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A Very Significant Force

Bill Drayton, United States: The Bubble

Bill Drayton was born in New York City in 1943. His father, William Drayton Sr., who descended from an English aristocratic family, was something of a maverick. In 1901, at the age of nineteen, William, inspired by Teddy Roosevelt, dropped out of Harvard College to become an explorer. He spent years doing mapping and archaeological research in the Sahara and gold mining in British Columbia.

Drayton's mother, Joan, grew up in a middle-class family in Melbourne, Australia. A gifted cellist, Joan played in the Melbourne Symphony Orchestra as a teenager. At age nineteen, during the Depression, she journeyed alone to New York with the dream of becoming one of the world's top cellists. Although she had played professionally, when she saw that she would never play at the level that satisfied her, she quit performing and began channeling her energy into a program that spotted promising young musicians and arranged their debut performances at New York's Town Hall.

"Both my parents gave themselves permission to pursue their dreams in life, to do something really excellent that was theirs," Drayton told me. "They looked very conservative and establishment, but they were quite willing to do radical things."

In grade four, Drayton launched his first venture, *The Sentinel*, a two-page class newspaper that soon grew into a thirty-two-page monthly magazine. He recruited a team of writers and illustrators, persuaded local merchants to advertise in the magazine, and got it distributed to several New York City elementary schools.

The Sentinel was a defining experience. "I wasn't very good at sports," Drayton recalled. "I suffered through baseball and soccer. But this stuff I was quite good at. It gave me an outlet to be forceful, creative, and be in control. So I gravitated to it."

As a high school student attending Phillips Academy in Andover, Massachusetts, Drayton established the Asia Society and turned it into the school's most popular student organization. He took over the school's literary magazine, *The Mirror*, and reinvigorated it. He joined the National Association for the Advancement of Colored People (NAACP), and in 1957, at the age of fourteen, organized a boycott of the local Woolworth store to protest its discriminatory practices. When school administrators threatened him with disciplinary action, Drayton went around stapling signs to trees denouncing segregation, then dispatched letters to elected officials. In response to one of his letters, the headmaster of Phillips Academy received a telephone call from Hubert Humphrey, then a U.S. Senator from Minnesota, who had called to defend the boy's right to demonstrate. Humphrey won a fan for life, and Drayton learned that it pays to write letters.

Drayton loved history, particularly Indian history. He had been fascinated by India since he had first come upon a description of Kashmir in a grade-four geography book. As a teenager, he was profoundly influenced by the ideas of Gandhi, who had led India to independence just a decade earlier. As the civil rights movement gathered momentum in the United States, Drayton watched with intense interest as Martin Luther King Jr. began emulating Gandhi's tactics of nonviolent resistance.

What most fascinated Drayton about Gandhi were his "how-tos": *How* did Gandhi craft his strategy? *How* did he build his institutions? *How* did he market his ideas? Drayton discovered that Gandhi, despite his other-worldly appearance, was fully engaged in the details of politics, administration, and implementation.[1]

Over the years Drayton came to believe that Gandhi's greatest insight was recognizing early in the twentieth century that a new type of ethics was emerging in the world—an ethics grounded not in *rules*, but in *empathy*. It was a change that was necessary as human society grew increasingly complex. In the past, when people lived in homogenous communities and rarely moved far from their birthplaces, rule-based ethics had been adequate to govern human relations. But the world had become too fast-paced and interconnected for rule-based ethics. There

were too many interactions in which rules were outdated and belief systems clashed. The new circumstances demanded that people become more ethically self-guiding: People had to be able to put themselves in the shoes of those around them. Those who could not navigate situations in which rules were changing or could not master the skills of empathetic understanding would find themselves unable to manage their behavior wisely and ethically; increasingly, Drayton asserted, they would be seen as "loose cannons" and marginalized within society.

Gandhi wasn't responsible for these changes, but he recognized them. "It was a deeply egalitarian transformation. Empathy had become a powerful new force in the world," adds Drayton. "And Gandhi fashioned political instruments that made that new force really have *political bite*. He saw that what you've got to do is make people face up to the fact that they are not treating other people equally. Once you do that, they can't continue doing it and still respect themselves."

How did he do it?

