Rivers, Railroads, Cities, and Industry: Ault and Sheeler

Basic Information

Grade Level: 6–8
Subject Area: Visual Arts, Social Studies, U.S. History
Time Required: 3 sessions
Student Skills Developed: Making inferences and drawing conclusions, comparison and contrast, narrative writing, evidence-based learning, decision making, interpreting written information

Artworks

Newark Museum Collection
George Copeland Ault (1891–1948)
From Brooklyn Heights, 1925
oil on canvas, 30 x 20 in.
Collection of the Newark Museum, 28.1802.

National Endowment for the Humanities, *Picturing America Collection*
Charles Sheeler (1883–1965)
American Landscape, 1930
oil on canvas, 24 x 31 in.
Gift of Abby Aldrich Rockefeller (166.1934)
The Museum of Modern Art, New York.
Digital Image © The Museum of Modern Art/licensed by SCALA/Art Resource, New York

Introduction

At the beginning of the twentieth century, rivers, canals, and railroads linked American harbors to the rich iron, coal, and agricultural resources of the West and Midwest. During the second Industrial Revolution, from 1900 to 1940, this network of transportation, especially the railroads, enabled the United States to become a powerful empire. Nowadays, trucks and airplanes also carry products across the nation and around the world. Students study two artworks for their impact on the landscape of the United States. They then examine how waterways impacted the industrial nation.

Guiding Questions

+ How do artists use shapes, lines, and color to suggest mood, movement, and energy?
  How did rivers and railroads influence the growth of American industry and cities?

Learning Objectives

At the end of this lesson, students will be able to:

+ Explain how railroads and waterways stimulated the growth of cities and industry during the second Industrial Revolution, 1870–1940

+ Identify transportation routes and structures in their local region.

+ Create an artwork describing transportation and industry in their local region.

Background Information for the Teacher

East River

The swift East River touches the five boroughs of New York City. Before construction of the Brooklyn Bridge, in 1883, and eventually nine other bridges and tunnels, ferries linked the island of Manhattan to Brooklyn. The southern part of the East River separating Manhattan and Brooklyn that Ault painted in his *From Brooklyn Heights* was once one of the busiest waterways in the world. Today, it's a short subway ride from residential Brooklyn to Wall Street offices. With the development of waterfront parks, today's view from Brooklyn Heights has changed from the completely industrial waterfront in Ault's painting.

The East River is actually a tidal strait with strong, dangerous currents. It connects Long Island Sound to Upper New York Bay and is part of of the Port of New York City, one of the largest ports in the world and the busiest port in the eastern United States. In 1885, engineers blasted out rocks in the East River's Hell Gate that had been the sight of many shipwrecks. Since then, the channel has been deepened.

Erie Canal

The Erie Canal, in upstate New York, links Lake Erie to the Hudson River. Like the East River, the Hudson River empties into New York Harbor. Along with railroads, the river is an important shipping route connecting the Midwest to the Atlantic Ocean and worldwide ports.

George C. Ault

George Copeland Ault, 1891–1948) was the son of a Cleveland, Ohio,

printer who was also an amateur painter. When George was eight his family moved to London. As a child, Ault visited European art museums with his father. He studied art in London before his family returned to the United States in 1911. They settled in New Jersey, near New York City. Ault began to experiment with and paint Cubist-influenced geometric cityscapes. Eventually, he moved to New York City, where he exhibited his work. George Ault had a troubled family life; three of his brothers committed suicide. After a divorce, he moved to Woodstock, New York, where he received government aid for his art during the Great Depression. In 1948, Ault drowned in a brook while walking in a storm. Authorities differ on whether his death was an accident or suicide.

From Brooklyn Heights

George Copeland Ault's 1925 oil painting *From Brooklyn Heights* shows the industrial 1920s Brooklyn waterfront. Ault simplifies his subjects, reducing them to basic shapes. His city view shows a normally teeming city devoid of people. This contributes to a feeling of urban isolation and loneliness often associated with Ault and other artists of this time period, including Charles Sheeler and Edward Hopper.

