

Beyond the

Hundredth Meridian

JOHN WESLEY POWELL

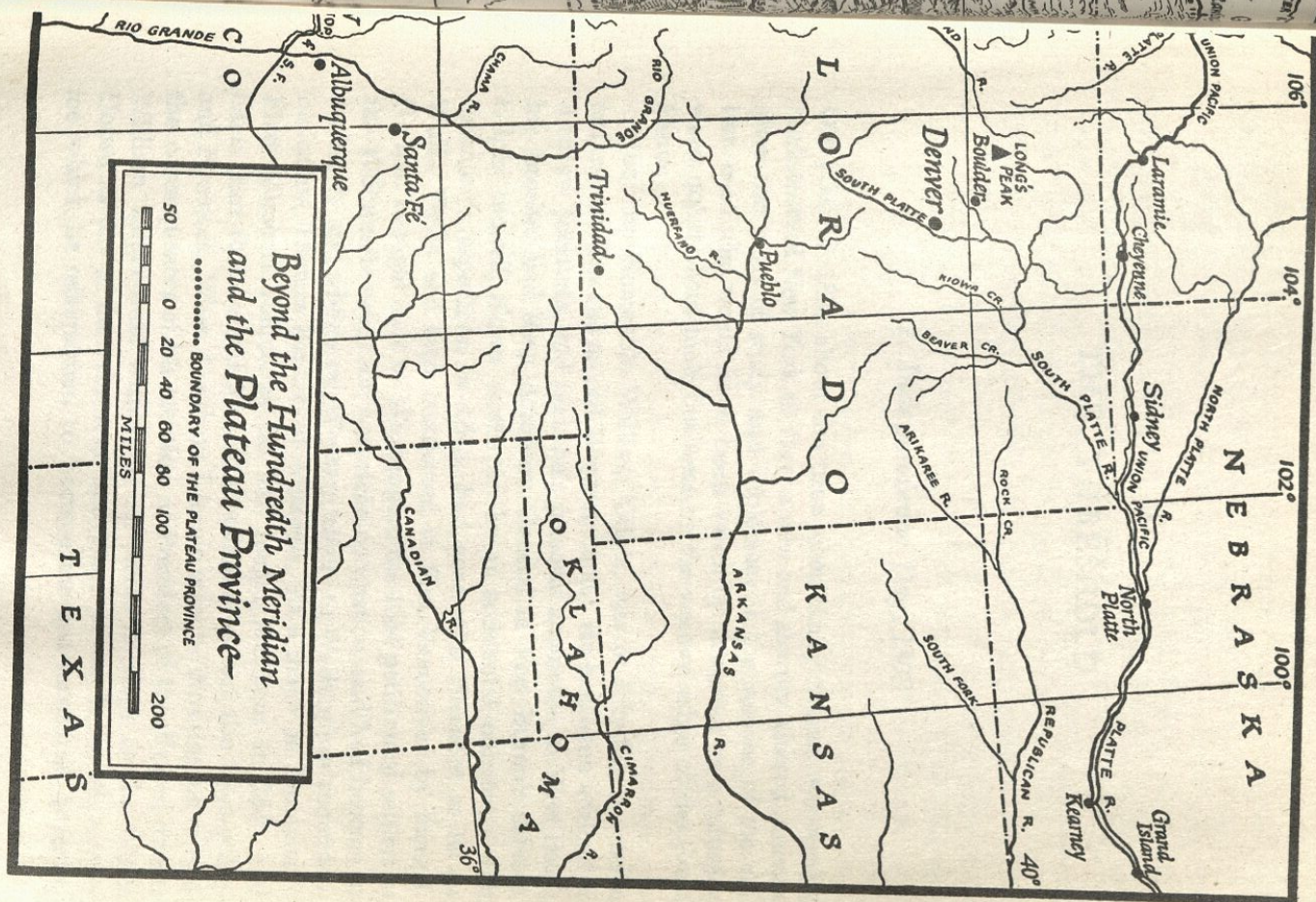
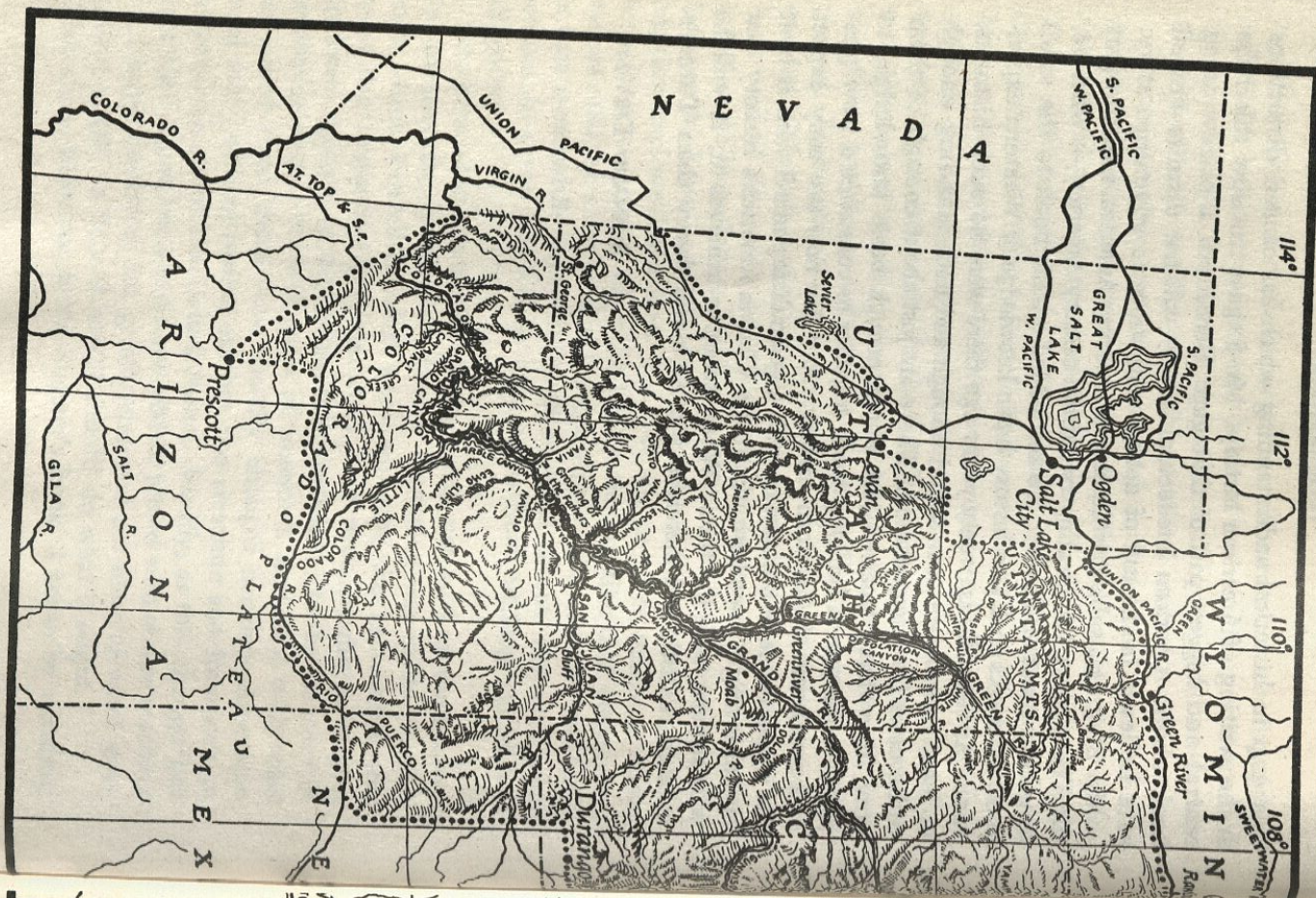
AND THE SECOND OPENING OF THE WEST

by Wallace Stegner

WITH AN INTRODUCTION BY
BERNARD DE VOTO



PENGUIN BOOKS



THE THRESHOLD

1. *Independence Day, 1868*

ON JULY 4, 1868, about the time when Henry Adams was turning back toward New York to face a new and sharply altered America after ten years of study and diplomacy in the service of the old, two men who would have been worth his attention as a historian were going about their business on the western edge of the Great Plains.

