

Machines in Desolation: Images of Technology in the Great Basin of the American West

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ABSTRACT: Mythic thinking about technology as an engine of progress has shaped the ways Americans have come to perceive the boundaries of vacant space. In the Great Basin of the Rocky Mountains, where the West still appears to the East as empty and formless, photography and art tell richly symbolic stories about wastelands transformed into wealth. Often those stories aggrandize machines and engineering. The essay presents a visual sampling of machines remaking the desert from three historical eras. First, from the postbellum era of the transcontinental railroad, are pictures of barrens redeemed by science and industrialization. Second, from pioneer Utah, are desert landscapes suspended between farming and industry. Third, from postmodern Nevada, are forebodings of apocalyptic demise.

On May 10, 1869, when Union Pacific met Central Pacific at Promontory in the territory of Utah, the driving of a golden spike became America's first live coast-to-coast multimedia extravaganza. Western Union broadcasted the final thud of the ceremonial hammer via a wire attached to the spike. Cannons simultaneously boomed in Boston and San Francisco. Fire engines with screeching whistles circled Philadelphia's State House for the ringing of the Liberty Bell.

A. J. Russell of the Union Pacific preserved the euphoric moment in a wet-plate photograph called *East Meets West at the Laying of the Last Rail* (See Figure 1). Composed as a tribute to the unifying spirit of *E Pluribus Unum*, with tycoons grasping hands below workmen on locomotives, the photo confirmed the technological magic of wasteland transformed into wealth. No matter that the photo was staged. No matter that the final spike was actually iron; that the railroad was far from finished; that the Union Pacific's man with the silver hammer had been kidnapped while his workers demanded their wages; or that the slaving Chinese—earning about a dollar a day—were excluded outside the frame. And no matter if the champagne bottles, toasted in celebration, mysteriously disappeared from later reproductions as if to mollify temperance crusaders. Russell's image was allegory. Neither fact nor entirely fiction, it strived for cultural truths. "Nature and Man shall be disjoin'd and diffused no more," wrote Walt Whitman, who saw the photo as a wood engraving in *Frank Leslie's Illustrated*.¹ Engineering was cited by the poet as proof that the pious would inevitably triumph. The driving of the golden spike in Russell's heroic framing was God's mighty purpose revealed.²

The pale blankness of Utah-Nevada made the metaphor visually stark. Stretched from nowhere to nowhere, from the Wasatch Front to the Sierra Nevadas across 210,000 square miles of rivers draining inward, through sundrenched shadeless mountains and pools that mysteriously disappeared through sinks of alkaline sand; the Great Basin of Utah-Nevada was the highest and driest of North America's deserts, the largest and least populated, the most disparaged and misunderstood (See Map in Figure 2). It was the Big Empty. The Void. The Great Unknown. Its



Figure 1. Chinese laborers stand outside the frame in A. J. Russell's *East Meets West at the Laying of the Last Rail*, May 10, 1860. (Beinecke Library/Yale)



Figure 2. The Great Basin of the American West, hydrologically, spans 4,000 square miles of watersheds draining inward with no outlet to the sea. (Karl Musser)

character was “dreary and savage,” said US Topographical Engineer John Charles Frémont from the Bear Lake corner of Utah in 1843.³ It was “worthless, valueless, d[amne]d mean God forsaken country,” said a peddler on the overland trail.⁴ Mark Twain imagined “a vast, waveless ocean stricken dead and turned to ashes.”⁵ For cowboy novelist Owen Wister, writing in 1897, the high desert of Utah-Nevada was an “abomination of desolation . . . a mean ash-dump landscape . . . lacquered with paltry, unimportant ugliness . . . not a drop of water to a mile of sand.”⁶

The strangeness repelled the first generation of landscape painters. Even as giants like Frederick Remington, Maynard Dixon, and Georgia O’Keeffe began to incorporate mesas and canyons, painters avoided the sagebrush. Printmakers and photographers compensated. Prints and photos of big machines and big engineering promoted tourism as they advertised land that financed the railroads. Hell-in-harness scenes of smelters and trestles, of shovels devouring hillsides, of dams, and the laying of track were images of American prowess, a chronicle of popular thought. Some of the images cheered, and others denounced, industrial progress. Some pined for the landscapes lost to smokestack industrialization. Some viewed irrigation as a scientific sensation. Some imagined a mechanized Eden reclaimed by the faithful for God.

Images of machines advanced the discovery process through which Americans learned to perceive the enigma beyond the Rockies as something more than a hideous void. Mixing the real and the ideal, the imagery left a culturally-coded appraisal of the highest and best use of land. Our sampling, herein, features landscapes from three historical eras. First, from the era of the golden spike, are pictures of barrens redeemed by steel and big engineering. Second, from paintings of agrarian Utah, are landscapes of farming’s surrender to industrialization. Third, from postmodern Nevada, are forebodings of the toxic Sahara the Great Basin might one day become.

Deserts and determinism

The frontier itself was a kind of machine that sputtered in arid places and had to be overhauled. So said Texas historian Walter Prescott Webb, writing in 1930. The machine with its axes and saws had moved west through swampy woodlands, clearing the timber, turning the sod. But the engine had stalled at base of the Rockies, and there the process gave way to a motive capitalist force that Webb called the cattle kingdom. “It was a machine, too,” said Webb, “but entirely different from the agricultural one undergoing repairs on the timber line.”⁷ Corporate and industrial, it crossed into Utah on rails. Its vital parts were windmills, barbed wire, steam engines, the McCormick Reaper, and the Colt revolver. Its triumph was to sustain the garden myth of the West as a Land of Plenty on a frontier that was factory-made.⁸

Webb sang for a chorus of western writers in the chasm between the promise of technology’s progress and the peril of what progress had wrought. From the chasm’s hopeful side came utopians such as Nebraska’s William E. Smythe who predicted, in 1905, that irrigation and big hydraulics would make the rising state of Nevada “politically untrammelled” and “economically freed.”⁹ From the chasm’s brooding side came a literature protesting the loss of agrarian landscapes. Novelist Frank Norris, writing in 1901, recoiled at the “soulless Force” of trains crossing the prairie, their “tentacles of steel clutching into the soil.”¹⁰ Divergent though they were, the writings of Norris and Smythe anticipated a deterministic Webbian view of factory-made innovation. If machines dictated culture, if factories and their tools were agents independent of hope, fear, politics, and scientific conjecture, then technology had motive power.

Technological determinism is the term scholars have used to describe this view of machines as the force behind civilization. Determinists claim that the six-shooter conquered the prairie, that The Pill (or hardtop automobile) caused the sexual revolution, that cars created the suburbs, that Guttenberg’s movable type brought the Protestant Reformation, that drones and nuclear weapons have divested the US Congress of its authority to make declarations of

war. In each case the implication is that the social consequences of invention are far-reaching, uncontrollable, and irreversible. In each, a tool or device is the cause or precondition of some inevitable transformation. Things, not nature or culture, are the decisive agents of change (Figure 3).¹¹



Figure 3. Poster artist Emmett Watson links patriotism to industrial progress in *Troop Train on the Great Salt Lake*, June 1944. (Springville Museum of Fine Art)

It's a comforting belief. Born in the European Enlightenment and reborn in the wishful thinking of Alexander Hamilton and image-makers like Currier and Ives, the gospel of progress through innovation squared nicely with the American myth of a clever, inventive people predestined to uproot the sagebrush and plow. Critics respond by evoking the peril of devastation. Thus the philosopher Lewis Mumford compared twentieth century Man to a drunken conductor of a runaway train. The train's conductor was "plunging through the darkness at a hundred miles an hour, going past the danger signals without realizing that our speed, which springs from mechanical facility, only increases our danger and will make more fatal the crash."¹²