Art Style

George Copeland Ault and Charles Sheeler are usually associated with the Precisionist painters. Although these artists never formally organized as a group, they shared similar styles and subjects. During the 1920s, many artists in the United States began distilling their compositions into simple geometrical shapes and structures. Precisionists usually included clearly outlined forms with smooth surfaces but few details. The sharp focus, value contrasts, and closely cropped subjects of contemporary photography influenced Precisionist artists. Their paintings were clear and orderly and, like European Futurism, often celebrated technology. Ault and Sheeler emphasized America's rapidly expanding technological advances, such as skyscrapers and industrial factories. They were interested in how America's landscape was changing.

Preparing to Teach This Lesson

+ Review the lesson plan and the websites used throughout. Locate and bookmark suggested materials and websites.
  Download and print out documents you will use, and duplicate copies as necessary for student viewing. Students can access the primary source materials and some of the activity materials via the EDSITEment LaunchPad.

Lesson Plan Activities

1. Look and Think Worksheet
2. Compare and Contrast
3. Mapping the Movement of Goods

Lesson Activity 1

Look and Think Worksheet

Before discussing George Ault's *From Brooklyn Heights*, have students individually study a print or online image of the painting and write their answers on the worksheet below Look and Think.

Use the worksheet questions and the students' answers as a framework for a class discussion about the art. Encourage them to notice types of transportation that Ault included. Discuss questions such as these:

What are some of the first words that you think of when you see this painting?

Allow each student to contribute a word. If students suggest the same word, point out that this is a consensus. Acknowledge opposing views.

From this painting, what do you know about the river in this painting?

a) *What is in the river?* Boats, wharves.
b) *What is alongside the river?* Buildings, railroads, boxcars.
c) *What color is the river?* Various shades of brown. Discuss what all these clues tell them about this river. It's a busy port beside a city, and the water is probably dirty.

Where could the artist have been when he painted this picture? What is his viewpoint? He's up high, looking down on the river. He was in Brooklyn Heights, maybe on the upper floor of a house.

Where has the artist shown textures? The river water.

What types of transportation do you see in the painting?

a. *Look carefully at the different types of boats in this painting.*
b. *How are they being powered or propelled?*
c. *What do they carry? Why do you think this?*

There are boats and railroad cars in this painting. Steam powers the ship. The other boats may be used for handling freight. Some may carry passengers. The shapes and open decks of the boats suggest their possible uses.

Compare and contrast the two sides of the river. Where are the taller buildings? Which side seems more organized?
The taller background buildings seem more ordered than the railyard and docks in the foreground.

Which side seems most industrial? Which side would probably have the most offices? How will the people who work in these offices get to them? The foreground is the industrial rail yard and docks. Ferries traditionally carried

people across the river. The Brooklyn Bridge was built in 1883, followed by other bridges, and by 1908 a subway connected Brooklyn with Manhattan. All these helped reduce congestion on the river.

Follow the direction in which the various objects point.

a. Where does each boat face?

b. Where do they lead the eye?

Have students follow and extend the main lines in the composition. Many converge near the prow of the steamship.

Which parts of the painting seem most vertical? The city skyline.
Which are horizontal? The middle part of the composition, with docks, boats, and the river.
Locate diagonal objects and lines. The boats and rail yard.
What do these various angles suggest about the mood of this scene? The jumble of lines creates a feeling of energetic busyness.

What mood do the black windows and open doors in the lower part of the composition suggest?
Emptiness, loneliness. Note how the absence of people enforces this mood.
Where could the people be? The light, shadows, and low clouds suggest early morning ground fog. Maybe the workday has not yet begun. Students may have other suggestions.

Describe the weather. What color are the clouds? Where are the various clouds coming from? Which may be natural and which probably include some industrial gases or steam? How does the artist feel about this? The clouds are white, pale purple, and gray. They may contain some of the black pollution from the boat's smokestacks. Ault observes this smoke, but do students think he is criticizing it?

What is the overall mood of this painting?
Some students may find that this painting romanticizes the city, cloaked in misty clouds, while others may find it dreary because of the dark foreground.

