ABOUT THE REPLICA CAVES

History

The Dunhuang Academy oversees the cave temples of Mogao and has a long tradition, dating back to 1944, of replicating the site’s wall paintings. Historically, replication was a traditional part of Buddhist practice and a way of earning karmic merit. It was also used to disseminate Buddhist teachings to those unable to read. The artists who began the Fine Arts Institute at the Dunhuang Academy studied and documented the painting and sculpture traditions found at Mogao. Initially, the purpose of replicating the caves was to understand the art and to document it as a means of preservation, but over time the goal became to share this art with people around the world unable to visit the caves themselves. Cave replication also became a way to provide visitors to the site with an opportunity to experience caves closed to visitation for their protection.

The Cave Replication Process, Step-by-Step

1. The shell of the replica cave is constructed to the exact dimensions of the original.

2. The cave’s interior is photographed and digitized, with errors of size or perspective corrected within a computer program. The wall paintings are then divided into sections and printed at full scale. These printed images are traced with a pencil.

3. Working in the cave itself, the artists study the original paintings, modifying the tracing to correct for scale and any distortion.

4. To capture the line and spirit of the original, the artist uses a brush to create a unique contour line drawing atop the reworked tracing, transferring the drawing onto fine mulberry bark paper.

5. A light, clay-based primer is applied to the mulberry bark paper used for the replica paintings. The primer is wiped smooth, and brushstrokes are then also used to imitate the texture of plaster.

6. A range of brush and coloring techniques are used to complete the replica wall paintings. There were many different techniques and historical styles used in the cave temples, and the Dunhuang artists work to reproduce them as closely as possible. It is important to the Dunhuang Academy that viewers see the caves as they actually look, rather than how they might have originally appeared. For this reason, the final replicas faithfully reproduce the current state of the cave, showing areas of loss and deterioration.

7. Once dry, paintings are individually affixed to the wooden shell of the replica cave.

8. Replica sculptures begin with a framework of wood. Bundled thin plant fibers are added to the frame to support the wet modeled clay, which is placed on top.

9. The features and garments are then modeled in the clay and painted using the same pigments and techniques as the wall paintings. As much as possible, the artists work in front of the originals in the caves themselves.