Determinism pervaded the imagery of yeomen drawn west by the pull of empty places. In the era of Manifest Destiny, when the "destiny" of Protestant civilization seemed "manifest" in the prowess of wondrous machines, the railroad was an obvious symbol of national triumph. Painters Thomas Cole, Asher Durand, George Inness, and others were no longer content with puffs of steam in the distant horizon. Railroads took center stage. In 1860, in a landscape commissioned by a railroad mogul, Philadelphian Thomas Otter featured a west-bound Baldwin locomotive

crossing a bridge as it overtook an emigrant's covered wagon. Satirist Thomas Nast depicted an Indian fleeing before a charging locomotive in his frontispiece to a popular guidebook called *Beyond the Mississippi* (1867). Another Nast illustration had an Indian warrior prone and helpless, his feathered head on the steel rail (Figure 4). Black smoke engulfed two cartoonish natives in a celebrated engraving called *Across the Continent: Westward the Course of Empire Takes its Way* (1868; Figure 5). Engraved after a sketch by Francis "Fanny" Palmer and colorized "for the masses" by the New York publishing giant Currier & Ives, *Across the Continent* showed the route of the Union Pacific as line of demarcation between savage and civilized worlds. Parallel lines of steel slanted west toward a treeless horizon. Unchallenged and pulling its mighty train of Anglo-Saxon values, the railroad moved from the past (as represented by cabins and toiling yeomen) into the nation's industrial future along the base of snowy mountains across a waterless plain.¹³

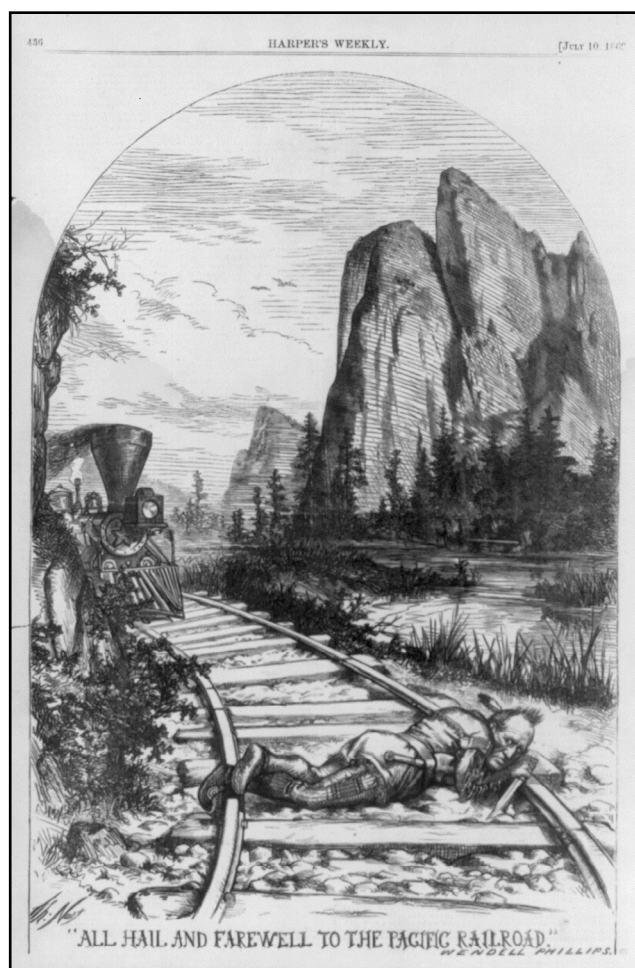


Figure 4. Thomas Nast sketched the Indian's view of the Union Pacific for *Harper's Weekly*, July 10, 1869. (Library of Congress)

The most famously garish of the genre's colorized prints was John Gast's *American Progress* (1872). First painted as oil-on-canvas, it reappeared as the frontispiece for *Croft's Trans-Continental Tourist Guide* (1874). The print, said its publisher, depicted the Goddess of Civilization. Blond and scantily clad in flowing classical robes, she floated through a grassy landscape. Her right hand held a school book; her left, strung telegraph wire. Indians and buffalo escaped through



Figure 5. Rails freight destiny in Frances Palmer's *Across the Continent: Westward the Course of Empire takes its Way*, 1868. (Museum of the City of New York)

a dark corner at the edge of the canvas. Golden rays of heavenly light blessed the icons of national greatness: the river steamboat, the wagon train, the prospector with his pick, the trapper with his rifle, the yeoman with his plow. Three locomotives pushed west.¹⁴

Iron machines crossed canvas prairies with a heavy cargo of visual misinformation about the desert's flattest terrain. Seldom did the heroic school of metaphorical painters incorporate scrub vegetation. Romantics like Albert Bierstadt and Thomas Moran preferred the alpine and the operatic. Indifferent to grey-green sagebrush, they reached instead for the jewels on the rim of the Basin: Lake Tahoe, Zion, the Green River, the Grand Canyon of the Colorado, the Shoshone Falls of the Snake. "Culture work[ed] as a lens providing focus," wrote historian Anne F. Hyde in an essay about western landscapes; and thus, the history of artistic perception was also the story of willful misperception.¹⁵ It remained for the photo savants of topographical science to reframe Utah-Nevada as a distinct geophysical place.

Among the first to mule-pack a camera in the service of science was a Sephardic Jew of Spanish-Portuguese decent. In 1853-54, Solomon Carvalho scaled the Rockies with a privately-funded scientific survey under Colonel Frémont's command. Frostbitten and surviving on horsemeat above Utah's Cathedral Valley, the surveyors were forced to abandon their scientific equipment. Daguerreotype cameras were left in the snow. The misadventure spread skepticism about photographic documentation. US geographers John Wesley Powell and Ferdinand Vandeveer Hayden both came to prefer the imaginative grandeur of woodcut engravings. Photography, many believed, was too literal. Book publishers such as William Cullen Bryant of the *New York Evening Post* dismissed the camera because "mere topographical accuracy" would

likely obscure “animation and beauty.” Photography, Bryant maintained, “lack[ed] the spirit and personal quality which the accomplished painter or draughtsman infuses into his work.”¹⁶

Not until photographer Timothy O’Sullivan met geographer Clarence King did the camera come into its own as a medium of scientific documentation. Irish-born O’Sullivan of Staten Island had campaigned with Union generals McClellan and Grant in the Army of the Potomac’s photographic corps. O’Sullivan’s silver prints of the Confederate dead, their corpses shoeless and posed, remain unsurpassed as testimony to the horror of war. Letters from the War Department brought O’Sullivan to the attention of King in the wake of Lee’s surrender. In July 1867, via steamer and Isthmus railroad from New York to Panama, San Francisco, and Sacramento, O’Sullivan followed King and his party of ten surveyors into Nevada across Donner Pass.¹⁷

O’Sullivan did more than produce a stunning visual record. Shunning romantic convention, he extended the vision of science. Precise and meticulous but hardly objective, he supplemented the charts, graphs, fossil sketches, stratigraphic diagrams, contour topographical maps, and cross-sectional schematics that gave geology its visual power. In 1867, however, the camera was an afterthought for explorers whose primary task was the search for mineral wealth. Clarence King of Yale, age twenty-five, had orders to survey in advance of the railroad from Lake Tahoe to Colorado. King’s United States Geological and Geographical Exploration of the Fortieth Parallel, 1867-1873, became the first to establish that Nevada’s Humboldt River drainage was a watershed distinct from the Great Salt Lake. The Great Basin discovered by Frémont was, according to King, many dozens of smaller basins where primordial lakes had drained into the ocean, leaving alkali playas of sand. Science aside, it was the booming importance of mining that kept the survey funded by Congress. In Utah’s Green River Basin, the expedition found rich deposits of “practically inexhaustible” coal.¹⁸ In Wyoming, where swindlers had salted a mesa with chips from South African diamonds, King won international fame for exposing a mining hoax.¹⁹