Gandhi's 1930 Salt March was perhaps the greatest example of his strategy in action. The ostensible goal of the march was to protest the salt tax and the British law that prohibited Indians from making their own salt. The plan was for Gandhi to walk 241 miles to the sea to pick up some salt from natural deposits—an illegal act—at which point the British would arrest him. Gandhi knew that the salt tax had been bitterly despised since the time of the Moguls.[2]

"It just makes the hair on the back of your neck stand up when you visualize what he did," explains Drayton. "It was illegal for the press to cover. But by walking to the sea, of course everyone in India knew about it and there was drama building up from day to day. And of course the British arrested him, and there then was this incredible wave of thousands of people [more than 60,000] being arrested for this very simple act of making salt. In the Bombay salt flats, wave after wave of the Congress Party workers would come up and be hit over the head and shoulders by this very violent metal-tipped hinged club. You can almost hear the thump of these hinged clubs on the unprotected bodies of the Congress workers. They would fall to the ground and other Congress workers would come up with stretchers and women would help take them off. And then the next line would come along. This was an incredible demonstration of self control and strength and nonviolence. And it confronted the British and the world with a morality play. It was part of the process of getting Indians to feel that they were not inferior. Quite to the contrary. Not that they

are superior, but that this is a superior *ethic*. It's a universal ethic but one that, historically, is especially characteristic of Indian society. And to the British, of course, he was saying, 'This is an ethic that you as a society of laws, in fact, believe in.' Now please live up to your beliefs."

After high school, Drayton enrolled in Harvard College. He remained marginally involved in the civil rights movement, organizing busloads of students who integrated picket lines in front of segregated businesses in Maryland.

As his interest in India deepened, he became fascinated by the ancient emperor Ashoka, who ruled from 269 to 232 bce.

Ashoka had undergone a stunning transformation early in his reign. After enlarging his empire through war and unifying much of the Indian subcontinent, he suddenly became stricken with remorse. He renounced armed conquest and, for the duration of his life, propagated the values of nonviolence, proper treatment of servants and animals, and generosity toward all beings.[3]

In Drayton's view, what distinguished Ashoka from other historical figures were, again, his "how-tos." Ashoka established what was effectively the world's first large-scale class of civil servants devoted to public welfare. These workers built up India's Grand Trunk Road, an ancient travelers' route extending from Afghanistan to West Bengal, placing watering sheds, rest houses, and shade trees along much of its length. They established hospitals for people and animals, food-for-work programs in the spirit of today's workfare, and land settlement programs comparable to the Kibbutzim in Israel.

Ashoka was also a global-minded leader, fostering long-distance trade and dispatching ambassadors to other empires. He played a seminal role in the spread of Buddhism. In fact, the oldest independent evidence of the existence of Buddhism are Ashoka's inscriptions.[4] Although himself a Buddhist, Ashoka tolerated other religious sects and guaranteed freedom of religion throughout his empire.

"He was a practical creator on as giant a scale as anyone in history," comments Drayton. "He realized the economic power of the continental scale empire and he used that power for social purposes."

At Harvard, Drayton established a weekly gathering that he called the *Ashoka Table*, inviting prominent government, union, business, and church leaders—"people running real things"—to off-the-record dinners at which students had the opportunity to ask "how things really worked."

In the summer of 1963, Drayton, then twenty, finally made it to India. Before leaving, he sought advice and introductions from numerous India experts, including Bayard Rustin, the U.S. civil rights leader who had counseled Martin Luther King Jr. in Gandhian nonviolence during the Montgomery bus boycott of 1955–56.

Rustin gave Drayton a letter of introduction to Jaya Prakash Narayan, one of India's leading political figures, who in turn put him in touch with Vinoba Bhave, the social reformer known as India's "walking saint."[5] Bhave had been one of Gandhi's key disciples. After Gandhi's assassination in 1948, Bhave continued to seek ways to promote nonviolence and self-reliance, and he chose to focus on land reform.

Bhave didn't believe that the government could achieve land reform peacefully. For him, the way was to change people's hearts. So, in 1951, he launched his *bhoodan* (land gift) movement, which later grew into his *gramdan* (village gift) movement. Although he was fifty-five at the time and suffered from malaria and a stomach ulcer, Bhave began walking across India, ten to twelve miles a day, teaching villagers about nonviolence and exhorting them to transfer portions of land to a cooperative ownership system to support landless people and "untouchables," the poorest of India's poor.

By 1960 Bhave's efforts had led to the voluntary redistribution of 7 million acres of land, an area larger than Massachusetts, Delaware, and Rhode Island combined.

Drayton traveled to Orissa, in eastern India, to join Bhave's encampment for a few weeks. Each morning Bhave and his group of fifteen to thirty "constructive workers" set out walking at 2:30 A.M. After a few hours they would stop and silently observe the sunrise. For Drayton, these walks during the cool morning hours were "completely magical."

Then Bhave and his colleagues would continue to a designated village. As they drew close, Drayton would watch as multitudes converged from all directions. When Bhave reached the village boundary, the local leaders would lead him under a palm arch and offer him the "light of the village" (a ceremonial honor). Then Bhave would hold a silent prayer service only for children. "You could hear a pin drop," Drayton recalled. "I have never seen such large numbers of children—thousands—behave that way so consistently."

Bhave's volunteers would then break into groups and negotiate with locals for "village gift."

In the heat of the afternoons, sitting together on a *charpoy*, a small bed or couch, Drayton would question Bhave about nonviolence. "Vinoba was very patient with me and adjusted to my level of understanding," he recalled.

It was clear that Bhave was a sophisticated thinker. He could be as calculating as any beltway insider. Yet he remained, at his core, a humble man, and villagers responded overwhelmingly to him. "He had a—*force*—about him," Drayton said, not quite satisfied with the word "force." "He was not only a political liberator, but a psychological liberator. He knew he had the ability to reach out and help people make heroic life decisions in a large part through his example. And like all good leaders he made people feel bigger, not smaller. I came away with great respect for him. I understood his intelligence on the analytical level. And I saw him as a living saint.

"Today I would probably see him as a social entrepreneur."

As Drayton's interests in Gandhi, King, Ashoka, and Bhave converged, another influence was soon added. As an undergraduate at Harvard, Drayton took a class with David C. McClelland, who had recently published his landmark book *The Achieving Society*, which, among other things, explored the motivational qualities of entrepreneurs.

McClelland, a psychologist, defined three dominant human motivations—need for *power*, need for *affiliation*, and need for *achievement*—and developed techniques to measure them. What most interested him was the need for *achievement* which he found correlated with entrepreneurship.

McClelland found that individuals with a high need for achievement tended to be less influenced than others by suggestions as to what they should do, think, or believe. They were "oriented forward in time toward longer-range goals, even when that means foregoing immediate pleasures."[6] They were less conforming and cared less about public recognition. What influenced them most in engaging problems were facts. They preferred the counsel of experts to friends.[7] They were not gamblers. They tended, in fact, to be conservative in games of chance and daring in games of skill, at which they usually overestimated their chances of success. While others viewed entrepreneurs as risk takers, McClelland noted that they did not see themselves this way. They typically accepted challenges only when they perceived that there was an acceptable chance of success and when the main determinant of success was their skill.[8] And, contrary to common assumption, McClelland asserted that entrepreneurs were motivated primarily by the sense

of achievement rather than a desire for money. Profits were important because they gave the entrepreneur "definite knowledge" of his or her competence.[9] But real satisfaction for the entrepreneur came from making the world conform in a very specific way to his or her will.

In much of this, Drayton recognized himself.

After graduating from Harvard, Drayton studied economics, public finance, and history at Oxford University, then enrolled in Yale Law School, where he founded Yale Legislative Services, a program that matched students with lawmakers in six states to help them craft intelligent social policy. At its peak, the organization involved a third of the law school's student body.

During this period, the late 1960s, Drayton also suffered a series of personal losses. His mother, Joan, passed away suddenly from cancer; his older cousin, Thornton, who had been like a second father to him, suffered a stroke that left him barely able to communicate; and in early 1969 Drayton had to sever an eight-year relationship with a Czech woman whom he had met on a trip to Eastern Europe in 1960. (After the Soviets invaded Czechoslovakia in 1968, Drayton believed that continued contact with the woman and her family would have placed them in jeopardy.)

Drayton responded by concentrating his energies and thoughts in the area where he could exert most control: his work.

"I just buried it all," he told me. "I didn't want to have any more of it."

During the first half of 1970s, he worked chiefly in McKinsey & Company's public practice ("to learn how institutions work," he says), taking leave to teach at Stanford's Law School and Harvard's Kennedy School of Government. As a management consultant, Drayton focused on public issues such as housing, unemployment, and minority economic development. He led a team that reworked the mechanism for environmental enforcement in Connecticut, removing the incentive for polluters to tie up cases in courts—the major hurdle in enforcement. (A number of those changes became part of U.S. environmental statutes.)

"Everything that Drayton did he worked to solve fundamentally," recalled Carter Bales, who hired him for McKinsey. "He taught me to look for the nonobvious ways to gain leverage times ten on an issue."

Drayton's achievements in Connecticut combined with his political contacts—he had worked on several campaigns—led to his appointment

as assistant administrator of the Environmental Protection Agency (EPA) in 1977. That was when he began pushing through the "bubble."

When I asked Drayton to explain the "bubble" to me, he explained that he would first have to provide a little background information about pollution regulation. "Imagine a factory, an auto plant," he began. "It gives off particulates and hydrocarbons, basic air pollution, *bad stuff*. There might be a hundred different processes in the plant that release air pollution: paint-spray booths, degreasing operations, and so forth. The way the regulatory system works is that there is a process that goes into motion for paint-spray booths, for degreasing operations, and for all the other ninety-eight sources that give off hydrocarbons, and each one of those processes involves a long administrative procedure: proposal, comment, revision, and so forth.

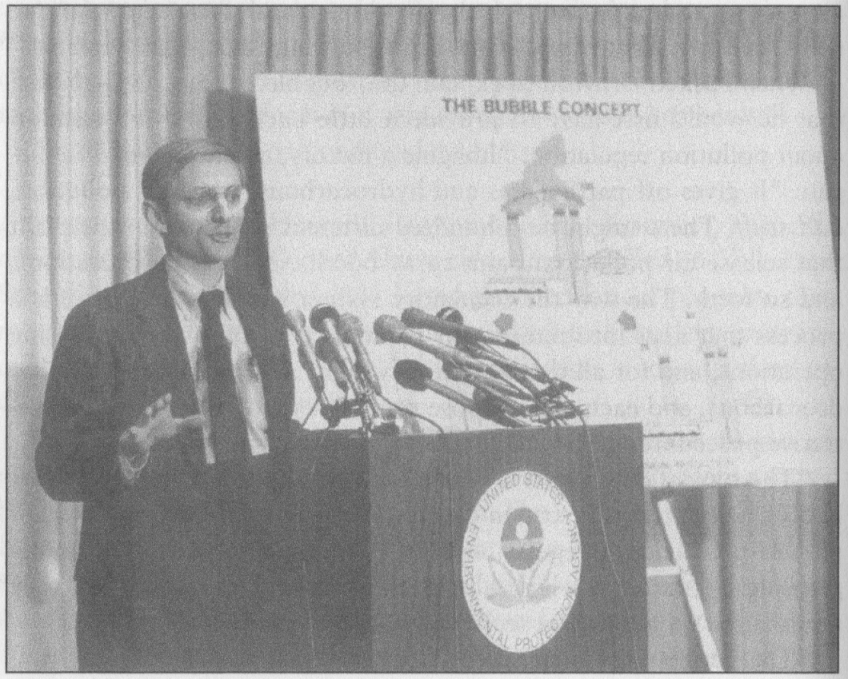
"The typical outcome is a regulation that applies to all paint-spray booths across the industry. In the meantime, a separate group of people are producing a regulation on a different time schedule for degreasing operations—which also deals with hydrocarbons—but they are focused on a different technology.

"The net result is a hundred different regulations that apply to a hundred different processes in the same plant that were written by different teams of people at different times that don't take one another into account.

"Now, the cost of removing one pound of hydrocarbons from the air differs markedly from one process to another. It is not uncommon to find a cost differential of a hundred to one. So, say in one process it costs $100 and in another it costs $1.

"It is immediately obvious that if you allow the factory to come back to you with a counterproposal so that if they can get more of the $1 pounds out they can stop taking $100 pounds out, they are saving an *oodle* of money. They have a big incentive to do this. One good thing that happens is that this lowers the cost of achieving any given level of pollution reduction. Lowering the cost means lowering political opposition. It also means eliminating a lot of crazy—i.e., politically costly—examples that inevitably come out of the application of rules to concrete cases."

The bubble was the framework that would make this possible. The basic idea was to imagine a bubble over a factory. Within it engineers had to limit total emissions in accordance with the law. The difference was that they could make proposals to the government about how to do it. They could offset one internal source against another, provided



Bill Drayton explaining the "bubble" at an EPA press conference, 1979

that the net result was as clean and enforceable as the government's standard. And any savings was theirs to keep.