One, the Honorable William Gilpin, was at fifty-five a veteran of large actions and an old Western hand.¹ He had been a friend of Andrew Jackson's, and Jackson's personal appointee to West Point; his brother had been Attorney General in Van Buren's cabinet. Gilpin himself, blown westward by an accidental encounter with Frémont's expedition in 1843, had gone with Frémont as far as Walla Walla and then continued to Fort Vancouver by himself. He had brought back to Washington the 1844 petition of settlers in the Willamette valley for American occupation, and had become an authority and adviser on Western affairs to Washington statesmen, including Thomas Benton of Missouri. As a major in Doniphan's First Missouri Volunteers he had fought Mexicans in 1846, and later than that he had joined expeditions against the Comanches and Pawnees. When Abraham Lincoln went to Washington to face the consequences of his election as President of the United States, William Gilpin went with him; for weeks he slept in the White House as one of the volunteer bodyguard of one hundred, a service which he relinquished to become the first territorial governor

of Colorado. In that office he had been active and effective in holding Colorado for the Union, and he had been through all his life a consistent and impassioned advocate of the imperial dynamism of Old Bullion Benton.

Speaking to the Fenian Brotherhood in the capital of the seven-year-old territory of Colorado on this Fourth of July, 1868, he repeated and summarized the things he had been saying in speeches and books since before the Mexican War and would go on saying until his death. It is almost awe-inspiring to contemplate this veteran Westerner, with twenty-five years of hard firsthand experience behind him, as he stands up in the raw frontier town of Denver and looks clear over the continent of facts and into prophecy.

"What an immense geography has been revealed!" he shouted at the sweating Fenians and their guests. "What infinite hives of population and laboratories of industry have been electrified and set in motion! The great sea has rolled away its sombre veil. Asia is found and has become our neighbor. . . . North America is known to our own people. Its concave form and homogeneous structure are revealed. Our continental mission is set to its perennial frame. . . ."

Gilpin's version of America's continental mission he had already elaborated in 1860, in a book entitled *The Central Gold Region, The Grain, Pastoral, and Gold Regions of North America with Some New Views of Its Physical Geography and Observations on the Pacific Railroad*. He would reprint it with additions in 1873 as *The Mission of the North American People*, and extend its ideas in 1890 in *The Cosmopolitan Railway*. The Manifest Destiny which he had learned from Benton, and which was a creed and a policy of his generation, was a passionate vision to Gilpin. He saw the West through a blaze of mystical fervor, as part of a grand geopolitical design, the overture to global harmony; and his conception of its resources and its future as a home for millions was as grandiose as his rhetoric, as unlimited as his faith, as splendid as his capacity for inaccuracy.

All the wishful convictions of his time and place had his credence. The Great American Desert whose existence had been vouched for by travelers and vaguely indicated on maps at least

since the report of Zebulon Pike in 1810 was waved away with a gesture. The semi-arid plains between the 100th meridian and the Rockies, plains which had barred settlement and repelled Spaniard and Anglo-American alike, were no desert, nor even a semi-desert, but a pastoral Canaan. Belief in such a desert, he said, had preceded settlement, the location being put ever farther west like the homeland of the White Indians, until now it pinched and disappeared before the eyes of gold seekers and pioneer farmers. Gilpin joined the politicians and the railroads, eager for settlers, in finding most of the plains region exuberantly arable. He had distinguished corroboration for his belief that artesian waters would unlock the fertility of the whole subhumid region east of the Rockies, and if he had chosen to he could have quoted everything from frontier folklore to government geologists in support of the theory that settlement improved the climate, that in very truth "rain follows the plow."²

No hindrances to settlement now existed, Gilpin said; the Mississippi Valley which now supported eighteen million people could easily support eighteen hundred million, ten times the total population of the Roman Empire under Trajan and the Antonines. On the more westerly plains, though there was little surface timber, a beneficent Nature had so disposed the rooting system of the low growth that settlers were able to dig for firewood and find plenty. And on these plains, once the wild herds were exterminated, three domestic animals could be pastured where one wild one had formerly roamed.

