to its limits. But his essential argument reflected basic economic thinking about the advance of technology and substitution of different materials. “Because we find new lodes, invent better production methods, and discover new substitutes,” he wrote, only the limits of human knowledge constrained “our capacity to enjoy unlimited raw materials at acceptable prices.”<sup>2</sup>

In conclusion, Simon asked why “false statements of bad news” dominated public discussion. He blamed financial incentives for researchers who sought grant funding and the fact that “bad news sells books, newspapers, and magazines.” Simon

also suggested a psychological explanation, arguing that people tended to compare the present and future with an “ideal state of affairs” rather than with the past. More careful comparisons with past trends would reveal steady improvement in human welfare, Simon thought. New exponential growth models, such as those used in *The Limits to Growth*, tended to “seduce and bewitch” their users. And all of this had the proverbial effect of the boy who cried wolf. Rather than “harmless exaggeration,” apocalyptic predictions by Ehrlich and other environmentalists, Simon thought, resulted in a “lack of credibility for real threats” and a “loss of public trust.”<sup>3</sup>

Simon’s *Science* article, which he also excerpted for the *Washington Post* opinion page, infuriated the Ehrlich camp. *Science* published a flurry of bitter letters from them in December 1980. Paul and Anne Ehrlich, along with their close colleagues John Holdren and John Harte, jointly denounced Simon’s article as full of “striking misconceptions.” Ehrlich and his colleagues insisted that energy and mineral scarcity was a real and present threat. They called Simon’s idea that copper could be made from other metals “preposterous.” They attacked Simon for suggesting that it was proper to “appropriate all the earth’s resources” to support human beings. They argued that technology could not replace services provided by ecosystems to regulate climate, water cycles, solar radiation, and other essential processes. The scientists derided Simon’s “tired old argument” as typical of economists who “know nothing about geology.” Wayne Davis, an expert on bat migration and biology at the University of Kentucky—no geologist himself—insisted that minerals and fossil fuels were scarce. Simon’s prediction that oil prices would continue to fall “defies logic,” Davis scoffed.<sup>4</sup>

In response to the letters, Simon dismissed the idea that a new era of resource scarcity had begun, one that marked a “dis-

continuity” with long-term resource trends. He believed the economic forces that had yielded progress in the past would continue to spur innovation and market solutions in the future. Simon also insisted that he had not said that “all is well everywhere.” The future was not simply “rosy.” “Children are hungry and sick; people live out lives of physical or intellectual poverty, and lack of opportunity; war or some new pollution may finish us.” Yet it did not help the world’s poor to insist that things were getting worse instead of recognizing the improvement in aggregate economic trends. Simon also acknowledged that he simply differed from the scientists on the basic question of the “rights of nonhuman species to exist.” “In tradeoffs between human beings and the rest of nature,” Simon wrote, “my sympathies usually lie with people.”<sup>5</sup>

Ehrlich and Simon’s rhetorical battle continued into the spring of 1981, spilling into the pages of the *Social Science Quarterly*. “How often does a prophet have to be wrong before we no longer believe that he or she is a true prophet?” Simon goaded. He argued that Ehrlich had been wrong about the “demographic facts of the 1970s,” whereas Simon’s own predictions had been right. Ehrlich had said in 1969, for instance, “If I were a gambler, I would take even money that England will not exist in the year 2000.” Ehrlich had been expressing his view that, without worldwide population control, overpopulation would cause nuclear war, plague, ecological catastrophe, or disastrous resource scarcities. Complaining that Ehrlich made wild statements without ever facing the “consequences of being wrong,” Simon said, “I’ll put my money where my mouth is” and asked Ehrlich to do the same. Rather than betting on the future existence of England, Simon challenged Ehrlich to bet on raw material prices and test their theories about future abundance. Ehrlich’s warnings about limits to economic growth,

famines, and declining food harvests suggested rising prices that reflected growing scarcity due to population growth. But Simon argued that prices generally were falling for natural resources because they were becoming less scarce due to increasing productivity and human ingenuity.<sup>6</sup>

Ehrlich took the bait, accepting Simon's "astonishing offer before other greedy people jump in." Ehrlich consulted with his friends John Holdren and John Harte to choose the raw materials whose supply they thought would come under the greatest pressure. They chose five key metals. Each played a critical role in the modern economy. Chromium was a crucial element in stainless steel and valued as a corrosion-resistant coating. Copper had been used for thousands of years for its malleability and then later for its ability to conduct heat and electricity. Nickel helped make stainless steel and batteries and magnets. Tin yielded corrosion-resistant alloys. Tungsten's heat-resistant characteristics found uses in lightbulbs, cathode-ray tubes, heating elements, and alloys. Each metal had seen dramatic production increases during the twentieth century. More than 95 percent of the copper ever mined in the history of the world, for example, was produced during the twentieth century.<sup>7</sup>

The market price for every one of these five metals had risen by at least 59 percent (copper) and as much as 357 percent (chromium) during the 1970s, giving Ehrlich plenty of reason to believe in their upward trajectory. But because inflation ran so high during the decade—averaging more than 7 percent—the general impression of rapidly rising prices was also misleading. Adjusted for inflation, copper prices actually fell by 15 percent in real terms from 1970 to 1979. Chromium prices had still more than doubled in real terms, rising by 143 percent, but the increase was still much less than it seemed. Adjusted for inflation, nickel, tungsten, and tin rose 11 percent, 76 percent,

and 126 percent, respectively. At the same time, the value of the dollar also declined during the 1970s, raising prices for commodities traded on international markets.<sup>8</sup>

Ehrlich, Holdren, and Harte knew about inflation and exchange rates, but soaring nominal prices could not help but encourage their belief that resources were rapidly getting scarcer. Many shared their conviction. The story of Bunker and Herbert Hunt, scions of a leading Texas oil family, might have provided a cautionary tale for the scientists. The Hunts gambled billions of dollars on the rising price of silver. When prices did not increase sufficiently, the Hunt brothers tried to corner the silver market; at one point, they and their partners controlled 77 percent of the silver in private hands. Their effort failed spectacularly in March 1980, however, when government regulators tightened credit and restricted silver purchases. As silver prices collapsed, the Hunt brothers in desperation were forced to borrow more than a billion dollars to extricate themselves from their silver play. Despite such stories from the business pages, Ehrlich and his colleagues believed that the price trends all were in their favor. They felt confident that they would prevail in the bet.<sup>9</sup>

Ehrlich and Simon's bet, which Holdren and Harte joined, would run for ten years, through 1990, covering a thousand dollars' worth of the five minerals (a two-hundred-dollar contract for each mineral). If the mineral prices went up, adjusting for inflation, Simon would pay the difference; if the prices went down, Ehrlich and his colleagues would pay the difference to Simon. Ehrlich, Harte, and Holdren particularly liked the structure of the bet, since the value of the thousand-dollar bundle of minerals could increase without limit yet the scientists could lose no more than their thousand dollars. It seemed a small price to pay to silence Julian Simon for ten years, they thought.

For both sides, the real winnings would be bragging rights and the chance to prove that they were right about the future course of history. It was, as the *Chronicle of Higher Education* reported, “the scholarly wager of the decade.”<sup>10</sup>

As Ehrlich and Simon worked themselves into this bet about resource prices and the consequences of population growth, Americans faced their own gamble about the future in 1980. A great deal more was directly at stake: Jimmy Carter or Ronald Reagan. Government planner versus free marketeer. Pessimist versus optimist. Cold houses and sweaters versus warm homes fueled by new nuclear power plants and oil wells. Of course, as complex political figures, neither Carter nor Reagan conformed precisely to these neat boxes. Carter, for example, had helped initiate the loosening of federal regulation of sectors of the economy such as air travel and energy. But Ehrlich and Simon’s bet over mineral prices captured in miniature the clash between the two ways of thinking that seemed to frame the Carter-Reagan contest. Ehrlich and other environmental leaders helped build a powerful movement in the 1970s. But they also fueled a backlash against liberals and environmentalists that former California governor Ronald Reagan exploited in his campaign for the White House. In retrospect, Reagan and the Republican Party’s extreme rhetorical turn against environmentalism in the early 1980s can be seen in part as a response to the equally extreme warnings about imminent doom emanating from Carter and environmentalists like Ehrlich.

