

Today, some 150 years after the concept was conceived, we know it to have been an unmitigated failure. Indeed, those of us, citizens of planet Earth fortunate enough to be present in the final decade of the Twentieth Century, have been privileged to witness events equal to any celebrated milestone in the history of mankind. In what seemed like a made-for-TV video, we were ringside spectators at a global rebellion. In less than an eye-blink the Berlin Wall fell, Germany was unified, Apartheid ended, Eastern Europe was liberated, the Cold War ceased, and a doctrine that impaired the freedom of three generations and misdirected the destiny of the entire planet for seven decades was decisively repudiated.

What a magnificent triumph of democracy and freedom. What a glorious victory for capitalism and free markets. What a majestic tribute to Thomas Jefferson, Adam Smith, Abraham Lincoln, and Milton Friedman. What a divine time to be alive. Surely these events represented some of the defining moments of the Twentieth Century. Ironically, the lynch-pin of all that occurred will not be found in the political or economic arena, but rather in the sciences. One hundred years after the Communist Manifesto, to be precise, on December 23, 1947—smack dab in the middle of the Twentieth Century—two Bell Laboratory scientists invented the first transistor. It was the birth of a technology that would serve to dominate the balance of this century and, I dare say, much of the Twenty-first as well. The Digital Age was upon us.

Transistors and their offspring, the microchip, transformed everything: the computer, the space program, the television, the telephone, the markets, and, to be sure, telecommunications. Modern telecommunications became the common denominator which gave everyone the ability to make a stark, uncompromising comparison of political and economic systems. The truth could no longer be hidden from the people. We had migrated said Walter Wriston of Citicorp from the gold standard to the "information standard."

In a very real sense, the technology of the Twentieth Century moved mankind from the big to the little. It is a trend that will surely continue. In physics, this century began with the theory of General Relativity; this dealt with the vast, with the universe. From there we journeyed to comprehension of the infinitesimal, to quantum physics. Physicists were now able to decode nature's age-old secrets. Similarly, in biology we also moved from macro to micro—from individual cells to gene engineering. We entered an era of biomedical research where we can probe the fundamental components of life and remedy mankind's most distressing afflictions.

Thus, in stark contrast to the signals at the turn of the last century, the evidence today is overwhelming that the next century will be dominated by the information standard. Today, millions of transistors are etched on wafers of silicon. On these microchips all the world's information can be stored in digital form and transmitted to every corner of the globe via the Internet. This will change the way we live, the way we work, and the way we play. Indeed, the Digital Revolution will direct the next century just as the Industrial Revolution directed much of the Twentieth.

So there you have it: the pain, the progress, and the promise of my parent's century. It would be grand to believe that we have learned from our mistakes, that only enlightened times await us, but I am afraid that would be a bit pollyannaish. Still, we stand on the threshold of immense scientific breakthroughs and the future looks brighter than it ever was. Indeed, the Weizman Insti-

tute of Science symbolizes the scientific miracles of the Twentieth Century and points the direction for the world as we enter the Twenty First. If my parents were still present, they would surely tell this kid from Bialystok to await the next century with great anticipation and with infinite optimism.

Thank you. •

RETIREMENT OF SOUTH CAROLINA CHIEF JUSTICE ERNEST FINNEY

• Mr. HOLLINGS. Mr. President, today it is my great privilege and honor to salute one of South Carolina's foremost jurists and public servants, South Carolina Supreme Court Chief Justice Ernest A. Finney.

On February 23, Chief Justice Finney announced he would retire from the Court after 14 years. This is a bitter-sweet day for my state. All of us who admire Judge Finney and appreciate his legacy are sorry to see him leave the bench; but we also are happy for Judge Finney if he has decided it is time to take a richly deserved rest from the rigorous demands of public service—demands he has shouldered over five decades.

When Ernest Finney graduated from law school in 1954, blacks were not allowed to join the South Carolina bar or serve on juries. Judge Finney worked as hard as anyone in the country to change that. One of only a handful of black lawyers in South Carolina in the 1950s, he began his legal career as an advocate for equal rights and desegregation.

Ernest Finney and his law partner, Matthew Perry, who went on to become the first black federal judge in South Carolina, tirelessly represented over 6,000 defendants arrested during civil rights demonstrations in the 1960s. Although they lost all the cases at the state level, they won almost all of them on appeal in federal courts.

After helping lead the fight to desegregate South Carolina, Ernest Finney turned his attention to another form of public service. In 1973, he became one of the first blacks elected to the South Carolina House in this century. He served until 1976, during which time he founded the South Carolina Legislative Black Caucus.

From 1976 to 1985, Judge Finney sat on the South Carolina Circuit Court bench. Always the pioneer, he was the first black Circuit Court judge in South Carolina.

In 1985, he became the first black member of the state Supreme Court since Reconstruction. He served with great distinction as an Associate Justice and earned respect and accolades from his peers and from attorneys appearing before the Court.

