



Big Era Three
Farming and the Emergence of Complex Societies
10,000 – 1000 BCE



Landscape Teaching Unit 3.5
Early Complex Societies in the Americas
1800 – 500 BCE

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Why this unit?

About five thousand years ago, agricultural societies were beginning to emerge in certain parts of North and South America. Shortly after 2000 BCE, complex societies began to appear. They had almost all the major elements of the complex societies, or civilizations that had appeared about 2,000 years earlier in Afroeurasia: densely clustered populations, cities, states, specialized occupations, social class structures, monumental building, intricate belief systems, and sophisticated technological and scientific knowledge. Peoples of North and South America got a later start on farming than Afroeurasians did, and the earliest American civilization arose on its own, entirely isolated from the lending and borrowing of ideas and inventions that in Afroeurasia flowed between one river valley society and another. The population of the Western Hemisphere was a sort of “control group,” suggesting that complex society was likely to develop wherever in the world intensive farming arose and population went up. Investigation of early complex societies in the Americas raises important questions: Was the rise of civilizations in the world inevitable once some human communities turned to farming? Were early complex societies in the Americas mainly similar to those in Afroeurasia? Or were they drastically different? Have the cultural heritages of early complex societies in the Americas endured in some ways up to today?

This unit focuses on the two early complex societies that reveal themselves in the archaeological record: the Olmec in Mesoamerica (Mexico and Central America) and the Chavín society in the Andean Mountains of South America. Archaeologists continue to make new discoveries about these complex societies. Therefore, the historical evidence continues to grow, and scholars continue to debate the meaning of this evidence. Students can join archaeologists and historians in constructing explanations of the meaning and purpose of artifacts found in sites identified as Olmec or Chavín. Building interpretations is an important habit of mind for young history students. Moreover, students will see that in ancient times people built complex societies on all the major land masses of the world, with the exception of Australia and Antarctica.

Unit objectives

Upon completing this unit, students will be able to:

1. Identify the fundamental elements of Olmec and Chavín societies and describe their similarities and differences.
2. Construct and evaluate an argument about the purpose of the monumental colossal heads that the Olmec built.
3. Infer characteristics of ancient societies based on archaeological evidence.

Time and materials

The unit will take about five class periods. The only materials needed are the Student Handouts provided in the unit.

Authors

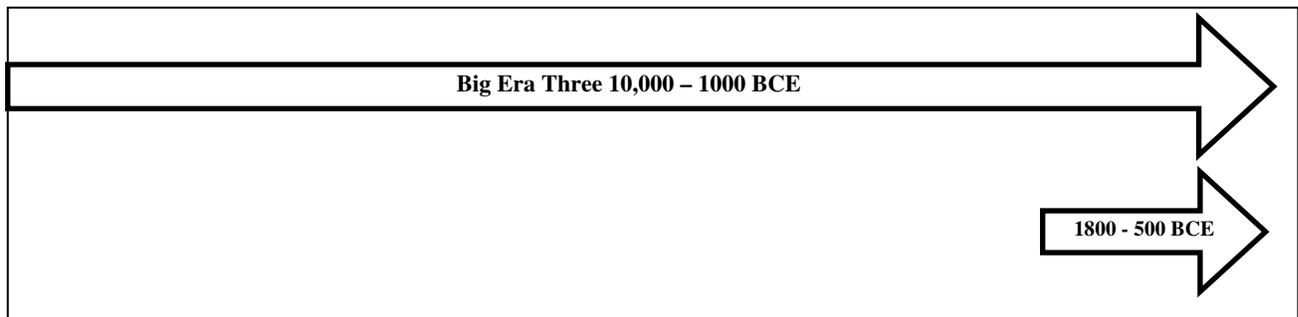
Mary Bickley is a recent graduate of San Diego State University. She teaches seventh grade at St. Kieran School in El Cajon, California. She joined the World History for Us All development team in 2003.

Sharon Cohen teaches world history at Springbrook High School in Silver Spring, Maryland. She is a member of the Advanced Placement World History Test Development Committee and a founding member of the editorial board for World History Connected.