Announcing his run for president in New York City in 1979, Reagan offered a vision of hope and limitless American growth. An American, Reagan declared, was a person who “lives in anticipation of the future because he knows it will be a great

place.” Reagan displayed a faith in human ingenuity that matched Julian Simon’s. “Nothing is impossible,” Reagan said. “Man is capable of improving his circumstances beyond what we are told is fact.” Reagan derided Carter’s apparent pessimism about the American future. “They tell us we must learn to live with less, and teach our children that their lives will be less full and prosperous than ours have been. . . . I don’t believe that. And, I don’t believe you do either. That is why I am seeking the presidency. I cannot and will not stand by and see this great country destroy itself.” Reagan mocked Carter’s approach to natural resource management as an “utter fiasco.” The federal government had “overspent, overestimated, and over-regulated” across the board, Reagan said, and that included Carter’s energy policies. “It is no program simply to say ‘use less energy.’” “At best,” Reagan declared, energy conservation “means we will run out of energy a little more slowly.” To meet the nation’s energy needs, Reagan insisted, America simply needed “more domestic production of oil and gas.”<sup>11</sup>

Reagan’s optimism about American abundance and prosperity reflected his mixed environmental record as governor of California from 1967 to 1975. Reagan, much like President Nixon at the national level, had responded to growing calls for environmental protection. Reagan called pollution a “national disgrace” that threatened the “delicate balance of ecology.” He supported the creation of a state department of environmental protection and he signed forceful legislation to combat air and water pollution. Reagan also backed the creation of Redwood National Park in northern California and blocked new dams proposed for the Feather and Eel Rivers. He created an interstate regional planning authority to manage development around Lake Tahoe. He led a highly publicized pack trip into the Minarets wilderness area of the eastern Sierras, where he declared his



Ronald Reagan on horseback at his California ranch, April 1986.

Courtesy Ronald Reagan Library

opposition to a proposed trans-Sierra highway that would have broken up continuous swathes of protected land. The land preservation efforts fit well into Reagan's celebratory appreciation of the western landscape. He felt a strong affinity for the idea of the American West and for rugged outdoorsmen, and he adopted the role of the western cowboy in his political persona. Reagan loved to ride horses and owned a series of ranches, including a 688-acre property in the Santa Ynez Mountains northwest of Santa Barbara, California, which became his west-

ern presidential retreat. He enjoyed spending a “pleasant evening” with a “stack of horse and western magazines.”<sup>12</sup>

As he signed off on some environmental measures, however, Governor Reagan viewed other proposals as unwarranted expansions of state regulatory power that threatened business development and local governance. Environmental protection, Reagan warned, should not bring “economic development to a sudden and catastrophic halt.” He opposed legislation to create state coastal and energy commissions, and he vetoed funds for coastal conservation. He criticized “panic about overbuilding” in California and castigated environmentalists for “doomsday” predictions. Reagan particularly dismissed new warnings about crises, overpopulation, and starvation as “simplistic overstatement.” “We used to have problems,” Reagan said dismissively in a 1971 speech to the American Petroleum Institute. “Today we have crises.” People like Paul Ehrlich were simply “anti-technology” and “anti-industry.” “The doomsday crowd,” Reagan said, “always seem to ignore the very real progress we have made.” During the 1973–1974 oil embargo, Reagan said that America’s abundant resources and technological prowess could make the nation energy self-sufficient. Markets and technology would resolve population problems, Reagan thought.<sup>13</sup>

Reagan similarly rejected the models and expert pronouncements that lay at the heart of *The Limits to Growth* and *The Global 2000 Report*. Reagan accused Carter of siding with “elitist” social planners willing to accept slower economic growth. “The limits-to-growth people who are so influential in the Carter administration are telling us, in effect, that the American economic pie is shrinking, that we all have to settle for a smaller slice.” Reagan called instead for “government to get out of the way while the rest of us make a bigger pie so that everybody can have a bigger slice.” In announcing his candi-

dacy in November 1979, Reagan attacked “unknown, unidentified experts,” such as the authors of *The Limits to Growth*, who used computer models to concoct warnings of forced scarcity. When the Carter White House released *The Global 2000 Report* at the height of the 1980 campaign, Reagan rejected its warnings about overpopulation and resource scarcity. “Well, you know there was a fella named Malthus who thought we were going to run out of food,” Reagan declared in September 1980. “But Malthus didn’t know about fertilizers and pesticides.” While Carter’s colleagues considered *The Global 2000 Report* as “significant as the Declaration of Independence,” Reagan dismissed it as unfounded pessimism and flawed reasoning. Reagan insisted that resource limits were not real and should not constrain America’s future.<sup>14</sup>

Reagan cast the 1980 election as a choice based on Americans’ assessment of the state of the nation and the causes of economic stagnation. When voters went into the polling booths, Reagan said in his one debate with Jimmy Carter, they should ask themselves, “Are you better off than you were four years ago?” Reagan argued that federal regulation and planning had made Americans worse off. “This country doesn’t have to be in the shape that it is in. We do not have to go on sharing in scarcity. . . . All of this can be cured and all of it can be solved.” Reagan called for getting the federal government “off the people’s backs” so that it would stop telling “us how to run our lives.” Reagan promised to reduce the federal role and leave other responsibilities to the states.<sup>15</sup>

Environmental leaders, meanwhile, at first did not fully support Carter. They were disappointed in his presidency. Despite Carter’s strong environmental bona fides, he had failed environmentalists on several fronts. Carter had allowed completion of the controversial Tellico Dam in Tennessee, and had

loosened some clean air and water regulations. He also had supported synthetic fuels, which environmentalists viewed skeptically. These actions led some environmental activists initially to support Senator Edward Kennedy of Massachusetts in the Democratic primary. Others, like John Harte, flirted with independent candidate John Anderson. Carter's advisers tried to patch things up with environmentalists leading into the election. On the recommendation of the heads of the environmental organizations, Carter appointed James Gustave Speth, a cofounder of the Natural Resources Defense Council, to chair the Council on Environmental Quality. "Environmentalists are important to me," Carter scrawled on an August 1979 request to his chief of staff, Hamilton Jordan, to increase the profile and White House role of the Council on Environmental Quality. "We need to try to keep our environmental constituency," Stuart Eizenstat, Carter's domestic policy adviser, told a colleague.<sup>16</sup>

In September 1980, as the election approached, twenty-two national environmental leaders went to the White House to announce their formal endorsement of Carter. They characterized the 1980 election as a "basic choice" between Reagan and Carter. Reagan's "ignorance of environmental issues" was "bad news, really bad news," according to Marion Edey, executive director of the League of Conservation Voters. The president of the National Audubon Society, Russell Peterson, declared that the "choice is very clear to those who care about their children and grandchildren." Peterson's endorsement was especially notable because he was a former Republican governor of Delaware and had served as chairman of the Council on Environmental Quality under Presidents Nixon and Ford. Peterson thought Carter was "facing up" to the long-term problems facing the planet, while Reagan displayed a "basic understand-

ing” and determination simply to “free up industry so that it can make a bundle today.”<sup>17</sup>

Reagan’s proposed expansion of energy production revealed the great difference between the two candidates. Carter had made energy efficiency and renewable energy central to his plan to reduce oil imports. He distrusted the international oil companies and supported additional taxes that would prevent the companies from capturing “windfall profits.” Reagan, by contrast, thought that the United States could solve its energy problems if “the government would get out of the way and let the oil companies explore and drill and produce the oil we have.” Reagan mocked Carter: “They say, ‘Turn down the thermostats, drive less, or don’t drive at all.’” America just needed to “set the oil industry loose.” Large quantities of oil and gas lay beneath the land and offshore, but Carter discouraged their development. Coal and nuclear power also had the potential to supply energy to millions of homes but were thwarted by “obstructionist campaigns.” “I am an environmentalist,” Reagan said during the campaign, but he thought that the Environmental Protection Agency tended to “insist on unreasonable and many times untried standards.” Reagan linked environmental concerns to national economic growth, declaring that the “economic prosperity of our people is a fundamental part of our environment.” If the “no growth” officials at EPA had their way, Reagan complained, “you and I would have to live in rabbit holes or birds’ nests.” He horrified environmentalists and editorial page writers by claiming, incorrectly, that the May 1980 volcanic eruption at Mount St. Helens and the decomposition of plants and trees released more pollutants than automobiles and power plants. Reagan thought that the nation’s air pollution had largely been cleared up since 1970 and that regu-

latory standards “helped force factories to shut down and cost workers their jobs.” Reagan embraced the Nevada-based Sagebrush Rebellion, which attacked federal land management and sought to shift control of federal lands to the states and private owners to encourage more rapid development. Environmental leaders came to view Reagan’s defeat as an urgent priority.<sup>18</sup>

Yet in November 1980, Reagan won the presidency with more than 50 percent of the popular vote and more than 90 percent of the Electoral College. Carter claimed a handful of states and 41 percent of the popular vote, with Independent candidate John Anderson garnering 6.6 percent. Many factors led to Carter’s rout. The economy remained mired in a toxic mix of high inflation, high interest rates, and unemployment, making it difficult for any incumbent president to be reelected. The Iranian hostage crisis and the Soviet Union’s invasion of Afghanistan elevated international disputes and raised questions about the forcefulness and effectiveness of Carter’s foreign policy. In addition to these factors, however, Reagan’s victory also meant defeat for Carter’s vocal embrace of limits and his warnings about the future. Environmental advocates in the 1970s, and Carter himself, sought broad public support for constraints on growth and reduced consumption. But many Americans resisted calls to change their behavior. The majority instead voted for Reagan and his faith in an abundant future and his skeptical view of government.