Throughout the vast concave bowl of the continental interior was illustrated the unifying effect of geography, for here where everything ran toward the center instead of being dispersed and divided by central mountains, the people could never be divided into a hundred tribes and nations as in Europe, but must be one. The native race was an illustration: all the tribes from Florida to Vancouver's Island exhibited a "perfect identity in hair, complexion, features, religion, stature, and language." To this same healthful homogeneity our fortunate geography would within a few generations bring white Americans also.

But marvelous and fecund as the valley was, the great plateau region, including the parks of the Rockies, was more wonderful.

Superlatives were futile for the description of the salubrity, richness, health, prosperity, and peace this West offered. The painful struggles of earlier times and harsher climates would not be found. Even houses were unnecessary, so temperate were the seasons. The aborigines used none, and Gilpin himself, in six years of living there, had rarely slept under a roof. (The Mormon handcart companies who starved and froze on the Sweetwater in 1856 might have been astonished to hear this; likewise the men of Frémont's 1848 expedition, reduced to the practice of cannibalism in the Colorado mountains.)

Agriculture was effortless: no forests needed clearing, manual tillage was not required, even the use of the plow was not essential, so eager were seeds to germinate in this Paradise. As the plains were amply irrigated by underground and artesian waters, the plateau was watered by mountain streams of purest melted snow, and to arrange fields for irrigation was no more trouble than fencing, which the ditches here superseded. No heat or cold, no drouth or saturation, no fickle climate or uncertain yield, afflicted this extensive region, and no portion of the globe, even the Mississippi Valley with its potential eighteen hundred millions, would support so dense a population. San Luis Park would in time become as renowned as the Vale of Kashmir; South Pass would be a gateway more thronging than Gibraltar. And all up and down the length of the cordillera that stretched through two continents, the unlimited deposits of precious metals assured the people of a perennial and plentiful supply of coin. In a moment of caution, keeping his feet on the ground, Gilpin admitted that there were a few—a very few—patches of gravelly and unproductive soil in the mountain parks, but he hastened to add that these could be depended upon to contain placers of gold.

Owning a territory that stretched from sea to sea and brought America face to face with Asia on the West as it was face to face with Europe on the East, possessed of unlimited gold and other resources; endowed with a population energetic and enduring, which the peculiar geography of the continent would soon blend into one people; blessed with a political system divinely appointed to emancipate the world's oppressed millions and set an example that would recreate the globe; tested and unified by the late bloody

civil strife, and with a geographical position squarely upon that isothermal zodiac which had nourished all the world's great civilizations, America lacked nothing for the most extravagant future. On the brink of the mountain West (and already past the threshold of the Gilded Age) Gilpin looked into the sunburst dazzle of Manifest Destiny and parted for words to express his triumph and his vision.

And he had some justification. West of the hustling capital on Cherry Creek the gulches were pouring out gold. North of it the Union Pacific tracks had crossed the pass between Cheyenne and modern Laramie and were approaching the continental divide at Creston. The tracks that had already surmounted altitudes greater than any railroad had surmounted before would ceremoniously mate with the Central Pacific rails north of Great Salt Lake on May 10 of the next year. Instantly the hardships of a continental crossing would be replaced by the luxury of Mr. Pullman's palace cars, and the symbolic union at Promontory would convert virtually a whole nation to the optimism of seers like William Gilpin. The cattle which would replace the buffalo were already coming north from Texas, beginning the fleeting romantic history of the cowboy West. The buffalo which were to be replaced were already being hunted to death for their hides or the sport of tourists, and it would not be too many years before the pioneer farmers of Kansas would make two and a half million dollars simply by clearing their fields of bones and shipping them east to fertilizer mills. Within five years of the time Gilpin spoke, literally millions of hides would go east via the Union Pacific, Kansas Pacific, and Santa Fe.³ The West was ready to welcome its happy settlers.

But on the same day when Gilpin summarized his geopolitical and prophetic extravaganza for the Fenians, an exploring party was camped a few miles out of Cheyenne, in what would in three weeks become Wyoming Territory. It included something over a dozen people, among them the wife and sister of the leader. Some of the rest were college students, some were teachers, some were amateur naturalists, one or two were merely tourists. All were so recently arrived that the camp was a disorderly collection of duffie and half-broken mules and half-organized intentions. Backing the expedition was an assortment of scientific and educational institutions, all in

on a penny ante basis: the Illinois Natural History Society, the Illinois Normal University, the Illinois Industrial University, and by virtue of some donated instruments and some good advice, the Smithsonian Institution.

Leading the party was a man who before he was through would challenge almost every fact and discourage every attitude that William Gilpin asserted or held about the West—challenge and attack them coolly and on evidence—and in place of Gilpin's come-all-ye frenzy would propose a comprehensive and considered plan for the opening of the regions beyond the 100th meridian. That plan, beside Gilpin's, would be so sober as to seem calamitous; it would employ consistently what a recent historian rather unhappily calls "deficiency terminology"⁴ when speaking of the West, and it would be decades before parts of it would get a calm public hearing.

If William Gilpin was enthusiastically part of his time, yapping in the van of the continentally confident, Major John Wesley Powell was just as surely working against the current of popular optimism in the policies he developed, and decades ahead of it in his vision. It was to be his distinction and in a way his misfortune that in an age of the wildest emotionalism and nationalist fervor he operated by common sense, had a faith in facts, and believed in system. It was also one of his distinctions that in an age of boodle he would persist in an ideal of public service which most public men of the time neither observed nor understood.

Major Powell was no pioneer Westerner as Gilpin was. The summer of 1868 was only his second summer in the West, and he was thirty-four years old to Gilpin's fifty-five. As yet he was not much of anything—not much of a scientist, not much of a school-teacher, not much of an explorer. But to the problems which the West suggested, and which from this time on absorbed his interest and shaped his career, he brought eventually science where Gilpin brought mythology, measurement where Gilpin brought rhetoric; and he brought an imaginative vigor as great as Gilpin's but much better controlled and much closer to fact. In his one trip to the Rockies in the summer of 1867 he had learned more basic truths about them than Gilpin would ever know. By the end of his career he would know the West as few men did, and understand its problems better than any.

He would know enough to correct Gilpin in all his major assumptions and most of his minor ones. Even in 1868 he knew enough not to say that "North America is known to our people." On the maps he carried there were great blank spaces: in less than a year he would be embarked on an exploration that would replace hundreds of square miles of cartographical guesswork with information. As part of his mature work he would plan and begin the systematic mapping of the whole country, a project that even yet is incomplete and will never be finished as he planned it. Through years of public life he would resist with all his energy the tide of unreasoning, fantasy-drawn settlement and uncontrolled exploitation that the Gilpins explicitly or implicitly encouraged. He would continue to believe in a modified Great American Desert, to talk in "deficiency terms," to insist that instead of supporting eighteen hundred million people the Mississippi Valley could be made, in its trans-Missouri reaches, a barren and uninhabitable wasteland by the methods used to irritate it into fertility. He would protest the plow that broke the plains, he would deny that rain followed the plow, he would fight Western Congressmen and Senators and land speculators and dreamers who persisted in the Gilpin belief in ample artesian water under the Dakota buffalo grass. Instead of taking on faith the existence of unlimited seams of metals and coal, he would have a large hand in the careful survey of all these resources, and he would have the vision to add water and grass and land and timber to those limited and destroyable riches. He would have the courage to seek a revision of the public land laws and a modification of the sacrosanct freehold of 160 acres to match the conditions of the West, and would fight for his proposals cunningly and tenaciously. He would labor to conserve the public domain and to withdraw lands from entry in order to protect for posterity and the public good watersheds and dam sites and playgrounds. The irrigation which to Gilpin was simpler than building fence would be a lifelong study to Powell, and he would father a public interest in the subject that would eventually flower in the Newlands Act of 1902, establishing the Reclamation Bureau which has remade the face of the West. He would be a prime mover in the establishment of the federal government as the sponsor of science for the public welfare. Instead of preaching unlimited supply and unrestrained exploitation he would preach conservation of an already