How does color contribute to this feeling?
Where are colors repeated?
It is mostly a gray, white, and black painting with red repeated in the foreground shapes.

What sounds could one hear in different parts of this scene?
Imagine the steamship whistle or horn. Other than that, it seems quiet.

What do you think the artist was trying to show in this scene?
He was trying to show the city, docks, and rail yards. Was he interested in the city's bustle and industry? Perhaps he shows the potential for activity once the city awakes. He is impressed with the number of buildings and ships within his sight.

INDUSTRIALIZED CITIES
LOOK AND THINK

Name: _____ Date: _____

Spend a few minutes looking at Robert Henri's *Willie Gee* and John Singer Sargent's *Portrait of a Boy*.

1. Glance briefly at Ault's paintings. What are some of the first words that come to mind when you see these paintings?

2. What do you know about the river from this painting?

3. Where could the artist have been when he painted this picture?

4. Where has the artist shown texture?

5. What types of transportation do you see in the painting?

6. Compare and contrast the two sides of the river. Where are the taller buildings?

7. Which side seems most industrial? Which side would probably have the most offices? How will the people who work in these offices travel to them?

8. What mood do the black windows and open doors in the lower part of the composition suggest?

9. Describe the weather.

10. What do you think each artist wanted to communicate in his painting? How well do you think he got his message across?

11. Who would want to own a painting like this?

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Lesson Activity 2

Compare and Contrast

Have students compare Ault's *From the Brooklyn Bridge* to Scheeler's *American Landscape*.

They should complete the Venn diagram provided.
Completed diagrams may contain words such as this:

After students have considered the similarities and differences in Ault's and Sheeler's paintings, discuss what each artist was witnessing and saying about America in this late 1920 to early 1930 era. Both show atmospheric pollution. Ask students if these artists are concerned about this? Sheeler depicts mighty industrial buildings that dwarf man. The whole scene is still and quiet, almost reverent. Ault shows New York City's silent skyline towering over a busy port in the foreground. A jumble of forms and shapes suggests this harbor's energy. But where are the people? Sheeler includes one tiny man in his scene, but even this does not lessen the sense of human isolation found in each painting.

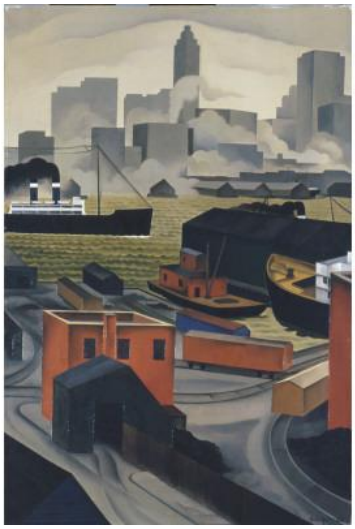
Sheeler	Similarities	Ault
Smooth with reflections	River	Stylized small waves
Part of factory	Smokestack	On ship
White	Smoke	Black
	Clouds	
Grain elevators, Ford factory	Buildings	Skyscrapers, small buildings in foreground
Orderly line of cars	Railroad cars	Cars set at angles to each other
Tracks not actually visible but track bed angles across width of painting	Railroad tracks	Curved, crossing in foreground
Sky is blue	Pale sky with red and reddish brown structures	Sky is pale purples. Buildings are a bright red.
	Geometric shapes	
Small person	Absence of humans contributes to detached, emotionally isolated feeling	No people
	Dark window shapes	
		Boats