The historical context

Archaeological evidence currently identifies the Olmec in Mesoamerica (1200-100 BCE) and the Chavín in the Andes (1200-400 BCE) as the earliest examples of complex societies in the Americas. These societies developed such an impressive array of art and religious practices that subsequent civilizations emulated them, including the Toltec, Maya, and Aztecs in Mesoamerica and the Inca in the Andes. Like complex societies in Afroeurasia, the Olmec and the Chavín demonstrated social stratification, labor specialization, some urbanization, and surplus of agricultural production.

This unit in the Big Era Timeline



Lesson 1

Rise of the Olmec

Introduction

Introduction to Monuments as Evidence of Complex Society

Provide a copy of Student Handout 1.1 to each student. Create a list, either as a whole class, in pairs, or individually, of the reasons that societies have constructed public monuments and chosen particular materials for building. Generate a list detailing who the students believe are the people that design and build monuments in our society. Additional monuments with which students are familiar can be added to the list.

Next, pass out a copy of Student Handout 1.2 to each student. Ask them to apply the same questions they addressed using the first handout to the colossal heads that the Olmec sculpted.

Finally, generate a list of questions students have regarding these colossal heads. Write these questions down. Revisit this list of questions at the end of the unit.

Activities

1. Look at the pictures in Student Handout 1.1. For each photograph, answer as many of the following questions as you are able:
 - A. Why do you think these monuments were created?
 - B. Who ordered them to be created? What kind of political organization and funding were necessary to put these monuments on the sites?
 - C. What kinds of materials did they use to create them?
 - D. Were the building materials near the site where the monuments are displayed?
 - E. What was the social status of the craftsmen who made them?
 - F. What tools were used?
 - G. How long did it take to complete each project?

What other monuments are you familiar with? Can you answer the above questions about them?

2. Look at the pictures in Student Handout 1.2. Answer as many of the following questions as you are able.
 - A. These heads are sculpted monuments. What do you think they commemorate?
 - B. Who do you think ordered that these monuments be created and for what purpose? What kind of political organization and funding was necessary to put these monuments on the sites?
 - C. Who do you think made them?
 - D. What kinds of materials did the makers use to create them?
 - E. Were the building materials near the site where the monuments are displayed?
 - F. What was the social status of the craftsmen who made them?
 - G. What tools were used?
 - H. How long did it take to complete each project?

Historians do not have final interpretations of the purpose of the colossal heads in the territory of the Olmec. Develop your own interpretation of the purpose of these monuments. Your hypothesis is called a thesis statement. You will test your thesis statement by analyzing additional information about the Olmec in the next two lessons.

Lesson 1

Student Handout 1.1—Monumental Sculptures in the United States



The Lincoln Memorial



Mount Rushmore



The Statue of Liberty



The Washington Monument

Lesson 1

Student Handout 1.2—Olmec Heads



Lesson 2
The Olmec Colossal Heads
Were They Evidence of a Complex Society?

Introduction

Using Student Handouts 2.1 and 2.2, have students construct a thesis about the possible methods the Olmec used to make the colossal heads. The thesis should include, but not be limited to, the following factors:

Securing the basalt rock from the mountain

Transporting the basalt from the mountain to the river and down the river to the city

Carving the basalt into the finished head

Lifting the finished head onto the platforms

Activities

1. Study the maps and the information in Student Handouts 2.1 and 2.2. Construct a thesis about the possible methods the Olmec used to transport the colossal heads. What kind of technology might they have used to move the basalt from the mountain to the river and then lift them to the ceremonial platform at La Venta.

2. Referring again to the maps and information in Student Handouts 2.1 and 2.2, construct a thesis about the methods the Olmec used to sculpt the colossal heads.

3. Divide the class into groups of four or five and ask each group to discuss the possible relationship between the colossal heads (including both what they might depict and the process of mining, transporting, sculpting, and lifting involved) and the existence of a complex society.
 - A. What kind of skills would have been necessary to create and move the heads?

 - B. What kind of social and political organization might have been required?

 - C. Did the work require the existence of a supreme ruler?

D. Did the work require many specialized jobs?

E. Could a hunting and gathering band of, say, thirty people have produced and placed these heads? Could an agricultural village population have done it?

