

Faces of the Frontier: Make Your Own Stereograph

Compiled by the National Portrait Gallery, Smithsonian Institution

Target Grade Level: 5–12 in United States history classes

Objectives

After completing this lesson, students will be better able to:

- Identify and analyze key components of a portrait and relate visual elements to relevant historical context and significance.
- Analyze the roles that various individuals played in the American West between 1845 and 1924.
- Understand the significance of stereographs as related to the American West.

Stereographic Portraits (found at: <http://www.npg.si.edu/exhibit/frontier/stereographs.html>)

- John Wesley Powell and Tau-ruv, a Ute woman by John K. Hillers, 1874
- George Armstrong Custer and the grizzly bear he shot by William Illingworth, 1874
- Timothy O’Sullivan in a ruined adobe dwelling, self-portrait, 1874
- Carleton Watkins in a mining pose, self-portrait, c. 1883
- Frank J. Haynes with horse and assistants, self-portrait, 1887
- Theodore Roosevelt and his party before the “Grizzly Giant” redwood by Underwood & Underwood, 1903
- Thomas Moran at the Grand Canyon by Underwood & Underwood, c. 1903

Please visit “Faces of the Frontier: Photographic Portraits from the American West, 1845–1924” at <http://www.npg.si.edu/exhibit/frontier>

Materials

- *Reading Portraiture Guide for Educators* found at <http://www.npg.si.edu/docs/reading.pdf>
- Disposable camera
- Sturdy cardboard
- Tape
- Photo spray glue
- Ruler

Background Information for Teachers

The American West was dramatically reconstructed during the eighty years between the Mexican War and the passage of the Indian Citizenship Act in 1924. Although the history of the trans-Mississippi West is many centuries old, the period beginning with the annexation of Texas and the outbreak of war with Mexico in 1845 was witness to an ever-increasing number of encounters between people of different cultural traditions and fields of endeavor. The completion of the transcontinental railroad, the emergence of the national parks movement, the admittance

into the Union of nineteen new states west of the Mississippi River, and the ongoing conflicts between Native Americans and non-Natives were just some of the factors that drew men and women to the West in this period. Under the auspices of larger political and corporate entities, these individuals explored, fought over, developed, and represented this vast territory. Through their words and deeds, they contributed to the wholesale transformation of this region and its identity.

Coinciding with these changes was the popularization of photography, a new visual technology that was first introduced in 1839 and proved influential in reshaping how Americans and others came to understand the West. More than any literary or artistic medium, photography made visible the region's great ecological and human diversity. Yet until the early twentieth century, Native Americans did not experiment with photography, and thus the portraits explored in this lesson represent the work of those who were new to the West. Although photography reinforced preconceived notions at times, it also gave rise to fresh ideas about the West—and in the process about America itself.

Stereographic Portraits from the West

A stereograph includes two nearly identical photographs affixed side-by-side. When seen through a stereoscope, the two photographs appear to the eye as a single three-dimensional image. Viewing stereographs was a popular pastime in middle-class households during and after the Civil War, and was regarded as having both educational and entertainment value. Photographers created thousands of views of historic landmarks, natural wonders, and celebrated people. Because the vogue for stereographs coincided with the exploration and settlement of the West, this region became a popular subject for stereograph manufacturers. The seven images in this exhibition demonstrate that noteworthy individuals were often depicted as characters within the narrative dramas enacted in these views. Not surprisingly, stereographic portraits had the effect of enhancing one's public notoriety. Before the introduction of motion pictures in the early twentieth century, stereographs were the dominant visual entertainment.

Portrait Activity

Have students “read” the stereographs to discover the setting of the portrait, to look for clues about the sitter, and to decide the message conveyed in the image.

Teacher Prep: Familiarize yourself with the “Background Information for Teachers.”

Portrait Reading Formula for Students:

1. Look at the portrait. Analyze the portrait using the *Reading Portraiture Guide for Educators*.
2. Gather biographical facts from the portrait's symbols and construct the context of the sitter's life.
3. Use Web resources and books available to research the sitter's life and historical contributions.
4. Share and compare the facts gathered from the portrait with the researched facts.

*Each of these steps could be done as a class, in small groups, or individually.