In 1994, Judge Finney was elected Chief Justice, the first black South Carolinian to attain that position. Without a doubt, he is one of the finest jurists in South Carolina history. As senior Associate Justice Jean Toal commented on the announcement of Judge Finney's retirement: "He's a

giant of the judicial system in South Carolina. His tenure will be remembered as one of the outstanding tenures of the modern system."

Mr. President, today it is my immense pleasure to salute the gigantic achievements of Judge Ernest Finney, one of the most estimable public servants in recent South Carolina history. I join his friends and admirers in wishing him well as he begins his retirement, during which I suspect he will continue influencing South Carolina for the better. •

HUMAN RIGHTS AND JUSTICE IN SIERRA LEONE

• Mrs. FEINSTEIN. Mr. President, I rise to join my colleagues from Wisconsin and Tennessee in co-sponsoring Senate Resolution 54, which was introduced on February 25. This resolution makes a strong, and much needed statement about U.S. concern and commitment to African peace and stability.

In the past several years, Sierra Leonians have seen their country go through a tumultuous period. On May 24, 1997, the Armed Forces Revolutionary Council (AFRC) and the Revolutionary United Front (RUF) seized control of Sierra Leone. The United States demanded that democratically elected President Tejan Kabbah be reinstated immediately.

Although diplomatic efforts by the United States and the Economic Community of West African States failed, a West African intervention force, (ECOMOG), was authorized by the international community to intervene, and it was successful in removing the unrecognized military rulers from power. On March 10, 1998, President Kabbah returned after 10 months in exile and reassumed control.

Unfortunately violence continues to ravage the country. In January of this year, RUF launched an offensive to take the capital, Freetown. Though ECOMOG drove rebel forces from the city, numerous reports of rape, mutilations, kidnapping of children for forced combat, and killings of innocent civilians by RUF forces continue to surface.

Official estimates report that in the last 2 months alone, the death toll has reached 2,000 to 3,000 people, with many also dying from lack of food and medicine. The United Nations High Commissioner for Refugees estimates the number of refugees fleeing to Guinea and Liberia at 440,000.

The administration has expressed shock and horror regarding the desperate situation in Sierra Leone and I am pleased that they have indicated they will provide \$1.3 million for logistical support for ECOMOG in 1999, and \$55 million for humanitarian assistance for the people of Sierra Leone. This Resolution builds on the administration's efforts, and calls for a strong U.S. commitment to end the violence and suffering in Sierra Leone.

First, it condemns the violence committed by the rebel troops and those

that provide them with financial, political, and other types of assistance.

Second, it supports increased U.S. political and logistical support for ECOMOG, while recognizing the need for ECOMOG to improve its performance and increase its respect for humanitarian law.

Third, it calls for immediate cessation of hostilities and the observance of human rights.

Fourth, it supports a dialogue between members of the conflict in order to bring about a resolution.

Finally, it expresses support for the people of Sierra Leone in their endeavor to create and maintain a stable democratic society.

The situation in Sierra Leone and the influx of refugees to neighboring countries threatens the stability of the entire West African region. This is not a time for the United States and the international community to turn our backs. The people of Sierra Leone have already suffered too much and will suffer even more if we do not act. Rather, this is the time to stand firmly on the side of peace and democracy and the betterment of the lives of all Sierra Leonians.

By passing this legislation, we are making a strong statement in support of the efforts to contain and bring to a peaceful end this conflict. We have seen all too many times, in all too many places around the world the price that is paid if we choose to avert our eyes and allow violence to flourish. We should not make that mistake. We should not hesitate to raise our voice. I encourage all my colleagues to vote in favor of this resolution and in favor of human rights and justice in Sierra Leone.●

DR. GLENN T. SEABORG

● Mr. MOYNIHAN. Mr. President, I rise today to salute a pioneering scientist and a great American, Dr. Glenn T. Seaborg, who died on February 25 at the age of 86. Although a chemist by training, Dr. Seaborg is best remembered for his contributions to nuclear physics. Dr. Seaborg was the co-discoverer of plutonium, and led a research team which created a total of nine elements, all of which are heavier than uranium. For this he was awarded the Nobel Prize in Chemistry in 1951 which he shared with Dr. Edwin M. McMillan.

In 1942, as a member of the Manhattan Project, Dr. Seaborg was assigned to a laboratory at the University of Chicago. There he headed a unit that worked to isolate plutonium from uranium—the fuel used in the atomic bomb dropped on Nagasaki. After the war ended, Dr. Seaborg returned to the University of California at Berkeley until 1961, when, at the request of President John F. Kennedy, he became chairman of the Atomic Energy Commission (AEC). It was a position he held for ten years, spanning three administrations. Dr. Seaborg was the first scientist to direct the Commis-

sion. It was in this capacity that Dr. Seaborg acted as an advisor to the U.S. negotiator, Averell Harriman, in talks that led to the Limited Test Ban Treaty and was an advocate for the peaceful use of atomic energy.