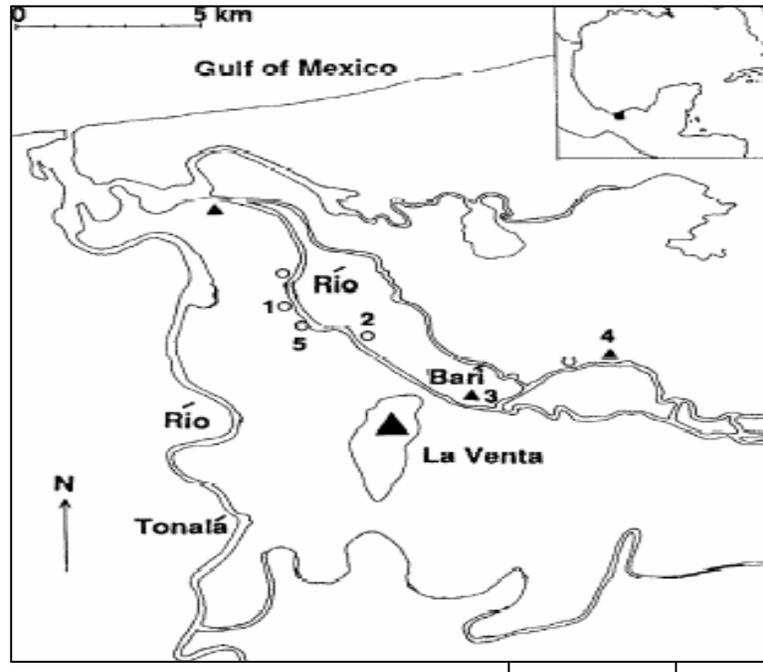
Have the groups report to the class about their discussion of these questions.

Lesson 2***Student Handout 2.1—The Olmec Region of South Central Mexico***

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The basalt used to make the colossal heads came from the Tuxtla Mountains, about sixty miles due west of La Venta. According to Michael Coe, an archaeologist, the Olmec selected some of the big basalt boulders from the bottom of the lower slopes of the mountains to make these heads. Historians still do not know whether the heads were carved at the base of a mountain or transported back to the ceremonial platforms and carved there.

Historians are also not sure how the Olmec transported basalt boulders weighing ten to twenty tons. About twenty-five miles from the base of the mountains, there are feeder streams that flow into the Coatzacoalcos River, near the mountains, and out to the Gulf of Mexico. The La Venta site is near another river, the Tonala River (Rio Tonala), which also flows into the Gulf.



Source: William F. Rust and Robert J. Sharer, "Olmec Settlement Data from La Venta, Tabasco, Mexico," *Science*, New Series, 242 (Oct 7, 1988): 102-104.

What tools or technology did the Olmec use to carve the basalt into the stone heads? With no local hardware store available, they first needed to make a chisel of some sort. What could they use to make a rock-breaking chisel? What tools or technology did they use to transport the heads to the ceremonial platforms? There were no beasts of burden to help with transportation. It is estimated that it would take 2,000 people to carry the colossal heads overland.

Lesson Three

Hierarchy of Olmec Society

Preparation

Review the basic elements of early complex societies:

- surplus production of food
- social stratification
- labor specialization
- monumental structures
- dominant religion
- centralized government

Students should now be able to identify some of the basic elements of Olmec society from the work done in Lessons 1 and 2.

Activities

Analyze the social hierarchy of the Olmec:

1. Review the generic social hierarchies in early complex societies: rulers, priests, merchants, artisans, peasants, and slaves.
2. Match the generic social hierarchy listed above with the specific types of social roles among the Olmec listed in Student Handout 3.1. Make a graphic organizer for Olmec complex society with the elite on top and the others below in the order listed in Student Handout 3.1.
3. Compare your thesis drafted in Lesson 2 regarding the purpose of the colossal heads in Olmec society with historical interpretations of the purpose of colossal heads in the complex society of the Olmec given in Student Handout 3.2. Make revisions to your thesis if necessary.

Lesson 3

Student Handout 3.1—Olmec Social Hierarchy

The elite of the Olmec, determined by status and wealth, included rulers and priests who possessed political and religious power. They, along with the skilled artisans and merchants, probably lived in the larger cities, and relied on farmers, who lived in the surrounding countryside, to produce enough food for the urban population. The upper class traded in art and other items of luxury, while the lower class, residing in less populated areas, hunted and farmed for a living.

Ruler: There was not one centralized ruler. Rather, there were multiple rulers of rival city-states. The rulers led any military operations against rival states.