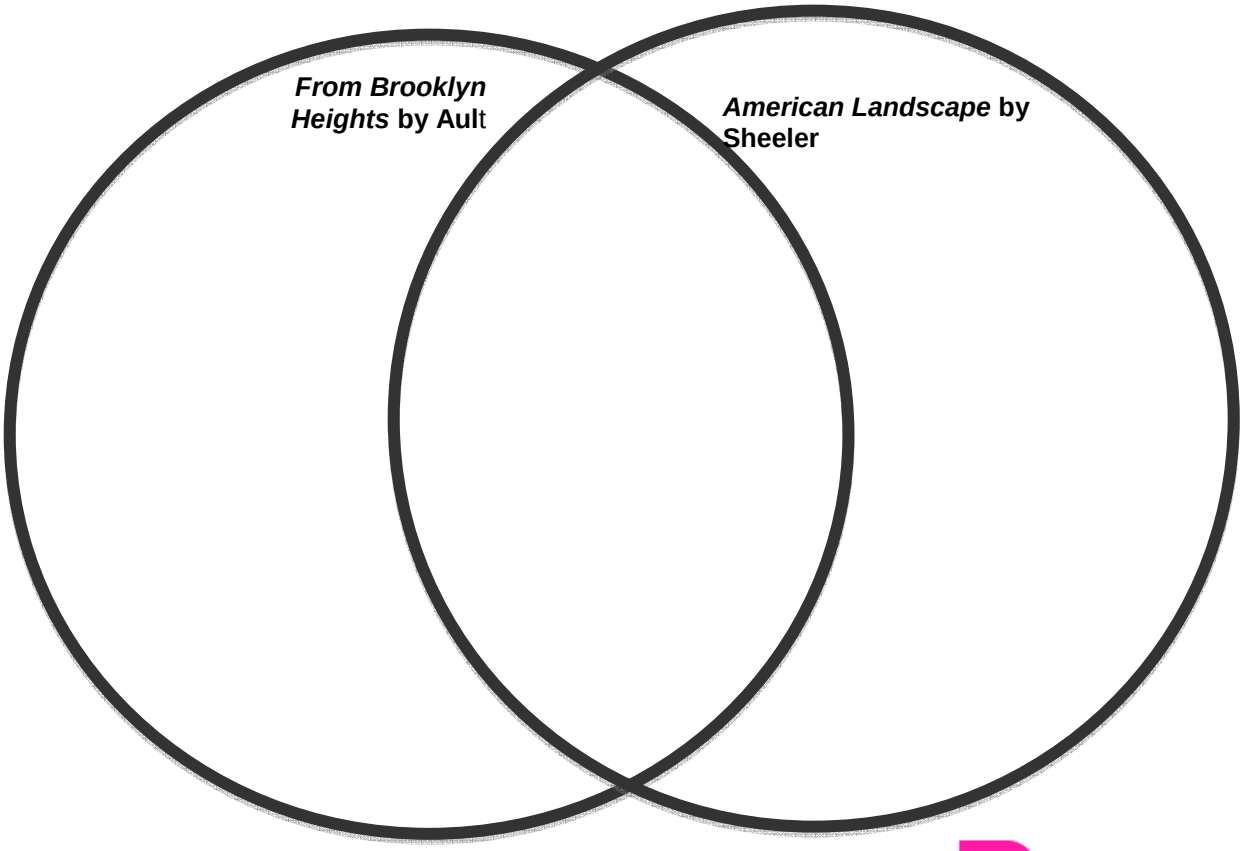
Large horizontal shapes contribute to calm, quiet mood in awe of mighty industrial buildings	Placement of shapes suggests a mood or feeling	Busy feel created by jumble of shapes and lines in foreground
More naturalistic, sharper forms, more lines	Simplification of forms	More abstraction, with few details, few stylized textures
24 x 31 inches	Similar size oil paintings	30 x 20 inches
Vertical composition		Horizontal composition

Industrialized Cities
Compare and Contrast

Name: _____ Date: _____

Write words and phrases describing each artwork in the circle for that painting.
Write similarities for both paintings in the center of the overlapping area.





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Lesson Activity 3

Waterways Transport Materials to Industrial Areas

Students will learn how rivers and canals connect resources of the Midwest to factories and to cities.

+ Have students read the excerpt from *America on the Move*, National Museum of American History, Smithsonian Institution at http://amhistory.si.edu/onthemove/exhibition/exhibition_6_1.html They may read this online or as a reprint. Have them compare the New York Harbor boats pictured on this site to the ones in Ault's painting.

+ On printouts of railroad maps from the New York State Department of Transportation, have students circle areas where railroads and rivers connect. What cities are at these points?

