



It started as an idea to draw sightseers. In 1923 state historian Doane Robinson suggested carving giant statues in South Dakota's Black Hills. Robinson was not the first American to think that a big country demanded big art. As early as 1849, Missouri Sen. Thomas Hart Benton proposed a superscale Christopher Columbus in the Rocky Mountains. In 1886 the 150-foot Statue of Liberty was unveiled in New York. Now, in the 1920s, an unconventional sculptor named Gutzon Borglum was carving a Confederate memorial on Stone Mountain in Georgia.

Robinson wanted his sculptures to stand at the gateway to the West, where the Black Hills rise from the plains as a prelude to the Rockies. Here, granite outcroppings resist erosion to form the Needles, clusters of tall, thin peaks reminiscent of the spires on a Gothic cathedral. Robinson imagined the Needles transformed into a parade of Indian leaders and American explorers who shaped the frontier. Many people were skeptical or downright hostile. "Man makes statues," proclaimed local conservationist Cora B. Johnson, "but God made the Needles."



Gutzon Borglum in Bosun Chair, 1930.

Undaunted, the memorial's backers called in the master sculptor of Stone Mountain. In an era when many artists scorned traditional patriotism, Gutzon Borglum made his name through the celebration of things American. To him "American" meant "big." Born in Idaho in 1867, this son of Danish Mormons studied art in Paris. Back home he worked in the shadow of his artist brother Solon even after several works brought Gutzon moderate fame. Among them were a remodeled torch for the Statue of Liberty, saints

A monument's dimensions should be determined by the importance to civilization of the events commemorated.... Let us place there, carved high, as close to heaven as we can, the words of our leaders, their faces, to show posterity what matter of men they were. Then breathe a prayer that these records will endure until the wind and the rain alone shall wear them away.

Gutzon Borglum



Mount Rushmore before carving, 1925.

and apostles for the Cathedral of St. John the Divine in New York, a seated Lincoln in Newark, N.J., and an oversized Lincoln bust for the United States Capitol. In 1915 he began the Stone Mountain memorial, which gave him experience in large-scale carving—and in showmanship.

Borglum scouted out a location far better than the fragile Needles: 5,725-foot Mount Rushmore, named in 1885 for New York lawyer Charles E. Rushmore. Its broad wall of exposed granite

faced southeast to receive direct sunlight for most of the day. Borglum's choice of subjects promised to elevate the memorial from a regional enterprise to a national cause "in commemoration of the foundation, preservation, and continental expansion of the United States." Borglum envisioned four U.S. presidents beside an entablature inscribed with a brief history of the country. In a separate wall behind the figures, a Hall of Records would preserve national documents and artifacts.

President Calvin Coolidge dedicated the memorial in 1927, commencing 14 years of work; only six years were spent on actual carving. Money was the main problem. It was here that Borglum's self-appraisal as a "one-man war" was earned. He personally lobbied state officials, representatives and senators, cabinet members, and presidents. "The work is purely a national memorial," he insisted at a congressional hearing in 1938. Pride in country—and the fact that public works created good jobs and good will—channeled \$836,000 of federal money toward the total cost of nearly \$1 million.



South Dakota Governor Berry, President Roosevelt, and Borglum at dedication of Jefferson head, 1936.

The Washington head was dedicated in 1930, followed by Jefferson in 1936, Lincoln in 1937, and Roosevelt in 1939. Borglum died in March 1941; the final dedication was not held until 50 years later. Son Lincoln Borglum supervised the completion of the heads. Work stopped in October 1941, on the eve of U.S. entry into World War II. Gutzon Borglum himself might have said that the time had come to defend the principles Mount Rushmore preserved in stone.



WHITE HOUSE HISTORICAL ASSOCIATION

George Washington

Served 1789–1797



WHITE HOUSE HISTORICAL ASSOCIATION

Thomas Jefferson

Served 1801–1809



THE LINCOLN MUSEUM

Abraham Lincoln

Served 1861–1865



WHITE HOUSE HISTORICAL ASSOCIATION

Theodore Roosevelt

Served 1901–1909

A Shrine in the Black Hills

Gutzon Borglum's vision for Mount Rushmore was no less than "the formal rendering of the philosophy of our government into granite on a mountain peak." Borglum chose to give human form to the abstract. His monument to America grouped four leaders who brought the nation from colonial times into the 1900s. Most prominent is George Washington, commander of the Revolutionary army and first U.S. president:

The preservation of the sacred fire of liberty, and the destiny of the Republican model of government are justly considered as deeply, perhaps as finally staked, on the experiment entrusted to the hands of the American people.