Olmec Priests: They probably had several duties: scribes, calendar makers, and overseers of rituals in the religious temple complexes. The temple complexes were earthen mound platforms shaped like upside-down cupcakes. Their areas were similar in size to those of volcanoes. The priests also may have been consulted about the location and ceremonies for the burial tombs. They were experts in the stories of the gods including the were-jaguar. Perhaps the priests also had the duty of deciding when to deface or to decapitate the heads of sculptures. The 260-day sacred calendar and 365-day secular calendar created by the Olmec used the highest volcano or mountains in view to mark the sunrise position on the summer solstice (June 22), thus establishing the true length of the solar year. They ingested Bufo toads to achieve a hallucinogenic trance that by tradition allowed them to transform themselves into jaguars or other supernatural beings.

Ball Players: They played the ritual ball game. The ball was made of rubber from latex found in trees in the area.

Engineers: They designed the plan to quarry volcanic basalt blocks and transport them by land and probably by rafts on streams and rivers and along the Gulf coast. They also must have ordered the drains for the artificial ponds. They were most likely responsible for creating the mounded earthen platforms, which after 900 BCE were built as pyramid-shaped platforms.

Sculptors: They carved the were-jaguar motif. The jaguar of Mesoamerica is comparable to the royal symbol of the lion in the Eastern hemisphere. The sculptors had to make tools to carve Obsidian and jade. They probably knew the meaning of special icon symbols, for example cleft heads in sculptures of jaguars. Their workspaces for their craft specialization show up in Olmec archaeological sites.

Artists: They produced colored clay masks, which were covered up right after being made.

Laborers: They quarried the volcanic basalt, carried the basalt blocks, constructed the rafts, sailed the rafts down rivers and along the coast, and lifted the basalt up to the religious temple complex platforms.

Merchants: They traded local products for jade, cacao beans, colored clay, obsidian, and other goods.

Farmers: They grew maize, beans, and squash in surplus quantities both to feed themselves and to supply all the social and occupational groups that did not farm.

Textile workers: They cultivated cotton, dyed it, wove it, and made it into clothing.

Lesson 3

Student Handout 3.2—Comparing Different Interpretations of Olmec Complex Society

Interpretation 1: A variety of “sister” chiefdoms existed in different areas with a common religion based on worship of the jaguar. The heads represent the shamanistic practices, such as the transformation of priests into jaguars. Over time, the jaguar became associated with the god of rain.

Interpretation 2: The purpose of heads was to honor the current ruler. When the ruler died, his sculpture was decapitated as a religious sacrifice. Some historians think that competitors for power were responsible for decapitating sculptures.

Interpretation 3: The colossal heads demonstrated the power of rulers. When monuments, such as heads, statues, altars, or pillars, were located in large public plaza, people would gather for ceremonies. Many large gatherings implied that the ruler possessed great power. Rulers were those who could show contact with ancestors and gods through shamanistic rituals. The purpose of the ceremonies was to ask for help with rainfall and to control the ferocity of jaguars and other aggressive animals in the rainforest. The heads represented those rulers who demonstrated religious power. The temple complex platforms were oriented eight degrees north to align with the summer solstice, so every year when the sunrise appeared in the right place, the ruler was legitimized.

Interpretation 4: Heads celebrated ball players who may have been rulers, too. Many of the earliest heads seem to represent participants in the ritualistic ball game, which, according to Mesoamerican beliefs, recreates the world.

Lesson Four

Hierarchy of Chavín Society

Introduction

Chavín de Huántar was a religious and political center located in the north central Andes Mountains of Peru. It is dated to between 1200 and 200 B.C. Therefore, its development closely parallels that of Olmec civilization.

Activity

Compare the social system of the Olmec with that of the people who lived at Chavín de Huántar. To research society, use the information in Student Handout 4.1, your textbook, and the websites or articles listed in the Resources section. Then divide students into four groups and have each group make a Venn diagram on large chart paper comparing aspects of Olmec and Chavín society in one of the following categories:

- Religion
- Social structure
- Trade
- Technology

Ask each group to present its comparisons. Then lead the class in a discussion of similarities and differences between the two societies, especially on the subject of the social hierarchy, that is, social class divisions. How does comparative analysis help us to understand each of these societies?



Lesson 4***Student Handout 4.1— Characteristics of Chavín Society***

Study this list of aspects of Chavín society:

Religion

Raised monumental platforms for religious ceremonies.

Feline (cat-like) figures found in religious art.

