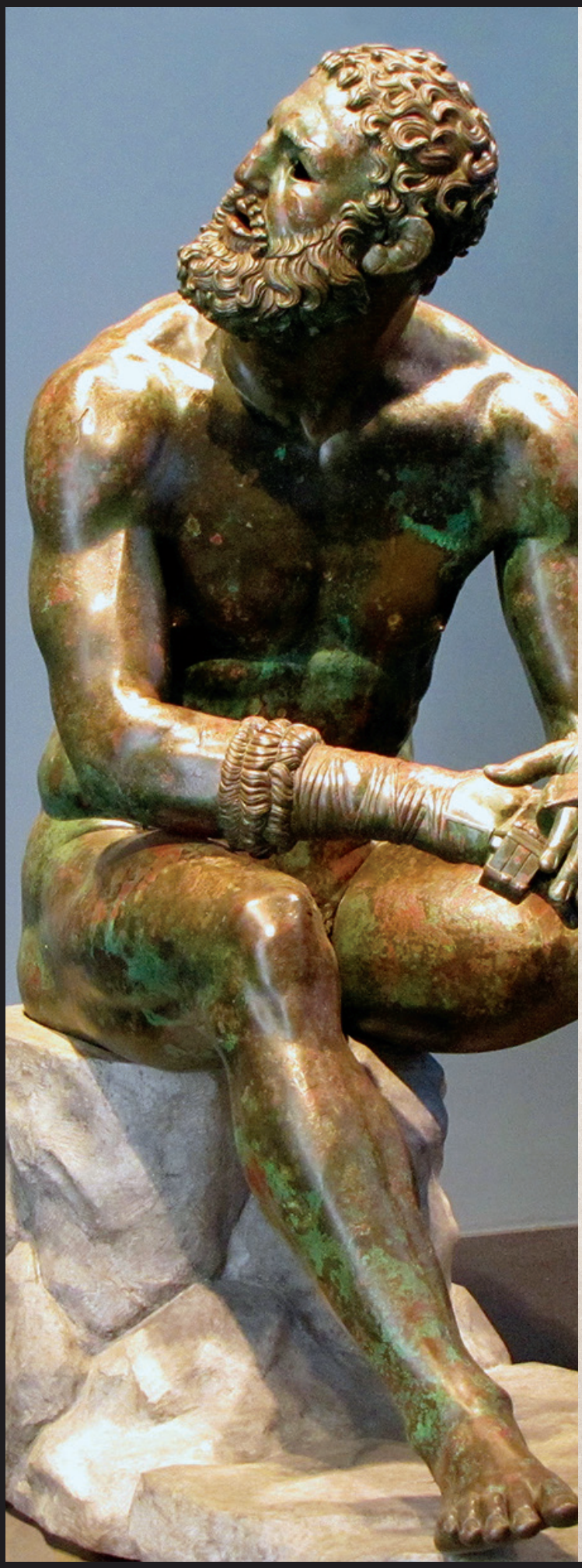


THE 250

smarthistory

GUIDE TO

THE ART OF AP® ART HISTORY

VOLUME 1 · 1-47

GLOBAL PREHISTORY

ANCIENT MEDITERRANEAN

Smarthistory guide to AP® Art History (volume one: 1-47)

Smarthistory guide to AP® Art History (volume one: 1-47)

DR. WILLIAM ALLEN, DR. JEFFREY BECKER, DR. DAVID BOFFA, THE BRITISH MUSEUM, DR. AMY CALVERT, DR. ESPERANÇA CAMARA, DR. ELIZABETH CUMMINS, FRANK DABELL, DR. KATHLEEN DOYLE, DR. LANE EAGLES, DR. ALLEN FARBER, DR. JULIA FISCHER, DR. SALLY HICKSON, DR. ELISA FOSTER, DR. SENTA GERMAN, NATHALIE HAGER, DR. BETH HARRIS, DR. JANE HORAN, DR. LAUREN KILROY-EWBANK, DR. REX KOONTZ, ABAGAIL LAPIN, MARY BETH LOONEY, DR. ELIZABETH MACAULAY-LEWIS, REBECCA MIR, DR. SHADIEH MIRMOBINY, DR. BONNIE NOBLE, DR. PAUL RANOGAJEC, RACHEL ROPEIK, DR. NANCY ROSS, DR. WENDY SCHALLER, DR. KRISTINE TANTON, DR. LAUREL TAYLOR, LOUISA WOODVILLE, CHRISTINE ZAPELLA, AND DR. STEVEN ZUCKER

Smarthistory guide to AP® Art History (volume one: 1-47) by Smarthistory is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License, except where otherwise noted.

AP® Art History is a trademark registered by the College Board, which is not affiliated with, and does not endorse, this publication.

Contents

Editors xiii

About Smarthistory xv

Global Prehistory

1. Apollo 11 Cave Stones
Nathalie Hager 3

2. Hall of Bulls, Lascaux
Mary Beth Looney 5

3. Camelid sacrum in the shape of a canine
Dr. Beth Harris 7

4. Running Horned Woman (Tassili n'Ajjer, Algeria)
Nathalie Hager 9

5. Bushel with ibex motifs
A conversation
Dr. Beth Harris and Dr. Steven Zucker 13

6. Anthropomorphic stele
Nathalie Hager 15

7. Jade Cong, Liangzhu culture
A conversation
Dr. Steven Zucker and Dr. Beth Harris 17

8. Stonehenge, Salisbury Plain, England
Dr. Senta German 19

9. Ambum Stone, Papua New Guinea
Dr. Jane Horan 23

10. Female figurine from Tlatilco
Dr. Rex Koontz 27

10 a. Tlatilco Figurines — an extraordinary variety
A conversation
Dr. Steven Zucker and Dr. Lauren Kilroy-Ewbank 31

11. Terracotta fragments, Lapita people
Dr. Jane Horan 35

Ancient Mediterranean

12. White Temple and its Ziggurat
Dr. Senta German 41

13. Palette of King Narmer
Dr. Amy Calvert 43

14. Standing Male Worshipper
A Conversation
Dr. Beth Harris and Dr. Steven Zucker 49

15. Seated Scribe from Saqqara
A conversation
Dr. Beth Harris and Dr. Steven Zucker 51

16. Standard of Ur from the Royal Tombs at Ur
The British Museum 53

16. Standard of Ur from the Royal Tombs at Ur
A conversation
Dr. Beth Harris and Dr. Steven Zucker 55

17. Great Pyramids of Giza
Dr. Amy Calvert 59

17. a. Pyramid of Khufu
Dr. Amy Calvert 63

17. b. Pyramid of Khafre and the Great Sphinx
Dr. Amy Calvert 65

17. c. Pyramid of Menkaure
Dr. Amy Calvert 67

18. King Menkaure and Queen
Dr. Amy Calvert 69

19. Law Code Stele of King Hammurabi
Dr. Senta German 73

19. Law Code Stele of King Hammurabi
A conversation
Dr. Beth Harris and Dr. Steven Zucker 75

20. Temple of Amun-Re and Hypostyle Hall
Dr. Elizabeth Cummins 77

21. Mortuary Temple of Hatshepsut
A conversation
Dr. Beth Harris and Dr. Steven Zucker 79

22. Akhenaton, Nefertiti, and three daughters
A conversation
Dr. Beth Harris and Dr. Steven Zucker 83

23. Tutankhamun's tomb, innermost coffin
Dr. Elizabeth Cummins 85

24. Last judgment of Hu-Nefer
The British Museum 89

24. Last judgment of Hu-Nefer
A conversation
Dr. Beth Harris and Dr. Steven Zucker 91

25. Lamassu, citadel of Sargon II, Dur Sharrukin
A conversation
Dr. Beth Harris and Dr. Steven Zucker 95

26. The Athenian Agora
A conversation
Dr. Beth Harris and Dr. Steven Zucker 99

27. Anavysos Kouros (youth)
A conversation
Dr. Beth Harris and Dr. Steven Zucker 101

28. Peplos Kore from the Acropolis
A conversation
Dr. Beth Harris and Dr. Steven Zucker 103

29. Sarcophagus of the Spouses
Dr. Jeffrey Becker 107

29. Sarcophagus of the Spouses
A conversation
Dr. Beth Harris and Dr. Steven Zucker 111

30. Audience Hall (apadana) of Darius and Xeres
Dr. Jeffrey Becker 113

31. Temple of Minerva (Veii), sculpture of Apollo
Dr. Laurel Taylor 117

31. Temple of Minerva (Veii), sculpture of Apollo
A conversation
Dr. Beth Harris and Dr. Steven Zucker 119

32. Tomb of the Triclinium
Dr. Jeffrey Becker 123

33. Niobid Painter, Niobides Krater
A conversation
Dr. Beth Harris and Dr. Steven Zucker 125

34. Doryphoros (Spear Bearer)
Dr. Beth Harris and Dr. Steven Zucker 127

34. Doryphoros (Spear Bearer)
A conversation
Dr. Beth Harris and Dr. Steven Zucker 129

35. a. The Parthenon, Athens
The British Museum 131

35. a. The Parthenon, Athens
A conversation
Dr. Beth Harris and Dr. Steven Zucker 133

35.a. i. Phidias, Parthenon sculpture (pediments, metopes and frieze)
A conversation
Dr. Beth Harris and Dr. Steven Zucker 137

35. a. ii. Plaque of the Ergastines
A conversation
Dr. Beth Harris and Dr. Steven Zucker 141

35. b. Victory adjusting her sandal, Temple of Athena Nike
A conversation
Dr. Beth Harris and Dr. Steven Zucker 143

36. Grave stele of Hegeso
A conversation
Dr. Beth Harris and Dr. Steven Zucker 147

37. Winged Victory of Samothrace
A conversation
Dr. Beth Harris and Dr. Steven Zucker 149

38. Great Altar of Zeus and Athena at Pergamon
A conversation
Dr. Beth Harris and Dr. Steven Zucker 151

39. House of the Vettii, Pompeii
Dr. Jeffrey Becker 157

40. Alexander Mosaic, House of the Faun, Pompeii
A conversation
Dr. Beth Harris and Dr. Steven Zucker 161

41. Seated Boxer (or Boxer at Rest)
A conversation
Dr. Steven Zucker and Dr. Beth Harris 165

42. Head of a Roman Patrician
Dr. Jeffrey Becker 167

43. Augustus of Primaporta
Dr. Julia Fischer 169

43. Augustus of Primaporta
A conversation
Dr. Beth Harris and Dr. Steven Zucker 173

44. Colosseum (Flavian Amphitheater)
A conversation
Dr. Beth Harris and Dr. Steven Zucker 175

45. Forum and Column of Trajan, Rome
Dr. Jeffrey Becker 179

45. a. Forum of Trajan, Rome
A conversation
Dr. Beth Harris and Dr. Steven Zucker 185

45. b. Column of Trajan, Rome
A conversation
Dr. Beth Harris, Dr. Steven Zucker, and Dr. Valentina Follo 187

45. b. Column of Trajan, Rome
Dr. Jeffrey Becker 191

45. c. Markets of Trajan, Rome
A conversation
Dr. Beth Harris and Dr. Steven Zucker 195

46. The Pantheon, Rome
Dr. Paul Ranogajec 197

46. The Pantheon, Rome
A conversation
Dr. Beth Harris and Dr. Steven Zucker 207

47. Ludovisi Battle Sarcophagus
A conversation
Dr. Beth Harris and Dr. Steven Zucker 211

Acknowledgements 215

Editors

Ruth Ezra
Ruth is a doctoral candidate at Harvard University, where she specializes in the art of late-medieval and Renaissance Europe. Upon completion of her BA at Williams College, she studied in the UK on a Marshall Scholarship, earning an MPhil in history and philosophy of science from the University of Cambridge and an MA in history of art from the Courtauld Institute. A committed educator, Ruth has recently served as a Gallery Lecturer at both the Museum of Fine Arts, Boston and the National Galleries of Scotland, as well as a Teaching Fellow at Harvard.

Beth Harris, Ph.D.
Beth is co-founder and executive director of Smarthistory. Previously, she was dean of art and history at Khan Academy and director of digital learning at The Museum of Modern Art, where she started MoMA Courses Online and co-produced educational videos, websites and apps. Before joining MoMA, Beth was Associate Professor of art history and director of distance learning at the Fashion Institute of Technology where she taught both online and in the classroom. She has co-authored, with Dr. Steven Zucker, numerous articles on the future of education and the future of museums, topics she regularly addresses at conferences around the world. She received her Master's degree from the Courtauld Institute of Art in London, and her doctorate in Art History from the Graduate Center of the City University of New York.