The bubble wasn't a new concept. Economists had been debating its merits for years, but the discussion remained theoretical.[10] In 1977, when Drayton, age thirty-three, arrived at the EPA, he resolved to make it real. "I came to the EPA with a very strong sense that the environment was built on a politically flawed and failing foundation," he explained. "I had experienced 'environmental reaction' in Ohio, Connecticut, and New York City. The field was on the defensive more than able to move ahead. Without a change in the underlying political balance, as long as the cost of pollution reduction and abatement increased, the inevitable consequence would be increased human exposure to pollution."

As Drayton saw it, the key to changing the political dynamic was to make it more attractive for business to fight pollution than to fight the EPA. One way to do this was to give plant managers and engineers—the people in the best positions to develop new pollution control technologies—economic incentives to do so. The prebubble regulatory

system had not only failed to create such incentives, it had created negative incentives. "The last thing in the world that anyone from industry's side wanted was someone to find a new and better way of controlling pollution because then, given the law, they'd all have to go and spend money to implement it," explained Drayton.

The bubble didn't have to be confined to one factory. Depending on the natural sink of the pollutant, a bubble could encompass all the factories in a state or a country or even the world. Greenhouse gases need to be controlled at the global level, so what is needed is a system that encourages people to search for greenhouse gas–reduction opportunities anywhere on earth: a system that allows a company in, say, Ohio to clean up a smoke-spewing factory in Calcutta, or maintain a forest in Honduras, in exchange for not having to make a less significant change at home that might be ten times as costly. The mechanism to make it happen, Drayton believed, was a tough regulatory framework that freed the market to work.

There were many obstacles involved in putting the bubble into practice. Above all, the idea had to be sold. Many environmentalists were flatly opposed to using the market to achieve public policy goals. Hard-liners did not feel that the government should have to consider the costs of pollution control.[11] Many in the EPA's air pollution program saw the bubble as a cave-in to big business, and some of the enforcement staff saw it as a budget threat. Nevertheless, in 1979 the bubble and pollution trading became U.S. environmental policy. Brian J. Cook, who chronicles the battle in his book, *Bureaucratic Politics and Regulatory Reform: The EPA and Emissions Trading,* details how Drayton, through his stubbornness and tenacity, his ability to recruit allies, and his mastery of the details, championed the bubble, pushing it through the system, changing the way the EPA worked, and gaining a "foothold" for the idea that is "not likely to be shaken."[12]

But it didn't end there.

In January 1981, following the election of President Ronald Reagan, Drayton left the EPA. That August he was contacted by a Republican senator on the Senate Environmental Committee, a Republican official at the Office of Management and Budget, and an employee in the EPA's personnel office, all of whom informed him (in confidence) that the Reagan administration was planning to destroy the EPA.

The administration had proposed a cascade of cuts that, within twenty months, would have reduced the EPA's budget by two-thirds. Reagan's new EPA administrator, Anne Gorsuch, was also planning

personnel changes that would have resulted in 80 percent of the employees in the EPA's headquarters being fired, demoted, downgraded, or reshuffled—destroying the web of experience and relationships that made the institution effective.[13] The details were buried in a 3,000-page budget plan that the senator had leaked to Drayton as well as boxes of files Drayton had gotten hold of from the personnel office.

Having served as the EPA's head of planning and chief budget officer, Drayton understood the implications of the Reagan administration's plan. "They were essentially dismantling the key decision-making processes," he explained. "They couldn't win the policy fight, so they were going to destroy the institution. It was a very clever attack. The laws don't matter if you don't have the institution to enforce them."

The budget cuts were coming at a time when the EPA needed more, not less, money to do its job. In the late 1970s, Congress had passed a wave of new environmental laws regulating the use and disposal of toxic pollutants. The EPA's workload had effectively doubled. Under Gorsuch, however, life in the agency had become so unpleasant that staff attrition was running at 32 percent a year.[14]

"There I was sitting with all this information," recalled Drayton. "I don't like conflict. Fighting to defend something doesn't turn me on. I like to build things. But I had spent a good part of my professional life building the environmental institution at the municipal, state, and federal levels. And what they were doing was illegitimate; it was just *wrong*."

He contacted a *New York Times* reporter, Philip Shabecof, who wrote a front-page story.[15] The following day the *Washington Post* responded with its own front-page story.[16] And the ball was rolling. Drayton then set up an organization called Save EPA and began building a network of environmental managers to help. He set up a peer-review Facts Committee, which soon identified a sharp decline in enforcement cases sent to the Justice Department, as well as drops in voluntary compliance—both indications that the budget cuts were taking a toll on the environment.