George Washington, First Inaugural Address, April 30, 1789.

Next was Thomas Jefferson, author of the Declaration of Independence, third president, and mastermind of the Louisiana Purchase:

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.

Thomas Jefferson, Declaration of Independence, July 4, 1776.

To the far right was 16th President Abraham Lincoln, whose leadership restored the Union and ended slavery on U.S. soil:

Let us have faith that right makes might, and in that faith, let us, to the end, dare to do our duty as we understand it.

Abraham Lincoln, Address at Cooper Union, February 27, 1860.

The 26th president Theodore Roosevelt promoted construction of the Panama canal and



ignited progressive causes like conservation and economic reform:

We, here in America, hold in our hands the hopes of the world, the fate of the coming years; and shame and disgrace will be ours if in our eyes the light of high resolve is dimmed, if we trail in the dust the golden hopes of men.

Theodore Roosevelt, Address at Carnegie Hall, March 30, 1912.

Everyone wanted to see the men on the mountain. Gutzon Borglum regarded his masterpiece as far more than a tourist attraction. Consider the assessment of another man who made a name blending art and nature: "The noble countenances emerge from Rushmore," noted architect Frank Lloyd Wright, "as though the spirit of the mountain heard a human plan and itself became a human countenance."

Creating Giants in the Black Hills



More and more we sensed that we were creating a truly great thing, and after a while all of us old hands became truly dedicated to it and determined to stick to it.

Red Anderson, Mount Rushmore driller and assistant carver

Sketches in Plaster

Borglum knew portraiture. In his youth he studied art in Paris with sculptor Auguste Rodin. He boasted a roster of memorials to famous Americans, including Gen. Philip Sheridan, Gen. Robert E. Lee, and Abraham Lincoln. Having read avidly about Lincoln and been personally acquainted with Theodore Roosevelt, Borglum was thoroughly prepared when the Mount Rushmore commission came his way in 1925. He based

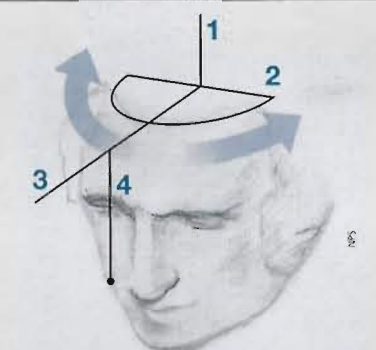


the models on life masks, paintings, photographs, descriptions, and his own interpretations. Plaster copies of the models were always displayed on the mountain as a guide for workers. But Borglum did not merely transpose the models directly into granite. The differences between the models in the sculptor's studio and the heads on the mountain show how Borglum fine-tuned the four granite giants into true works of art.

Inches to Feet

How to transfer the models to the mountain? Borglum's answer was his "pointing" machine: The models were sized at a ratio of 1:12—one inch on the model would equal one foot on the mountain. A metal shaft (1) was placed upright at the center of the model's head. Attached at the base of the shaft was a protractor plate (2), marked in degrees, and a horizontal ruled bar (3) that pivoted to measure the angle from the central axis. A weighted plumb line (4)

hung from the bar; it slid back and forth to measure the distance from the central head point, and raised and lowered to measure vertical distance from the top of the head. Thus, each point on the model received three separate measurements. The numbers were then multiplied by 12 (angles remained the same) and transferred to the granite face via a large-scale pointing mechanism anchored at the top of the mountain.



The Faces Emerge

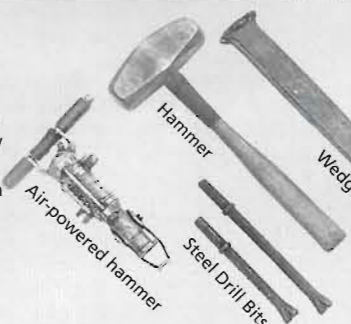
The only shaping technique available to the carvers was the removal of the stone. No material could be added. With such an unforgiving medium, Borglum at first ruled out dynamite. He quickly changed his mind; the rock was so hard that blasting was the only practical way to remove the huge portions of the weathered face to reach solid granite for carving. After an egg-shaped volume of rock was prepared for each head, the



pointers went to work measuring for facial features. Skilled blasters dynamited to within a few inches of a desired measurement. The closer the blasters got to the finished surface, the more carefully Borglum studied the heads, making changes as necessary. The most drastic change was the relocation of Jefferson's head from Washington's right to left side because there was not enough rock to complete the figure.