The Fortieth Parallel Survey was also theoretical science. Basalt flows in impossible canyons with toothed and twisted formations were offered as proof of the crumbling and crushing that had sculpted and resurfaced the globe. King’s *Systematic Geology* (1878), in part a challenge to Charles Darwin, advanced the theory that “moments of great catastrophe” had accelerated the life-altering process of natural selection. Volcanism drove evolution. Fractures, faults, fissures, and floods had forced the biota to cope or die.²⁰

The violence of geologic events also focused the photographer’s lens. Where King reported catastrophe, O’Sullivan accentuated the cataclysmic bizarre. In the Humboldt Sink of Nevada, where King used the word “picturesque” to describe volcanic fissures, O’Sullivan supplied what the scientists called “picturesque evidence.”²¹ At Witches Rocks, Utah, where, according to King, the crashing of tectonic plates had upthrust spires of sandstone, O’Sullivan exaggerated the height of the weird formation in a skewed low-angle shot. Another photograph of the fingerlike Witches formation used a paper masking to isolate a single teetering spire. Returning to the Comstock Lode at the western edge of Nevada, O’Sullivan framed lunar landscapes. An 1867 O’Sullivan print called *Sand Dunes, Carson Desert* showed mules pulling a wagon (Figure 6). Boot prints were tracked in the sand to emphasize isolation. Dark wedges of rock were engulfed by the whiteness of sky. Hailed for its minimalism, *Sand Dunes* was, according to historian William Goetzmann, “one of the great matter-of-fact photos of all time.”²² Yet the photo was, nevertheless, a staged misrepresentation. The dunes of the Carson Desert had long been an emigrant landmark in a farming region near a Pony Express station. O’Sullivan had composed the photograph to exclude a well-travelled emigrant road.²³

Changing photography as he changed the perception of Utah-Nevada, O’Sullivan pioneered an aesthetic of distance and space. His panoramas, bleak and edgeless, showed men in



Figure 6. Boot prints trail away from Timothy O'Sullivan's darkroom wagon in *Desert Sand Hills near the Sink of Carson, Nevada*, 1867. (Library of Congress)

improbable places that looked nothing like El Dorado. And when the focus of the survey turned to the silver bonanza in western Nevada, the documentation defied the romantic sublime (Figure 7). Squalid mills trailing factory smoke seemed "hideous", even "satanic."²⁴ One dark print from Virginia City showed six despondent miners as they waited to be lowered in cages through a shaft of the Savage Mine (Figure 8). A print of a mine disaster showed a miner's severed leg. Below the surface, danger was ever-present. In February 1868, in a dark gaseous tunnel below the Gould & Curry Mill in Virginia City, the photographer risked explosion by igniting magnesium flares. Historians have hailed the flare-lit mining study as the world's first exposures of men working deep underground.²⁵

O'Sullivan exposed the counter-intuitive fact that the Basin, like much of the West, was urban before it was rural, its settlement clustered in towns. From Carson City to Reno through ore and lumber centers; from Galena to Washoe City, Virginia City, Franktown, Devils Gate, and Ophir, the Comstock's scarred industrial landscape spread through the urban core. In Utah it was Brigham Young and the overland trails that made Salt Lake City the point of debarkation. Walled cities had effectively colonized the Ute and Shoshone homelands before the coming of the Union Pacific. Waterpower drove foundries and gristmills. A church-owned public utility called the Deseret Telegraph linked the five hundred mile Mormon urban network from Logan to St. George.²⁶



Figure 7. Timothy O'Sullivan's showed Nevada as urban before it was rural. Pictured: *Gold Hill, Nevada, 1867.* (US Geological Survey)



Figure 8. Elevators transport miners in Timothy O'Sullivan's *Shaft of Gould & Savage Mine, Virginia City, 1868.* (US Geological Survey)

Railroad photographers did the most to document the transformation. Alfred A. Hart of Sacramento, formerly a portrait painter, sold stereo cards of the Central Pacific as it crossed northern Nevada. Determinism pervaded Hart's 1869 prints of Paiutes posed next to trains or in the path of railroad construction (Figure 9). Another master photographer of the Utes and Paiutes was the English-born Charles R. Savage of Salt Lake City (Figure 10). Savage rode circuit through the Mormon country, taking portraits and selling stereographic pictures of men with their heavy sledges breaking stone for the Mormon shrines. In 1867, at soon-to-be-famous Promontory Summit in Utah, Savage joined photographers Hart and A. J. Russell for the recording of the joining of rails. Mythology still shrouds the event. One persistent fable is that the Chinese workmen were excluded from the famous photos because they were camera shy. Legend has it that the Chinese dropped the rail and scattered when a bystander yelled at Savage: "Now's the time, Charlie! Take a shot!"²⁷

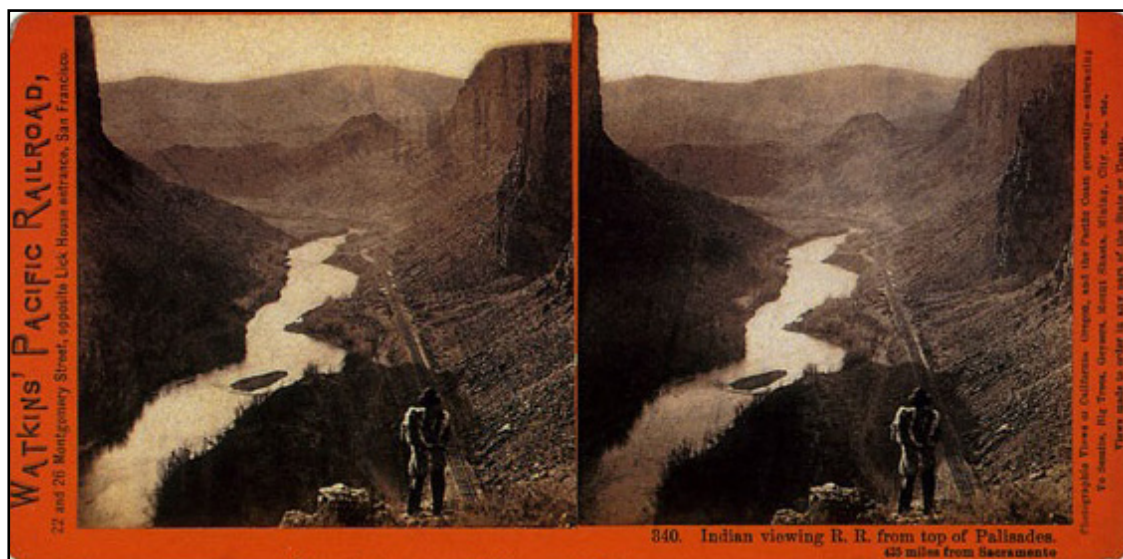


Figure 9. Primitive man contemplates doom in Alfred A. Hart's *Indian Viewing R. R. from Top of Palisades*, albumen stereograph print, 1869. (Neil Goldblatt/Flickr)

The lesson within the legend is that historians and photographers faced a common interpretive challenge when framing symbolic events. With images, with words, they sought balance between reproduction and construction, between the passive mining of data and the sequencing of that information into narratives with emotional power. The photographer's viewfinder became, as Yale's Alan Trachtenberg phrased it, "a political instrument" for validating the expansionist need to fence and subdivide land.²⁸ When icons of obsolescence were juxtaposed with the mechanical emblems of progress—when the covered wagon was overtaken, when Chinese fled before the hooded camera, when the Paiute alone on his cliff saw doom in the form of a freight train—territorial conquest, being inevitable, seemed pridefully justified.

Of the three photographers at Promontory, it was A. J. Russell more than Savage or Hart who milked the most metaphorical meaning from the power of the western landscape. Soldier, correspondent, salesman, and diorama artist; Russell, like O'Sullivan, had photographed machinery for the union army during the Civil War. In 1868, from his base camp in Echo City, Wyoming, he had documented the last six hundred miles of the advance of the Union Pacific en route to the joining of rails. Fifty of Russell's most sensational prints graced a silvery album formally titled *The Great West Illustrated in a Series of Photographic Views across the Continent* (Figure 11).