After his defeat, Carter continued to press for action on environmental and population issues. In his farewell address in January 1981, Carter emphasized the themes of *The Global 2000 Report* as key elements of his legacy. Citing “real and growing dangers” to the air, water, and land, Carter warned of the “rapid depletion of irreplaceable minerals, the erosion of topsoil, the destruction of beauty, the blight of pollution, the

demands of increasing billions of people . . . problems which are easy to observe and predict but difficult to resolve.” According to one of his speechwriters, Carter spent more time shaping and rewriting the farewell address than any other speech of his presidency. Carter hoped to sustain momentum around *The Global 2000 Report* and to pressure the Reagan administration to address the problems it identified. “If we do not act,” Carter said, “the world of the year 2000 will be much less able to sustain life than it is now.” In subsequent comments, Carter insisted that *The Global 2000 Report* was “not a prophecy of doom; it was an expression of confidence and hope—provided warnings were heeded and appropriate and feasible actions were taken.”<sup>19</sup>

With Reagan’s election, however, the warnings of *The Global 2000 Report* were simply ignored. Shortly after Reagan’s 1980 victory, Republican congressmen David Stockman and Jack Kemp presented the president-elect with a detailed economic plan entitled “Avoiding a GOP Economic Dunkirk.” Stockman was a boyish and wonky conservative from Minnesota in his early thirties, while Kemp, in his mid-forties, had been an all-star quarterback for the San Diego Chargers and the Buffalo Bills before getting into politics as an economic conservative from western New York. Warning of economic threats facing the incoming Reagan administration, from recession to possible short-term surges in oil and food prices, Stockman and Kemp urged Reagan to defuse the “regulatory time bomb” put in place during the 1970s wave of environmental, energy, and safety legislation. “McGovernite no-growth activists” had gained control of key administrative posts under Carter and had generated a “mind-boggling outpouring of rule-makings, interpretative guidelines, and major litigation” that would create a staggering regulatory burden. Stockman and

Kemp called for a “regulatory ventilation” that would unilaterally “defer, revise or rescind” regulations that threatened to impose more than a hundred billion dollars in compliance costs. They particularly warned about the consequences of new federal standards for automobile and truck emissions, workplace noise, asbestos exposure, appliance efficiency, and industrial wastewater. The EPA had rules, Stockman said, that “would practically shut down the economy if they were put into effect.”<sup>20</sup>

Reagan liked this antiregulatory advice so much that he appointed David Stockman director of the Office of Management and Budget to carry out the proposed agenda. The *Wall Street Journal* covered the appointment by calling Stockman a “relentless warrior against the widely held view that society is running out of resources and that government must therefore allocate them.” The *Limits to Growth* viewpoint, Stockman explained, merely provided a rationale for those advocating more government economic planning. In his first month in office, Reagan followed Stockman’s advice by postponing hundreds of regulations and ordering a review of potentially burdensome federal rules. Reagan also created a new cabinet-level task force on regulatory relief led by Vice President George H. W. Bush. Reagan cut funding for alternative energy development—later in his presidency, the White House solar panels that Carter had installed to great fanfare were removed and placed in storage.<sup>21</sup>

Reagan appointed western firebrand James Watt to spearhead the administration’s attack on federal natural resource management. A tall, thin, balding western conservative, Watt had served previously under Presidents Nixon and Ford as a deputy assistant secretary of the Interior, working on water and power projects. Watt understood the federal bureaucracy and how to move it. He had a steely temperament and deep religious faith following his adult baptism and embrace of the Pen-

tecostal evangelical church. Watt also had a clearly articulated political perspective that favored the “development of our natural resources by private enterprise.” Just before joining Reagan’s cabinet, Watt served as the first president of the Mountain States Legal Foundation, a nonprofit legal center funded by Joseph Coors Sr. of the Coors Brewing Company, to strengthen private property rights and contest government regulation. Coors also had founded the conservative Heritage Foundation to provide a philosophical underpinning for the anti-environmental movement. From its inception, the Heritage Foundation urged followers to “strangle the environmental movement,” which Heritage named “the greatest single threat to the American economy.” Watt spoke passionately against the environmental movement. In a 1978 speech in Dallas, Watt warned of a “new political force in the land—a small group of extremists who don’t concern themselves with a balanced perspective or a concern about improving the quality of life for mankind—they are called environmentalists.” What was the real motive for these “extreme environmentalists”? Watt suggested that their goal was to “delay and deny energy development” and to “weaken America.”<sup>22</sup>

Newly empowered as secretary of the interior, Watt opened federal lands to development and fired departmental attorneys responsible for enforcing environmental standards. He sought to push out unsympathetic career government employees so that he could hire staff members who shared his views. Watt declared candidly that his mandate was to “undo 50 years of bad government,” by which he meant the expansion of federal control and regulation of public natural resources. He sought to open public lands for energy and mineral development, and he halted the purchase of new national park lands. Watt emphasized broad and easy access to existing parks, rather than



Ronald Reagan with Secretary of the Interior James Watt at the signing of the 1982 Reclamation Reform Act. Courtesy Ronald Reagan Library.

wilderness protections that only served “elitist groups” and “rugged young backpackers.” Carl E. Bagge, president of the National Coal Association, reportedly said of Watt’s appointment, “We’re deliriously happy.” Representative Morris Udall, a leading environmentalist in Congress, complained of Watt that Reagan had picked the “most controversial, bombastic person” he could find. The *Washington Post* reprinted a joke told in corporate suites: “How much power does it take to stop a million environmentalists? One Watt.” Reagan supported Watt’s efforts and shared Watt’s belief that he had to protect the American people against environmental extremism. In a September 1981 diary entry, Reagan recorded a meeting with Watt, noting, “He’s taking a lot of abuse from environmental extremists but he’s absolutely right. People are ecology too and they can[’]t forage for food and live in caves.” Reagan’s selection of Colorado state representative Anne Gorsuch to run the Environmental

Protection Agency appalled environmentalists almost as much as Watt's appointment. A former lawyer for the regional telephone company, she had been elected to the Colorado legislature in 1976, where she made her reputation as one of the "House Crazies" who sought a fundamental conservative overhaul of government. Known as the "Ice Queen" and the "Dragon Lady," Gorsuch immediately started making enemies among the EPA's career staff after her arrival at the agency. Critics—including Russell Train, the EPA's second administrator under Nixon and Ford—warned that Gorsuch's proposed personnel and budgetary cuts threatened to "destroy the agency as an effective organization."<sup>23</sup>

The day after Reagan's inauguration in 1981, the leaders of nine of the largest national environmental organizations met in a Washington restaurant to coordinate their response to the new administration. Watt and Gorsuch became the visible targets for campaigns that brought a surge in membership in the national organizations. The Sierra Club grew by 30 percent per year in the early 1980s, doubling in size in just a few years. A National Audubon Society fundraising appeal that directly attacked the Reagan administration yielded ten times the donations of its previous efforts. Environmental organizations filed lawsuits to compel the administration to enforce the Clean Water Act and other laws, even as the administration sought to cut the EPA's enforcement budget by 39 percent in inflation-adjusted terms.<sup>24</sup>

Environmental organizations became increasingly allied with the Democratic Party and with moderate Republicans, whose numbers were starting to shrink. The environmentalists flexed their political muscle effectively in their fights with Watt and Gorsuch. Both appointees had been driven from office by the end of 1983. Reagan described Gorsuch's resignation over a

congressional investigation of the Superfund program as a “lynching by headline hunting congressmen.” Watt had done a “fine job,” Reagan thought, but the “Environmental Lynch mob” got him, too. Environmentalists celebrated. “I Survived the Ice Queen’s Acid Reign,” read the T-shirts distributed by alienated EPA employees after Gorsuch’s resignation. With political success, however, came the recognition of a new vulnerability. Professional national environmental organizations increasingly depended on doomsday warnings to raise money to fuel their growth. Watt played such an outsized role as a bogeyman for environmentalists that his departure nearly caused a financial crisis for the Sierra Club. Michael McCloskey, executive director of the Sierra Club at the time, recalled that they “had lost the villain” that they needed to campaign against. Media coverage of Reagan’s environmental policies plummeted. New member growth and charitable donations dropped sharply. The split between Republicans and environmentalists, however, continued to grow in the years following Watt’s departure. Both Republicans critics of environmental regulation and environmental advocates, who leaned toward the Democratic Party, used the conflict to sharpen their public identity and enlist and motivate supporters.<sup>25</sup>