Finishing Touches

After blasting, the features were shaped by workers suspended by cables in swing seats called Bosun chairs. First they used pneumatic drills to honeycomb the granite with closely spaced holes to nearly the depth of the final surface. Excess rock was then chiseled off. A blacksmith sharpened hundreds of drill bits each day that dulled quickly on the rock. Later, the



men "bumped" away the drill holes and lines with pneumatic hammers to create a smooth, white surface. It was attention to detail that gave humanity to the sculptures. Up close, the pupils of the eyes are shallow recessions with projecting shafts of granite. From a distance, this unlikely shape makes the eyes sparkle and brings the presidents to life.

LINCOLN SCULPTURE: SEPT. CHARLES D'EMERY; TOOLS: BRIGITTE NPS

Planning Your Visit

Parking Mount Rushmore has a concession-operated parking facility that charges a fee. The National Parks and Federal Recreational Lands Pass is not applicable for parking.

Facilities The information center and the Lincoln Borglum Visitor Center are open from 8 am to 5 pm in winter and until 10 pm in summer; hours vary in spring and fall. Begin at the information center, where staff and displays will help you plan your visit to the park and the Black Hills region. From here, go up the walkway toward the sculpture and other facilities. The Lincoln Borglum Visitor Center has exhibits on the carving of Mount Rushmore, a 14-minute film "Mount Rushmore—The Shrine," an information desk, restrooms, and a bookstore operated by the Mount Rushmore History Association. The Sculptor's Studio (closed in winter) displays models and tools used in the carving process. Programs are conducted here daily in summer. The concession building, open year-round, has food service and a gift shop.



Activities You can view the memorial from the roadside 24 hours a day, year-round. It is best viewed and photographed in morning light. The main developed area (including facilities) is open 6 am to 10 pm in winter and 5 am to 11 pm in summer. Viewing spots include the Grand View Terrace, Amphitheater, Presidential Trail along the Avenue of Flags, Borglum View Terrace, and near the Sculptor's Studio. The 0.6-mile Presidential Trail begins at Grand View Terrace, with

access to viewing sites near the talus slope below the faces. The Evening Lighting Ceremony is held in the outdoor amphitheater daily in summer. The rest of the year the sculpture is illuminated at dusk for a couple of hours. Check schedules in summer for ranger-led programs.

Accessibility Most park grounds and facilities are accessible to persons with disabilities; assistance may be required on some trails. Accom-

The carving of George Washington's head is as tall as a six-story building. If his body was carved from head to toe, the height of the full figure would be 465 feet.

Dimensions of head:
Forehead to chin—60 feet
Width of eye—11 feet
Length of nose—20 feet
Width of mouth—18 feet

Mountain goats were brought to the area in 1924 and have adapted well to the environment. Watch for them scaling the granite rocks around Mount Rushmore.

Mount Rushmore National Memorial is one of over 390 parks in the National Park System. Learn about parks at www.nps.gov.

modations can be made for access to lower areas. Service animals are welcome.

For a Safe Visit Please observe these regulations: • Climbing the mountain, feeding wild animals, and building fires are prohibited. • It is unlawful to collect plants, animals, and rocks or other natural materials. • Pets are prohibited in developed areas. • Stay on trails while walking. • Drive carefully on Black Hills roads. You must wear seatbelts in all National Park System areas. • Camping is prohibited in the park.

Location Mount Rushmore National Memorial is 25 miles southwest of Rapid City, S. Dak., via U.S. 16; and three miles from Keystone via U.S. 16A and S. Dak. 244. Major airlines and bus routes serve Rapid City.

More Information
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www.nps.gov/moru

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While in the area you may wish to visit these National Park Service sites: Badlands and Wind Cave national parks, Minuteman

Missile National Historic Site, and Jewel Cave and Devils Tower national monuments (Devils Tower is not shown on this map). Other areas

include: Custer State Park, Pine Ridge Indian Reservation, Black Hills National Forest, and Buffalo Gap National Grassland.