The long-term impact of a budget cut does not lend itself to gripping journalism. However, Drayton put together a strong case to show that the cuts would effectively double Americans' exposure to toxic pollutants by 1990.[17] During the autumn of 1981 he spent six hours each day on the phone selling this case to editors, journalists, and environmentalists, triggering newspaper articles and editorials across the

country. He even got industry magazines, such as *Chemical Week*, to recognize the dangers, by arguing that, in the absence of enforcement, companies that flouted environmental laws would enjoy a competitive advantage over those that abided by them in good faith. This would lead to an increase in pollution from industry and, inevitably, a public backlash. Drayton also cautioned that the Reagan-Gorsuch program could cause the EPA, under future administrations, to "swing back vigorously," becoming more rigid and adversarial with business.[18]

He funneled Save EPA's analysis to Democrats on the Hill, along with strategy briefs on how to exploit the Reagan administration's weakness on the environment. That October Congress hastily convened a hearing on the issue. Then, in January 1982, as Congress reconvened, Save EPA went on the offensive. "We planned a 'Let's destroy their credibility' week," Drayton recalls. They prepped ABC news for an exposé. Drayton met with Garry Trudeau, and for a week the destruction of the EPA was the subject of the *Doonesbury* comic strip. Drayton also met with Russell Train, who had been the EPA administrator from 1973 to 1977, and showed him a list of people who had been squeezed out of the agency. Train wrote an op-ed piece for the *Washington Post* under the headline "The Destruction of EPA."[19]

"It was a catalytic week," Drayton recalled. "We were able to tip the presumption in our favor. The general assumption afterward was that something really bad and probably illegal was going on."

Over a secret breakfast meeting, as Drayton recalls, one of Reagan's advisors confided: "Political people don't care about the environment. But they're not against it. They just want to win politically. So you just have to make it obvious to them that this is going to be political torture until they stop."

Drayton took the advice. For the next three years, as soon as the administration unveiled its budget plan, Save EPA was all over it: getting advance copies of the figures, analyzing them, showing the impact on the environment, and getting the message to the press. Eventually the Senate acted to halt further budget cuts to the EPA. Meanwhile, Congress discovered serious abuses of power within the agency, and Gorsuch was forced to resign. It was no victory to be sure: The EPA had lost a third of its funding (some of which was restored under George Bush Sr.'s presidency).

"They did tremendous damage," Drayton says. "But it could have been a lot worse."

Doonesbury comic strip, January 25–28, 1982

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By the late 1990s, it was reported that the emissions-trading provisions in the 1990 Clean Air Act had brought significant reductions in sulfur dioxide pollution, the source of acid rain.[20] By 1997 emissions trading had become one of the central features of the Kyoto Protocol, the leading international framework to address global warning.[21] In 2003 the European Parliament launched the world's first international global emissions-trading market to curb carbon dioxide output from 10,000 companies (responsible for 46 percent of emissions in the European Union). The market, which began operating in January 2005 and includes 27 nations, is the centerpiece of the EU's strategy to meet its commitments under the Kyoto Protocol (which include an 8 percent reduction from 1990 emissions levels by 2010). The emissions-trading market is expected to reduce the costs of achieving this target by 35 percent.[22] In 2006, the government of California passed the California Global Warming Solutions Act, which mandates that the state reduce emissions of global warming gases to 1990-levels by 2020. A central feature of the plan is an emission trading system, which California hopes to link to the EU system, as well as to encourage participation from the federal government, other U.S. states, and other nations.[23]

"Concepts that Bill was advocating twenty-five years ago, that were considered radical cave-ins by the environmental movement, are today advocated by nearly everybody as better ways to control pollution," explains Jodie Bernstein, the former director of the Federal Trade Commission's Bureau of Consumer Protection, who worked with Drayton at the EPA. "Bill was a very, very significant force in changing the way the government went about carrying out the environmental mission."

After I met Drayton, I began researching the bubble and emissions trading. I went through newspapers and magazines and searched the Internet. I found hundreds of reports and articles on the subject, but very little linking Drayton to the initial demonstration and marketing of the idea. It would have been easy to conclude that emissions trading was one of those ideas whose "time had come." There was no indication that it had been fought for with dogged persistence by an unusually determined and creative individual.