Mary Thompson
Mary is a recent graduate of the University of Puget Sound where she studied Art History and French. She focused her undergraduate research on the modern construction of the female nude. Smarthistory has been extremely influential in the development of Mary's studies and she is grateful to have worked on this project.

Steven Zucker, Ph.D.
Steven is co-founder and executive director of Smarthistory. Previously, Steven was dean of art and history at Khan Academy. He was also chair of history of art and design at Pratt Institute where he strengthened enrollment and lead the renewal of curriculum across the Institute. Before that, he was dean of the School of Graduate Studies at the Fashion Institute of Technology, SUNY and chair of their art history department. He has taught at The School of Visual Arts, Hunter College, and at The Museum of Modern Art. Dr. Zucker is a recipient of the SUNY Chancellor's Award for Excellence in Teaching. He has co-authored, with Dr. Beth Harris, numerous articles on the future of education and the future of museums, topics he regularly addresses at conferences around the world. Dr. Zucker received his Ph.D. from the Graduate Center of the City University of New York.

At Smarthistory® we believe art has the power to transform lives and to build understanding across cultures. We believe that the brilliant histories of art belong to everyone, no matter their background. Smarthistory's free, award-winning digital content unlocks the expertise of hundreds of leading scholars, making the history of art accessible and engaging to more people, in more places, than any other provider.

This book is not for sale, it is distributed by Smarthistory for free.

smarthistory books
DISTRIBUTING KNOWLEDGE FOR FREE

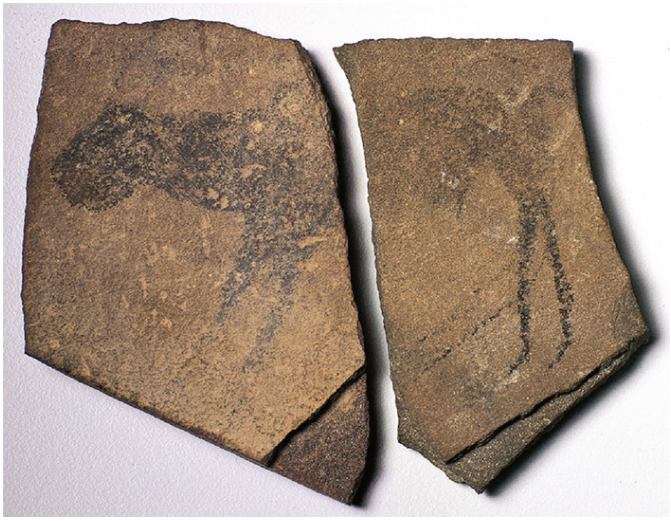
Global Prehistory

1. Apollo 11 Cave Stones

Nathalie Hager

A significant discovery

Approximately 25,000 years ago, in a rock shelter in the Huns Mountains of Namibia on the southwest coast of Africa (today part of the Ai-Ais Richtersveld Transfrontier Park), an animal was drawn in charcoal on a hand-sized slab of stone. The stone was left behind, over time becoming buried on the floor of the cave by layers of sediment and debris until 1969 when a team led by German archaeologist W.E. Wendt excavated the rock shelter and found the first fragment (below, left). Wendt named the cave "Apollo 11" upon hearing on his shortwave radio of NASA's successful space mission to the moon. It was more than three years later however, after a subsequent excavation, when Wendt discovered the matching fragment (below, right), that archaeologists and art historians began to understand the significance of the find.



Apollo 11 Cave Stones, Namibia, quartzite, c. 25,500–25,300 B.C.E. (State Museum of Namibia, Windhoek)



Location of the Huns Mountains of Namibia, ©Google

Indirect dating techniques

In total seven stone fragments of brown-grey quartzite, some of them depicting traces of animal figures drawn in charcoal, ocher, and white, were found buried in a concentrated area of the cave floor less than two meters square. While it is not possible to learn the actual date of the fragments, it is possible to estimate when the rocks were buried by radiocarbon dating the archaeological layer in which they were found. Archaeologists estimate that the cave stones were buried between 25,500 and 25,300 years ago during the Middle Stone Age period (a period of African prehistory generally considered to have begun around 280,000 years ago and ended around 50–25,000 years ago) in southern Africa making them, at the time of their discovery, the oldest dated art known on the African continent and among the earliest evidence of human artistic expression worldwide.

While more recent discoveries of much older human artistic endeavors have corrected our understanding (consider the 2008 discovery of a 100,000-year-old paint workshop in the Blombos Cave on the southern coast of Africa), the stones remain the oldest examples of figurative art from the African continent. Their discovery contributes to our conception of early humanity's creative attempts, before the invention of formal writing, to express their thoughts about the world around them.

The origins of art?

Genetic and fossil evidence tells us that Homo sapiens (anatomically modern humans who evolved from an earlier species of hominids) developed on the continent of Africa more than 100,000 years ago and spread throughout the world. But what we do not know—what we have only been able to assume—is that art too began in Africa. Is Africa, where humanity originated, home to the world's oldest art? If so, can we say that art began in Africa?



View across Fish River Canyon toward the Huns Mountains, /Ai-/Ais – Richtersveld Transfrontier Park, southern Namibia (photo: Thomas Schooch, CC-BY-SA-3.0) <https://commons. wikimedia.org/wiki/File:Fish_River_Canyon_Namibia.jpg>

The Apollo 11 rock shelter overlooks a dry gorge, sitting twenty meters above what was once a river that ran along the valley floor. The cave entrance is wide, about twenty-eight meters across, and the cave itself is deep: eleven meters from front to back. While today a person can stand upright only in the front section of the cave, during the Middle Stone Age, as well as in the periods before and after, the rock shelter was an active site of ongoing human settlement.

Inside the cave, above and below the layer where the Apollo 11 cave stones were found, archaeologists unearthed a sequence of cultural layers representing over 100,000 years of human occupation. In these layers stone artifacts, typical of the Middle Stone Age period—such as blades, pointed flakes, and scraper—were found in raw materials not native to the region, signaling stone tool technology transported over long distances. Among the remnants of hearths, ostrich eggshell fragments bearing traces of red color were also found—either remnants of ornamental painting or evidence that the eggshells were used as containers for pigment.

On the cave walls, belonging to the Later Stone Age period, rock paintings were discovered depicting white and red zigzags, two handprints, three geometric images, and traces of color. And on the banks of the riverbed just upstream from the cave, engravings of a variety of animals, some with zigzag lines leading upwards, were found and dated to less than 2000 years ago.

But the most well-known of the rock shelter's finds, and the most enigmatic, remain the Apollo 11 cave stones (image above). On the cleavage face of what was once a complete slab, an unidentified animal form was drawn resembling a feline in appearance but with human hind legs that were probably added later. Barely visible on the head of the animal are two slightly-curved horns likely belonging to an Oryx, a large grazing antelope; on the animal's underbelly, possibly the sexual organ of a bovid (the Bovidae are the biological family of mammals that includes bison, African buffalo, water buffalo, antelopes, gazelles, sheep, goats, muskoxen, and domestic cattle).

Perhaps we have some kind of supernatural creature—a therianthrope, part human and part animal? If so, this may suggest a complex system of shamanistic belief. Taken together with the later rock paintings and the engravings, Apollo 11 becomes more than just a cave offering shelter from the elements. It becomes a site of ritual significance used by many over thousands of years.

Global origins of art

In the Middle Stone Age period in southern Africa prehistoric man was a hunter-gatherer, moving from place to place in search of food and shelter. But this modern human also drew an animal form with charcoal—a form as much imagined as it was observed. This is what makes the Apollo 11 cave stones find so interesting: the stones offer evidence that Homo sapiens in the Middle Stone Age—us, some 25,000 years ago—were not only anatomically modern, but behaviorally modern as well. That is to say, these early humans possessed the new and unique capacity for modern symbolic thought, "the human capacity," long before what was previously understood.

The cave stones are what archaeologists term *art mobilier* —small-scale prehistoric art that is moveable. But mobile art, and rock art generally, is not unique to Africa. Rock art is a global phenomenon that can be found across the World—in Europe, Asia, Australia, and North and South America. While we cannot know for certain what these early humans intended by the things that they made, by focusing on art as the product of humanity's creativity and imagination we can begin to explore where, and hypothesize why, art began.

2. Hall of Bulls, Lascaux

Mary Beth Looney

We are as likely to communicate using easily interpretable pictures as we are text. Portable handheld devices enable us to tell others via social media what we are doing and thinking. Approximately 15,000 years ago, we also communicated in pictures—but with no written language.



Map showing select prehistoric sites

The cave of Lascaux, France is one of almost 350 similar sites that are known to exist—most are isolated to a region of southern France and northern Spain. Both Neanderthals (named after the site in which their bones were first discovered—the Neander Valley in Germany) and Modern Humans (early Homo Sapiens Sapiens) coexisted in this region 30,000 years ago. Life was short and very difficult; resources were scarce and the climate was very cold.

Location, location, location!

Approximately 15,000 years later in the valley of Vèzére, in southwestern France, modern humans lived and witnessed the migratory patterns of a vast range of wildlife. They discovered a cave in a tall hill overlooking the valley. Inside, an unknown number of these people drew and painted images that, once discovered in 1940, have excited the imaginations of both researchers and the general public.

After struggling through small openings and narrow passages to access the larger rooms beyond, prehistoric people discovered that the cave wall surfaces functioned as the perfect, blank "canvas" upon which to draw and paint. White calcite, roofed by nonporous rock, provides a uniquely dry place to feature art. To paint, these early artists used charcoal and ochre (a kind of pigmented, earthen material, that is soft and can be mixed with liquids, and comes in a range of colors like brown, red, yellow, and white). We find images of horses, deer, bison, elk, a few lions, a rhinoceros, and a bear—almost as an encyclopedia of the area's large prehistoric wildlife. Among these images are abstract marks—dots and lines in a variety of configurations. In one image, a humanoid figure plays a mysterious role.

How did they do it?

The animals are rendered in what has come to be called "twisted perspective," in which their bodies are depicted in profile while we see the horns from a more frontal viewpoint. The images are sometimes entirely linear—line drawn to define the animal's contour. In many other cases, the animals are described in solid and blended colors blown by mouth onto the wall. In other portions of the Lascaux cave, artists carved lines into the soft calcite surface. Some of these are infilled with color—others are not.

The cave spaces range widely in size and ease of access. The famous Hall of Bulls (below) is large enough to hold some fifty people. Other "rooms" and "halls" are extraordinarily narrow and tall.

Archaeologists have found hundreds of stone tools. They have also identified holes in some walls that may have supported tree-limb scaffolding that would have elevated an artist high enough to reach the upper surfaces. Fossilized pollen has been found; these grains were inadvertently brought into the cave by early visitors and are helping scientists understand the world outside.



Left wall of the Hall of Bulls, Lascaux II (replica of the original cave), original cave: c. 16,000-14,000 B.C.E., 11 feet 6 inches long (photo: Adibu456, <https://www.flickr.com/photos/50193753@N02/5961891157> CC BY-NC 2.0)

Hall of Bulls

Given the large scale of many of the animal images, we can presume that the artists worked deliberately—carefully plotting out a particular form before completing outlines and adding color. Some researchers believe that "master" artists enlisted the help of assistants who mixed pigments and held animal fat lamps to illuminate the space. Alternatively, in the case of the "rooms" containing mostly engraved and overlapping forms, it seems that the pure process of drawing and repetitive re-drawing held serious (perhaps ritual) significance for the makers.

Why did they do it?

Many scholars have speculated about why prehistoric people painted and engraved the walls at Lascaux and other caves like it. Perhaps the most famous theory was put forth by a priest named Henri Breuil. Breuil spent considerable time in many of the caves, meticulously recording the images in drawings when the paintings were too challenging to photograph. Relying primarily on a field of study known as ethnography, Breuil believed that the images played a role in "hunting magic." The theory suggests that the prehistoric people who used the cave may have believed that a way to overpower their prey involved creating images of it during rituals designed to ensure a successful hunt. This seems plausible when we remember that survival was entirely dependent on successful foraging and hunting, though it is also important to remember how little we actually know about these people.

Another theory suggests that the images communicate narratives (stories). While a number of the depictions can be seen to do this, one particular image in Lascaux more directly supports this theory. A bison, drawn in strong, black lines, bristles with energy, as the fur on the back of its neck stands up and the head is radically turned to face us (below).

A form drawn under the bison's abdomen is interpreted as internal organs, spilling out from a wound. A more crudely drawn form positioned below and to the left of the bison may represent a humanoid figure with the head of a bird. Nearby, a thin line is topped with another bird and there is also an arrow with barbs. Further below and to the far left the partial outline of a rhinoceros can be identified.