Religious platforms aligned to reveal the sunrise at the winter solstice.

Hallucinogenic drugs used to induce trances in shamans (spiritual leaders)

Social structure

Status and wealth evident from grave goods in burial sites.

Trade

Trade items included pottery, shells, stone tools, wool, textiles, metals, and dried fish.

Location of Chavín de Huántar allowed for flow or control of trade between major environmental zones from the High Andes down to the seacoast. Long distance trade fueled success and growth.

Trade depended on llamas for transport.

Technology

Innovations seen in textiles, including use of llama and alpaca hair in cotton cloth, dying animal hair, textile painting, resist painting, discontinuous warps and warp wrapping, and the heddle loom.

Gold metallurgy that included soldering, sweating, welding, use of silver-gold alloys, and production of three-dimensional forms.

Final Assessment

Listed below are three methods of assessing student comprehension for this teaching unit.

The student will:

1. Write a paragraph describing the elements of early complex Olmec society in Mesoamerica.

The best responses incorporate these elements:

- Existence of large mounds
- Location along coast facing Gulf of Mexico
- Time period from about 1300 BCE
- Society with social class hierarchy
- Forced labor to build structures and move stone heads
- Far ranging system of trade in obsidian, jade, colored clay, cacao beans, and other goods

2. Draw a diagram or graphic organizer detailing the complex society of the Olmec. (Graphic organizers can be used as a part of differentiated instruction.)

The best responses incorporate these elements:

- Ruler (No single ruler, rather multiple rulers)
- Priests/Scribes
- Royal assistants
- Military
- Engineers
- Sculptors
- Calendar writers
- Merchants
- Farmers

3. Draw a scene depicting the different aspects of social hierarchy in Olmec society. For example, the ruler and priests on the ceremonial platform, the laborers transporting the big heads, and farmers growing corn. (Differentiated instruction for high level learners can include a paragraph describing the scene depicted in the drawing. All three alternative assessments may be made more challenging by incorporating comparisons with Chavín society.

This unit and the Three Essential Questions

 <p>HUMANS & the ENVIRONMENT</p>	<p>Research the land of the Olmec, including topography, soil, climate, and plant and animal life. Then become “a farmer for a day,” describing in words or pictures your experiences. What plants do you cultivate, and how? What animals are part of your daily life? What problems do you have in growing food, and what solutions to them do you try? How is information about Olmec farming known to us today?</p>
 <p>HUMANS & other HUMANS</p>	<p>Drawing on recent research, debate the validity of the statement that the Olmec were the “mother civilization” of Mesoamerica. What sort of evidence would you marshal to make your case?</p>
 <p>HUMANS & IDEAS</p>	<p>Time and again, Olmec civilization appears in the news because new archaeological discoveries lead to new hypotheses and interpretations. In what significant ways have recent discoveries altered or challenged the views of researchers regarding Olmec civilization and its place in Mesoamerican history? A good source of information is the History News Network at http://hnn.us/.</p>

This unit and the Seven Key Themes

This unit emphasizes:

Key Theme 2: Economic Networks and Exchange

Key Theme 3: Uses and Abuses of Power

Key Theme 4: Haves and Have-Nots

Key Theme 6: Science, Technology, and the Environment

This unit and the Standards in Historical Thinking

Historical Thinking Standard 1: Chronological Thinking

The student is able to (F) reconstruct patterns of historical succession and duration in which historical developments have unfolded, and apply them to explain historical continuity and change.

Historical Thinking Standard 2: Historical Comprehension

The student is able to (F) appreciate historical perspectives-(a) describing the past on its own terms, through the eyes and experiences of those who were there, as revealed through their literature, diaries, letters, debates, arts, artifacts, and the like; (b) considering the historical context in which the event unfolded-the values, outlook, options, and contingencies of that time

and place; and (c) avoiding “present-mindedness,” judging the past solely in terms of present-day norms and values.

Historical Thinking Standard 3: Historical Analysis and Interpretation

The student is able to (D) draw comparisons across eras and regions in order to define enduring issues as well as large-scale or long-term developments that transcend regional and temporal boundaries.

Historical Thinking Standard 4: Historical Research Capabilities

The student is able to (A) formulate historical questions from encounters with historical documents, eyewitness accounts, letters, diaries, artifacts, photos, historical sites, art, architecture, and other records from the past.

Resources

Resources for teachers

Miller, George R. and Richard L. Burger. “Our Father the Cayman, Our Dinner the Llama: Animal Utilization at Chavín de Huantar, Peru.” *American Antiquity* 60 (July 1995): 421-458. Includes map of Chavín site in context of Andes.

Adams, Richard E. W. *Ancient Civilizations of the New World*. Boulder, CO: Westview Press, 1997.

Benson, Elizabeth P. and Beatriz de la Fuente. *Olmec Art of Ancient Mexico*. Washington, D.C.: National Gallery of Art, 1996.

Burger, Richard L. *Chavín and the Origins of Andean Civilization*. New York: Thames & Hudson, 1992.

Coe, Michael D. and Richard A. Diehl. *In the Land of the Olmec*. Austin: University of Texas Press, 1980.

Diehl, Richard A. *The Olmecs: America's First Civilization*. London: Thames & Hudson, 2004.

Pohl, Mary E. D., Kevin O. Pope and Christopher von Nagy. “Origins of Mesoamerican Writing.” *Science* 298 (2 Dec 2002): 1984-87.

<http://www.islc.net/%7Elesley/nationalmuseum.html>

The National Museum of Anthropology in Mexico City has clear photographs of their Olmec collection.

<http://www.dartmouth.edu/~izapa/>

Investigation of the Olmec calendar by Vincent H. Malmström, Dartmouth College.

Resources for Students

Coe, Michael D.. *Mexico: From the Olmecs to the Aztecs*. 4th ed. New York: Thames & Hudson, 1994. Clear information about the Olmec with photographs.

Miller Mary Ellen *The Art of Mesoamerica: From Olmec to Aztec*. 3rd ed. New York: Thames & Hudson, 1996. Clear information about the Olmec with photographs.

“The Olmecs: America’s Oldest Civilization (1300-400 B.C.).” *Calliope: Exploring World History*. 14 (Jan. 2004).

Stone-Miller, Rebecca. *Art of the Andes: From Chavín to Inca*. 2nd ed. London: Thames & Hudson, 2002. Clear information about Chavín’s influence on later Andean art, including textiles.

Villescas, Daniel. The Mother Culture of Mexico: The Olmecs. El Alma de la Raza Project. Denver Public Schools and Metropolitan State College of Denver, 2000.
<http://www.dpsk12.org/programs/almaproject/pdf/TheMotherCulture.pdf>. A teaching unit for sixth grade students.

Correlations to National and State Standards and to Textbooks

National Standards for History

Era 3: Classical Traditions, Major Religions, and Giant Empires, 1000 BCE - 300 CE. 4: The student understands the achievements of Olmec civilization.

World history textbooks

Across the Centuries (Houghton Mifflin). Chapter 15: Early American Civilizations. Lesson 1: Origins. Lesson 2: The Olmec.

Ancient World: Adventures in Time and Place (Macmillan/McGraw-Hill). Chapter 10: Ancient Americas. Lesson 1: The Geography of the Americas. Lesson 2: The Olmec.

Human Heritage: A World History (Glencoe). Chapter 8: Africa and the Americas. Section 4: Path to the Americas. Section 5: Mesoamerica.

World History: The Human Experience (Glencoe/McGraw-Hill). Chapter 15: The Americas. Section 1: The Early Americas. Section 2: Early Mesoamerican Cultures.

Conceptual links to other teaching units

In Big Era Three, peoples of Afroeurasia and the Americas had no regular contact with one another. In terms of global interactions they constituted two separate “worlds.” As we have seen, however, city-building civilizations emerged in both of these regions. The next unit, Landscape Teaching Unit 3.6, introduces developments in Australia and the Pacific Ocean basin between 10,000 and 500 BCE. Until the sixteenth century when sailors began to cross the Pacific from one shore to the other, this region, which makes up about a third of the earth’s surface, might be described as a third “world” of human activity. In Big Era Three, Urban civilizations did not develop in either Australia or the Pacific region (called Oceania). Nevertheless, pioneer migrants, in some places farmers and in others hunter-gatherers, established settlements throughout most of Australia and on hundreds of Pacific islands. World history courses and textbooks often have little to say about the early history of Australia and Oceania. That is a mistake. The story of how humans colonized both the southern continent and the Pacific islands, separated from one another by hundreds or even thousands of miles, is one of the great adventures of history.