Figure 10. Charles Savage of Salt Lake showcased the rise of industrious Utah. Pictured: *Electric Light Works, Ogden Canyon, Utah*, about 1880. (Utah Historical Society)



Figure 11. Workers pose with Engine No. 119 in A. J. Russell's *Promontory Trestle Work*, from *Great West Illustrated*, 1869. (Library of Congress)

Lavishly published with leather binding in 1869, the album sold in Manhattan bookstores for more than a rail worker's monthly wage. The Far West with its trestles, tunnels, and trains appeared an astonishing and even "luxuriant" region of "colossal grandeur."²⁹ The desert, no longer wretched, appeared subdued and commoditized. Geographer Hayden cited *Great West* as proof that Utah was potentially fertile. Journalist Samuel Bowles, who travelled with Russell and witnessed the joining of rails, saw the photography as documentation of commercial and political virtues. The transcontinental, Bowles insisted, was more than a remarkable feat of American engineering: it was the single greatest engineering achievement of all time.³⁰

There were no buffalo storming the prairie in A. J. Russell's grand presentation. No coolie-hatted Chinese. No Paiutes dwarfed by trains. In the futuristic Utah that photography framed in its moment of industrial triumph, the primitive was anachronistic and too distant to be perceived as a threat.

Machines in the Garden of Zion

A desert and elsewhere a garden, a Silverado, a cattle frontier, a passage, a pariah, a bleak and shifting mirage, the strangeness at the foot of the Rockies fed towering expectations for the West's most perplexing terrain. Its discovery—a process, not an event—was visceral and subjective, an act of the mind as well of the eyes. Where tycoons saw industrial conquest, geographers saw cataclysm. Where engineers found canyons for dams and flatness for irrigation, the artist George Catlin, a painter of Utes and Shoshone, confirmed the defeat of a vanishing race. Always a West of the imagination, a projection of heartbreak and dreams, the Great Basin was also a biblical Zion for the chosen but persecuted who found, in that chaste isolation, God's plan for restoring the Earth. Latter-day Saints, in flight and seeking salvation, escaped from the factory cities to preordained sanctuary. "Their spirit was *inward*, practical, and agricultural," wrote historian Ronald W. Walker.³¹ Even now, according to geographer Richard Francaviglia, "life in the Intermountain West is somehow buffered or sequestered from the terrors of the outside world."³²

Aridity and farming in the kingdom of the Latter-day Saints gave rise to a variant telling of the industrial fable about the inevitability of megamachines. As developed in the western writings of American masters like Emerson, Whitman, and Hawthorne, the story featured pioneers who fretted about modernization without losing faith in modern machines. Compelled, even predestined, to dominate wild places, they yearned for sylvan landscapes and pined for a lost way of life. Farmers mostly, they recoiled at uncut nature. They turned to nature for inspiration without wanting to return there on a permanent basis. Historian Leo Marx, in an important book about cultural symbols, linked the narrative to a pastoral longing for order in chaotic places. "Pastoralism", as Marx defined it, held out the hope that the conquest of empty places would reconcile conflicting ideals. One ideal was progress through mass production—the machine. Another was tranquil living—the garden. The machine in the garden became a metaphor for balance between nature and industrialization. Blurring old into new, simplicity into sophistication, the machine would work in tandem with agrarian virtue to recover the garden lost to the industrial age.³³

God had given that redemptive garden to Mormons because, said Brigham Young, it suited no other people on Earth. Treeless and semiarid, it was topography starkly foreign to yeomen from a woodland culture. Even the native population was sparse. Yet the sloping valley at the foot of the Wasatch Mountains showed agricultural promise. Black soil supported a cover of vegetation so thick that the first pioneers, in July 1847, waded a considerable distance before finding a camping ground. Bunchgrass towered over the oxen. Feeders to the Jordan River seemed well suited for gristmills. Sagebrush could be burned. The air seemed

"good and pure, sweetened by healthy breezes." Geothermal springs bubbled up from the Earth with medicinal powers enough to "heal all who bath no matter what their complaint."³⁴

Most miraculous of all in the marvel that was Utah was the wondrous Great Salt Lake. An American Galilee, the lake was "an ocean," said a rail tourist, "of majestic mystery clad in beauty divine."³⁵ Parisian tourist Albert Tissandier found it "impossible to dream of anything more poetic."³⁶ Currier & Ives published an 1870 lithograph that imagined surreal snowy mountains rising from the luminous lake. Painters Albert Bierstadt and Englishman Alfred Lambourne depicted the lake with shorebirds as it appeared in the Utah legend about crickets vanquished by seagulls. By 1883, with the arrival of the Denver & Rio Grande Railroad, the "strange beauty" of the Great Salt Lake was being promoted in *Harper's* as "one of the points in the United States that all tourists think should not be missed."³⁷

Storytellers of later times downplayed the wealth of the valley to heighten the drama of conquest. "There was little to invite and much to repel," wrote Orson Whitney in his 1892 *History of Utah*. "A seemingly interminable waste of sagebrush," the future site of the Mormon city was "baked and burning . . . the paradise of the lizard, the cricket, and the rattlesnake."³⁸ But Mormon artists told another story. Most of the best from the pioneer generation were converts from distant places like Denmark, Norway, and England. Carl C. A. Christensen of Copenhagen, a painter of portraits and panoramas, had trekked one thousand miles from Iowa City to Utah while pulling an emigrant's handcart flying the Danish flag. Danquart Anthon Weggeland, missionary and educator, was a Norwegian trained in Denmark and perhaps the only pioneer painter in Utah busy enough to make a most of his income from art. George Ottinger, American-born, had wandered the globe as a whaler and forty-niner before his conversion to Mormonism. Reaching Utah with his mother by covered wagon, Ottinger tinted photographs for Charles Savage and established himself as an all-purpose painter of mountains and genre scenes. "Romantic realists", they have been called: romantic because they painted the Salt Lake Valley as a biblical Canaan; realists because their paintings documented folkways and customs of Mormon pioneer life.³⁹

The first generation painted Utah cartoonishly but with reverence for the communitarian work of subduing the wild. Few of the paintings were overtly religious, but many showed pious devotion to Mormon teachings about beautification, self-reliance, and the virtue of pooling labor. Weggeland emphasized work toward common objectives in *Old Fisher Folks* (1870s), *Rosebank Cottage* (1881), *Manti Temple* (1884), and pioneer epics like *Mormon Emigrants Crossing the Plains* (1912). Christensen and Ottinger likewise glorified Utah in formulaic landscapes of praise for the holy work of reclaiming the Garden lost to the Fall. Christensen's *Wheat Harvest in Ephraim* (undated) pictured three of his well-fed children smiling with armfuls of grain. In the distant village of Ephraim was a tabernacle peaked above a horizon of gable-roofed and chimneyed houses that Mormons called Nauvoo Style. Waterworks and modern equipment were excluded from the original painting. In 1904, however, when Christensen repainted the harvest, he added a hatless young man on his knees with a cup of water at the wooden gate of the homestead's canal.⁴⁰

Paintings of the Utah harvest told parables of regeneration that were hardly unique to the Latter-day Saints. Strong in the Puritan heritage of Brigham Young's native New England, where the metaphor for earthly Zion had been "the city upon a hill," the iconography of regeneration had migrated west in the Mormon gospel of order vanquishing chaos, of wildness defeated and Eden restored.⁴¹ "Make beautiful everything around you," Young had directed his people. "Build cites, adorn your habitations, make gardens, orchards and vineyards, and render the earth so pleasant that when you look upon your labors you may do so with pleasure and that angels may delight."⁴²