Disemboweled bison and bird-headed human figure? Cave at Lascaux, c. 16,000-14,000 B.C.E. (photo: Peter80 <https://commons.wikimedia.org/wiki/File:Lascaux_01.jpg>, CC BY-SA 3.0)

Interpreters of this image tend to agree that some sort of interaction has taken place among these animals and the bird-headed human figure—in which the bison has sustained injury either from a weapon or from the horn of the rhinoceros. Why the person in the image has the rudimentary head of a bird, and why a bird form sits atop a stick very close to him is a mystery. Some suggest that the person is a shaman—a kind of priest or healer with powers involving the ability to communicate with spirits of other worlds. Regardless, this riveting image appears to depict action and reaction, although many aspects of it are difficult to piece together.

The Caves of Lascaux are the most famous of all of the known caves in the region. In fact, their popularity has permanently endangered them. From 1940 to 1963, the numbers of visitors and their impact on the delicately balanced environment of the cave—which supported the preservation of the cave images for so long—necessitated the cave's closure to the public. A replica called Lascaux II was created about 200 yards away from the site. The original Lascaux cave is now a designated UNESCO World Heritage Site. Lascaux will require constant vigilance and upkeep to preserve it for future generations.

Many mysteries continue to surround Lascaux, but there is one certainty. The very human need to communicate in the form of pictures—for whatever purpose—has persisted since our earliest beginnings.

3. Camelid sacrum in the shape of a canine

Dr. Beth Harris

Prehistoric art around the globe

When we think about prehistoric art (art before the invention of writing), likely the first thing that comes to mind are the beautiful cave paintings in France and Spain with their naturalistic images of bulls, bison, deer and other animals. But it's important to note that prehistoric art has been found around the globe—in North and South America, Africa, Asia, and Australia—and that new sites and objects come to light regularly, and many sites are just starting to be explored. Most prehistoric works we have discovered so far date to around 40,000 B.C.E. and after.

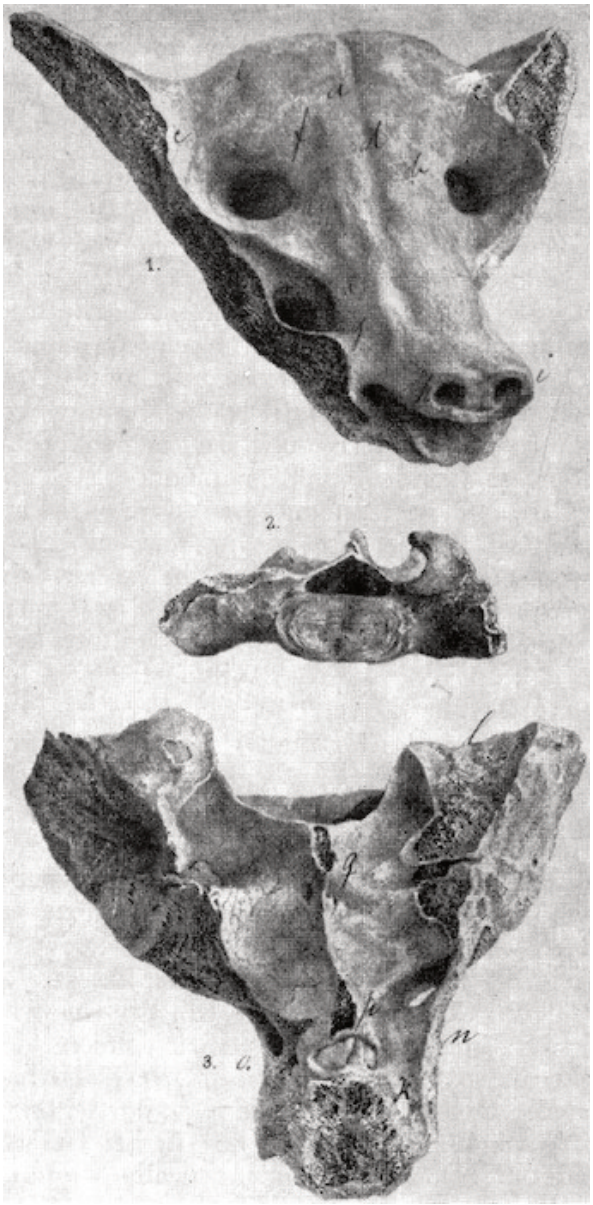
This fascinating and unique prehistoric sculpture of a dog-like animal was discovered accidentally in 1870 in Tequixquiac, Mexico—in the Valley of Mexico (where Mexico City is located). The carving likely dates to sometime between 14,000–7000 B.C.E. An engineer found it at a depth of 12 meters (about 40 feet) when he was working on a drainage project—the Valley of Mexico once held several lakes. The geography and climate of this area was considerably different in the prehistoric era than it is today.

What is a camelid? What is a sacrum?

The sculpture was made from the now fossilized remains of the sacrum of an extinct camelid. A camelid is a member of the Camelidae family—think camels, llamas, and alpacas. The sacrum is the large triangular bone at the base of the spine. Holes were cut into the end of the bone to represent nostrils, and the bone is also engraved (though this is difficult to see in photographs).

Issues

The date of the sculpture is difficult to determine because a stratigraphic analysis was not done at the find spot at the time of discovery. This would have involved a study of the different layers of soil and rock before the object was removed. Another problem is that the object was essentially lost to scholars between 1895 and 1956 (it was in private hands).



Lithograph of the sacrum as illustrated by Mariano Bárcena, published in Anales del Musei Nacional, vol. 2 (1882)

In 1882 the sculpture was in the possession of Mariano de la Bárcena, a Mexican geologist and botanist, who wrote the first scholarly article on it. He described the object in this way:

"…the fossil bone contains cuts or carvings that unquestionably were made by the hand of man…the cuts seem to have been made with a sharp instrument and some polish on the edges of the cuts may still be seen…the articular extremity of the last vertebra was utilized perfectly to represent the nose and mouth of the animal." [As quoted in Luis Aveleyra Arroyo de Anda, "The Pleistocene Carved Bone from Tequixquiac, Mexico: A Reappraisal," *American Antiquity*, vol. 30, (January 1965), p. 264.]

Bárcena was convinced of the authenticity of the object, but over the years—due to the lack of scientific evidence from the findspot—other scholars have questioned its age, and whether the object was even made by human hands. One author, in 1923, summarized the issues:

> To allow us to state that the sacrum found at Tequixquiac was a definite proof of ancient man in the area the following things must be proven: (1) That the bone was actually a fossil belonging to an extinct species. We cannot doubt this since it has been affirmed by competent geologists and paleontologists. (2) That it was found in a fossiliferous deposit and that it had never been moved since it found its place there. This has not been proved in any convincing manner. (3) That the cuttings of the bone can actually be attributed to the hand of man and that it can never have occurred without human intervention. This has not been proved either. (4) That the carving was made while the species still existed and not in later times when the bone had already become fossilized. [As quoted in Luis Aveleyra Arroyo de Anda, "The Pleistocene Carved Bone from Tequixquiac, Mexico: A Reappraisal," *American Antiquity*, vol. 30 (January 1965).]

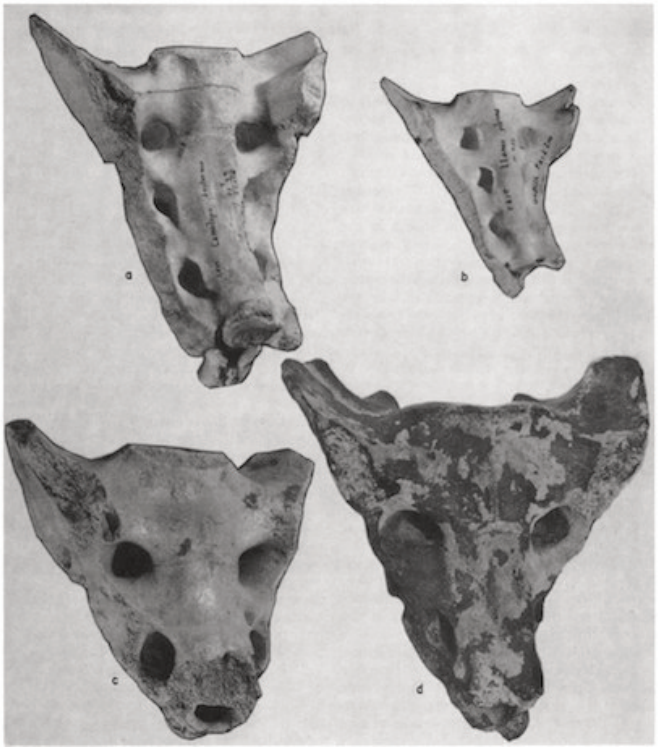
Today, scholars agree that the carving and markings were made by human hands—the two circular spaces that represent the nasal cavities were carefully carved and are perfectly symmetrical and were likely shaped by a sharp instrument. However, the lack of information from the findspot makes precise dating very difficult. It is quite common, in prehistoric art, for the shape of a natural form (like a sacrum) to suggest a subject (dog or pig head) to the carver, and so we should not be surprised that the sculpture still strongly resembles a sacrum.

Interpretation

Because the carving was made in a period before writing had developed, it is likely impossible to know what the sculpture meant to the carver and to his/her culture. One possible way to interpret the object is to look at it through the lens of later Mesoamerican cultures. One anthropologist has pointed out that in Mesoamerica, the sacrum is seen as sacred and that some Mesoamerican Indian languages named this bone with words referring to sacredness and the divine. In English, "sacrum" is derived from Latin: os sacrum, meaning "sacred bone." The sacrum is also—perhaps significantly for its meaning—located near the reproductive organs.

"Language and iconographic evidence strongly suggest that the sacrum bone was an important bone indeed in Mesoamerica, relating to sacredness, to resurrection, and to fire. The importance attached to this bone and its immediate neighbors is not limited to Mesoamerica. From ancient Egypt to ancient India and elsewhere, there is abundant evidence that the bones at the base of the spine, including especially the sacrum, were seen as sacred." [footnote]Brian Stross, "The Mesoamerican Sacrum Bone: Doorway to the otherworld," FAMSI Journal of the Ancient Americas (2007) pp. 1-54.

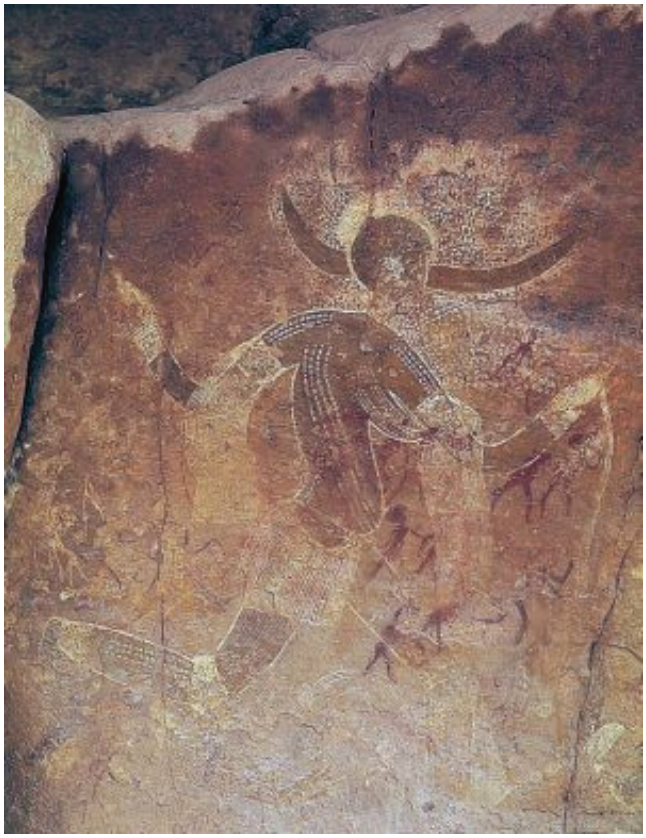
As appealing as this interpretation is (and the argument the author makes is quite convincing), it is wise to be wary of connecting cultures across such vast geographic distances (though of course there are some aspects of our shared humanity that may be common across cultures). At this point in time, we have no direct evidence to support this interpretation, and so we can not be certain of this object's original meaning for either the artist, or the people that produced it.



Sacra from various forms of camel, illustration from: Luis Aveleyra Arroyo de Anda, "The Pleistocene Carved Bone from Tequixquiac, Mexico: A Reappraisal," American Antiquity, vol. 30, (January 1965), p. 269.

4. Running Horned Woman (Tassili n'Ajjer, Algeria)

Nathalie Hager



Running Horned Woman, 6,000-4,000 B.C.E., pigment on rock (Tassili n'Ajjer, Algeria)

"Discovery"

Between 1933 and 1940, camel corps officer Lieutenant Brenans of the French Foreign Legion completed a series of small sketches and hand written notes detailing his discovery of dozens of rock art sites deep within the canyons of the Tassili n'Ajjer. Tassili n'Ajjer is difficult to access plateau in the Algerian section of the Sahara Desert near the borders of Libya and Niger in northern Africa (see map below). Brenans donated hundreds of his sketches to the Bardo Museum in Algiers, alerting the scientific community to one of the richest rock art concentrations on Earth and prompting site visits that included fellow Frenchman and archaeologist Henri Lhote.

Lhote recognized the importance of the region and returned again and again, most notably in 1956 with a team of copyists for a 16--month expedition to map and study the rock art of the Tassili. Two years later Lhote published *A la découverte des fresques du Tassili*. The book became an instant best-seller, and today is one of the most popular texts on archaeological discovery.



Sand and rocks (Tassili n'Ajjer, Algeria) (photo: Akli Salah, CC BY-SA 4.0) <https://commons.wikimedia.org/wiki/File:Tadrert_,_tassili_n%27ajjer_,_alg%C3%A9rie.jpg>

Lhote made African rock art famous by bringing some of the estimated 15,000 human figure and animal paintings and engravings found on the rock walls of the Tassili's many gorges and shelters to the wider public. Yet contrary to the impression left by the title of his book, neither Lhote nor his team could lay claim to having discovered Central Saharan rock art: long before Lhote, and even before Brenans, in the late nineteenth century a number of travelers from Germany, Switzerland, and France had noted the existence of "strange" and "important" rock sculptures in Ghat, Tadrart Acacus, and Upper Tassili. But it was the Tuareg—the indigenous peoples of the region, many of whom served as guides to these early European explorers—who long knew of the paintings and engravings covering the rock faces of the Tassili.



Tassili n'Ajjer is a Tamahaq name meaning "plateau" of the Ajjer people (the Kel Ajjer is group of tribes whose traditional territory was here). Much of the 1,500-2,100 meter high plateau is protected by an 80,000 square kilometer National Park, map © Google

The "Horned Goddess"

Lhote published not only reproductions of the paintings and engravings he found on the rock walls of the Tassili, but also his observations. In one excerpt he reported that with a can of water and a sponge in hand he set out to investigate a "curious figure" spotted by a member of his team in an isolated rock shelter located within a compact group of mountains known as the Aouanrhet massif, the highest of all the "rock cities" on the Tassili. Lhote swabbed the wall with water to reveal a figure he called the "Horned Goddess":

> On the damp rock surface stood out the gracious silhouette of a woman running. One of her legs, slightly flexed, just touched the ground, while the other was raised in the air as high as it would normally go. From the knees, the belt and the widely outstretched arms fell fine fringes. From either side of the head and above two horns that spread out horizontally was an extensive dotted area resembling a cloud of grain falling from a wheat field. Although the whole assemblage was skillfully and carefully composed there was something free and easy about it…

The Running Horned Woman, the title by which the painting is commonly known today, was found in a massif so secluded and so difficult to access that Lhote's team concluded that the collection of shelters was likely a sanctuary and the female figure—"the most beautiful, the most finished and the most original"—a goddess:

Perhaps we have here the figure of a priestess of some agricultural religion or the picture of a goddess of such a cult who foreshadow—or is derived from—the goddess Isis, to whom, in Egypt, was attributed the discovery of agriculture.

Lhote's suggestion that the painting's source was Egyptian was influenced by a recently published hypothesis by his mentor, the French anthropologist Henri Breuil, the then undisputed authority on prehistoric rock art who was renowned for his work on Paleolithic cave art in Europe. In an essay titled, "The White Lady of Brandberg, South-West Africa, Her Companions and Her Guards," Breuil famously claimed that a painting discovered in a small rock shelter in Namibia showed influences of Classical antiquity and was not African in origin, but possibly the work of Phoenician travellers from the Mediterranean. Lhote, equally convinced of outside influence, linked the Tassili painting's provenance with Breuil's ideas and revised the title to the 'White Lady' of Aouanrhet:

In other paintings found a few days later in the same massif we were able to discern, from some characteristic features, an indication of Egyptian influence. Some features are, no doubt, not very marked in our 'White Lady'; still, all the same, some details as the curve of the breasts, led us to think that the picture may have been executed at a time when Egyptian traditions were beginning to be felt in the Tassili.

Foreign influence?

Time and scholarship would reveal that the assignment of Egyptian influence on the *Running Horned Woman* was erroneous, and Lhote the victim of a hoax: French members of his team made "copies" of Egyptionized figures, passing them off as faithful reproductions of authentic Tassili rock wall paintings. These fakes were accepted by Lhote (if indeed he knew nothing of the forgeries), and falsely sustained his belief in the possibility of foreign influence on Central Saharan rock art. Breuil's theories were likewise discredited: the myth of the "White Lady" was rejected by every archaeologist of repute, and his promotion of foreign influence viewed as racist.

Yet Breuil and Lhote were not alone in finding it hard to believe that ancient Africans discovered how to make art on their own, or to have developed artistic sensibilities. Until quite recently many Europeans maintained that art "spread" or was "taken" into Africa, and, aiming to prove this thesis, anointed many works with Classical sounding names and sought out similarities with early rock art in Europe. Although such vestiges of colonial thinking are today facing a reckoning, cases such as the "White Lady" (both of Namibia and of Tassili) remind us of the perils of imposing cultural values from the outside.



Tassili National Park (photo: magharebia, CC BY 2.0) <https://commons.wikimedia.org/wiki/File:Tassili_Desert_Algeria.jpg>

Chronology

While we have yet to learn how, and in what places, the practice of rock art began, no firm evidence has been found to show that African rock art—some ten million images across the continent—was anything other than a spontaneous initiative by early Africans. Scholars have estimated the earliest art to date to 12,000 or more years ago, yet despite the use of both direct and indirect dating techniques very few firm dates exist ("direct dating" uses measurable physical and chemical analysis, such as radiocarbon dating, while "indirect dating" primarily uses associations from the archaeological context). In the north, where rock art tends to be quite diverse, research has focused on providing detailed descriptions of the art and placing works in chronological sequence based on style and content. This ordering approach results in useful classification and dating systems, dividing the Tassili paintings and engravings into periods of concurrent and overlapping traditions (the *Running Horned Woman* is estimated to date to approximately 6,000 to 4,000 B.C.E.—placing it within the "Round Head Period"), but offers little in the way of interpretation of the painting itself.

Advancing an interpretation of the *Running Horned Woman*

Who was the *Running Horned Woman*? Was she indeed a goddess, and her rock shelter some sort of sanctuary? What does the image mean? And why did the artist make it? For so long the search for meaning in rock art was considered inappropriate and unachievable—only recently have scholars endeavored to move beyond the mere description of images and styles, and, using a variety of interdisciplinary methods, make serious attempts to interpret the rock art of the Central Sahara.

Lhote recounted that the *Running Horned Woman* was found on an isolated rock whose base was hollowed out into a number of small shelters that could not have been used as dwellings. This remote location, coupled with an image of marked pictorial quality—depicting a female with two horns on her head, dots on her body probably representing scarification, and wearing such attributes of the dance as armlets and garters—suggested to him that the site, and the subject of the painting, fell outside of the everyday. More recent scholarship has supported Lhote's belief in the painting's symbolic, rather than literal, representation. As Jitka Soukopova has noted, "Hunter-gatherers were unlikely to wear horns (or other accessories on the head) and to make paintings on their whole bodies in their ordinary life." [Jitka Soukopova, "The Earliest Rock Paintings of the Central Sahara: Approaching Interpretation," Time and Mind: The Journal of Archaeology, Consciousness and Culture 4, no. 2 (2011), p. 199.] Rather, this female horned figure, her body adorned and decorated, found in one of the highest massifs in the Tassili—a region is believed to hold special status due to its elevation and unique topology—suggests ritual, rite, or ceremony. Rather, this female horned figure, her body adorned and decorated, found in one of the highest massifs in the Tassili—a region is believed to hold special status due to its elevation and unique topology—suggests ritual, rite, or ceremony.



Running Horned Woman (detail) (photo: FJ Expeditions, CC BY 2.0) <http://www.fjexpeditions.com/expeditions/past/ tassili11/P4700.jpg>)

But there is further work to be done to advance an interpretation of the *Running Horned Woman*. Increasingly scholars have studied rock shelter sites as a whole, rather than isolating individual depictions, and the shelter's location relative to the overall landscape and nearby water courses, in order to learn the significance of various "rock cities" in both image making and image viewing.

Archaeological data from decorated pottery, which is a dated artistic tradition, is key in suggesting that the concept of art was firmly established in the Central Sahara at the time of Tassili rock art production. Comparative studies with other rock art complexes, specifically the search for similarities in fundamental concepts in African religious beliefs, might yield the most fruitful approaches to interpretation. In other words, just as southern African rock studies have benefitted from tracing the beliefs and practices of the San people, so too may a study of Tuareg ethnography shed light on the ancient rock art sites of the Tassili.

Afterword: the threatened rock art of the Central Sahara

Tassili's rock walls were commonly sponged with water in order to enhance the reproduction of its images, either in trace, sketch, or photograph. This washing of the rock face has had a devastating effect on the art, upsetting the physical, chemical, and biological balance of the images and their rock supports. Many of the region's subsequent visitors—tourists, collectors, photographers, and the next generation of researchers—all captivated by Lhote's "discovery"—have continued the practice of moistening the paintings in order to reveal them. Today scholars report paintings that are severely faded while some have simply disappeared. In addition, others have suffered from irreversible damage caused by outright vandalism: art looted or stolen as souvenirs. In order to protect this valuable center of African rock art heritage, Tassili N'Ajjer was declared a National Park in 1972. It was classified as a World Heritage Site by UNESCO in 1982 and a Biosphere Reserve in 1986.

5. Bushel with ibex motifs

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted in the Musée du Louvre, Paris.



Bushel with ibex motifs, together with other Vessels, 4200-3500 B.C.E., Susa I period, necropolis, acropolis mound, Susa, Iran, painted terra-cotta, 28.90 x 16.40 cm, excavations led by Jacques de Morgan, 1906-08 (Musée du Louvre) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/kEsCZ3>

Steven: We're in the Louvre in Paris, which holds one of the most important collections of clay vessels from Ancient Susa.

Beth: Ancient Susa is in modern-day Iran, going back about 6,000 years to 4000 B.C.E., and we're looking at a beautiful beaker decorated with animal forms and geometric patterns.

Steven: So, 6,000 years ago, this is right at the cusp of the Neolithic and the Historical Era, just before the great cities of Mesopotamia rise.

Beth: In fact, this area at certain moments in history becomes politically part of southern Mesopotamia, the cities of Uruk and Ur, but at this point, 4000 B.C.E, this is still Prehistoric. We are looking at people who lived in a very fertile river valley, who painted beautiful vessels and buried them in their cemeteries.

Steven: At about 4000 B.C.E., we believe that they built a raised mound and had a temple on top, and the whole area was continuously occupied for about 5,000 years, so we have this extraordinary accumulation, but when we dig all the way down, we get to this pot and pots like it.

Beth: And because this is Prehistoric—this is before writing—we have no records of why they bury their dead with the pots, what they believe, what their religion was, the gods or goddesses they were worshiping on that temple mount, but we do have extraordinarily beautiful pots.

Steven: It's handmade, it's clay, and it's painted. It's quite thin and it doesn't have the perfection you get from something that's made on a wheel, though some archaeologists have conjectured it was perhaps made on a slow wheel, although others think it was completely handmade. In any case, it was clearly hand-painted.

Beth: The circular forms, balanced by forms that are linear, balanced by geometric, hard-edged forms, like rectangles…



Bushel with ibex motifs, detail with Ibex, 4200–3500 B.C.E., Susa I period, necropolis, acropolis mound, Susa, Iran, painted terra-cotta, 28.90 x 16.40 cm, excavations led by Jacques de Morgan, 1906-08 (Musée du Louvre) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/kEqVWH>

Steven: And you mentioned animals: the most obvious is the mountain goat. The mountain goat occupies the large rectangle, and the body is actually made out of two arcs, to create this very geometric form.

Beth: But it's mostly his horns that take up the space—so this is not a naturalistic image of a mountain goat. His body is reduced to triangles. So, very stylized images of these natural forms.

Steven: Nevertheless, there is real detail here. We can make out the goat's beard, his ears. We can make out his nose, where his eyes would be. We can see the bush of his tail, and we see that kind of detail in the other animals that are represented here. Just above the rectangle that holds the goat, we see a band that wraps around the vessel, that has a kind of dog that's rather like a greyhound.



Bushel with ibex motifs, detail with dogs and birds, 4200–3500 B.C.E., Susa I period, necropolis, acropolis mound, Susa, Iran, painted terra-cotta, 28.90 x 16.40 cm, excavations led by Jacques de Morgan, 1906-08 (Musée du Louvre) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/kEsxaC>

Beth: Very thin and elongated, perhaps it's reclining, perhaps it's running, and then above that, we see wading birds with elongated necks.

Steven: The necks speak to the verticality of the vessel, and the roundness of the horns speak to the cylindrical shape of the vessel. It's wonderful the way these geometric elements reflect the shape of the object itself. There's this beautiful integration between the pictorial and the actual body of the pot.

Beth: Look at how the tails of the dogs spin back in the opposite direction of the horns of the mountain goat, of the ibex. But then we have these things we can't identify, this criss-cross pattern with these angular forms in the center almost looks like stitching on a baseball. We see that shape repeated on other vessels, so perhaps it has meaning…in fact, perhaps the animals themselves had meaning and were associated with different ideas, perhaps fertility, or water, because we know that those associations were made later on in ancient Mesopotamia.



Bushel with ibex motifs, behind two bowls, 4200–3500 B.C.E., Susa I period, necropolis, acropolis mound, Susa, Iran, painted terra-cotta, 28.90 x 16.40 cm, excavations led by Jacques de Morgan, 1906-08 (Musée du Louvre) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/kEqskH>

Steven: Right, but we don't know if those meanings are in play here in Susa.

Beth: The name "Susa" may be familiar, because later on it figures in the Prophecy of Daniel, and it also figures in the Book of Esther, sometimes called Shushan.

Steven: And in fact, the reason that these pots were found is because an archaeologist was looking for the tomb of Daniel and came upon this extraordinary cemetery.

Watch the video. <https://www.youtube.com/watch?v=eeNfDr4ojZg>

6. Anthropomorphic stele

Nathalie Hager



Anthropomorphic stele, El-Maakir-Qaryat al-kaafa near Ha'il, Saudi Arabia, 4th millennium B.C.E. (4000-3000 B.C.E.), sandstone, 92 x 21 cm (National Museum, Riyadh) (photo: Explicit, CC BY-SA 4.0) <https://commons.wikimedia.org/wiki/File:Anthropomorphic_stele_at_National_Museum_of_Korea_02.jpg>

An anthropomorphic stele from Ha'il

This stele is tall, measuring approximately three feet high. But it is not just vertical height that makes this free-standing stone sculpture appear human, or anthropomorphic.

While both sides are sculpted, emphasis is on the front, particularly the face, chest, and waist: a trapezoidal head rests directly on squared shoulders with the outline of a face framing two closely-spaced eyes and a flattened nose; on the robed figure's torso a necklace hangs with two cords diagonally crossing the body with an awl (a small pointed tool) attached; and at the waist, a double-bladed dagger hangs from a wide belt that continues around to the back. The sculpture is simple, even abstract, but clearly represents a human figure. [simple_tooltip content='A stele is a vertical stone monument or marker often inscribed with text or relief carving.']What is a stele?[/simple_tooltip]

Found in a small village near Ha'il in northwest Saudi Arabia, this anthropomorphic (human-like) stele was one of three discovered in the region. The trio join a corpus of more than sixty low-relief sculptures in human form dating to the fourth millennium B.C.E. and discovered across the Arabian Peninsula in the last four decades. Despite the vast territory in which they were found (some 2,300 kilometers, stretching from Jordan in the north to Yemen in the south) these stelae (the plural of stele or in Latin, stela) share certain features and characteristics. How can this be?

Arabia's prehistory

While today Saudi Arabia is known for its desert sands and oil reserves, in prehistoric times the environment and landscape were dramatically different—more fertile and lush, and readily accessible to humans: early stone petroglyphs (rock engravings in which an image has been cut into the rock) —depict people hunting ostriches, a flightless bird that hasn't been able to survive in the region for thousands of years.

It was during the Neolithic period, from the sixth to the fourth millennium B.C.E. when the Arabian Peninsula was more like a savannah than a desert, that small groups of hunter-gatherers gradually shifted their economy from predation to production by domesticating such herd animals as sheep, goats, and cattle, and settling in oases and mountainous regions linked to one another by caravan trails. Due to changing climactic conditions these settlement sites were often only temporary—occupied seasonally but repeatedly,

and probably for centuries—yet it was this constant need for movement that stimulated communication between regions and interaction among its societies. But more than just people moved along Arabia's caravan trails: ideas and objects travelled too.



Map of the Arabian Peninsula (https://commons.wikimedia.org/wiki/File:Saudi_Arabia_map.png)

Figural representation in pre-Islamic Arabia

On a rock wall at Tabuk, close to the Jordan-Saudi Arabia border, two human silhouettes dating to the late Neolithic period show the same cord, awl, and double-bladed dagger as the Ha'il stele. In Riqseh, in southern Jordan, a broken stele has been found with a similar awl and dagger. While in Southern Arabia stelae are considerably smaller than in the north (some reach only 40 centimeters high), examples from Rawk in Yemen display the same characteristic lack of detail as the Ha'il stele. This evidence of stylistic influence, coupled with the presence of exogenous materials (materials that originated elsewhere), confirm that during the Neolithic period objects were circulated and exchanged across wide swathes of territory.

What is just as interesting as this common visual repertoire is the shared anthropomorphism: each stele represents an upright male figure carved in stone—remarkable, for it is figural representation in a land thought for so long to have none. Indeed, for many, the history of the Arabian Peninsula began with the rise of Islam in the seventh century C.E. when artistic expression was focused on the written word and human form was largely absent. But what the Ha'il stele reveals—what the full corpus of anthropomorphic stelae show us—is the existence of a pre-Islamic Arabia in which the human figure dominates.

Arabia: an open peninsula at the crossroads of trade

Archaeology is a relatively new field of study on the Arabian Peninsula: surprisingly, it is only within the last forty years or so that scientists have been able to shed light on Saudi Arabia's early material culture to recognize a historical and cultural past largely ignored and previously believed to hold no importance at all.

Before Arabia traded in incense, before Islam (when Muslims traveled in pilgrimage to Mecca), during the Neolithic period early caravan trails expanded into an intra-regional network that eventually spread externally into contact between Eastern Arabia and Mesopotamia. It was this early contact that positioned the Peninsula, in the Bronze Age and through Antiquity, as the center of an active and interconnected Ancient World—a commercial and cultural crossroads bridging East and West—linking trade and pilgrimage routes that reached from India and China, to the Mediterranean and Egypt, Yemen and East Africa to Syria, Iran and Mesopotamia.

Interpreting the Ha'il stele

Despite apparent visual similarities it would be a serious error to assume that the meanings and symbols of each stele were everywhere the same—each region, village, and tribe is believed to differ in custom and to have developed strong local traditions. To avoid the risk of assigning generalized meanings to distinct anthropomorphic stelae excavated across the Arabian Peninsula, scholars have increasingly focused on local culture in their analysis of material history. In other words, they have looked beyond what appears to be a common style to conduct a fine-grained analysis of each stone's unique context of local social and ritual practices. With this in mind, how are we to interpret the Ha'il stele, one of the Arabian Peninsula's earliest known artifacts?

Archaeologists believe that the Ha'il stele was probably associated with religious or burial practices, and was likely used as a grave marker in an open-air sanctuary. While we do not know who produced the stele (just imagine a specialist stone carver working among mobile pastoral herders), we continue to be intrigued by the quality of the carving and its minimalist, yet expressive, representation of the human figure.

Postscript: the global phenomenon of the stele

While carved or inscribed stone stelae were used primarily as grave markers, they were also used for dedication, commemoration, and demarcation. Stele is the term used most often in the Mediterranean World, yet similar objects called by other names and dating to most periods have been found throughout the world including the Ancient Near East, Ancient Egypt, Greece and Rome, China, Islamic lands, and Pre-Columbian Mesoamerica and South America.

7. Jade Cong, Liangzhu culture

A CONVERSATION

Dr. Steven Zucker and Dr. Beth Harris

This is the transcript of a conversation conducted at the British Museum.



Jade Cong, c. 3300-2200 B.C.E., Liangzhu culture, Neolithic period, China (British Museum) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/fATZoS>

Steven: Where does history begin?

Beth: Well, history begins with writing. That's how we use the term "Prehistoric," before writing.

Steven: But of course we're not satisfied with only knowing literate cultures. We want to push back further and understand the cultures that are preliterate. But in order to invent writing, you have to have a society, you have to have some stability. We find that at the end of the Neolithic period.

Beth: The Neolithic period begins around 10,000 B.C.E., when we have human beings who can settle down because they've figured out how to domesticate animals, they figured out how to farm, how to raise crops—and that brings some stability. They don't have to live a hunter-gatherer existence anymore.

Steven: This is known as the Neolithic Revolution.

Beth: And it really was a revolution. It completely changed human beings' way of relating to nature. We could, for the first time, control nature to some degree.

Steven: This takes place after the end of the last ice age and it may have to do with the environment becoming more hospitable. We see this Neolithic Revolution in areas all over the world that were disassociated from each other.

Beth: Sometime around the year 3000 B.C.E., many of those cultures also developed writing.

Steven: Writing is seen as one of the hallmarks of civilization, and we see the development of what we recognize as civilization—that is, early cities, farming techniques, writing—developing in the great river valleys around the world. Most famously, in Egypt (Nile), in Mesopotamia (Tigris and Euphrates), in the Indus Valley, and in China (Huang He and Yangzi).

Beth: There are several areas in China that had sophisticated Neolithic culture. One in particular is called Liangzhu. This culture developed around what is today Shanghai and Yangzi River.

Steven: Right at the delta of the Yangzi River.

Beth: Just like Egypt developed right around the delta of the Nile, and ancient Mesopotamia developed between the Tigris and Euphrates River. It made sense: these were places where you could irrigate crops.



China Galleries, with Jade Cong, c. 2500 B.C.E., Liangzhu culture, Neolithic period, China (British Museum) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/fAU3pQ>

Steven: In fact, the Liangzhu people seem to have become expert rice growers, and were able to create a surplus, which allowed them not to worry about eating, not to worry about feeding themselves. It allowed at least certain elements of society to begin to develop in more sophisticated ways.

Beth: Liangzhu culture was especially known for producing beautiful jade objects, specifically something that we call cong: square, hollow tubes that are decorated with lines and sometimes with circles that represent faces. Some of them are short and some of them seem to be stacks that are quite tall. We're looking, actually, at several examples here at the British Museum.



Jade Bi, c. 2500 B.C.E., Liangzhu culture, Neolithic period, China (British Museum) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/fAU3Sq>

Steven: These were found in graves. Sometimes there were many cong in graves. There were also objects called bi. These are round disks, also with holes in the center. We have no idea what any of this means. This is a culture where we have found no traces of writing. It's possible that they were preliterate or it's possible that they wrote on a material that didn't survive, but the result is, all of the ideas that surround these objects are theories.

Beth: Because they clearly represent faces—whether they're monster faces or animal faces or human faces—these clearly meant something.

Steven: And there's a great degree of regularity and specificity. Now this jade is true jade, or nephrite, and it is extremely hard. This culture did not have tools that were harder than this nephrite. That is, they couldn't carve it.

Beth: You can't incise into it. You can't take a knife and cut into it. It's just too hard.

Steven: You can't even really scratch it. So when you look at these objects that are so precise, it's almost impossible to imagine that they were produced by rubbing sand.

Beth: Some of the lines are very, very fine and run parallel to each other. It's important to think about the care with which these objects are made.

Steven: They are clearly symbols. There's a uniformity, there's an intentionality, there's a clarity, and there is tremendous effort. Though we don't speak this language, we recognize it as the product of a human mind.

Beth: A human mind that was trying to say something about power, perhaps; about our relationship to nature; about the spiritual world; about what happens after death…the kinds of questions that human beings ask all the time still. Their verticality, the repetition of these parallel lines—it's hard not to think about these in relationship to issues of power.

Steven: Some scholars have suggested that the rectilinear quality of the cong is a symbol for Earth. That the round interior is a symbol of the heavens, of the sky, of the sun. These are symbols that develop later in China, and it's very seductive to link this Neolithic culture with later Bronze Age cultures.

Beth: To read that definition back into time is definitely tempting.

Steven: It is possible that this is the origin of those symbols, but we can't really know.

Watch the video <https://www.youtube.com/watch?time_continue=302&v=ld8kHvz1yN4>.

8. Stonehenge, Salisbury Plain, England

Dr. Senta German



Stonehenge, Salisbury Plain, Wiltshire, England, c. 2550-1600 B.C.E., circle 97 feet in diameter, trilithons: 24 feet high (photo: Noah Zucker, CC BY-NC-SA 2.0)

Stonehenge, on Salisbury plain in England, is one of the most recognizable monuments of the Neolithic world and one of the most popular, with over one million visitors a year. People come to see Stonehenge because it is so impossibly big and so impossibly old; some are searching for a connection with a prehistoric past; some come to witness the workings of a massive astrological observatory. The people living in the fourth millennium B.C.E. who began work on Stonehenge were contemporary with the first dynasties of Ancient Egypt, and their efforts predate the building of the Pyramids. What they created has endured millennia and still intrigues us today.

Phase one

In fact, what we see today is the result of at least three phases of construction, although there is still a lot of controversy among archaeologists about exactly how and when these phases occurred. It is generally agreed that the first phase of construction at Stonehenge occurred around 3100 B.C.E., when a great circular ditch about six feet deep was dug with a bank of dirt within it about 360 feet in diameter, with a large entrance to the northeast and a smaller one to the south. This circular ditch and bank together is called a henge. Within the henge were dug 56 pits, each slightly more than three feet in diameter, called Aubrey holes, after John Aubrey, the seventeenth-century English archaeologist who first found them. These holes, it is thought, were either originally filled with upright bluestones or upright wooden beams. If it was bluestones which filled the Aubrey holes, it involved quite a bit of effort as each weighed between 2 and 4 tons and were mined from the Preseli Hills, about 250 miles away in Wales.



Aerial view, 2014, Stonehenge, Salisbury Plain, Wiltshire, England, c. 2550-1600 B.C.E., circle 97 feet in diameter, trilithons: 24 feet high (photo: timeyres <https://www.flickr.com/photos/timeyres/14425050602>, CC BY-SA 2.0)

Phase two

The second phase of work at Stonehenge occurred approximately 100-200 years later and involved the setting up of upright wooden posts (possibly of a roofed structure) in the center of the henge, as well as more upright posts near the northeast and southern entrances. Surprisingly, it is also during this second phase at Stonehenge that it was used for burial. At least 25 of the Aubrey holes were emptied and reused to hold cremation burials and another 30 cremation burial pits were dug into the ditch of the henge and in the eastern portion within the henge enclosure.

Phase three

The third phase of construction at Stonehenge happened approximately 400-500 years later and likely lasted a long time. In

this phase the remaining blue stones or wooden beams which had been placed in the Aubrey holes were pulled and a circle 108 feet in diameter of 30 huge and very hard sarsen stones were erected within the henge; these were quarried from nearby Marlborough Downs. These upright sarsen stones were capped with 30 lintel stones.



Interior of the sarsen circle and bluestones in the foreground, Stonehenge, Salisbury Plain, Wiltshire, England, c. 2550-1600 B.C.E., circle 97 feet in diameter, trilithons 24 feet high (photo: Stonehenge Stone Circle, CC BY 2.0) <https://flic.kr/p/e9osu3>

Each standing stone was around 13 feet high, almost seven feet wide and weighed around 25 tons. This ring of stones enclosed five sarsen trilithons (a trilithon is a pair of upright stones with a lintel stone spanning their tops) set up in a horseshoe shape 45 feet across. These huge stones, ten uprights and five lintels, weigh up to 50 tons each.

Bluestones, either reinstalled or freshly quarried, were erected in a circle, half in the outer sarsen circle and half within the sarsen horseshoe. At the end of the phase there is some rearrangement of the bluestones as well as the construction of a long processional avenue, consisting of parallel banks with exterior ditches approximately 34 meters across, leading from the northeast entrance to Stonehenge, dipping to the south and eventually to the banks of the Avon river.

Questions

All three phases of the construction of Stonehenge pose fascinating questions. The first phase of work required precise planning and a massive amount of labor. Who planned the henge and who organized whom to work together in its construction? Unfortunately, remains of Neolithic villages, which would provide information about who built Stonehenge, are few, possibly because so many lie underneath later Bronze Age, Roman, Medieval and modern cities. The few villages that have been explored show simple farming hamlets with very little evidence of widely differing social status. If there were leaders or a social class who convinced or forced people to work together to build the first phase of Stonehenge, we haven't found them. It also probably means the first phase of Stonehenge's construction was an egalitarian endeavor, highly unusual for the ancient world.

Who were the people buried at Stonehenge during its second phase? Recent analysis of these bones has revealed that nearly all the burials were of adult males, aged 25-40 years, in good health and with little sign of hard labor or disease. No doubt, to be interred at Stonehenge was a mark of elite status and these remains may well be those of some of the first political leaders of Great Britain, an island with a ruling tradition extending all the way to the House of Windsor. They also show us that in this era, some means of social distinction must have been desirable.

Conclusions

The work achieved in the long third phase of Stonehenge's construction, however, is the one which is most remarkable and enduring. Like the first phase of Stonehenge, except on a much larger scale, the third phase involved tremendous planning and organization of labor. But, it also entailed an entirely new level of technical sophistication, specifically in the working of very hard stone. For instance, the horizontal lintel stones which topped the exterior ring of sarsen stones were fitted to them using a tongue and groove joint and then fitted to each other using a mortise and tenon joint, methods used in modern woodworking.

Each of the upright sarsens were dressed differently on each side, with the inward facing side more smoothly finished than the outer. Moreover, the stones of the outer ring of sarsens were subtly modified to accommodate the way the human eye observes the massive stones against the bright shades of the Salisbury plain: upright stones were gently widened toward the top which makes their mass constant when viewed from the ground.

The lintel stones also curve slightly to echo the circular outer henge. The stones in the horseshoe of trilithons are arranged by size; the smallest pair of trilithons are around 20 feet tall, the next pair a little higher and the largest, single trilithon in the south west corner would have been 24 feet tall. This effect creates a kind of pull inward to the monument, and dramatizes the outward Northeast facing of the horseshoe. Although there are many theories, it is still not known how or why these subtle refinements were made to Stonehenge, but their existence is sure proof of a sophisticated society with organized leadership and a lot of free time.

A solar and lunar calendar?

Of course the most famous aspect of Stonehenge is its relationship with the solar and lunar calendar. This idea was first proposed by scholars in the eighteenth century, who noted that the sunrise of the midsummer solstice is exactly framed by the end of the horseshoe of trilithons at the interior of the monument, and exactly opposite that point, at the center of the bend of the horseshoe, at the midwinter sunset, the sun is also aligned. These dates, the longest and shortest days of the year, are the turning point of the two great seasonal episodes of the annual calendar. Since this discovery, several other theories about astrological observation have been offered but few stand up to scrutiny together with the physical details of the monument.



Stonehenge, Salisbury Plain, Wiltshire, England, c. 2550-1600 B.C.E., circle 97 feet in diameter, trilithons: 24 feet high (photo: Stonehenge Stone Circle, CC BY-SA 2.0) <https://flic.kr/p/e9okjh>

9. Ambum Stone, Papua New Guinea

Dr. Jane Horan



Ambum Stone, c. 1500 B.C.E., greywacke, 20 x 7.5 x 14 cm, Ambum Valley, Enga Province, Papua New Guinea (Australia National Gallery, Canberra)

The *Ambum Stone* is a masterfully crafted stone carving, created around 3,500 years ago in the highlands of the island we now know as New Guinea. Who actually carved it and for what original purpose is not known. Nevertheless, the *Ambum Stone* had a life as a religious object for a group of people in Papua New Guinea before becoming an aesthetically beautiful and intriguing artifact of exotica in a Western gallery. More recently it suffered a mishap that left it broken, and the publicity around this thrust the *Ambum Stone* into ongoing political debates about who owns historical artifacts. Every chapter of this carving's history has been entangled with personal and political intrigue, and chronicles a bigger story about colonization and shifting and evolving structures of power.



Map, © Google

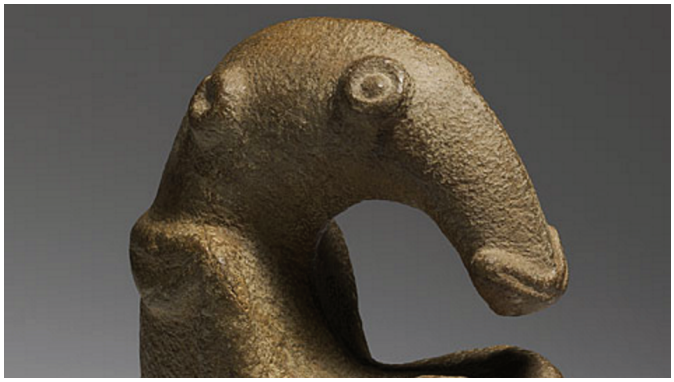
An ancient pestle

There are 12 recorded artifacts like the *Ambum Stone*: ancient stone mortar and pestles (a mortar is a bowl and a pestle is an object used to grind against the sides of the mortar; mortars and pestles are commonly made of hard material such as stone and are often used to prepare food) excavated from New Guinea, usually from the mountains of its interior. The smoothly curved neck and head of the *Ambum Stone* suggest its possible utility as a pestle when we consider its size—at about 8 inches high, the "neck" of the creature it depicts can be held in the hand, and its fat base could have been used to pound food and other materials. The tops of other ancient pestles from New Guinea are distinguished by human or bird heads, or by fully sculpted birds, while the mortars also include geometric imagery alongside avian (bird) and anthropomorphic (human) depictions.

The *Ambum Stone* is prized above all others not only for its age—it is one of the oldest of all sculptures made in Oceania—but also for its highly detailed sculptural qualities. It has a pleasing shape and smooth surface, and the slightly shiny patina on some of its raised details suggest it has been well handled. It was made from greywacke stone, and its finished shape may suggest the original shape the stone it was carved from. Greywacke is a very hard sedimentary stone, which often has fracture lines and veins that reveal its age and formation. Much greywacke has been subjected to significant amounts of tectonic movement, pressure and heat over extended periods, and some of the greywacke in the islands of the Pacific is more than 300 million years old. Imagine carving something as

symmetrical and aesthetically pleasing as the *Ambum Stone* using only stone tools. It must have taken its maker many months to chip out the rough shape then finish it carefully, and the time and effort involved in its making suggests it was special and valued by whomever it was made for.

Carved in the form of some kind of animal, its features are rounded and include a freestanding neck, elegantly curved head and long nose, and upper limbs that hug its torso and appear to enclose a cupped space above its belly. Stylized eyes, ears and nostrils are depicted in relief, and shoulder blades and what could be an umbilicus suggest the maker's understanding of anatomy. While it is possibly a fetal-form of a spiny anteater known as an echidna, which is thought to have been valued for its fat prior to the introduction of pigs, it might also be a bird or a fruit bat, and some have speculated that it represents a now extinct mega-sized marsupial.



Ambum Stone (detail), c. 1500 B.C.E., greywacke, 20 x 7.5 x 14 cm, Ambum Valley, Enga Province, Papua New Guinea (Australia National Gallery, Canberra)

Ritual use in Papua New Guinea

When the *Ambum Stone* first became known to Westerners in the 1960s, it was being used by a group of people called the Enga who live in the western highlands of Papua New Guinea. For the Enga, the *Ambum Stone* and other objects like it are called *simting bilong tumbuna* which literally translates as the "bones of the ancestors" (Egloff 2008:1). This is the Enga term for a class of cult objects which were used as powerful ritual mechanisms where ancestors reside. While the ritual object is not actually an ancestor per se, paradoxically, such sacred objects are believed to have a life of their own, and they can even move around, mate, and reproduce. It would seem—for the *Ambum Stone* at least—they can also go on adventures and create controversy.

Enga society is based on an organizational power structure known as the "big man" system, and the negotiation of power depends on commanding natural resources like pigs and produce, as well as supernatural forces like the goodwill of the ancestors (or the Christian God). Power is vested with those "big men" who can cajole, organize, or even manipulate other people into giving them resources so these can be redistributed at big ritual events. Before the Enga decided to convert to Christianity in the wake of the arrival of missionaries and colonization in the 1930s, the *Ambum Stone* and other objects like it were imbued with supernatural powers through ritual processes. They were buried in a group's ancestral land and regular sacrifices of pigs were needed to appease the stones and the ancestors that resided in them. With the appropriate care they could ward off danger and promote the fertility and vigor of the tribe and the land.

Christianity, colonization, and commoditization

When Christian missionaries arrived in Papua New Guinea, people largely embraced the new religion, the new system of power that came with colonization, and the consequent Australian administration. The big man system was maintained but the way of managing the supernatural took on a Christian guise. Objects like the *Ambum Stone* lost some of their former potency, but under the "Whiteman's gaze" they acquired new parameters of value as "primitive art" and were therefore worth money.

The *Ambum Stone* came to distil exoticism, imbued with all the romance perceived by Westerners in the stark differences of Papua New Guinean ways of seeing the world, and evoking a primitivism and purity lost to the West. This exoticism was enhanced by its specific dimensions and proportions that meet a certain aesthetic ideal from a Western point of view. All of this, its "primitive" and aesthetic value drove its pathway through a murky set of transactions, culminating in its acquisition by the Australian National Gallery in 1977, where it is valued as a priceless antiquity.



Ambum Stone (detail), c. 1500 B.C.E., greywacke, 20 x 7.5 x 14 cm, Ambum Valley, Enga Province, Papua New Guinea (Australia National Gallery, Canberra)

Originally sold by two young boys (at the urging of resident missionaries) for 20 shillings to the European owner of the trade store in Wabag (Enga Province), it was then sold by an intermediary to Philip Goldman, a London art dealer. Goldman subsequently offered it to the British Museum, before selling the sculpture to the Australian National Gallery in Canberra, Australia. In his negotiations with the Museum and by way of justifying his asking price, Goldman compared the *Ambum Stone* to Jackson Pollock's *Blue Poles (1952)* which the gallery had purchased a few years earlier: basing the "primitive" *Ambum Stone*'s value on that of a work of modern art (in 1973 the Gallery is reported to have paid 1.3 million dollars for the painting *Blue Poles)*. Eventually, the Australian National Gallery agreed to pay Goldman $115,000 United States dollars for the stone.

Protecting the cultural heritage of Papua New Guinea

The Papua New Guinea Museum attempted to buy the *Ambum Stone* when it was offered to the Australian Museum, but was unsuccessful. Papua New Guinea became an independent state in 1975, and robust legislation and other legal structures have been in place since 1913 that prohibit the export of objects of antiquity and relevance to Papua New Guinea as a unique place in the world. The country has not been able to afford to make purchases on the international antiquities

market because prices are too high for a developing nation. Further, Papua New Guinea has not had the capacity to enforce its legislation internationally until recently. Whether the *Ambum Stone* was legally exported from Papua New Guinea remains a point of contention.



Australian National Gallery, Canberra (photo: Nick-D <https://commons.wiki media.org/wiki/File:National_Gallery_of_Australia_October_2012.JPG>, CC BY-SA 3.0)

Many objects of New Guinea's historical material culture were shipped to foreign museums and galleries for "safe keeping." Other desirable or even potentially valuable objects were smuggled out illegally. In 1977, the legal standing of the Papua New Guinea state to reclaim objects of national significance was bolstered by the opening of the Papua New Guinea National Museum and Art Gallery, complete with state of the art storage and exhibition facilities. It was staffed first by Europeans who in turn trained Papua New Guinea nationals in museum management who were politically and philosophically intent on having antiquities returned to Papua New Guinea. Over the years the Papua New Guinea Museum and Art Gallery has perfected its systems of export control and its capacity to enact legal proceedings against that intent on taking antiquities out of the country. They have also been able to successfully negotiate the return of objects and whole collections that were sequestered away for safe keeping elsewhere in the world. Nevertheless, there are limits to their ability to enforce the return of objects such as the *Ambum Stone*.

Damage and restoration

In 2000, while on loan to a French art museum, the *Ambum Stone* was accidentally dropped and shattered into three main pieces and various shards of stone. It was later discovered by conservators, as they pieced it back together, that what had previously been thought to be old breaks, mended while in Papua New Guinea, were actually fracture lines of the greywacke stone. Fissures and grooves containing organic material were examined and were used to suggest its date of 1500 B.C.E. The *Ambum Stone* was carefully repaired, but other damage had been done. News of the incident made it into international media, which in turn generated the discussion about what the *Ambum Stone*—a registered antiquity belonging to Papua New Guinea—was doing in the possession of an Australian gallery in the first place. Whilst the *Ambum Stone* remains in Canberra, arguably the controversy over this artifact has meant that Papua New Guinea's capacity to negotiate at the global level has been bolstered.

At the heart of the recent chapters of the story of the *Ambum Stone* is a narrative about colonialism and its legacy. The *Ambum Stone* was made and imbued with particular meanings and values by a group of what we now know as Papua New Guineans, and then relocated to a Western museum where it has been reinterpreted within a framework of aesthetics and exchange, where we continue to marvel at it—and exoticize it—because of its origins, and the mysteries we perceive in the pages of its story, remain closed to us.

10. Female figurine from Tlatilco

Dr. Rex Koontz



Double-faced female figurine, early formative period, Tlatilco, c. 1500–1200 B.C.E., ceramic with traces of pigment, 9.5 cm. high (Princeton University Art Museum)

We don't know what the people here called themselves. Tlatilco, meaning "place of hidden things," is a Nahuatl word, given to this "culture" later. Around 2000 B.C.E., maize, squash and other crops were domesticated, which allowed people to settle in villages. The settlement of Tlatilco was located close to a lake, and fishing and the hunting of birds became important food sources.

Archaeologists have found more than 340 burials at Tlatilco, with many more destroyed in the first half of the twentieth century.

Intimate and lively

Tlatilco figurines are wonderful small ceramic figures, often of women, found in Central Mexico. This is the region of the later and much better-known Aztec empire, but the people of Tlatilco flourished 2,000-3,000 years before the Aztec came to power in this Valley. Although Tlatilco was already settled by the Early Preclassic period (c. 1800-1200 B.C.E.), most scholars believe that the many figurines date from the Middle Preclassic period, or about 1200-400 B.C.E. Their intimate, lively poses and elaborate hairstyles are indicative of the already sophisticated artistic tradition. This is remarkable given the early dates. Ceramic figures of any sort were widespread for only a few centuries before the appearance of Tlatilco figurines.

Appearance

The Tlatilco figurine at the Princeton University Art Museum has several traits that directly relate to many other Tlatilco female figures: the emphasis on the wide hips, the spherical upper thighs, and the pinched waist. Many Tlatilco figurines also show no interest in the hands or feet, as we see here. Artists treated hairstyles with great care and detail, however, suggesting that it was hair and its styling was important for the people of Tlatilco, as it was for many peoples of this region. This figurine not only shows an elaborate hairstyle, but shows it for two connected heads (on the single body). We have other two-headed female figures from Tlatilco, but they are rare when compared with the figures that show a single head. It is very difficult to know exactly why the artist depicted a bicephalic (two-headed) figure (as opposed to the normal single head), as we have no documents or other aids that would help us define the meaning. It may be that the people of Tlatilco were interested in expressing an idea of duality, as many scholars have argued.



Double-faced female figure figurine, early formative period, Tlatilco, 1500–1200 B.C.E., ceramic with traces of pigment, 9.5 cm. high (Princeton University Art Museum)

The makers of Tlatilco figurines lived in a large farming villages near the great inland lake in the center of the basin of Mexico. Modern Mexico City sits on top of the remains of the village, making archaeological work difficult. We don't know what the village would have looked beyond the basic shape of the common house—a mud and reed hut that was the favored house design of many early peoples of Mexico. We do know that most of the inhabitants made their living by growing maize (corn) and taking advantage of the rich lake resources nearby. Some of the motifs found on other Tlatilco ceramics, such as ducks and fish, would have come directly from their lakeside surroundings.



Reconstruction of a house, c. 1200 B.C.E., central Mexico



Shaman, Middle Preclassic (1200-600 B.C.E.), Tlatilco, 9.5 cm high (National Museum of Anthropology <http://www.mna.inah.gob.mx/coleccion/pieza-72/ficha-basica.html>, Mexico City)

Male figures are rare

Tlatilco artists rarely depicted males, but when they did the males were often wearing costumes and even masks. Masks were very rare on female figures; most female figures stress hairstyle and/or body paint. Thus the male figures seem to be valued more for their ritual roles as priests or other religious specialists, while the religious role of the females is less clear but was very likely present.

How they were found

In the first half of the twentieth century, a great number of graves were found by brick-makers mining clay in the area. These brick-makers would often sell the objects—many of them figurines—that came out of these graves to interested collectors. Later archaeologists were able to dig a number of complete burials, and they too found a wealth of objects buried with the dead. The objects that were found in largest quantities—and that enchanted many collectors and scholars of ancient Mexico—were the ceramic figurines.



Tlatilco figurine of a woman with a dog, Tlatilco, c. 1200–600 B.C.E., ceramic (National Museum of Anthropology, Mexico City) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://www.flickr.com/photos/profzucker/16628577908/in/photostream/>

Craftsmanship

Unlike some later Mexican figurines, those of Tlatilco were made exclusively by hand, without relying on molds. It is important to think, then, about the consistent mastery shown by the artists of many of these figurines. The main forms were created through pinching the clay and then shaping it by hand, while some of the details were created by a sharp instrument cutting linear motifs onto the wet clay. The forms of the body were depicted in a specific proportion that, while non-naturalistic, was striking and effective. The artist was given a very small space (most figures are less than 15 cm high) in which to create elaborate hairstyles.

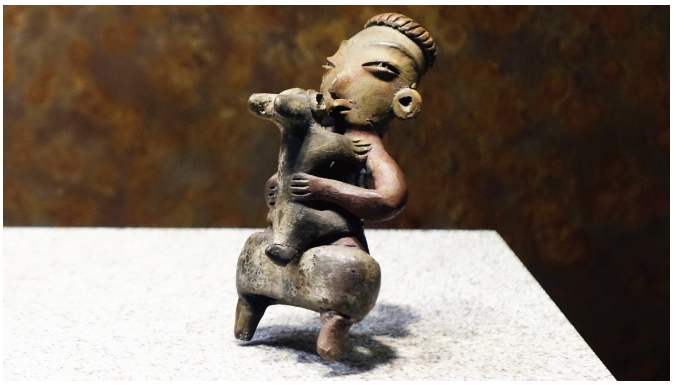
Even for today's viewer, the details in this area are endlessly fascinating. The pieces have a nice finish, and the paint that must indicate body decoration was firmly applied (when it is preserved, as in the two-headed figure above). Many scholars doubt that there were already full-time artists in such farming villages, but it is certain that the skills necessary to function as an artist in the tradition were passed down and mastered over generations.

10 a. Tlatilco Figurines — an extraordinary variety

A CONVERSATION

Dr. Steven Zucker and Dr. Lauren Kilroy-Ewbank

This is the transcript of a conversation conducted in the National Museum of Anthropology, Mexico City.



Tlatilco figure kissing dog, c.1200-900 B.C.E., ceramic with traces of pigment, Tlatilco, Mesoamerica (present-day Mexico) (National Museum of Anthropology, Mexico City) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rkqJqE>

Steven: We're in the National Museum of Anthropology in Mexico City, and we're looking at some of the most extraordinary little clay figurines that were from a village in this area in the Valley of Mexico, about 3,000 years ago.

Lauren: The name of the town was Tlatilco, and it had hundreds of burials where you find these amazing figurines. (Tlatilco is a Nahuatl word, which means "place of hidden things." It was given to the "culture" later; we don't know what the people here called themselves.)

Steven: The figurines have extraordinary variety, but they give us an insight into what was important to people 3,000 years ago—that they made and then had themselves buried with.

Lauren: What we're seeing at Tlatilco is one of the earliest developments of a wide array of objects that display this very advanced visual expression. And so right now we're standing in front of a series of figurines of individuals with two faces or two heads.

Steven: The double-headed figures come in a whole variety. There's one at Princeton University that I'm particularly in love with because it has a bifurcated face with two noses, two mouths, but only three eyes.



Double-faced female figurine, early formative period, Tlatilco, c. 1200–900 B.C.E., ceramic with traces of pigment, 9.5 cm. high (Princeton University Art Museum)

Lauren: And it's a very representative type of Tlatilco female figurine, where you have the narrow waist, the broad hips, traces of paint on the face, on the incised hair.

Steven: Now this is clay, and it would have been incised with a sharp instrument to create, for instance, the lines of the hair, and pinched to created forms like the nose.



Double-faced female figure figurine, early formative period, Tlatilco, 1200–900 B.C.E., ceramic with traces of pigment, 9.5 cm. high (Princeton University Art Museum)

Lauren: You typically see red, yellow or black pigment, and then decorations where you had roller stamps, where you could roll designs over the various surfaces.

Steven: Some of the figures that we're seeing here don't actually have a combined double face, but have two heads.



Tlatilco two-headed figurine, c.1200-900 B.C.E., ceramic with traces of pigment, Tlatilco, Mesoamerica (present-day Mexico) (National Museum of Anthropology, Mexico City) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rBZ3zk>

Lauren: One of the figurines that we're looking at right now you have a single body, so only two legs, two arms, two breasts, but then two individual heads. And we see a variety of these here, that are relating to this idea of duality.