+ Have students trace routes from the Great Lakes to the Atlantic Ocean. Map of New York State Railroads https://www.dot.ny.gov/divisions/operating/opdm/passenger-rail/passenger-rail-repository/2013%20NYS%20Rail%20Map.pdf

+ Discuss with students what is grown, mined, or manufactured in your local area and state. Explain how this is delivered or shipped to the rest of the world. Have students trace transportation routes for raw materials to local urban areas and ports on railroad and highway maps. You may choose to use maps from American Memory Railroad Maps: Geographic Location http://memory.loc.gov/ammem/gmdhtml/rrhtml/rrmap.html

+ Directions to students:
    - On a map (computer printout) use a color marker to trace a shipping route for crops, manufactured objects, or natural materials from your area to a port. If you live near an ocean, print the shipping lanes to the rest of the world.
    - Identify or draw buildings or structures, such as large bridges, terminals, grain elevators, mines, refineries, cotton gins, factories, or warehouses, on this route.
    - On a separate sheet of paper, write a description of how a product or resource is shipped from your local region to the rest of the world. Describe the material that is transported, what type of transportation it travels in or on, and to which port it goes.
    - Staple or LIGHTLY glue your map to your paper.

Extending the Lesson

+ Have students look at the three-dimensional image of a kerosene lamp from the Newark Museum's teaching collection. Ask the students how this object fits into the scene of George Ault's *From Brooklyn Heights.* Who could have used this object, and how would they use it? Describe the job of the person holding the lamp. Where are they traveling to? What mode of transportation are they using? What goods are they delivering?

+ Have students work in groups of four to study color prints of either *American Landscape* or *From Brooklyn Heights*. Students in each group will each be assigned a role: wealthy industrialist, Italian immigrant, middle-class factory owner, and Progressive reformer. With their assigned role in mind, students should examine the painting and interpret its meaning. In character, the students should discuss with other group members the things that stand out to them in the artwork and why.

+ Locate Brooklyn Heights on a map to see where Ault was when he painted this picture. Internet maps, such as those on Google, include today's satellite views of this area. Currently, the City of New York is redeveloping and creating parkways along the East River in the area that George Ault depicted in his 1925 painting. View the plans in the City of New York's *Ttransforming the East River Waterfront* at www.nyc.gov/html/dcp/pdf/erw/erw_7_gateway_projects.pdf.

Resources

Selected NEH EDSITEment Websites

Picturing America
picturingamerica.neh.gov

1920s Industrial America Classroom Activity Guide—Smithsonian's History Explorer
http://historyexplorer.si.edu/resource

America on the Move Exhibition—Section 6: The Connected City—Smithsonian's History Explorer
http://americanhistory.si.edu/onthemove/exhibition/exhibition_6_1.html

Transportation Infrastructure Videos—Smithsonian's History Explorer
http://historyexplorer.si.edu/resource

National Parks of New York Harbor, National Park Service
http://www.nps.gov/npnh/index.htm
This site has information about New York Harbor and its history.

Selected EDSITEment Lesson Plans

I Hear the Locomotives: The Impact of the Transcontinental Railroad

The Industrial Age in America: Robber Barons and Captains of Industry

The Industrial Age in America: Sweatshops, Steel Mills, and Factories

Was There an Industrial Revolution? New Workplace, New Technology, New Consumers

Carl Sandburg's "Chicago": Bringing a Great City Alive

Standards Alignment

NAES – VisArts – 5-8, 2 Using knowledge of structures and functions
NAES – VisArts – 5-8, 4 Understanding the visual arts in relation to history and cultures
NAES – VisArts – 5-8, 6 Making connections between visual arts and other disciplines
CCSS.ELA-Literacy.CCRA.L.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-Literacy.W.7.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-Literacy.CCRA.R.7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
CCSS.ELA-Literacy.SL.7.5 Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
CCSS.ELA-Literacy.RH.6-8.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

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George Copeland Ault

(1891–1948)
From Brooklyn Heights, 1925
oil on canvas, 30 x 20 in.
Collection of the Newark Museum, 28.1802

