

A SHORT HISTORY OF PLUVICULTURE IN THE AMERICAN WEST

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RAINMAKING AND THE MID-CENTURY MIND

Reading or watching *The Rainmaker* in our empirical age, we may be inclined to dismiss the very notion of producing rain from the ground—to say nothing of the thought of paying someone for their efforts—as fanciful at best. The Currys' willingness even to entertain the idea that the itinerant Starbuck's boasts could be anything but a scam might strike us as extremely wishful thinking. To appreciate N. Richard Nash's work in its original context, however, we must recognize how far removed our automatic skepticism towards what seems to us an exotic, primitive superstition is from the relative currency rainmaking and rainmakers would have had in the minds of an audience of Nash's contemporaries.

While a New York audience of the middle 1950s would likely have shared at least a modicum of our suspicion towards "pluviculture," even the scientific case against rainmaking would by no means have appeared closed to them, and the cultural significance of the phenomenon was palpable, especially in the West. Pseudoscientific American rainmaking, many of the hallmarks of which we can discern in Starbuck's unusual practices, was a fixture of the culture, economy, and lore of the western United States throughout the 19th and 20th centuries. A 1954 scholarly article called "Hatfield the Rainmaker" in *Western Folklore* refers to rainmaking as "one of the more contemporary miracles of science," and the editors of the *Stanford Law Review* took it seriously enough to publish an article entitled "Tort Liability for Rainmaking" in 1949. Regarding the rainmakers themselves, mainstream media paid them considerable attention even years after *The Rainmaker* debuted. The *Dallas Morning News* of June 15, 1963, matter-of-factly reported that one Neal Bosco of Fabens, Texas, was offered \$750 by residents of Waco to use "a system of flares which he ignites to release material which he says 'seeds' the clouds to make them release their moisture."

EARLY HISTORY AND THE GOLDEN AGE

While the art of rainmaking was far from dead by the premiere of Nash's play, the craft had already seen its glory days come and go well before World War II. Although, as w. e. Steps remarks in *Transactions of the Kansas Academy of Science*, "the period of greatest early-day activity in Kansas in the rainmaking field occurred during the drouth [sic] years of 1890 to

1894,” the history of rainmaking in the American West goes back a good deal farther than that. Numerous Native American groups, famously including the Hopi, have dedicated dances and highly cultivated rituals to the coming rains for millennia, and rainmaking and rain dances became a staple of western U.S. folklore.

Though Starbuck’s methods themselves may owe more to pioneer folklore and the iconographic figure of the lone rainmaker on the Plains, the government and the scientific establishment also made significant forays into rainmaking during the 19th century. As Barbara Tuthill observes, the names of authorities like James P. Espy, General Robert Dryenforth, L. Gatham, Edward Powers, and William Morse Davis were frequently on the lips of rainmakers as they set up their towers or prepared their gaseous emissions. Almost all of these scholars have been more or less willfully forgotten by the scientific community.

To help us understand the position of rainmaking in the American society of the 1890s, it might be worthwhile to take a look at the procedure of the first government-appointed rainmaker, General Dryenforth. Congress appropriated some \$19,000 in the drought years of the early 1890s to conduct official tests of rainmaking methods. Under the auspices of the Department of Agriculture, Dryenforth set off to Texas to begin the experiments. His cargo included: “sixty-eight explosive balloons, three large balloons for making ascensions, and material for making one hundred cloth-covered kites, beside the necessary explosives, etc.” Of the experiment, according to Caldwell, “an observer stated that ‘it was a beautiful imitation of a battle.’” Though the results of the government tests were inconclusive, the official experiments only served to heighten the popular appeal of rainmaking—and rainmakers.

Despite government involvement, however, the tradition of rainmaking in the American West was dominated by the charisma and discretion of lone men. They always made certain that their reputations preceded them, often made reference to science in their broad claims about their practices, and invariably kept their “secret” close to the breast. Their methods commonly included producing explosions, releasing chemical gases, or building large towers on public fairgrounds for indeterminate purposes.