Dr. Seaborg kept a journal while chairman of the AEC. The journal consisted of a diary written at home each evening, correspondence, announcements, minutes, and the like. He was careful about classified matters; nothing was included that could not be made public, and the journal was reviewed by the AEC before his departure in 1971. Nevertheless, more than a decade after his departure from the AEC, the Department of Energy subjected two copies of Dr. Seaborg's journals—one of which it had borrowed—to a number of classification reviews. He came unannounced to my Senate office in September of 1997 to tell me of the problems he was having getting his journal released, saying it was something he wished to have resolved prior to his death. I introduced a bill to return to Dr. Seaborg his journal in its original, unredacted form but to no avail, so bureaucracy triumphed. It was never returned. Now he has left us without having the satisfaction of resolving the fate of his journal. It is devastating that a man who gave so much of his life to his country was so outrageously treated by his own government.

Dr. Seaborg continued to lead a productive life until the very end. After his tenure as chairman of the AEC, Dr. Seaborg returned to the University of California at Berkeley where he was a University Professor—the highest academic distinction—and later a professor in the university's graduate school of education as a result of his concern about the quality of science education. He was the director of the Lawrence Berkeley Laboratory and until his death its director emeritus.

And there were well deserved accolades. In 1991 Dr. Seaborg was awarded the nation's highest award for scientific achievement, the National Medal of Science. In 1997 the International Union of Pure and Applied Chemistry named an element after a living person for the first time. Thus element 106 became Seaborgium (Sg), and Dr. Seaborg was immortalized as a permanent part of the periodic table to which he had already added so much.

So today I remember Dr. Seaborg for his contributions to nuclear physics, and I salute him for his service as chairman of the Atomic Energy Commission. Dr. Seaborg's family is in my prayers at this time of great loss; his wife of 57 years, Helen, and five of their six children: Lynne Annette Seaborg, Cobb, David Seaborg, Stephen Seaborg, John Eric Seaborg, and Dianne Karole Seaborg. Their son Peter Glenn Seaborg died in May of 1997.

Mr. President, I ask that Dr. Seaborg's obituary, which appeared in the Washington Post on Saturday, February 27, 1999, be printed in the RECORD.

The obituary follows:

[From the Washington Post, Feb. 27, 1999]

NOBEL-WINNING CHEMIST GLENN SEABORG
DIES

(By Bart Barnes)

Glenn T. Seaborg, 86, the chemist whose work leading to the discovery of plutonium won a Nobel Prize and helped bring about the nuclear age, died Feb. 25 at his home near Berkeley, Calif.

He had been convalescing since suffering a stroke in August while being honored at a meeting in Boston of the American Chemical Society.

Dr. Seaborg was a major player on the team of scientists that developed the world's first atomic bomb used in warfare, which was dropped on Hiroshima, Japan, on Aug. 6, 1945, in the closing days of World War II. His research was later a critical element in the peacetime operation of nuclear power plants.

For 10 years, during the Kennedy, Johnson and Nixon administrations, he was chairman of the U.S. Atomic Energy Commission. It was a period of Cold War tension and mounting international anxiety over the nuclear arms race. As the president's primary nuclear adviser, Dr. Seaborg participated in negotiations that led to the Limited Nuclear Test Ban Treaty of 1963, and he was an articulate and forceful advocate for the peaceful use of atomic energy.

A former chancellor of the University of California at Berkeley, Dr. Seaborg returned to the university as a chemistry professor on leaving the AEC chairmanship in 1971.

It was at the Berkeley laboratories three decades earlier that he created from uranium a previously unknown element that he called plutonium. The amount was infinitesimally small, about a millionth of a millionth of an ounce, and it could not be seen with the naked eye.

The process by which this was achieved—the transmutation of uranium into plutonium by bombarding it with neutrons—would win the 1951 Nobel Prize in chemistry, which Dr. Seaborg shared with a Berkeley colleague, Edwin M. McMillan. A form of this new element—known as plutonium 239—was found to undergo fission and to release great energy when bombarded by slow neutrons.

That, Dr. Seaborg would say later, gave plutonium 239 "the potential for serving as the explosive ingredient for a nuclear bomb."

In 1942, at the age of 30, Dr. Seaborg took a leave of absence from the University of California to join the Manhattan Project, the code name for the U.S. World War II effort to develop an atomic bomb. Since Nazi Germany was believed to be engaged in a similar effort, the project was given the highest wartime priority.

Assigned to a laboratory at the University of Chicago, Dr. Seaborg was chief of a Manhattan Project unit that was trying to devise a way of isolating large amounts of plutonium from uranium. By 1943, they had separated enough plutonium to send samples to the Manhattan Project scientists working at the laboratories at Los Alamos, N.M., where it was needed for some crucial experiments.

To arrange for the return of the plutonium to the Chicago laboratory, Dr. Seaborg had to devise a shortcut around the cumbersome and top secret wartime security apparatus. Lacking clearance to enter the Los Alamos laboratories, he took his wife on a vacation to nearby Santa Fe, where one morning he had breakfast with one of the Los Alamos physicists. At the restaurant after the meal, the physicist handed over the plutonium, which Dr. Seaborg placed in his suitcase and took back to Chicago on a train.

By 1945, there had been enough plutonium produced to build two atomic bombs, including the one dropped on Nagasaki, Japan,