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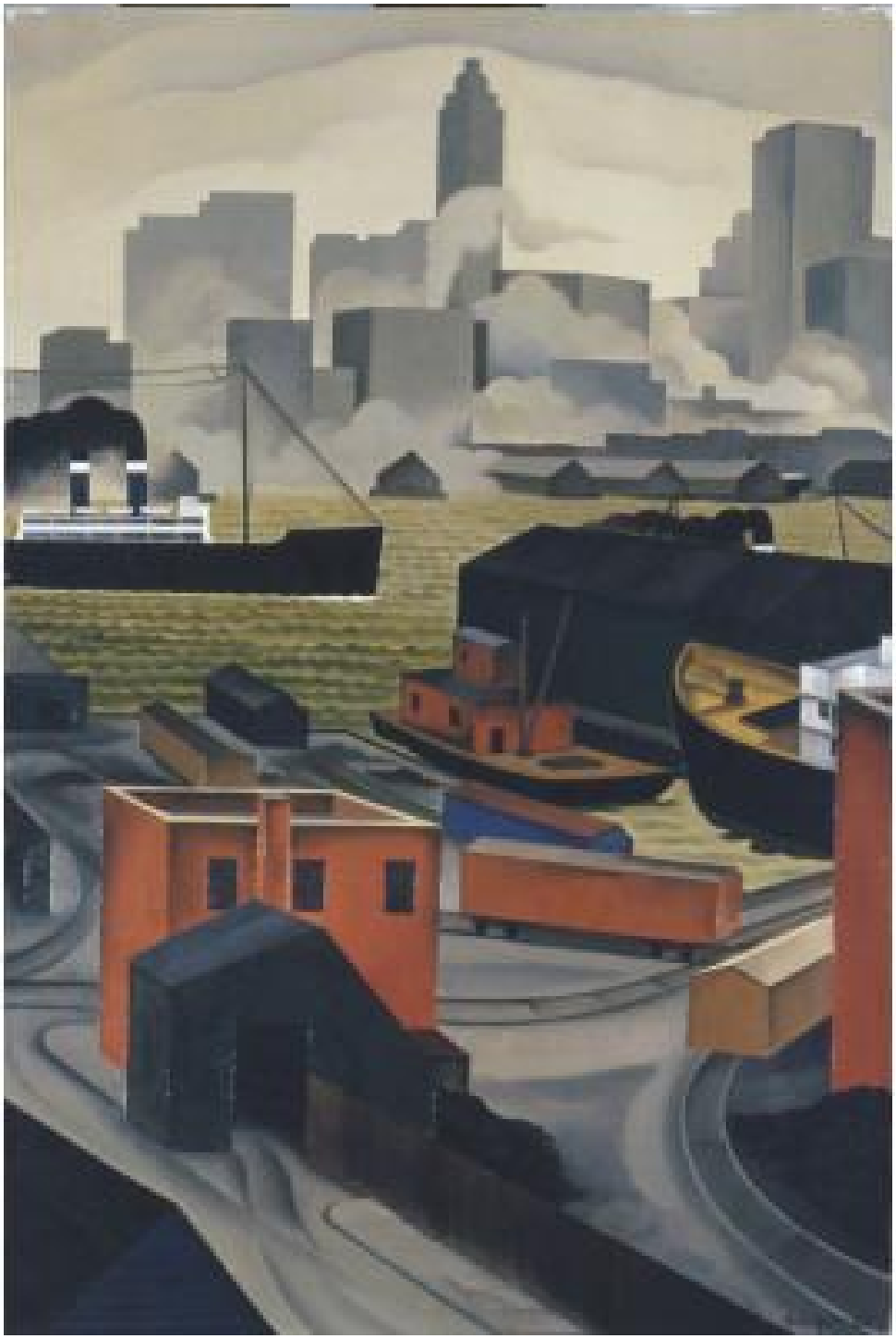

Charles Sheeler

(1883–1965)
American Landscape, 1930
oil on canvas, 24 x 31 in.
Gift of Abby Aldrich Rockefeller
(166.1934)
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