FRANK MELBOURNE AND THE KANSAS DROUGHT

During the Kansas drought of 1890–94, Frank Melbourne, the first great star of western rainmaking, came to prominence, traveling much of the region plying his craft. Because of his self-mythologizing, wide success, itinerant habits, and overblown assertions about the efficacy of his methods, Melbourne’s story typifies the conception of the rainmaker in the popular culture of his time. Martha B. Caldwell writes:

The fame of Frank Melbourne, said to be an Australian, as a “rain wizard” had spread throughout the country. Marvelous stories were told of his operations at Canton, Ohio, where he was said to so control the weather that he could “bring rain at a given hour.” Since he was fond of outdoor sports he “so adjusted his machine that all the Sunday rains come late in the afternoon, after the baseball games and horse races for the day are over.” Mr. Melbourne said his machine was “so simple that were its character known to the public every man would soon own one and bring rain whenever he felt like it.”

Melbourne’s operations in Goodland, Kansas, were, in classic rainmaking style, both profoundly public and veiled in an intentional secrecy.

[O]n Wednesday he took his rain apparatus to the fair grounds to begin work [which] he performed in great secrecy; no one was allowed within the building and to keep the inquisitive from coming too close a rope barrier was erected about twenty feet from the building and the windows were curtained. However, everyone went up and “gazed” at the building and the small hole in the roof through which cloud-making substances escaped. . . . The upper story, containing four windows facing the different points of the compass, was Melbourne’s workroom. The room also contained a hole in the roof four inches in diameter for the escape of rain-making gases.

The residents of Goodland and numerous other Plains cities treated Melbourne’s work with the utmost seriousness. He was greeted with an official welcome wherever he went, and although there was always a vocal minority of those who considered his rainmaking either fraudulent or blasphemous, the arrival of the rainmaker was nothing if not a major civic event.

Rainmaking, the “never-failing drought crop,” as w. j. Humphries of the Weather Bureau put it, continued on in the Plains until relatively recently, but on a decidedly more modest scale. By the turn of the 20th century, with endless trainloads of people from all walks of life streaming into the semi-arid region of Southern California and trying to farm, the area of greatest uncertainty about rain had shifted west, and the stage for the greatest rainmaker of them all had been set.

THE GREAT RAINMAKER

As in so many genres, the rainmaker who enjoyed the widest acclaim and power—the man who epitomized his medium—was the last of his kind. Though the journalist and historian



Charles Hatfield, the rainmaker, checking some equipment

Carey McWilliams calls Charles Mallory Hatfield—or Hatfield the Rainmaker, as he was popularly known, or simply the Great Rainmaker—“the first popular folk-hero” of Southern California, he lacked the unpolished braggadocio of the midwestern huckster of the 1890s: Hatfield was a professional. This “moisture accelerator,” whom nearly every Southern California municipality contracted between 1903 and 1928 “for fees ranging from \$50 to \$10,000,” was described in the *San Diego Union* as “a quietly dressed, slender man of middle height with square shoulders, who is crowding forty.” Well versed in the scientific literature, Hatfield peppered his sentences with scientific-sounding phrases, called himself a specialist in “meteorol-

ogy, the science of the atmosphere,” and referred to his métier as creating “a chemical attraction or an affinity working in harmony with natural forces that make rain.”

While his language and appearance may have been more refined than those of his midwestern brethren, his means were similar. When contracted by a community, he would typically have several towers (or “evaporating tanks”) built, generally between 12 and 20 feet high, topped with platforms. These tanks gave the distinct impression that the rainmaker was hard at work, with the added benefit of ensuring that the public could have no clear idea of what exactly he was doing. On each platform, there were, “galvanized iron pans about 3 feet square and 9 inches deep containing Hatfield’s chemicals”—or, as Hatfield himself put it, “certain chemicals the character of which must necessarily remain secret.” Hatfield’s true methods, however, were the very soul of western rainmaking; as McWilliams writes: