

LESSON PLAN

## Animals in Ancient Chinese Bronzes



**Subjects:** Visual Arts, Social Studies

**Grade Level:** Middle School/Junior High

**Duration:** Three 50-minute sessions

**Dynasty:** Shang (ca. 1600–1050 BCE)

**Object Type:** Metalwork, Vessel

**Themes:** Technology and Production; Animals and Nature

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**Lidded ritual ewer (*huo*) in the form of an elephant with masks and dragons**

China, Middle Yangzi Valley

Shang dynasty (ca. 1600–1050 BCE), ca. 1200–1100 BCE

Bronze

6 3/4 x 4 3/16 x 8 7/16 in

Purchase—Charles Lang Freer Endowment. Freer Gallery of Art, F1936.6a-b

### Objective

Students will be able to identify, analyze, and interpret the visual imagery of ancient Chinese bronzes.

### Essential Questions

- How did Shang people make bronze vessels?
- What are some different symbols used to decorate the bronze vessel?
- How were these bronze vessels used?

### Background Information

The Shang dynasty (ca. 1600–1050 BCE) marked the middle of China's Bronze Age, which first began around 2000 BCE. Bronze played an important role in the agricultural, religious, and military life of the Shang period. Religious rites, which included human and animal sacrifices, also included offerings of wine and food presented in decorated bronze vessels. These ritual bronze vessels were frequently buried with members of the royal family of the Shang state. Many bronze vessels, weapons, tools, and even musical instruments (bells) of that period have been unearthed. These buried



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bronze objects demonstrate high levels of technology and casting skills. Shang people used a piece-mold casting technique to create different types of bronzes. These vessels not only functioned as a symbol of power, wealth, and luxury but also revealed a great degree of creativity, efficiency, and innovation.

One of the excellent examples of Shang dynasty bronze casting from the Freer Gallery's collection is a ritual ewer shaped as a small elephant standing on top of a larger elephant's back. Liquid was stored in the larger elephant's belly and poured from the trunk. The smaller elephant served as a knob for the vessel's lid. The ewer is decorated with different ornaments, depicting mythical creatures, such as dragons or zoomorphic masks called *taotie*. *Taotie* typically consists of eyes, jaw, beak or fang, snout, crest, horns, legs, and tail. The *taotie* face pattern is usually frontal and symmetrical, but its body is shown in profile. Although animal-shaped bronze vessels were relatively rare in the Shang state's capital, located in the northern Yellow River valley, people who lived in the southern Yangzi River region showed their appreciation of animals by creating animal-shaped bronzes.

## Vocabulary

**ancestor:** someone from whom you are descended. In Western thought, it is usually more distant than a grandparent; however, in Chinese culture, deceased parents and grandparents are considered ancestors.

**bronze:** a mixture of copper, tin, and often lead that produces a strong metal.

**Bronze Age:** a period of human culture characterized by the initial use of weapons, tools, and other objects made of bronze. Changes in material culture engendered profound alterations in social, political, and economic systems. The Chinese Bronze Age is dated between about 1800 and about 300 BCE.

**casting:** an object made by pouring molten metal or other material into a mold.

**coiling method:** one of the oldest techniques for making pottery vessels. Coils of clay are layered on top of each other and then pressed together.

**ewer:** a pouring vessel like a jug or pitcher used to hold water or wine.

**mold:** an outer housing used to shape an object.

**motif:** a repeating design, pattern, or image.

**ornament:** an object or motif used for decorative purposes.

**piece-mold casting:** a technique used for casting bronzes. After a desired vessel was fashioned from clay, it was covered with an additional layer of clay that, when dried, was carefully cut away in matching vertical sections (usually three or four) to create the casting molds. The original clay model was then shaved down for the interior core, and the mold sections were reassembled around it to make the outer walls. The space between the core and outer molds was then filled with molten bronze. In many cases, the joins between mold sections appear as raised ribs on the exterior of finished bronzes. After the bronze cooled, the clay molds were broken and removed, and the vessel was polished to take away flaws and any metal that had seeped into gaps between the mold sections.

**pinch-pot method:** one of the oldest techniques for making pottery. The shape of a vessel is created by pinching the walls with one's fingers.

**relief:** three-dimensional forms that protrude from a flat surface.

**ritual:** a set pattern of behavior for a religious or other kind of ceremony.

**symbol:** a sign, drawing, word, or design that represents an idea or an act.

**symmetrical:** a mirror image in which objects on one side of an imaginary middle line are exactly like objects on the other side.

**taotie:** a stylized animal face-mask pattern commonly found on ancient Chinese bronzes with symmetrically arranged eyes, ears, horns, snout, and jaw.

**vessel:** a container such as a cup, bowl, pot, or dish.

**zoomorphic:** shaped like an animal.

# Materials

## Materials for Students:

- Air-dry clay (4–12 oz. per student)
- Watercolors, paint brushes, and cups of water to share
- Black fine point sharpie (one per student)

## Instructional Materials:

- 3-D Model: <https://3d.si.edu/model/fullscreen/p2b-1530967613522-1531003309191-0>
- Teacher sample
- One 8 x 11 inch white paper printed with an example of a *taotie* pattern and a blank box for students to design their own *taotie* pattern.

# Procedure

## Day 1

1. Present the 3-D image of the ritual ewer (*huo*) in the form of two elephants to the students and engage the class with the **Describe** questions.
2. Engage the students with the **Analyze** and **Interpret** questions.
3. Show the students the following video of the piece-mold casting process:  
<https://www.youtube.com/watch?v=EIRsk8-MgqA>
4. Introduce the vocabulary term *taotie*. Have the students identify the *taotie* on the ewer.

## Day 2

1. Show five additional images of bronzes in different animal forms (see the webpage for this lesson plan).
2. Have students observe each image and describe the characteristics of each animal.
3. Have students list 3–5 different animals they like and draw a picture next to the list.
4. Demonstrate the coiling method for making a pot or vessel.
5. Demonstrate the pinch-pot method for making decorative parts of a pot or vessel.
6. Have students write down ideas and make sketches for their vessel.
7. Have students share their sketches and designs with their peers. Revision is allowed during the sharing and discussion time.
8. Distribute the air-dried clay to students.
9. Have students start to create their works (vessels in animal shape) according to their sketches using the coiling and pinching methods.
10. Examine each student's work and give guidance.
11. Guide students to put the vessels away on the drying racks (with their names).
12. Guide students to put all materials and tools away. Clean the tables.

## Day 3

1. Guide students to pick up their dried clay vessels and return to their seats.
2. Present three to five images of bronze vessels and guide students to observe different colors of the bronze.
3. Distribute watercolors to students and let students paint different green colors onto the vessel.
4. Have students draft their own *taotie* pattern on a paper or sketchbook while letting the watercolor paint dry. Remind students of the symmetrical feature of the *taotie* pattern.
5. Students can fold the 8 x 11 paper in half when they design their own *taotie* pattern and draw on one side. Then, they can use a window with natural light for tracing the other half of the *taotie* pattern for a symmetrical design.
6. Have students transfer the *taotie* pattern draft onto the clay vessels by using black sharpies.
7. Have students place their works on one table for discussion and critique. Engage students in a critique of the artworks.
8. Have students put tools and materials away.

## Discussion Questions

### Describe

- What do you see in this image?
- What shapes do you see?
- What else do you see on the surface of the object? How would you describe them?

### Analyze

- What was the object made from? What makes you say that?
- How was this object made?
- How were those patterns and symbols made on the surface of the object?

### Interpret

- What kinds of patterns do you see?
- Who do you think this object belonged to? What makes you say that?

### Inquire

- What other bronze making processes do you know about? How are they different from making Shang dynasty bronzes?
- How do we honor our ancestors today?

# Extensions

## Science

- Research the compounds of bronze, the oxidation process, and write about the variations of color in Shang dynasty bronzes.

## Technology

- Document the step-by-step process of casting and firing Shang dynasty bronzes by drawing diagrams.

## Engineering

- 3-D print the object.

## Social Studies

- Research how Shang people used these vessels in their daily lives and how religious beliefs at the time shaped society and social behaviors.

# Resources

*The Art and Archeology of Ancient China. A Teacher's Guide.* Smithsonian Freer Gallery of Art and Arthur M. Sackler Gallery, 2003, pp. 8, 33, 43, 52–54. <https://asia.si.edu/wp-content/uploads/2020/05/Art-and-Archaeology-of-Ancient-China.pdf>

Smithsonian Digitization 3-D, Lidded ritual ewer. <https://3d.si.edu/model/fullscreen/p2b-1530967613522-1531003309191-0>

Ancient Chinese Bronzes (Freer Sackler). <https://asia.si.edu/learn/ancient-chinese-bronzes/>

Piece-mold casting process by the Art Institute of Chicago (Ding Vessel, 1'38", no audio).  
<https://www.youtube.com/watch?v=EIRsk8-MgqA>

China, 2000–1000 BCE. Heilbrunn Timeline of Art History (Metropolitan Museum).  
<https://www.metmuseum.org/toah/ht/03/eac.html>

Shang and Zhou Dynasties: The Bronze Age of China (Metropolitan Museum).  
[https://www.metmuseum.org/toah/hd/shzh/hd\\_shzh.htm](https://www.metmuseum.org/toah/hd/shzh/hd_shzh.htm)

How to create a bronze vessel (Princeton Art Museum).  
<https://artmuseum.princeton.edu/asian-art/archived/creating-a-bronze-vessel/>

View this image online at <https://asia.si.edu/object/F1936.6a-b/>

Learn more at <https://asia.si.edu/teachingchina>