Writing Activity

As an alternative to a class discussion, assign students a stereograph from the "Faces of the Frontier" exhibition and instruct them to write about what they see in the portrait.

Questions to Consider for Writing Activity

- What do you see?
- Describe the setting in which the portrait was created. What might this tell you about the sitter?
- If the individuals in the stereographs came to life, what would they do next?
- How do you think this portrait was created?
- For what purpose was this portrait created?

Further Extensions

Make Your Own 3-D Stereograph

- The stereographs found in "Faces of the Frontier" include a likeness of an individual placed in an outdoor setting. These exhibition stereographs that the students have written about should provide inspiration for the creation of their own contemporary stereograph.
- Guidelines for students' stereographs:
 - a. Choose a landscape that is the setting for the portrait.
 - b. Decide who will be in the portrait.
 - c. Determine what message will be conveyed by the stereograph.
 - d. Be able to justify each of the above decisions.
- Students will acquire a single-use (disposable) camera.
- The camera must be used in the vertical position because a horizontal format would be too wide. Students should stand the camera on its end in the vertical position, on a flat, sturdy surface.
- Students will be taking two pictures, three inches apart.

Activity Directions for Students:

- Take a picture of any stationary object or scene, and then slide the camera over to the right three inches and take a second picture. (You can draw a line or glue a ruler on the flat surface to ensure that the camera is moved the proper distance and slides straight.) A small table can act as your surface. You can photograph people if you can get them to hold still. If you need to tilt the camera up or down, tilt the table instead, because one camera shot should not be tilted differently than the other.
- Your first photograph is the "left view," and the second photograph is the "right view." Keep track of which is which. When you get the film developed, get the 3 x 5-inch print size; 4 x 6-inch prints are too wide, even in the vertical format. Order matte prints for less glare.
- To make a stereograph from the two prints, tape the left and right views together down the middle, on the back, making sure that when viewed, the left view is on the left, and the right view is on the right. The stereo pairs can also be mounted side-by-side on cardboard with photo spray glue. If you mount the prints onto cardboard, leave no border at the bottom.

- You can view your stereographs in antique stereoscopes, or “free-view” the images, or use any prismatic lens stereo viewer.

Source: <http://www.3dviewmax.com/viewer.htm>

(Teachers can purchase a “HOLMES STYLE STEREOSCOPE KIT” for students to view their stereographs, which can be found online. Another alternative would be to have students create their own stereoscopes; directions may be found at http://www.funsci.com/fun3_en/stscp/stscp.htm.)

National Standards in History for Grades 5–12

Era 4: Expansion and Reform (1801–1861)

Standard 1: United States territorial expansion between 1801 and 1861, and how it affected relations with external powers and Native Americans

Standard 2: How the industrial revolution, increasing immigration, the rapid expansion of slavery, and the westward movement changed the lives of Americans and led toward regional tensions

Era 6: The Development of the Industrial United States (1870–1900)

Standard 2: Massive immigration after 1870 and how new social patterns, conflicts, and ideas of national unity developed amid growing cultural diversity

Standard 4: Federal Indian policy and United States foreign policy after the Civil War

Key Terms

Stereograph: A single or double picture for a stereoscope: two stereoscopic pictures or one picture with two superposed stereoscopic images, designed to give a three-dimensional effect when viewed through a stereoscope or special glasses

Stereoscope: An optical instrument through which two pictures of the same object, taken from slightly different points of view, are viewed, one by each eye, producing the effect of a single picture of the object with the appearance of depth or relief

Web Resources

New Perspectives on the West: <http://www.pbs.org/weta/thewest/>

A companion to the PBS series; contains timelines, primary sources, teacher resources, biographies, and many other helpful features.

Explorations in American Environmental History:

<http://lcweb2.loc.gov/ammem/ndlpedu/lessons/98/environ/intro.html>

These lessons from the Library of Congress introduce students to historical perspectives of nature and the environment, drawing on the American Memory collections, other digital resources, readings, and writing exercises. Students examine materials in a variety of formats to understand the contexts of America’s concern for the environment.

Make Your Own 3-D Stereographs: <http://www.3dviewmax.com/viewer.htm>

Fun Science Gallery—Make Your Own Stereoscope:

http://www.funsci.com/fun3_en/stscp/stscp.htm