Paul Ehrlich considered Reagan, Gorsuch, and Watt simply uneducated on environmental issues. “I don’t believe that those people are either total morons or totally evil,” Ehrlich said in a 1983 interview. Therefore, he reasoned, they must simply be “profoundly ignorant.” Ehrlich could not fathom the possibility that fundamentally different values or ideologies might yield different conclusions. His certainty helped make Ehrlich a more zealous advocate and steel him for political combat, but it also made it hard for him to understand his critics and per-

suade others. Ehrlich continued with his butterfly research, primarily in California and at the Rocky Mountain Biological Laboratory in Colorado. He wrote to the Yale ecologist G. Evelyn Hutchinson in 1983 that his research group had developed a useful new theory of butterfly mating strategies. "A small triumph, but one settles for them more and more!"<sup>26</sup>

Ehrlich welcomed the small scientific victories, because the Reagan years largely brought him to despair about the future. Reagan's military buildup and hawkish rhetoric particularly disturbed Ehrlich, and he turned his attention to the dangers of nuclear war and proliferation. Scientists had worked on anti-nuclear campaigns since the 1940s, but now they focused more on dangers to biological systems. The issue preoccupied Ehrlich. In June 1983, he wrote to Hutchinson, "I grow increasingly apprehensive as the December deadline for cruise missile/Pershing II deployment approaches with no signs of progress in the [intermediate-range nuclear forces] negotiations—and as the administration pushes forward with the destabilizing MX [missile]." Ehrlich channeled his concern about nuclear weapons into research and writing. He helped organize a 1983 conference in Cambridge, Massachusetts, on the biological threats posed by nuclear war. Ehrlich also served as lead author and chief organizer for an essay in *Science* on the "Long-Term Biological Consequences of Nuclear War." Twenty other prominent scientists, including Carl Sagan and Stephen J. Gould, signed on as coauthors. They warned that a large-scale nuclear war could cause a nuclear winter, in which soot and smoke would block sunlight and precipitously drop global temperatures. Ehrlich had raised this possibility in his 1977 *Ecoscience*. The change in solar radiation brought about by the nuclear explosions could destroy civilization's biological support systems and reduce human populations to "prehistoric levels or below."

“Extinction of the human species itself cannot be excluded.” Ehrlich also coedited, along with Carl Sagan and two others, a 1984 report from the Cambridge conference, entitled *The Cold and the Dark: The World After Nuclear War*. The threat of nuclear winter was closely tied to Ehrlich’s earlier apocalyptic predictions, as he feared that resource scarcity and overpopulation would spark conflicts that would lead to a global thermonuclear war.<sup>27</sup>

While Ehrlich darkly contemplated the end of civilization, Julian Simon encountered a newly enthusiastic audience in Washington, where the Reagan administration brought free market advocates and critics of environmental regulation into power. Simon’s controversial essay in *Science* in 1980 changed everything for him, and he relished the attention that followed. “I have hit the jackpot,” he wrote in notes to himself the following year. “The world has now made it easy for me to remain undepressed. I no longer must deflect my mind from my professional difficulties in order to stay happy, but instead I can now dwell on my worldly ‘success’ and take pleasure from it.” His article led to many invitations to write and speak. He finally had a chance to “reach a wide audience with a set of ideas that had previously fallen mostly on deaf ears, or more exactly, on no ears.”<sup>28</sup>

As Ehrlich and Simon argued in the pages of *Science* and *Social Science Quarterly* and agreed to their bet, Julian Simon completed the final touches on what he hoped would be his magnum opus, *The Ultimate Resource*. Published in 1981 by Princeton University Press and excerpted over three issues of the *Atlantic Monthly*, the book crystallized Simon’s thinking about the relation between population and resources issues in accessible prose. In Simon’s formulation, people were the “ulti-

mate resource.” “Human resourcefulness and enterprise” could meet impending shortages and solve problems indefinitely. In fact, new solutions generally would leave society “better off than before the problem arose.” Simon acknowledged that his thesis was not original. Adam Smith and Friedrich Engels, as well as later writers such as Jules Verne and H. G. Wells, had “given full weight to man’s imagination and creative powers” to solve population and resource problems. More recent inspirations included Simon Kuznets’s national income and population research, Harold Barnett’s writings on resource scarcity, and Ester Boserup’s theories about agricultural innovation.<sup>29</sup>

Simon argued that food, land, natural resources, and energy were all becoming more abundant, not scarcer. How did he know? Rising prices and a rising ratio of price to income were the indicators of scarcity. Yet since the beginning of the Industrial Revolution, resource prices generally had fallen, particularly relative to income. Humans spent less and less of their time and income meeting essential needs for heat, light, food, and water. Simon also argued that population growth was not mechanical and automatic, as Malthus (and later Ehrlich) had suggested in long-term projections of exponential growth. Having babies was like drinking alcohol, Simon wrote. Few people were “drunkards” who drank themselves to death—most drew lessons from their experience and moderated their behavior. Similarly, Simon’s research showed that people make rational choices about family size. These decisions change under different circumstances and would respond to resource scarcity and other indicators of overpopulation. While additional people certainly present a burden on society, Simon said that both new babies and immigrants “produce more than they consume.” Their benefits to society far outweighed their cost. Given resource abundance and these benefits, Simon criti-

cized misguided and often oppressive efforts to reduce population growth.<sup>30</sup>

Simon's critique of population control in *The Ultimate Resource* reflected his personal values and his version of utilitarian philosophy. Simon differed from Ehrlich and other population control advocates in his attitude about the worth of human life. Ehrlich, complained Simon, said that nothing would be lost if fewer people existed and that the United States, and the world, would be better off with a smaller population. In 1972, when the United States population was almost 210 million people, Ehrlich had told a reporter, "I can't think of any reason for having more than one hundred fifty million people." Simon found this dismissal of the value of sixty million Americans to be cavalier. Ehrlich's bleak descriptions of human misery further suggested to Simon that Ehrlich thought "poor people's lives are not worth living." Simon took up their cause. Writing of the impoverished beggars in India, Simon commented, "Ehrlich writes nothing about those people laughing, loving, or being tender to their children—all of which one also sees among those poor Indians." Drawing on a utilitarian perspective that aspires to the greatest good for the greatest number, Simon contended, in his own variant of the theory, that more people living rewarding lives maximized social welfare. "Because people continue to live, I believe that they value their lives. And those lives therefore have value in my scheme of things." The continued existence of poor people did not signal overpopulation, Simon wrote.<sup>31</sup>

The publication of *The Ultimate Resource* in 1981 established Julian Simon as a national conservative intellectual. A sympathetic reviewer in the *Washington Post* called Simon's book the "most powerful challenge to be mounted against the principles of popular environmentalism in the last 15 years."

On the public television show *Firing Line*, conservative commentator William F. Buckley declared that “Julian Simon may be the happiest thing that has happened to the planet since the discovery of the wheel.” Buckley suggested that *The Ultimate Resource* would “dominate the debate” over population and resource scarcity in the 1980s.<sup>32</sup>

As if eager to prove Buckley right, Simon followed his book with a steady stream of articles and interviews in leading national publications, including the *Washington Post*, *New York Times*, *Wall Street Journal*, and *Los Angeles Times*, along with the *Atlantic Monthly*. Simon hammered home his argument for the economic benefits of immigration. He challenged the fear that badly needed farmland was disappearing, being paved over for highways and suburban sprawl. Instead, Simon argued that cropland was more available and less scarce than before. Julian Simon was becoming the “most visible apostle of optimism,” according to the *New York Times*, with his insistence that “life on earth is getting better, not worse.”<sup>33</sup>

Simon’s rapid emergence as a public critic of environmentalism brought him to the attention of national conservative organizations that previously did not know he existed. Simon had accomplished his rise to prominence largely on the basis of his own ambition and determination and the limited opportunities and resources available to a little-known University of Illinois professor. Simon now started to benefit from financial and organizational support from foundations and conservative think tanks and to circulate in higher-level conservative circles. His appeal was no secret: Simon appeared perfectly suited to delivering and backing up an important part of Reagan’s message.<sup>34</sup>

This institutional support became useful in 1982, when Simon teamed with idiosyncratic conservative Herman Kahn to prepare a rejoinder to *The Global 2000 Report*. Kahn was the

white-bearded, rotund cofounder of the Hudson Institute, a politically conservative research center that published studies of the future. Kahn first made a name for himself with a controversial 1960 Rand Institute study, *On Thermonuclear War*, which had argued that nuclear war was both possible and winnable. As Kahn grew interested in domestic policy issues in the 1960s and 1970s, he criticized predictions of environmental catastrophe and predicted “unprecedented affluence” in the coming decades. At a 1975 conference on *The Limits to Growth* in Woodlands, Texas, Kahn declared, “Two hundred years ago mankind was almost everywhere poor, almost everywhere scarce, almost everywhere powerless before the forces of nature. Two hundred years from now mankind will be almost everywhere rich, almost everywhere plentiful, almost everywhere in control of the forces of nature.” Kahn’s relentlessly optimistic outlook cited the same market forces that Julian Simon emphasized—technological innovation, substitution, and discoveries of new kinds of resources. In 1980 and 1981, Kahn attacked *The Global 2000 Report* as “Globaloney 2000.” At a time when the world population was 4.4 billion, Kahn declared “no reason why the world should not be able to support a population of 30 billion people.” Kahn anticipated a new economic boom with abundant energy and growing international trade. He described the world as “halfway through a great transition” that would spread progress and technology “for the good of all.” Kahn elaborated on these optimistic predictions at length in a full-length 1982 book, *The Coming Boom*.<sup>35</sup>

Simon and Kahn now undertook to reexamine the “baseless” and “gloomy assertions” of *The Global 2000 Report*. They initially sought a two-hundred-thousand-dollar consulting contract from the EPA to conduct their study. Allies within the Reagan administration, such as presidential adviser Danny J.

Boggs, shared their desire to repudiate *The Global 2000 Report*. After the news of Simon and Kahn's project leaked out, however, congressional opponents and Reagan's own White House Council on Environmental Quality blocked the contract and an official imprimatur to their report. Kahn and Simon instead turned to the conservative Heritage Foundation for financial and administrative support. Heritage's president, Edwin Feulner, feared that the Council on Environmental Quality would issue a report on global environmental trends that would "run exactly counter" to the president's point of view by "emphasizing physical limits on our progress instead of the vast possibilities for progress and improvement limited only by our energies and will." With the Heritage Foundation's support, Kahn and Simon enlisted prominent and generally conservative scholars to rebut *The Global 2000 Report's* claims. Contributors included William Baumol, past president of the American Economics Association; John Fraser Hart, former president of the Association of American Geographers, and Aaron Wildavsky, a leading political scientist at the University of California, Berkeley. The authors were asked to contribute essays that rebutted the claims of *The Global 2000 Report*.<sup>36</sup>

After Kahn died unexpectedly of a stroke at age sixty-one in 1983, Simon finished editing the volume by himself. In the introduction, Simon polemically offered a direct inversion of the claims of *The Global 2000 Report*. The report had declared:

If present trends continue, the world in 2000 will be more crowded, more polluted, less stable ecologically, and more vulnerable to disruption than the world we live in now. Serious stresses involving population, resources, and environment are clearly visible ahead. Despite greater material input, the world's people will be poorer in many ways than they are today.

Simon countered:

If present trends continue, the world in 2000 will be less crowded (though more populated), less polluted, more stable ecologically, and less vulnerable to resource supply disruption than the world we live in now. . . . The world's people will be richer in most ways than they are today. . . . Life for most people on earth will be less precarious economically than it is now.

William Tucker, author of *Progress and Privilege: America in the Age of Environmentalism*, described *The Global 2000 Report* as the “wicked witch in *Sleeping Beauty*” who “laid a curse upon the land.” Simon and Kahn’s *The Resourceful Earth*, in turn, had arrived like the “good witch . . . to lift the spell.” “For more than a decade, the prophets of gloom and doom have had their way, painting a frightening picture of the world coming apart at the seams,” wrote a journalist in a cover story in the *Chicago Tribune* sympathetic to Simon and Kahn. Their book now declared these predictions “nonsense.”<sup>37</sup>

A vigorous debate ensued. In the spring of 1983, Simon and coauthors in *The Resourceful Earth* presented their findings at the American Association for the Advancement of Science meeting in Detroit. The session brought national attention to the report and provoked lively discussion. “That was a good talk in Detroit,” the Harvard demographer Nathan Keyfitz, one of Simon’s critics, wrote to Simon afterward. “You are the most interesting person with whom I have disagreed in a long time.” In December 1983, the American Economics Association invited Simon to participate on a panel at its annual meeting in San Francisco, “Limits to Growth: What Have We Learned?” In May 1984, Simon organized a second American Association for the Advancement of Science session entitled “Knockdown-Dragnet on the Global Future,” pitting Simon and Danny Boggs,



*New Yorker* cartoon highlighting the sharp contrast in views of the future in the early 1980s. © Frank Modell/New Yorker Cartoon Collection/  
www.cartoonbank.com.

deputy secretary of energy, against the environmental scientists Barry Commoner and Peter Raven. “I shall attack you and your report,” Commoner told Simon. The clash between starkly different ways of viewing the future became an increasingly common trope. *Science* captured it in an article about Simon and his critics. In a cartoon accompanying the article on the forthcoming *Resourceful Earth*, a man in an overstuffed chair read a book entitled “The Coming Boom.” To his left sat another man, reading “The Coming Collapse.” *USA Today* summarized the choices in a 1983 headline: “Future is a.) dim or b.) bright (pick one).” Simon and his opponents both used the stark contrast between their points of view to raise their public profiles. As the lesser-known challenger attacking conventional beliefs, Simon perhaps benefited the most from the attention.<sup>38</sup>

Simon's efforts gave political conservatives a weapon that they badly needed to support their attack on liberals and environmentalists. *The Resourceful Earth* and *The Ultimate Resource* bolstered the Reagan administration's critique of environmental regulation and of Jimmy Carter's economic record. At a speech in Texas in 1983, Vice President George H. W. Bush embraced Julian Simon's way of thinking about natural resources issues. Bush denounced *The Global 2000 Report* as a vision of stagnant economic growth and an "age of limits." He called it Carter's "economic philosophy in black and white." Bush continued, "We all have a choice to make: It is between the shrinking vision of America held by the pessimists or the expansive vision—the expansive reality—we are building right now. We are too great a nation, we are too great a people to shrink from the future." Bush's speechwriter, Joshua Gilder, wrote to thank Julian Simon for his "inspiration and research." Gilder called himself a "great fan" of Simon's work. In a 1983 commencement address at Ohio State University that Gilder also helped to write, Vice President Bush practically quoted Simon's work while discussing how the "prophets of doom" were wrong and global trends improving. Humanity was not depleting the world's resources. Instead, Bush argued, "the world's resources are becoming more plentiful all the time. The fact is that new technologies are not only allowing us to use our old resources more efficiently—they actually create new resources." Julian Simon's ideas about resource abundance also resonated with other Republican politicians, sometimes in quirky ways. Georgia congressman Newt Gingrich, who would later rise to be Speaker of the House of Representatives and run for the presidency, reached out to Simon to discuss the possibilities of using the "resources of space to counter the Limits-to-Growthers." Administrators in the Department of the Interior and the Cen-

sus Bureau invited Simon to brief their staffs—or, as William Butz of the Census Bureau phrased it, “get us all riled up.”<sup>39</sup>

As Julian Simon ventured further into the national arena, becoming a favored critic of the environmental movement and a regular presence on the op-ed pages, Rita and he decided in 1983 to leave the cornfields and quiet streets of Illinois to move to Washington, DC. Rita had been offered a position at American University as dean of the School of Justice, a department focused on the study of law and society. Julian, meanwhile, had received a grant from the Sloan Foundation to study the economic consequences of immigration, which paid half his salary for eighteen months. He became a senior fellow at the Heritage Foundation and also eventually landed a faculty appointment position teaching business administration at the University of Maryland. Having grown up in and around New York City, the Simons never imagined living all their lives in the flat Midwest. Julian also was growing a little bored with life in Urbana, where he felt “less and less excitement in the conversations that chance throws up for me.” Now their kids were teenagers, soon leaving for college. Moving to Washington provided new opportunities, both personal and professional. The new location, Julian wrote to friends in 1983, “will make it more convenient to try to sell some views on public policies.”<sup>40</sup>

Julian and Rita settled into a house in suburban Chevy Chase, Maryland. Julian enjoyed the new Washington setting. Between early spring and midautumn, Julian would sit outside on the back deck for hours with his computer. Always by his side was a pair of binoculars so that he could watch the birds visiting his feeders. At the same time, he also missed aspects of the easy life of Urbana, where he could “jump out of bed and be in the office in four minutes and then hustle out of the office



Julian, David, Daniel, Judith, and Rita Simon (left to right) at David's graduation from high school in Urbana, Illinois, 1982. Courtesy of Naomi Kleitman.

and be on the squash court.” He took to dictating correspondence and other writing into a tape recorder during his commute to work.<sup>41</sup>

New doors continued to open for Julian Simon after he arrived in Washington. Simon used his post at the Heritage Foundation to make inroads in the Washington policy community. In September 1983, shortly after arriving at Heritage, for example, he invited more than twenty people to a meeting to discuss congressional proposals to increase the government’s “foresight capability” on resources, population, and the environment. Simon opposed these congressional proposals based on his critique of *The Global 2000 Report*. He described his work to Burt Pines, Heritage’s vice president, as “trying to put the boots to the environmentalists’ initiative for a government ‘global foresight’ activity.” The meeting brought Simon closer

to Washington business conservatives such as Fred Smith at the Competitive Economy Foundation (who later founded the Competitive Enterprise Institute). Smith warned, “Conceding any legitimacy to a government data collection role is in my opinion extremely dangerous.” Rather than more regulation, Smith called for “free market environmentalism” led by private-sector entities through market mechanisms and private property rights. New contacts with conservatives like Smith accelerated Simon’s transformation from isolated intellectual in Urbana, Illinois, into connected and influential Washington commentator.<sup>42</sup>

From his new perch at Heritage, Simon also launched what he called a “full-scale investigation” of the United Nations Fund for Population Activities and the Agency for International Development. He aimed to “lay bare the patterns of funding that wind up with” nongovernmental organizations promoting family planning in the United States. In the fall of 1983, Simon unsuccessfully sought credentials as a US delegate to the United Nation’s population conference to be held in Mexico City in August 1984. In a letter to the deputy secretary of state, Simon practically begged to go, saying, “This is the first time in my life, literally, that I have sought an appointment other than an ordinary job.” Although he did not get the credentials he sought, Simon supported the Reagan administration’s new positions on population, which rejected the idea of a population crisis. In June, before the United Nations meeting, Simon testified before the House of Representatives Subcommittee on Census and Population that “overpopulation” was a “myth.” Simon complained in his testimony that the US delegation did not reflect the full diversity of views on population growth. He warned that the “population lobby” used the issue of access to abortion as a cover for its population control agenda. White

House staffers acknowledged that Simon's ideas influenced the administration's new global population policy. James Buckley, the chairman of the Mexico City delegation, later recalled how the Americans had been able to "pierce the Malthusian gloom" of the meeting with statistics showing the fall in birth-rates in the developing world and the increase in human life expectancy, rise in caloric intake, and growth in per capita income. In the second presidential debate between Reagan and Walter Mondale that took place in October 1984, Reagan embraced Simon's position, calling the "population explosion . . . vastly exaggerated." Simon defended the administration's policy shift, arguing that Reagan was "backed by empirical scientific research."<sup>43</sup>

Even as Republican political leaders moved closer to Simon's point of view on population, Simon increasingly made his arguments about population into a case for free enterprise. In a 1985 essay in the *Washington Post*, for example, Simon contended that governments and development agencies continued to focus on overpopulation as the cause of international development problems in order to avoid talking about the more obvious cause of underdevelopment—dysfunctional economic and political systems. Simon rejected Carter-era government conservation. Simon supported Reagan's call for private individuals to seek profit and to create new resources. "Listening to environmentalists," Simon wrote in *USA Today* in 1984, "you'd think our air is unbreathable, our water is undrinkable, and that this country faces a crisis of major proportions. It's simply not so." Simon's narrow focus on the economics of population and resources expanded. In a 1984 essay in *Reason* magazine, Simon theorized that humanity had evolved culturally so that "our patterns of behavior . . . predispose us to deal successfully with resource scarcity." Over centuries, social rules and cus-

toms gave humanity “greater rather than less command over resources.” Simon believed that humankind was “on balance a creator rather than a destroyer.” His perspective contrasted strikingly with his opponents, he said, who viewed people primarily as destructive consumers of resources.<sup>44</sup>

Julian Simon’s celebration of people’s creative abilities, rather than their destructive and wasteful tendencies, encouraged his increasing focus on immigration. Paul Ehrlich had joined the immigration debate in 1979 with his book *The Golden Door*, which had sought to justify a restrictive immigration policy. Simon had countered with pro-immigration testimony to a congressionally authorized committee that same year. Immigration policy served as a natural continuation for Simon’s and Ehrlich’s battles about overpopulation, since both fights centered, in part, on the question of whether there were too many people. During the early 1980s, political conflict over immigration deepened. Millions of illegal immigrants crossed the nation’s southern border to live and work in the United States. The *Wall Street Journal* warned against “The Latino Tide” in June 1984. “Our nation has lost control of its borders,” Ronald Reagan declared the following month.<sup>45</sup>

Julian Simon sought to counter the stigma associated with immigration and argued instead for its economic benefits. In an op-ed in the *New York Times*, Simon attacked the idea that immigrants caused job losses. He argued instead that they helped create new jobs by expanding aggregate economic demand and creating new businesses that employed workers. In 1985, Simon published a monograph on the economic effects of immigration, which he extended into a full-length book in 1989.<sup>46</sup>

Simon celebrated immigration for some of the same reasons that he embraced population growth more generally. Im-

migrants did not threaten the US economy and society. Illegal immigrants, in particular, contributed more than they took. Illegal immigrants use few medical or welfare services because they are afraid of being found out, Simon declared in his interviews with journalists. Noting that illegal immigrants paid payroll taxes without receiving Social Security benefits or income tax refunds, Simon argued, "We rip them off unconscionably." Harold J. Barnett, the economist who had inspired Simon with his 1963 *Scarcity and Growth*, concurred that "it simply is not true that immigrants make us poorer." Simon argued further that immigrants offered a way to *strengthen* the US economy. Just as he had pushed for an auction for airline tickets, Simon suggested that the United States auction off rights to enter the country. Liberals denounced his idea, saying that it betrayed the values of the nation and the preferences given to refugees, relatives, and skilled workers. But Simon viewed immigration as a way to turbocharge the economy with new entrepreneurial citizens. His idea would later be adopted in modified form in the 1990 immigration act, which provided visas for immigrant investors.<sup>47</sup>

Simon's argument that immigrants benefited the American economy countered growing anti-immigrant sentiment. It also complicated liberal and conservative battle lines on the contentious subject. "Nine Myths About Immigration," an essay written by Simon and promoted by the Heritage Foundation in 1984, circulated widely on Capitol Hill. Senator Edward Kennedy, a leading liberal, embraced Simon's report and entered it into the *Congressional Record*. "We have heard that immigrants are 'welfare abusers,'" Kennedy declared, "that undocumented aliens heavily use welfare services, and that immigrants pay less than their share of taxes." But these accusations were simply "based upon fear." Kennedy quoted Simon's conclusion

that “many of the alleged costs of immigrants are simply unfounded, hollow myths.” Simon welcomed Kennedy’s enthusiasm and his efforts on behalf of immigrants, telling the senator that “a long ethnic memory can have benefits for all of mankind.”<sup>48</sup>

As Kennedy’s warm Democratic embrace suggests, Simon’s Heritage report and his positions drove a wedge into the conservative coalition over the controversial topic of immigration. Some conservatives joined Simon in favoring looser immigration policies, including amnesty for some illegal immigrants, out of free-market principle or probusiness sentiment; others feared the cultural and economic costs of immigration and sought to expel illegal immigrants and shut the borders. Immigration opponents complained to the Heritage Foundation that Julian Simon’s “Nine Myths” was being used as “part of a vicious campaign against the administration-supported . . . immigration reform bill now before the House.”<sup>49</sup>