Town planning echoed that piety of regenerative beautification. Villages right with the compass were said to be right with God. Rectangular townships “that lieth four-square” soon checkered the desert wherever the Saints methodically platted: in Salt Lake City with its ten-acre blocks symmetrically subdivided; in Spring City where LDS converts from Denmark built a cemetery in the rectangular shape of Utah; in Snowflake, Arizona, where the standardized streets were wide enough for a team of oxen to circle a wagon; in Franklin on the Idaho line where the Gothic limestone houses followed the rectangular patterns that latter-day prophets proscribed.⁴³

Gridded towns with gridded fields framed the orderly sameness of hay derricks and hay stacks, of regimented orchards and sheep grazing with cattle, of cedar-post fences and cavernous barns. Scholars of Great Basin settlement patterns have called it the “Mormon landscape.” For geographer Richard Francaviglia, who coined the term in a dissertation, the pattern was symmetry, parallel lines, wide streets, central plazas, and geometrical repetition.⁴⁴ For novelist Wallace Stegner, it was red-dusted fields of alfalfa, onions, and beets with row after parallel row of Lombardy poplars planted as fence lines. These fast-growing trees, Stegner explained, “were practically never planted singly, but always in groups [that] took the form of straight lines and ranks.”⁴⁵ Gardens were also important. “A Mormon who creates something green,” wrote Mark Leone of Princeton, “has shown his inner state.”⁴⁶

That the state of a man’s religion was the state of his village and farm became the diving premise of Utah’s agrarian art. Weggeland’s *Bishop Sam Bennion Farm, Taylorsville*, painted in 1879, praised the virtue of Mormon farming in a compact symbolic composite of the emerging settlement pattern (Figure 12). A painting in three parts, it honored the trinity of mountain, field, and home: the mountain, reddish brown, that the saints called Mt. Olympus; the orderly field with domes of haystacks; the home of salt-white stucco with double chimneys and multiple doors. Fruit trees shaded the homestead. Children played. A farmer hoed. Cottonwood Creek fed a canal as it branched toward the Jordan River. A train bound for Provo trailed smoke at the base of the mountains as if crossing between the yearning for tranquil nature and the questing for material wealth.⁴⁷



Figure 12. Orderly places were blessed in Danquart Anthon Weggeland’s paintings of the Salt Lake Valley. Pictured: *Bishop Sam Bennion Farm, Taylorsville*, 1879. (Springville Museum of Fine Art)

The motif of the train puffing smoke was a visual concession to the Walter Prescott Webbian realization that utopians looking backward still needed forward motion, that farmers needed the railroads, and that even Canaanites with biblical place names—Ephraim, Lehi, Manti, Nephi, Moroni—were inevitably forced to rely on factory-made tools and machines. Regimented orchards and windbreaks, because they depended on ditch irrigation, measured growing reliance on sophisticated dams and canals. Reclamation in Mormon doctrine became divinely providential. For apostle John A. Widtsoe, a biologist and educator, the “science” of reclamation was more than an economic necessity. It was Christian duty, a religious rite. “There can be no full conquest of the earth, and no real satisfaction to humanity,” Widtsoe explained, “if large portions of the earth remain beyond his highest control.”⁴⁸ That God dwelled in dams and canals was also apparent to the journalist William Smythe who, in 1905, defended the science of big hydraulics as “religious” and “divine.”⁴⁹

Publicists rushed in to prove the promise of a mechanized Eden where minimal physical labor produced a perpetual abundance of crops. Color advertisements for the Oregon Short Line posed modern-day Adams and Eves near machines and irrigation equipment. Lombardy poplars framed the perfect square of a Utah orchard on the cover of 1915 brochure for the Denver & Rio Grande (Figure 13). Idaho photographer Clarence Bisbee, meanwhile, aggressively courted the US Reclamation Service with postcards of water rushing through geometric canyons that seemed ideal for hydro dams. Steam tractors redeemed the Idaho barrens in Bisbee’s 1910 promotion of the doomed Salm Falls Creek colony west of Twin Falls (Figure 14). Factory and garden elsewhere converged in photography of symmetrical orchards dissected by highways and flanked by telegraph wires.⁵⁰

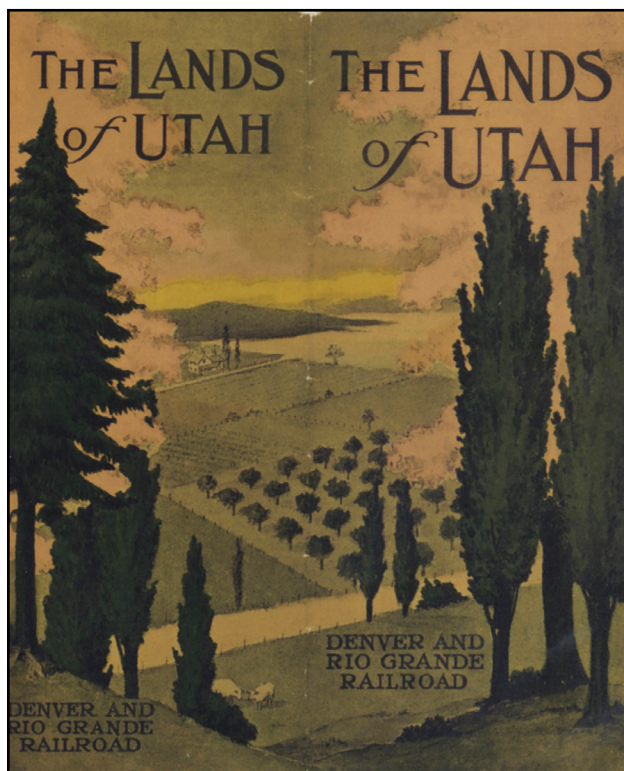


Figure 13. Trees, crops, and ditch irrigation are stylized emblems of the Mormon Landscape in a 1915 brochure for the Denver and Rio Grande Railroad. (Washington State Historical Society)



Figure 14. Clarence Bisbee of Twin Falls, Idaho, featured the power of steam in photo promotions for irrigation projects. Pictured: freighting equipment from Twin Falls to Salmon Falls Creek, 1908. (Twin Falls Public Library)

But machines in the garden of Zion still presented a modernist challenge to the tranquil aesthetic of Mormon art. In the 1890s, when five LDS painters were “called” to study in Paris at the Académie Julian, the art of Utah began to absorb a pastoral naturalism of muted colors and peasant themes. Art missionary John Hafen found in opulent Paris a model for the grander things that God had divined for Utah. Hafen’s *Harvest Time near Sugar House* (1897), *Girl among the Hollyhocks* (1902), and *Corn Stocks* (1905) were tributes to Zion’s glory, peaceful and devoid of machines. Fellow missionary Lorus Pratt, who sailed to Paris with Hafen, returned a devotee of the “toilers of the soil” tradition with its emphasis on sturdy peasant with primitive tools. Pratt, nevertheless, belatedly came to acknowledge Utah’s changing folkways. In *Harvest Time in Cache Valley*, painted in 1913, Pratt posed yeomen under the log boom of a primitive derrick near a gas-chugging threshing machine (Figure 15). Impressionism, post-impressionism, expressionism, and modernism were all adapted to Mormon landscapes. Expressionist Mabel Frazer mixed Mormon symbols into her praise of self-reliance in a vibrant painting called *The Furrow* (1929; Figure 16). Utah’s Philip Barkdull imported the fauvism of Henri Matisse in the saturated hues of the thick impasto he squeezed directly onto the canvas. Barkdull’s *Symphony in Colour* (1930) isolated a Mormon homestead on the banks of what appears to be Bear River irrigation. Canal water reflects the uniform massive trunks of three Lombardy poplars, their crowns reaching skyward as if searching the heavens for God (Figure 17).⁵¹



