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## Breaking the Chains

On January 2, 1959, a Soviet rocket carrying the Lunik I space capsule—also known as *Mechta*, “the dream”—blasted off from the Baikonur Cosmodrome in Tyuratam, Kazakhstan, accelerated to twenty-five thousand miles per hour (the magical speed known as “escape velocity”), sailed past the moon, and pushed free of Earth’s orbit, becoming the first man-made object to revolve around the sun among the celestial bodies. The next issue of *Time* magazine hailed the feat as “a turning point in the multibillion-year history of the solar system,” for “one of the sun’s planets had at last evolved a living creature that could break the chains of its gravitational field.”

The flight of the Lunik set off a year when chains of all sorts were broken with verve and apprehension—not just in the cosmos, but in politics, society, culture, science, and sex. A feeling took hold that the breakdown of barriers in space, speed, and time made other barriers ripe for transgressing.

1959 was the year when the shockwaves of the new ripped the seams of daily life, when humanity stepped into the cosmos and also commandeered the conception of human life, when the world shrank but the knowledge needed to thrive in it expanded exponentially, when outsiders became insiders, when categories were crossed and taboos were trampled, when everything was changing and everyone knew it—when the world as we now know it began to take form.

Just two months before Lunik, “the jet age” roared into being, when a brand-new Boeing 707, owned by Pan American World Airways, took off with great fanfare on the first nonstop flight across the Atlantic to Paris. On the runway, First Lady Mamie Eisenhower declared, “I christen thee ‘Jet Clipper America!’” before smashing a bottle of ocean water across the plane’s nose and cheering with a crowd of thousands as the plane rolled down the runway while the Air Force band played “The Star-Spangled Banner.” The *New York Times* enthused over “the possibility of hurdling an ocean from one continent to another, from one world to another, in half a dozen hours”—age-old longings that were “no longer daydreams, because the jets are here.”

Now, with the New Year barely under way, the world was thrust into “the space age.” The Russians and the Americans would go at it—in a “space race”—all year long, back and forth, each side trumpeting some new triumph with startling alacrity.

Outer space and lightning speed animated the popular consciousness. Mass-circulation magazines and newspapers ran lengthy articles explaining the “new geography” of solar orbits and galaxies. NASA lingo—“blast off,” “countdown,” “A-OK”—swooshed into the everyday lexicon. Madison Avenue picked up on the coinage with advertisements touting new products—from cars to telephones to floor waxes—as “jet age,” “space age,” “the world of the future,” “the countdown to tomorrow.”

And tomorrow promised to be not just another day but a new dawn. The era’s rising young political star, John Fitzgerald Kennedy, would run for president on a slogan of “Leadership for the ’60s”—the first time that the future was defined in terms of a decade, which presumed to hold out both menace and hope but in either case great change. Kennedy presented his youth as a virtue—another reversal of the norm—describing himself as a man “born in this century,” keen to explore “the New Frontier.”

The phrase was a reference to Frederick Jackson Turner’s classic essay of 1893, “The Frontier in American History,” which argued that the “American character”—its “restless, nervous energy” and “dominant individualism”—was a product of the frontier’s vast emptiness, with its prospect of a continuous “expansion westward,” each step siring “new opportunities” for conquest, settlement, and “perennial rebirth.”

By the 1950s, this frontier had long been filled and settled. The new frontier now lay in outer space, and its prospect of seemingly infinite expansion set off a new wave—a new way of seeing and experiencing on Earth.

The space program itself, and the markets that it seemed certain to generate, spurred scientists to develop new technologies—most notably the microchip and faster, smaller computers—which would transform the fantasies of science fiction into the routines of daily life.

This enchantment with the new also galvanized a generation of artists to crash through their own sets of barriers—and attracted a vast audience that was suddenly, even giddily, receptive to their iconoclasm.

New comedians—“sick comics,” some called them—satirized the once-forbidden topics of race, religion, and politics. Brazen novelists loosened the language and blurred the boundaries between author and subject, reportage and literature. Rebellious filmmakers shot improvisational movies outside the confines of Hollywood studios. Painters created a new kind of art that streaked outside the canvas. Jazz musicians improvised a new kind of music that broke through the structures of chords and pre-set rhythms. A new record label, Motown, laid down a jazz-inflected rhythm and blues that insinuated black culture into the mainstream, inspired baby-boomer rock 'n' roll, and supplied the soundtrack for the racial revolts and interminglings that lay ahead.

These currents were quickened by a series of expansive government edicts. The new United States Civil Rights Commission ordered a series of investigations on racial discrimination in voting, housing, and schools. The Supreme Court issued rulings that lifted restrictions on free speech and literature. Toward the end of the year, the Food and Drug Administration held hearings that resulted in the approval of a birth-control pill, which unleashed a revolution in women's lives and in sexual activity, unbridled and spontaneous.

Yet the thrill of the new was at once intensified and tempered by an undercurrent of dread. Outer space loomed as a frontier not only for satellites, rockets, and computers but also for missiles, H-bombs, and apocalyptic war.

And so, the year also saw panic over fallout shelters, fears of a “missile gap,” and an escalation of the Cold War. Nikita Khrushchev,

the Soviet premier, boasted that his defense factories were churning out nuclear-tipped missiles “like sausages.” In the U.S. Congress, the Joint Atomic Energy Committee held five days of public hearings on the effects of a “limited” nuclear attack. Scientists were detecting hazardous levels of radiation in milk, as a result of H-bomb tests in the atmosphere. A mordant physicist named Herman Kahn toured the country and tantalized large crowds with marathon lectures on how to fight, survive, and win a nuclear war.