partly gutted continent and planning for the development of what remained.

And even the matter of racial homogeneity. It is hard to imagine what enthusiasm could have led Gilpin to say that all of the North American Indians were of one stature, language, complexion, religion, and culture. A glance at Gallatin's work would have told him differently; his own experience with Indians should have forced him to other conclusions. Powell would demonstrate, the first to bring a comprehensive order and system to the study, that the Indians were on the contrary of an incredible variety in every way. He would undertake the classification of all the Indian languages, would study Indian myth and folklore, and would found a government bureau whose whole purpose was the scientific investigation of that variety before the tribes were obliterated in the tide of Gilpin's settlers. In the course of those ethnological studies, he would contribute to the remaking and enlarging of the science of cultural anthropology.

But all of these activities, knowledges, and achievements were in the future. On July 4, 1868, they lay around in Powell's mind half realized and half intended, as much in need of thought and discipline and organization as the half-organized camp of the Rocky Mountain Scientific Exploring Expedition.

2. *The Dynamics of a Homemade Education*

THE BOY HENRY ADAMS, appraising the careers that were open to him, felt that of all the possibilities, the West offered him the least. "Neither to a politician nor to a business-man nor to any of the learned professions did the West promise any certain advantages, while it offered uncertainties in plenty."¹ Adams could not have been expected to know in 1854 the shape of things to come, but the reminiscent Adams who was writing his *Education* in 1905 might have admitted that to certain politicians — Lincoln, Grant, and Garfield among them — as well as to certain business-

men — Miller and Lux, Isham, Henry Villard, Leland Stanford — as well as to numerous teachers, preachers, writers (Twain, Howells, Bret Harte, Hamlin Garland, Edward Eggleston) — the West had offered not merely opportunity but golden opportunity. One did not have to like everything the West brought into the nation's life to be aware that it had brought *something*, even that long before 1905 it had come to have a certain dominance in national affairs. Yet Adams, forgetful or not of how the nation's center of gravity had shifted from the Quincy and Beacon Hill of his boyhood, was certainly right in not going west to grow up with the country. Whatever his education had prepared him for, it had not prepared him for that. That took an education of a special kind. To grow up with the West, or to grow with and through it into national prominence, you had to have the West bred in your bones, you needed it facing you like a dare. You needed a Western education, with all the forming and shaping and the dynamics of special challenge and particular response that such an education implied.

The thing that many western boys called their education would have seemed to Adams a deprivation, so barren was it of opportunities and so pitiful were its methods and equipment. Considered in any way but in terms of its results in men and women, it *was* a deprivation. But the men it produced over a period of several generations showed such a family resemblance that until immigration drowned them under they constituted a strong regional type, and their virtues as exemplified in a Lincoln or a Mark Twain force the conclusion that this crude society with its vulgar and inadequate culture somehow made noble contributions to mankind. John Wesley Powell, without being a Lincoln or a Mark Twain, was of that persuasion, one of a great company. It is worth looking for a moment at how he was made.

It is easy enough to summarize: he was made by wandering, by hard labor, by the Bible, by an outdoor life in small towns and on farms, by the optimism and practicality and democracy of the frontier, by the occasional man of learning and the occasional books he met, by country schools and the ill-equipped cubs or worn-out misfits who taught them, by the academies and colleges with their lamentable lacks and their industry and their hope, by