Figure 15. Lorus Pratt hints at the transition to mechanized farming in *Harvest Time in Cache Valley*, 1913. (Springville Museum of Fine Art)



Figure 16. LDS master Mabel Pearl Frazer sought distance from Europe with scenes of agrarian self-reliance. Her 1929 masterwork *The Furrow* has been called Modern Expressionist. (J. Willard Marriott Library, University of Utah)



Figure 17. Irrigation water reflects Lombardy poplars in Philip Barkdull's *Designed Landscape: Symphony in Colour*, 1930. (Springville Museum of Fine Art)

Shockwaves of the Great Depression dislodged the French tradition and hit Utah especially hard. The Beehive State, in 1933, had the nation's fourth highest rate of unemployment. Annual per capita income dropped nearly fifty percent. Police manned highway checkpoints to turn back migrant labor. Shacktowns of tar-paper shanties—Hooverilles, they were called—sprouted wherever the lines of shivering homeless quietly waited for bread. For the arts, nationwide, the trauma forced introspection. In the prose of John Dos Passos, in the protest of Woody Guthrie, in the murals of John Steuart Curry and Thomas Hart Benton, and the bleak photography of Dorothea Lange, the despair stirred realism and a prideful rebuke of European ideals (Figure 18). “If we are to have anything that can be called a vital American art,” wrote Maynard Dixon, a powerful presence in Utah, “it must come this way; not by the obedient repetition of European formulas, but through the ability and courage of our artists to take the life and the material of their own country and of these express their aspirations.”⁵² Regionalist Edward Hopper concurred. “We are not French,” said Hopper, “and any attempt to be so is to deny our inheritance and to try to impose upon ourselves a character that can be nothing but a veneer.”⁵³

A stoic man in a soft hat and suspenders—his trademark, a shirt-pocketed sprig of sagebrush—probably did much as any Great Depression painter to document the dislocation



Figure 18. The hand of God in the form of cloud blesses Utah irrigation in Maynard Dixon's study for a courthouse mural in Provo, 1940. The mural was never completed. (Brigham Young University of Art, gift of Edith Hamlin Dixon)

in a mix of vernacular styles. LeConte Stewart of Davis County, Utah, in career spanning seven decades, rarely strayed far from his cottage in Kaysville where a narrow strip of farmland hugged the eastern shore of the Great Salt Lake. Stewart's grayish purples and blues savored the serenity of the scrub vegetation; its pageantry, but also, said a critic, "the sorrow of men who have trekked across it to die."⁵⁴ Sagebrush, his sprig of solace, was also his "eau de cologne." "As a youngster in Richfield and Glenwood, where I was born," Stewart explained, "I stubbed bare toes over sage and prickly pear chasing cows over the sunbaked hillsides. The smell of the soil and pungent odor of sage got into my blood."⁵⁵

In 1903, when the artist was twelve, heart failure claimed his mother. One-by-one, soon after, three of his four siblings had died. In 1913 his father had been visibly grieved when the young man spent six hundred dollars in savings to respond to a magazine ad for the Art Student League in New York. "I'd rather [paint] than eat," Stewart insisted. A year later he was back in Kaysville, suffering from chronic bronchitis. He taught school. He lettered signs. He married. In 1917, when called overseas for his Mormon mission, he painted Edenic murals in a temple near Honolulu. More mural projects for the church in Canada and Arizona led to one-man-shows in Ogden. In the 1920s he painted orchards and barns in a bold vibrating style of muted colors called tonal impressionism. But the subject matter darkened with the anguish of the Great Depression. Stark paintings of stricken Utah—of clutter and abandonment, of gas stations, hotels, frozen mills, and derelict homesteads—were praised and elsewhere denounced as "negative" and "ugly" but "down-to-earth" and "true."⁵⁶ Stewart's *House by the Rail Tracks* (1935; Figure 19) featured an autumn field with a yellow house, its paint blackened by soot. *Ogden, Becker's Brewing* (1933; Figure 20) and *Cannery* (1937) showed factories without factory workers. *The Smiths', the Joneses', and the Browns'* (1936; Figure 21) depicted a row of shabby housing in field of telephone poles.

In the 1930s, like no other American time, the art world was drawn to these homely places and consumed by the plight of the poor. Stewart paralleled the journey of other American masters—Grant Wood of Iowa was one, Hopper of New York was another—who gravitated toward the



Figure 19. Steel and telephone poles frame a blackened farmhouse in LeConte Stewart's *House by the Railroad Tracks*, 1935. (Church History Museum)



Figure 20. Empty factories and storefronts were hallmarks of LeConte Stewart's American Scene Realism. Pictured: *Ogden, Becker's Brewing*, 1933. (Private Collection)



Figure 21. Suburban housing encroaches in LeConte Stewart's *The Smiths', the Joneses', and the Browns'*, 1936. (Springville Museum of Fine Art)

commonplace and aggressively realistic in a movement that came to be called American scene regionalism. Stewart painted so many thousands of Utah landscapes that his work has been hard to label. Some saw introspection where others found defiance. Either way, the best of his art made sobering comment on Babylon's encounter with Zion. In *Private Car* (1937; Figure 22), for example, he depicted hobos on moving boxcars. One stood in cocky pose as if train were his private car. In *Death Curve at Roy, Utah* (about 1936; Figure 23) the glare of garish neon broke the vastness of a menacing night. Neither painting was a polemic yet they signaled a cultural change. In the kingdom of agrarian virtue, where technology was divinely ordained, progress had ceased to be progress. Machines ran amok in the garden. Beautification had derailed in blight.⁵⁷

It has been said that no one ever really recovered from the despair of the Great Depression. Stewart, in 1938, turned inward like the vanishing streams. That summer he accepted a teaching post at the University of Utah, and there for the next eighteen years his studies of the Mormon landscape retreated to autumn colors and snow-blanketed silos and barns. In 1985, Stewart, age ninety-four and still tracking backwards, winced at the sheetrock and plywood advancing towards Davis County. "This town used to be full of old barns," Stewart lamented. "Everything that I find that's good to [paint] they tear down."⁵⁸

Framing Armageddon

Now chaos, now garden, the desert emerged in the Christian view of Creation as emptiness transformed. Deserts ever since have begged the obvious question: empty of what? Certainly, in the gap between Colorado and California, the emptiness has seldom been empty of food. Native peoples found more than they could harvest in the basin's nutritional balance of beans, roots,



Figure 22. Faceless men ride boxcars near Layton, Utah, in LeConte Stewart's *Private Car*, 1937. (Church History Museum)



Figure 23. Paintings of the ordinary were dismissed as "bleak" and "raw". Pictured: LeConte Stewart's *Death Curve*, 1936. (Private Collection)

bulbs, fish, bison, game birds, grasshoppers, and other sources of protein.⁵⁹ Empty, then, of what? “Of everything and nothing,” wrote the literary critic John Beck in an essay on cultural landscapes.⁶⁰ Seemingly vast, the desert bred hope and fear and uninhibited experimentation. Chaotic, it must be ordered. Empty, it must be filled.⁶¹

From the imperative to fill and confine what appeared to be empty and endless came the West as a tabula rasa where history could be written anew. Literary critic Catrin Gersdorf, a scholar from the Baltic Sea who writes about vacant places, found four basic storylines. First was the Jeffersonian narrative of the West as a garden of boundless abundance; second, a wilderness story of the desert as spiritual refuge; third, a West-meets-East parable of Orientalism in which aridity was contrasted against wet Victorian landscapes; and fourth, a story of otherness (or “heterotopia” as the French theorist Michael Foucault defined it) where Americans have constructed a sandbox for cultural experimentation, where sightings of flying saucer manifest alienation and atomic scientists contemplate the doom.⁶² Often the stories are deterministic. In railroad and mining promotions, in parables of self-reliance and landscapes of dreams turned to dust during the trauma of the Great Depression, the stories aggrandize machines. Historians of technology, stressing complexity, have mostly come to reject stories that purport to compact human encounters with deserts or trace them like a chain reaction to a single powder-keg spark. Metaphors, nevertheless, thrive where legend and folklore diverge from the empirical structure of history books.⁶³

And so it has always been in North America’s largest desert where heat and flatness conspire with stereotypes and idealizations to aggrandize and distort. Only artist or true believer stands far enough back to contain the hallucination. Only at a mythic distance from specific events in unique locations is it possible to see the machine—or capitalism, or aridity, or God, or any single factor—as history’s overpowering force. Closer inspection reveals the confusion of social and cultural factors that set machines in motion, shaping historical change.