It was this twin precipice—the prospect of infinite possibilities and instant annihilation, both teetering on the edge of a new decade—that gave 1959 its distinctive swoon and ignited its creative energy.

The latter half of the preceding decade, especially from 1945 to 1947, when America created the bomb, won World War II, and emerged as a sprawling global power, also marked a vivid turning point. But the generation in control before the war remained in control just after. The most talented among them adapted well to the expansion of their domain. They devised new institutions and strategies—political, economic, and military—that rebuilt the West and allowed the emerging American superpower to advance its interests without triggering World War III. But these men tended to view nations as static pieces on a chessboard; the elites of the opposing superpower did the same, more harshly still; and the smaller pieces on the board, devastated by six years of brutal warfare, could manage little in the way of resistance—as yet. At home, these leaders saw the end of the war as a time to restore the old order—unaware that although the American homeland was physically intact, its social fabric had unraveled.

It would take another dozen years before the nation set out, or stumbled forth, in a clear new direction—before it responded to the shifting contours and redefined itself in their light and shadows. The new path was carved by the younger generation, those who grew up through depression and war—and who felt dissatisfied with the false peace that followed: bent out of shape, or spurred to revolt, by the dissonance between the new era’s promised hopes and palpable fears. It was in the late 1950s that the war years’ adolescents and young soldiers came into their own, approaching the ages of thirty or forty—too young to shove their elders out of power but old enough,

and self-consciously so, to claim a stake in the future and to make themselves heard.

This raucousness reached a crescendo in the next decade—the sixties—with the sexual revolution, free speech, rock 'n' roll, campus uprisings, and racial riots, all erupting against the escalation of a savage war in Southeast Asia and the wondrous spectacle of landing a man on the moon. Yet all of these cataclysms sprang not from the impulses or ideals of the baby-boom generation but rather from the revolts and revelations of 1959—and many of the new instigators were well aware of their roots and took inspiration from their predecessors.

The truly pivotal moments of history are those whose legacies endure. And, as the mid-forties recede into abstract nostalgia, and the late sixties evoke puzzled shudders, it is the events of 1959 that continue to resonate in our own time. The dynamics that were unleashed fifty years ago and that continue to animate life today—the twin prospects of infinite expansion and total destruction—seem to be shifting to a new phase, crossing yet another new frontier.

A dramatic, though in some ways coincidental, parallel is the emergence of another young outsider elected on a promise of hope and change—though Barack Obama, born in the year of John F. Kennedy's inauguration, pushes the concept of outsider to new extremes. The son of a Kansan mother and a Kenyan father (whose own father was born Muslim), Obama grew up in Indonesia and Hawaii, went to college in California and New York and to law school at Harvard, then rose through politics in Chicago—he's not just a black man (extraordinary enough), he's multiracial, multinational, multiethnic, a man of the country, the city, the tropical islands, and beyond—the living embodiment of every late-fifties dream of smashing through barriers and integrating not merely black with white, but America with the world.

Yet the more significant parallels are the conditions surrounding the two young presidents' ascents—global power dispersing, cultures fracturing, the world shrinking, and science poised to spawn new dreams and nightmares—though, again, in Obama's time, our time, these trends appear monstrously magnified.

The distribution of global power—which once let American policy makers get by with a little knowledge about Russia and maybe

China—began dispersing in the late fifties to the point where ignorance of small countries like Vietnam and Cuba got us into deadly trouble. Today the collapse of power centers, brought on by the end of the Cold War, requires political elites to know about regional tribes, separatist enclaves, stateless terrorists, to say nothing of financial interdependencies, climate change, energy alternatives, and other aspects of security that have nothing to do with traditional gauges of the military balance.

Cultural power has also devolved, as the assaults that seemed so daring fifty years ago, in painting, literature, music, and film—the idea that anything can be art, anyone can be an artist, any language is permissible, one kind of artist can also be another kind of artist, and neither age nor ethnicity determines eligibility—have insinuated themselves into the mainstream. Now the next round of splintering—already under way in blogs, iTunes, eBooks, YouTube, Twitter, News Feed, Flickr, and who knows what new forums to come—is not only broadening further the boundaries of art but stands to shatter the final barriers between artist and audience, public and private, spectacle and life.

In science and technology, the trajectory from 1959 to 2009, and likely onward to the future, is one of ever-expanding expectations of what is explorable—from the galaxies to subatomic particles and everything in between—to the point where we seem on the verge of touching infinity in all directions.

The microchip, which brought forth the digital age—with its mini-computers, multipurpose cell phones, and instantaneous access to everyone, everything, everywhere—may, over the next few decades, spark revolutions in artificial intelligence, brain-augmenting nanochips, and other devices of such minuscule size yet such gargantuan processing power that their full applications can scarcely be imagined.

Advances in biological research, which in 1959 produced a pill to control human birth—with its resulting social, economic, and cultural upheavals—may in the coming years create gene therapies and synthetic organs that long postpone human death, with still more tumultuous consequences.

There was, is, and always will be a dark side of this juggernaut to tomorrow. Just as the flip side of rockets and satellites was H-bombs

and missiles, so biotechnology can also yield biohazards and bio-weapons, brain-augmentations might dehumanize the soul, the omnipresence of online networks could warp community and erode the sense of self, while the infinite fracturing of culture threatens to wipe out the concept of a shared culture, nation, or world.

In the summer of 1959, Allen Ginsberg, the generation's visionary poet of exuberance and doom, wrote in the *Village Voice*: "No one in America can know what will happen. No one is in real control. America is having a nervous breakdown. . . . Therefore there has been great exaltation, despair, prophecy, strain, suicide, secrecy, and public gaiety among the poets of the city."

He might as well have written it today.