The Reagan administration, just like the Heritage Foundation, was pulled in different directions on immigration. A 1986 draft study by Reagan’s Council of Economic Advisors reflected Simon’s view that restricting immigration would hamper economic growth. But the administration’s probusiness position ultimately gave way to political pressure to reduce immigration. Simon himself opposed the administration-supported immigration reform bill, which aimed to reduce the number of immigrants into the United States. The 1986 Immigration Reform Act restricted future immigration levels while also providing amnesty to current illegal immigrants. Simon thought that the immigration restrictions represented “economic ignorance and plain racism.” He called concern over the illegal status of immigrants “mostly a red herring on the part of those who are simply anti-Mexican.” Simon acknowledged the split between

advocates of free markets and conservative anti-immigrant groups, saying that the divide illustrated why he was not a down-the-line political conservative. Simon's unorthodox position on immigration ultimately led to him shifting his affiliation from the Heritage Foundation to the Cato Institute, which was more committed to free market ideology.<sup>50</sup>

In addition to his enthusiasm for the free movement of labor, Simon's cherished memories of growing up in the Weequahic neighborhood of Newark clearly influenced his proimmigrant sentiments. Simon freely acknowledged that his "values and tastes favor having more immigrants." He explained, "I delight in looking at the variety of faces that I see on the subway when I visit New York, and I mark with pleasure the range of costumes and languages of the newspapers the people are reading." Accounts of immigrants moving to New York City filled him with nostalgia as he recalled the contribution that his grandparents had made "with little except their hopes and their willingness to work hard and take chances."<sup>51</sup>

In the years following his 1980 essay in *Science*, Simon thus established himself as a politically significant conservative thinker whose writings reshaped national debates over population, resources, and immigration. As a marker of his new prominence in the nation's capital, the *Washington Post* profiled Simon in 1984 and then again, under the title "The Heretic Becomes Respectable," in 1985. Simon was not alone in capturing the public stage as a conservative darling during the early Reagan years. Others also similarly made a name attacking environmentalists. In a prominent 1984 book, *The Apocalyptic: Cancer and the Big Lie*, for example, the journalist Edith Efron denounced environmentalists, scientists, and the media for spreading the idea that synthetic industrial chemicals were

causing a cancer epidemic. Julian Simon kept pace with peers like Efron, carving out a distinctive area of expertise. Simon's demanding work ethic generated a steady stream of publications elaborating on the themes of *The Ultimate Resource*. With support from the Heritage Foundation, Simon wrote dozens of op-ed articles for leading national publications. He also landed prime-time interviews on television shows such as PBS's *MacNeil-Lehrer NewsHour* and William F. Buckley's *Firing Line*. Overpopulation debates proved a little too "abstract" and "philosophical" for more general interest shows, but Simon also tried to get on *Late Night with David Letterman*, *The Merv Griffin Show*, and *The Phil Donahue Show*. Heritage staff members helped organize attention-grabbing publicity for *The Resourceful Earth* and for Simon's immigration reports. After his years struggling to get attention, Simon marveled at Heritage's ability to do "repeatable magic" in drawing attention to his work. Simon testified before Congress and got to know conservative politicians like Jack Kemp.<sup>52</sup>

Simon's media appearances and popular writings invariably provoked outrage. Some critics attacked his data and conclusions. Others mocked and dismissed Simon as a "mail order master," because of his successful 1965 book on the mail-order business, which McGraw-Hill reprinted five times. Even scholars sympathetic to Simon's views criticized his controversial tone and his ideological affiliation with conservative organizations such as the Heritage Foundation and Manhattan Institute. The geographer Gilbert White, for instance, complained that the draft introduction to *The Resourceful Earth* was "needlessly contentious," undermining its credibility.<sup>53</sup>

Simon defended his provocative approach as necessary for an outsider who had struggled for many years to be heard. Getting to the point of publishing *The Ultimate Resource* had been a

“long and difficult time for me,” he wrote one colleague. To Albert Rees, president of the Alfred P. Sloan Foundation, Simon explained, “If I had not stated my arguments provocatively, starting with an article in *Science* in 1980, I think that I would still be quite on the outside, having to struggle to round up my children and a few neighbors to hear what I had to say on my chosen subject.” To the demographer Samuel Preston, Simon argued, “It would be nice to have the luxury of being above the fray, striking a graceful stance and having all one’s dignity. But people with minority views don’t have such a luxury.” In a letter to friends in 1987, Simon referred to “the pain and frustration and failure that I feel almost constantly in connection with the demographic and economic research and writing.” Attacks on his scholarship and his character—and even more his recurring tendency to feel disrespected and ignored—wounded Simon, feeding the oppositional attitude that he had nurtured since childhood.<sup>54</sup>

Despite his recurring feelings of failure, Simon had changed the political debate in Washington through persistence and provocation. The clout of the Heritage Foundation had helped him find an audience in the newly receptive political climate. In 1986, the National Research Council, the research affiliate of the National Academy of Sciences, demonstrated just how far the population-resources debate had shifted in Simon’s direction when it published *Population Growth and Economic Development*. The National Research Council had previously examined population issues in 1971, issuing a sharp warning about how population growth threatened to slow per capita income growth, deepen economic inequalities, and otherwise undermine societal welfare. The new 1986 report sought a middle road, rejecting both the “most alarmist” and the “most complacent” views regarding the economic effects of population

growth. According to the economists and other social scientists involved in preparing the report, Simon's constant refrain had prompted the new literature review. *The Limits to Growth* and *The Global 2000 Report* had suggested "much to fear about population growth." By contrast, the 1986 report noted, despite rapid population growth, developing countries had achieved unprecedented per capita income, life expectancy, and levels of literacy over the previous quarter century. No clear statistical association existed between population growth rates and per capita income growth. Human behavior and institutions mediated between population and the economy.<sup>55</sup>

The most important scientific body in the country was saying that population growth did not present a major obstacle to economic development. The 1986 report respectfully referenced Julian Simon's work numerous times and accepted the overall gist of his arguments. The report found that concerns about resource exhaustion had "often been exaggerated." "The scarcity of exhaustible resources is at most a minor constraint on economic growth in the near to intermediate term." Price increases would spur conservation, improved extraction, and substitution. The report declared that "exhaustible resource depletion does not seem likely to constrain world economic growth in the foreseeable future." Following Ester Boserup's arguments about agricultural innovation, the report pointed out that technological advances came about through scarcity, which stimulated "a search for economizing strategies."<sup>56</sup> One reviewer wrote that the report was "one long subterranean roar, rumbling out 'Malthus was wrong.'" The report did not mention Malthus's name, instead trying to "slip the old man into the ground unnoticed."<sup>57</sup>

The National Research Council report made mainstream Julian Simon's thinking about the relation between economic

and demographic change. Simon welcomed the report, saying that it “bravely wrests itself from many unsound propositions published widely in the past.” Yet he was not satisfied. The report’s conclusions felt to Simon like “being charged with first-degree murder when one is innocent, and then having the court reduce the sentence to manslaughter.” Was he supposed to be grateful? The National Academy of Sciences had “backed away from what it now regards as the crazies . . . but has still left an unsound impression.” The authors continued to insist that economic development would be faster if fertility were lower. Simon said that this incorrect view underlay “misguided and dangerous policies” of the United States. The report’s soft tone allowed the World Bank, Agency for International Development, and other entities to continue their population control efforts as before. Simon was furious about the press release for the report, which attributed famine and starvation in Ethiopia to “very badly functioning markets combined with rapid population growth.” That description, he said, differed greatly from an alternate account that the “food shortages were caused by dictatorial governments which beggared farmers by appropriating their land and heavily taxing their output, together with denying them the right to move freely to wherever they wished to work and live.” Where the press release cited “market failure,” Simon saw government tyranny in Ethiopia.<sup>58</sup>

Where Simon grudgingly celebrated a partial victory, Paul Ehrlich was apoplectic about the “incompetent” population report. The National Research Council study asserted that the “most important resources are not natural, but artificial,” including social and economic infrastructure. Ehrlich denounced this mentality. He said the attitude ignored the degradation of land and water resources, the importance of biodiversity, and the ability of the environment to absorb pollution. Although the

study focused explicitly on the economic impact of population growth, Ehrlich complained that the review committee had included no ecologists, evolutionists, or earth scientists.<sup>59</sup>

Many other scientists shared Ehrlich's disparaging views of the 1986 report. G. Evelyn Hutchinson asked Ehrlich to "use my name in any way that seems useful to combat this idiocy." Ansley Coale, coauthor of an influential 1956 study that had described population growth as an impediment to economic growth in developing countries, sharply criticized this new approach. He said that the report relied too heavily on assumptions of neoclassical economics that markets would address demographic challenges and did not show that fertility reduction was undesirable in low-income countries. Environmental economist Herman Daly also criticized the report as trapped by the "mental straitjacket" of neoclassical economics. The report simply ignored the constraints of long-term carrying capacity, Daly said. Daly rejected the idea that capital could replace natural resources—a "notion that cannot withstand even a moment's reflection." Daly spoke favorably of the Chinese population policy, which rejected market solutions in favor of "stringent population controls." Daly confessed his "astonishment" that a committee of the National Academy of Sciences would favor conservatives like Julian Simon and Herman Kahn over biologists such as Paul Ehrlich and Garrett Hardin.<sup>60</sup>