Whether or not the things humans make drive their civilizations, there is no denying that machines, as metaphors and metaphysics, filter the ways Americans have come to perceive the boundaries of vacant space. In Nevada, especially, where the West still appears to the East as formless and empty, iconography provokes fatalism. Photographer Edward Weston was one of the first to double back on the tradition of Ansell Adams where humanity’s trespass was screened from Sierra Club calendar art. Weston, in 1937, posed a steam shovel’s hungry claw above Reno’s Truckee Basin as if to devour the romantic sublime. Postmodernists, ever since, have reconstructed the idea of the West with landscapes of exploitation, with billboards, graffiti, and strip malls, with bomb craters and shrapnel, with open-pit cyanide mining at places like Battle Mountain and an ancient homeland contaminated at Yucca Mountain’s nuclear dump. Manifest destiny is here rescripted to mean an attack—literally, in the case of weapons testing—on negative space that confounds.⁶⁴

Often in Nevada’s era of the A-bomb, the iconography of the pulverized desert was an apocalypse rained down from above. Aerial assaults on wild mustangs spurred anti-cruelty legislation when photos of a Nevada roundup went public in 1958 (Figure 24). Augustus “Gus” Bundy of Washoe County, a sculptor and portrait artist, had taken the photos seven years before in the Smoke Creek Desert near Pyramid Lake. Legend has it that the photos were shot with a hidden camera under his coat. Historians insist there was no need for stealth in an era when roping horses from pickups was standard practice. Surreptitious or not, the images captured the carnage—the herding of horses with planes, the stampeding with shotguns, the lassoing from speeding pickups. Photos showed horses tethered to tires and staggered by heat exhaustion. Slaughtered for soap and horsemeat, they were hauled off the playa in trucks. *True: The Man’s Magazine* purchased eight of the roundup photos for a story sensationally titled “Mustang



Figure 24. Gus Bundy's action photos of horsemeat hunters shocked Congress and prompted a ban on mechanical roundups. Pictured: Bundy's *Horse and Truck*, 1951. (Special Collections, University of Nevada, Reno)

Murder: About the Killing of the Wild Mustang Horse Out West." The photography, said *True*, had exposed "the ruthlessness with which our mustangs have been pursued and captured to the point of near-extinction."⁶⁵ On September 8, 1959, with Dwight Eisenhower's signature, a ban on mechanical roundups became federal law.⁶⁶

Black trucks in the glaring whiteness. Mustangs maimed from the air. Bundy's photos were cited as proof that humanity, armed with machines, was the desert's most lethal species. Lethal and also absurd said a Columbia English professor on sabbatical leave in Tucson. Joseph Wood Krutch of New York, writing in 1952, took a thousand-mile circular tour from Arizona through the Mojave arm of the Basin in search of spiritual meaning. His memoir, *The Desert Year*, contrasted Manhattan's abundance of consumer goods with another kind of plenty—a plenty of salt and sagebrush, a plenty of space and light. It was not Technological Man, said Krutch, but the roadrunner and the coyote who best exploited desolation: the bird because he was cocky, the canine because he was stealthy. Both were stars already under contract for Looney Tunes at Warner Brothers. Roadrunner, the absurdist, darted through a yellow celluloid desert where gizmos and gadgets fell from top-heavy rock formations. Wile E. Coyote played the Krutchian hero too smart for his own survival. A beta-tester for ACME Corporation, Coyote crashed weather balloons, rockets, and bombs. Invariably, in the cartoons as in Krutch's musings, materialism imploded in improbable ways.⁶⁷

Surprises everywhere fell from the sky in the heyday of Wile E. Coyote. On February 2, 1951, at Frenchman Flat about seventy miles north of Las Vegas, the searing three-second flash could be seen as far as Boise. It was followed by a roaring boom that mushroomed into a cloud

then fluffed into the shape of a bowtie. Baker-2, the blast was code named. Remote-controlled cameras showed pigs writhing with radiation. Dollar-sized greyish burns spotted the backs of Nevada cattle. Sheep and horses wandered with bleeding sockets for eyes.

"Now, for the first time in human history," warned Lewis Mumford, "there is no spot on earth where the innocent may find refuge."⁶⁸ Certainly no spot of refuge near Frenchman Flat in the bombing range that came to be called the Nevada Test Site. From 1951 to 1963, above ground zero in the desolate test site, at least one hundred so-called "devices" mushroomed radiation. Downwind in St. George, Utah, lymphoma spiked and leukemia went epidemic among children under fourteen. Vegas played it for laughs with hair-sprayed mushroomed hairdos. There were Miss A-bomb competitions (Figure 25) and, at the New Frontier's Venus Room, long, tall Elvis from Memphis was "atomic powered."⁶⁹ Nearby to the west, a Jesus reincarnated in concrete rose from a sculpture garden with hands outstretched to heaven as if preparing for Rapture's fire. Facing doom from the East was an art complex that grew to become the world's largest outdoor sculpture. Michael Heizer's *City*, begun in 1972 and still under construction, resembled a mile-long temple-like bunker with a coating of chocolate cement. Minimalist and monumental, the bunker seemed massive enough to survive nuclear Armageddon. There were UFO watchers who thought *City* was an alien airstrip. Others saw a message sent deep into the cosmic future that art had predated The Fall.⁷⁰



Figure 25. Miss Atomic Bomb promotes Las Vegas, 1957. (Las Vegas News Bureau)

From photo documentation to minimalism and brutalization, the landscape continued to mutate. Landscape photographer Peter Goin of Reno, one of the first to interpret the test site, framed radioactive debris in toxic panoramas devoid of greenery and people. Goin's *Nuclear Landscapes* (1992) shunned romantic convention with edgeless horizons and bleached colors in bright-white Kodachrome light. Goin called them landscapes of fear. Classically composed but equally fearsome were bombing range studies by photographer Richard Misrach in his *Desert Cantos* (ongoing) series. Misrach's *Bravo 20* (1993) documented the covert bombing and shelling of a pockmarked Nevada barren that was still being used for ranching (Figures 26 and 27). Taunting Congress, the photographer appended a serious-sounding proposal for a bombing range national park. Architectural drawings showed a Devastation Drive for tour buses, boardwalks with subterranean walk-in bomb craters, and a café with a viewing tower. In a Las Vegas suburb, meanwhile, painter Robert Beckmann isolated in oil on canvas the apocalyptic moment of impact of a sixteen-kiloton bomb. Beckmann's *The Body of a House* (1993; Figure 28) colorized and enlarged eight chilling frames from 2.3 seconds of 1953 Pentagon footage. The sequence showed what The Bomb might do to a two-story suburban home. Another Beckmann series pictured a fireball of radiation above the lucky 7-7-7 of a Vegas slot machine.⁷¹



Figure 26. Richard Misrach, *Bomb Crater and Destroyed Convoy, Bravo 20 Bombing Range, Nevada*, 1986. (Fraenkel Gallery)

The obvious metaphor for Beckmann and his traumatized generation was nuclear war as the ultimate gamble. More subtle was the postmodern critique of blank Nevada as a tranquilizing abstraction for the numbing of horrific events. "What, after all," asked Rebecca Solnit in *Savage Dreams* (1994), "is the American idea of a Nuclear Armageddon but that of preservation and reinvention of the frontier?"⁷² The idea of the American West, Solnit explained, had always been about new beginnings. Bomb shelters and survivalist gear were—like the Mormon concept of Zion and A. J. Russell's framing of the Pacific railroad—variations on the prophecy that order



Figure 27. Richard Misrach's *Desert Cantos* shows human trespass. Pictured: *Outdoor Dining, Bonneville Salt Flats, Utah*, from the *Desert Cantos* series, 1992. (Fraenkel Gallery)

would arise from chaos. The promise had always been that the Chosen would return to the fated places to create and elsewhere destroy.

Burning women and men

Bare-chested men were the movers of progress in sculptures pressed into concrete in the towers above Hoover Dam. Iconic, heroic, the men resembled machines. "Forms such as these," wrote an art critic in *Fortune*, "are more deeply human than the muscles of a torso because they trace the firm pattern of the human mind."⁷³ Hoover Dam, like the driving of the golden spike at another great dedication, conflated machines with muscles and men in an aesthetic of limitless power.

Seventy seven years almost to the day since Hoover Dam's 1935 dedication, about four hundred miles north in another Nevada barren, artists again were obsessed with machines. But now the energy was solar powered and the bare-chested were of every gender. Headless metal torsos guarded the carnival promenade where an artist mechanically danced as naked as desolation. A catapult shot men and pianos. A Viking shot flames from his helmet. A robot had torches for arms. "It's the Louvre of underground art," said King from California, our guide. His golf cart was a twenty-foot Japanese monkey with clapping cymbals. "It was the most annoying thing I could think of," said King.⁷⁴ In the chalky alkali whiteness the monkey fell in with the mutant procession—a mechanical fossilized mammoth, a Wile E. coyote art car, a giant walking spider machine. Night fell and the moon rose to the techno beat of a band named Robot Heart. The dehydrated, the overdosed, the hallucinogenic, the perpetually groovy and questing, the digiterati from Silicon Valley . . . more than fifty-two thousand people in all emerged from the desert darkness to circle a forty-foot effigy man on a fifty-foot wooden platform. Chanting "burn the Man, burn the Man"



Figure 28. Robert Beckmann's *Test House—First Light*, 2008, adapted from his 1993 *Body of a House* exhibition concerning the effects of a nuclear blast at the Nevada Test Site. (Robert Beckmann)

and waving neon glow sticks, they sought purification by fire. It was not Woodstock or circus night in Las Vegas or a city in open rebellion. It was Burning Man in the Black Rock Desert, 2012.

Incubated in San Francisco and released into Nevada, the festival called Burning Man was an art epidemic gone wild (Figure 29). To describe the dynamic in words would be, said the festival's website, like explaining a shade of color to someone born blind. Burning Man, in this respect and others, twisted the trail of past generations who struggled to make sense of the void. This image essay, herein, has marked that artistic trail in three mechanical phases. First, from the era of the golden spike, came images of the machine as a passage to industrial triumph; second, mostly from Utah, the machine as agrarian beautification; third, from postmodern Nevada, the machine as apocalyptic demise. All three phases layered the Great Basin with myths of western conquest, the most fundamental being that there ever existed a West as a definable geophysical region, not just a slogan or a compass direction. Mythologies, providential and enigmatic, still frame the pioneer genius for technological innovation in the aesthetics of a restless nation pridefully obsessed with its fate.

Fated technology, the fatalists continue to tell us, will surely outpace human reason in ways we can barely image. If true, then Burning Man may be a haven, for there, in the flattest of places, the fetish for fire and mechanization has been imaged and reimagined in most every conceivable way. "What Burning Man calls for, above all, is openness to transformation and wonder," says Daniel Pinchbeck of New York, a student of shamanism.⁷⁵ The same could be said *writ large* of the steppe at the foot of the Rockies where machines drive the story of progress and emptiness beguiles.



Figure 29. Effigy ritually torched at the Burning Man art festival in Nevada's Black Rock Desert, by Cristina Garcia Rodero, 2005. (Magnum Photos/ARTstor)

NOTES

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- 3 John C. Frémont, *The Exploring Expedition to the Rocky Mountains, Oregon, and California* (Buffalo: Derby & Co., 1850), 298.
- 4 Dan Carpenter quoted in Richard V. Francaviglia, *Believing in Place: A Spiritual Geography of the Great Basin* (Reno: University of Nevada Press, 2003), 8.
- 5 Mark Twain, *Roughing It* (Hartford, CT: American Publishing Company, 1872; New York: Harpers & Brothers, 1913), 127. Citations are to the Harpers & Brothers edition.
- 6 Owen Wisner, "Lin McLean," *Sunset* 20 (November 1907–April 1908), 572. William Smythe challenged Wisner's view of Nevada in *The Conquest of Arid America* (New York: MacMillan, 1905), 214. See also, Elizabeth Raymond, "When the Desert Won't Bloom: Environmental Limitation and the Great Basin," in *Many Wests: Place, Culture, and Regional Identity*, eds.

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 - 8 Walter Prescott Webb’s great work, published in 1931, was about the semi-desert of the near-West tall grass prairie on the eastern side of the Rockies. In 1957, in a controversial essay published in *Harper’s*, the analysis migrated west to the continent’s “desert heart”. Although Webb main fascination was climate, he was Marxian in his view that factory mechanization would leap beyond social control; see, George O’Har, “Where the Buffalo Roam: Walter Prescott Webb’s The Great Plains,” *Technology and Culture* 47 (January 2006): 156–163; see also, Walter Prescott Webb, “The American West, Perpetual Mirage,” *Harper’s Magazine*, May 1957, 25–31.
 - 9 Smythe, *Conquest of Arid America*, 220.
 - 10 Frank Norris, *The Octopus: A Story of California* (1901; repr., New York: Cosimo, Inc., 2009), 33. Citations are to the Cosimo edition.
 - 11 William Shaw, “‘The Handmill Gives You the Feudal Lord’: Marx’s Technological Determinism,” *History and Theory*, 18, no.2 (May 1979): 155–176; for the argument that Marxist determinism was economic more that technological see, Bruce Bimber, “Three Faces of Technological Determinism” in *Does Technology Drive History? The Dilemma of Technological Determinism*, eds. Merritt Roe Smith and Leo Marx (Cambridge: The MIT Press, 1994), 89–99.
 - 12 Lewis Mumford, *Art and Technics* (New York: Columbia University Press, 1952), 11–12.
 - 13 Albert Deane Richardson, *Beyond the Mississippi: from the great river to the great ocean, life and adventure on the prairies, mountains, and Pacific coast* (Hartford, CN: American Publishing Company, 1867), 567.
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 - 17 The most complete biographical treatment is James D. Horan, *Timothy O’Sullivan: America’s Forgotten Photographer* (Garden City, NY: Doubleday & Co., 1966); see also, Rosalind Krauss, “Photography’s Discursive Spaces: Landscape/View,” *Art Journal* 42, no.4 (Winter 1982):311–319.

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- 19 On the evolving complexities of scientific mapping see, William Goetzmann, *Exploration and Empire*, Francis Parkman Prize edition (New York: History Book Club, 2006), 333–351; see also, Robert Wilson, *The Explorer King: adventure, science, and the great diamond hoax* (New York: Simon and Schuster, 2006), 235–254; and, Richard V. Francaviglia, *Mapping And Imagination in the Great Basin: A Cartographic History* (Reno: University of Nevada Press, 2005), 126–130.
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- 21 Alan Trachtenberg, *Reading American Photographs: Images as History, Mathew Brady to Walker Evans* (New York: Hill and Wang, 1989), 132.
- 22 William H. Goetzmann and William N. Goetzmann, *West of the Imagination* (New York: W. W. Norton and Company, 1986), 200.
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