For Ehrlich, the 1986 report illustrated the dismally low status of population biology, since no population biologists participated in the writing of the report. Ehrlich argued that one reason for population biology's low status was that its results pointed toward "constraints and limits on the human enterprise." Population biologists were "seldom the bearers of good news." They told hard truths that economists, developers, politicians, and chemists needed to hear. Molecular biology might

cure cancer and extend the life expectancy of Americans by “a few years at most.” But failing to heed the lessons of population biologists could “easily reduce American life expectancy by 30 years or more.” Unlikely events, such as nuclear war or rapid climate change, posed “nearly infinite” risks that a conservative society would avoid. Unless checked, the increasing scale of human activities, Ehrlich declared, “will lead inexorably to lower standards of living, less healthy lives, and quite likely the collapse of civilization.” Ehrlich urged ecologists and population biologists to represent their interests in Washington more effectively and to train graduate students in “scientific politics.”<sup>61</sup>

To promote biological thinking about social problems, Ehrlich worked with scientific colleagues in 1987 and 1988 to start a new group called the Club of Earth. The Club of Earth, which included a small number of other prominent biologists such as G. Evelyn Hutchinson and Edward O. Wilson, took its name from the Club of Rome, which had published *The Limits to Growth* in the early 1970s. Ehrlich thought that the group could provide “an authoritative counter-balance” to the “idiocy you get from economists and politicians.” In September 1988, the Club of Earth issued a public statement warning about the problems of human overpopulation. Calling the planet “already overpopulated,” the statement described population growth as second only to the threat of nuclear war as a problem facing humanity. “The population explosion will come to an end one way or another and likely within the lifetimes of most people today. The only question remaining is whether we will halt it ourselves by limiting births or whether it will be halted for us by some combination of ecological collapse, famine, plague, and thermonuclear warfare.”<sup>62</sup>

Ehrlich’s new Club of Earth failed to garner significant attention and did not continue. Ehrlich also proposed creating a



Paul and Anne Ehrlich in London, 1986. Courtesy of Sally Kellock.

new Population Biology Institute to press for funding for population biology and to help translate biological lessons into public policy. His organizational efforts revealed his increasing frustration with the public discussion of environmental issues. Population and ecological studies also were becoming marginalized within biology, as molecular and cellular approaches became dominant. Ehrlich's attacks on his critics became even more caustic. "People who don't understand why I emphasize population are the ones who have to take their shoes off to count to 20," Ehrlich liked to say. He particularly lamented the attention that the media paid to Julian Simon. Ehrlich refused to mention Simon by name, referring to him disparagingly as a "specialist in mail order marketing." More generally, Ehrlich denounced the "narrow training of economists" that made most "utterly unequipped to understand the ecological underpinnings of economic systems."<sup>63</sup>

Despite his accomplishments, Julian Simon felt frustrated, too. He also had tried to start a new advocacy group to promote his point of view. After the 1984 Mexico City population conference, which he had been disappointed not to attend, Simon proposed a new organization to "celebrate human life." The new entity, alternately called Pro People or Committee on Population and Economy, would counter the population establishment and show that there was no "consensus" on the need for population control. Sensing a "shift in the wind" after two decades of media despair about overpopulation, Simon wanted to remind people that "children are the heart of progress" and the "measure of all things in the Jewish-Christian-Islamic-Western tradition." "An additional human being tends to benefit rather than harm others economically." Limits to human progress were receding, and population growth, on average, increased the

standard of living rather than reducing it. Pro People would oppose legislative efforts to discourage parents from having children and to stabilize the United States population. Most importantly, Pro People would provide the media with “an organizational address” that could provide contrasting viewpoints on population issues. In the absence of such an organization, Simon complained, “the anti-natalists frequently characterize those who do not agree with them as a tiny and bizarre fringe group.” Pro People would “combat the anti-population and anti-growth ideas” of groups such as Zero Population Growth and the Global Tomorrow Coalition, which was promoting *The Global 2000 Report*. Pro People, like Ehrlich’s Club of Earth, went nowhere organizationally. Simon continued to lack strong organizational support for his views. The Heritage Foundation proved too tactically focused on the short-term for Simon, whose independent and scholarly attitude did not mesh well with the action-oriented, policy-focused think tank.<sup>64</sup>

Simon’s frustration came from his feeling that he had won the intellectual argument but failed to change policy behavior or break up the population establishment. The 1986 National Research Council report provided a new scientific synthesis that largely repudiated Ehrlich’s views on population growth. Simon described the shift on population issues as “the unreported revolution.” Population control advocates had the same prominent media platform for their views. In May 1989, Ehrlich presented three five-minute segments on NBC’s *Today* show, reaching an audience of millions. The television segments, Simon complained, showed “nary a whiff of the ‘balance’ that journalists pride themselves on.” What could be done about this? Simon had little hope. “Efforts to change the beliefs of the public and the assertions of journalists,” he wrote, “are likely to be a waste of time.”<sup>65</sup>

Powerful governmental institutions also continued to urge population control. The 1986 National Research Council report had not left much of a mark on international population policy. In a talk at the World Bank in 1988, Simon asked, “How can the World Bank, the UNFPA, AID, Planned Parenthood, and the population establishment go on repeating the same old scary statements?” Simon took his contrarian views right into hostile territory. The bank’s president, Barber Conable, had recently called population control “imperative” for developing countries. Simon denounced that point of view. People like Conable, Simon said, showed “blatant intellectual dishonesty” or turned “a blind eye to the scientific evidence.” Simon now broadened his attack to characterize population control advocates “as warriors against human life, even as enemies of humanity,” because they aimed to prevent people from being born. “Stupidity in high places—including the lofty places here in this World Bank Building—has cost the lives of tens of millions or even hundreds of millions of human beings in the last decade or so, far more human lives than were lost in World War II.” Simon blamed “simple racism,” a “corrupt” relationship between researchers and policy-makers, and the desire to avoid divisive political and economic reforms for the continued embrace of population control. The “world’s problem,” Simon concluded, was “not too many people, but lack of political and economic freedom.”<sup>66</sup>

As the 1980s came to a close, the decade’s events validated Reagan’s optimism in many respects. While the American economy had its ups and downs and ended the decade dipping into recession in 1990, economic growth generally was strong and unemployment relatively low. When the Berlin Wall fell in 1989, it marked the end of decades of Soviet domination of

Eastern Europe. Perhaps most important, no global food or energy shortages occurred or even appeared on the horizon. At the same time, there was much to criticize in Reagan's soaring defense spending, the expanding federal deficit, and growing economic inequality. Reagan's broad antagonism toward 1970s environmental regulation also was out of step. Public commitment to laws protecting clean air and water and public health proved fiercer and more resilient than Reagan anticipated. By provoking a forceful and organized backlash, his administration's stark anti-regulatory rhetoric in the end may have made it more difficult to achieve meaningful conservative reforms. Reagan failed to fundamentally change the course of environmental law. He ended up appointing more moderate environmental administrators after 1983 and, heeding the warnings of scientists, even forcefully embraced the 1987 Montreal Protocol for the protection of the ozone layer. Substantive policy changes in the environmental arena in the 1980s thus were relatively modest and ultimately forced toward the center.<sup>67</sup>

Yet the ideological battles of the Reagan years scarred the nation. The growing environmental divide between the two political parties and within the nation as a whole mirrored the gulf between Ehrlich and Simon. Each man believed that he was losing his life's intellectual struggle in the political arena. Each had ventured far into the political fray, straying well beyond the narrow confines of academia. Simon's move to Washington had brought him close to powerful people. He had helped overturn prevailing views on population growth as well as immigration. He had contributed to the rejection of the Carter administration's environmental and economic viewpoints, embodied in *The Global 2000 Report*. Ehrlich, in turn, had continued to stoke the fires of the environmental movement. He had denounced James Watt for his environmental sins and bashed

Reagan for his high-stakes nuclear brinksmanship. Ehrlich warned of the mass extinction of species and the collapse of human civilization in a nuclear winter. Could the two men, and the competing camps that they represented, find a way to reconcile their views, or would they descend further into bitterness and recrimination, talking past each other in a fury of argument and counterargument?