Steven: We really don't know what this means, because we don't have a written record to go with this. We've got the objects themselves.

Lauren: And this is a great example of where the visual archaeological record is one of the main ways in which we're able to know about this culture.

Steven: I'm really taken by this small, clay object that is a single, mask-like form, but is bifurcated, that is, divided right down the middle.



Mask of duality, c.1200-600 B.C.E., ceramic, 8.7 cm high, Tlatilco, Mesoamerica, present-day Mexico (National Museum of Anthropology, Mexico) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qEZmQY>

Lauren: On the left, you see the face alive, and on the right side, a skeletonized face—so basically, the de-fleshed, dead face.

Steven: So "duality" can have lots of different meanings. I think in the twenty-first century, when we use that term, we're often thinking about a kind of east Asian notion of duality, of the yin and the yang. But here in Mexico, what do we know about duality in later cultures, where we do have a better record?

Lauren: Well, if we're kind of making broad generalizations around this idea of duality. The idea of life and death paired together might relate to the cycle of life. It's through death that life is able to continue.

Steven: So we usually think about life and then death. And you're saying that people in Mesoamerica thought also about death and then life?

Lauren: Exactly, there is this concept that you see consistently about the cycle of life, and this idea of regeneration and rebirth.



Mask of duality (side view), c.1200-600 B.C.E., ceramic, 8.7 cm high, Tlatilco, Mesoamerica, present-day Mexico (National Museum of Anthropology, Mexico) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qFcNSc>

Steven: As I look at this mask—and it's too small to be worn, it would actually fit comfortably in the palm of my hand— the right side is terrifying. It is this skull with that wide open eye, and it's almost as if we see the grinning of the teeth. But on the left side, it's also unnerving because it is almost a kind of animal-like face. And the tongue is sticking out below the teeth.

Lauren: The lip has been pulled open as if it is this grimace, which to us reads as threatening or a little terrifying.



Mask of duality (left side), c.1200-600 B.C.E., ceramic, 8.7 cm high, Tlatilco, Mesoamerica, present-day Mexico (National Museum of Anthropology, Mexico) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rkpPfE>

Steven: And it's important to remember that this was found in a burial. We don't know if it was originally intended for a burial, but that's where it ended up.

Lauren: What we find in most in most of these Tlatilco figurines are scenes of daily life and very humorous or charming figurines.

Steven: There is that small infant in what looks to be a crib, a woman who seems to be kissing a small dog, and another that cradles the dog.



Child in Crib, c.1200-600 B.C.E., ceramic, 8.7 cm high, Tlatilco, Mesoamerica, present-day Mexico (National Museum of Anthropology, Mexico) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rBTtyg>

Lauren: These are some of my favorites. Here we see not only people in daily life but people engaged in types of activities that are truly more intimate, that you don't see as frequently throughout Mesoamerican art.

Steven: It's interesting, what you're saying, because there's so much that carries from the early cultures to the later cultures, but that's not true here.

Lauren: We know that in some ways Tlatilco is contemporary with Olmec civilization (c. 2500-200 C.E.), which is considered the mother culture of Mesoamerica. Tlatilco is not necessarily influencing—at least as far as we know right now—later cultures (such as the in the same way that, say, the Olmec are.

Steven: And then there are those amazing animal vessels. They're so plump and playful.



Animal vessel, c.1200-600 B.C.E., ceramic, Tlatilco, present-day Mexico (National Museum of Anthropology, Mexico) (photo: Gary Todd, by permission) <https://flic.kr/p/fU27Kx>

Lauren: So some of my favorite include the head of a fish, or a duck….

Steven: These were settled people.

Lauren: I mean at this point, they're living more sedentary lives here, say in the village of Tlatilco, and so they're able to create ceramics. What we are seeing here are animals and plants that people are using for food, as much as they are creating them to replicate, in ceramics, this amazing variety of the natural environment that they see before them.

Watch the video. <https://youtu.be/Q3DpCMAyWyw>



Animal vessel, c.1200-600 B.C.E., ceramic, Tlatilco, present-day Mexico (National Museum of Anthropology, Mexico) (photo: Gary Todd, by permission) <https://flic.kr/p/fU2aw4>

11. Terracotta fragments, Lapita people

Dr. Jane Horan

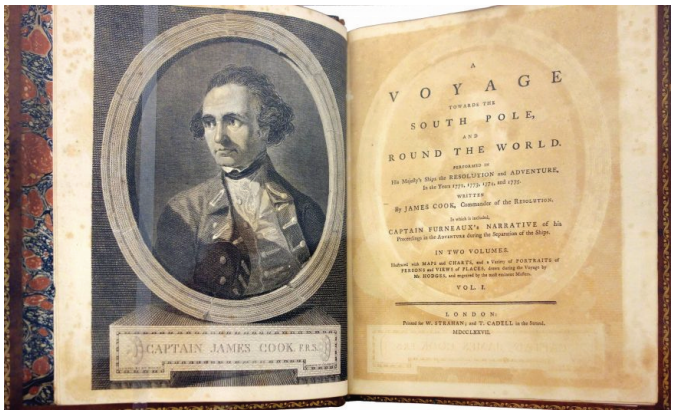


Terracotta fragments, Lapita people, c. 1000 B.C.E., red-slip earthenware, Santa Cruz Islands, south-east of Solomon Islands (Department of Anthropology, University of Auckland, CC BY-NC-ND 3.0)

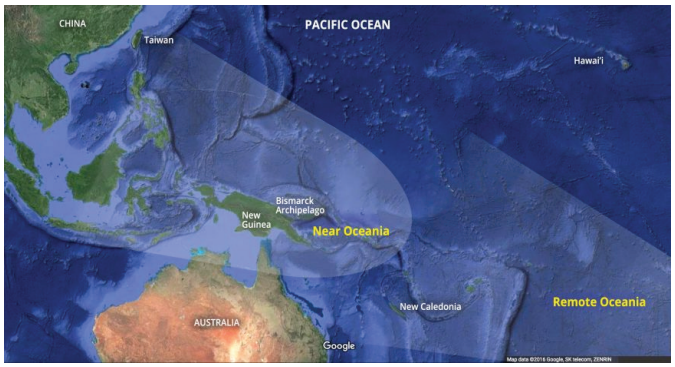
Archaeologists get very excited when they find pieces of Lapita pottery. Why? Because the sequential depositing of potsherds (fragments of pottery) in an easterly direction across the island groups of the Pacific has become the pivotal evidence that tells the extraordinary story of the peopling of the vast Pacific Ocean. Pieces of the distinctive red-slipped (slip is made up of tiny particles of clay suspended in water and can be colored with iron oxide or other minerals to decorate the surface of a pot) pottery of the Lapita people have been recovered from sites spanning thousands of miles across the Pacific from the outer reaches of Southeast Asia, through the island groups often referred to as Micronesia (the region of the western Pacific, which includes the Federated States of Micronesia, Guam, Kiribati, Mariana Islands, the Marshall Islands, Nauru, Palau, and Wake Island) and Melanesia (a region of the western Pacific that includes the islands and island groups of Fiji, New Guinea, the Solomon Islands, and Vanuatu), and into the central Pacific and Polynesia.

An archaeological puzzle

Though Pacific Islanders have their own richly detailed historical accounts of the exploration of their "sea of islands," European speculation about how and when the Pacific was populated began with James Cook and other European voyagers of the Enlightenment era (1700s).[1] Theories based on thin historical conjecture proliferated in the late eighteenth and nineteenth centuries, often at odds with Islanders' own knowledge systems. At first it was thought that the inhabitants of what is now known as Near Oceania colonized the islands southeast of the Solomon group, now referred to as Remote Oceania (see map below). It was not until archaeologists began to undertake stratigraphic archaeology in the Pacific from the 1950s onwards that this idea was debunked—mostly due to evidence provided by the multiple archaeological sites where Lapita pottery has been found (stratigraphic archaeology is the study of stratification, layers deposited one atop another over time).



Captain James Cook, A voyage towards the South Pole, and round the World. Performed in His Majesty's ships the Resolution and Adventure, in the years 1772, 1773, 1774, and 1775 (London: Printed for W. Strahan; and T. Cadell in the Strand. 1777) (photo: Daderot, CC0 1.0) <https://tinyurl.com/y5pggt55>



Map © Google

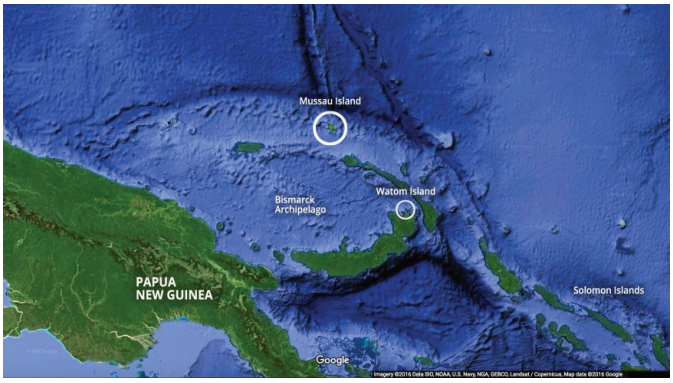
Archaeologists now believe that, somewhere between 4,000 and 3,500 years ago, a group of people who had sailed from the area around Taiwan in Southeast Asia arrived by canoe to the beaches of the Bismarck Archipelago. The new arrivals, who we now know as the Lapita people (named for the beach on the island of New Caledonia where a large number of pottery sherds were found), spoke a different language than the people they would have encountered there. These local people had been living on the large island now known as New Guinea and the surrounding islands for between 60,000 and 40,000 years.[2] Aside from their language and different genetic stock, the Lapita were different to those they encountered because they had sophisticated seafaring and navigation capability—and they manufactured and decorated ceramics in very particular ways. We can only theorize about the political and environmental pressures that drove these people to set out to sea in search of new places to live. Nevertheless, the pieces of broken but stylistically related potsherds distributed across thousands of miles of islands, laid down in datable stratigraphic layers, have revealed important information about the ancestors of the contemporary peoples of the central Pacific.



Terracotta fragments, Lapita people, red-slip earthenware, Watom Island, Bismarck Archipelago (photo: Merryjack, CC BY-NC-SA 2.0) <https://flic.kr/p/dwqGZq>

Travel and trade

Lapita pottery was shaped by hand, and perhaps using a paddle-and-anvil technique to thin the walls, but without the aid of a potter's wheel. It is low-fire earthenware (no evidence of Lapita kilns have been found). This means that the dry clay pots would likely have been placed in open fires to harden—the descendants of the Lapita people in Fiji and other areas still make pottery in this way. There is some geographical variation in the shapes and sizes of the pottery but most were simple bowls, some had pedestal feet, and others were flat-bottomed vessels. We know that the pottery was generally not used for cooking because carbon residues are not normally found on the potsherds. Rather, the evidence suggests that much of the pottery was used for serving food, while larger vessels were likely used for storage.



Map, © Google

The makers of the Lapita pottery blended clay with a particular type of sand. The sand was needed as a temper (temper, often sand, or other added materials, reduces the elasticity of the clay—how much it shrinks—and helps to avoid cracking during the firing process) to make the vessels more durable during firing. Both the clay and sand are only found in certain areas of the Pacific. The islands in Remote Oceania are far less diverse in terms of geology than those in Near Oceania, and only a limited number of island locations had deposits of the clay used to make the pottery.

Analysis of the composition of the sherds has revealed valuable information about where the raw materials came from. The archaeologist Terry Hunt has analyzed a large number of potsherds found by the archaeologist Patrick Kirch at Talepakemalai and other Mussau Lapita sites (see map above). The Mussau islands, which are mostly limestone, are one of the island groups with very little clay. Hunt showed that a large number of the potsherds found there had been made from materials brought from other places, indicating that either the raw materials or perhaps the pots themselves had been imported. This reveals that the Lapita people had the means and the need to travel and trade across significant ocean stretches—their "sea of islands." Perhaps, the most remarkable thing about the Lapita pottery sherds is that despite the remaining sherds being found thousands of miles apart, they share a formal and discernible design grammar that archaeologists can analyze. In fact, it is the decoration of Lapita pottery that holds the greatest amount of information for archaeologists.

A design grammar

The decoration of the pottery consists of stamped and incised motifs that adhere to a very regular, structured, and repeated set of specific patterns. The motifs were applied to the surface of the vessel with a small dentate (tooth-like) stamp and/or drawn free-hand with a sharp edge of some sort. The pattern stamps used included both linear and curved shapes of various lengths, as well as round forms. Once a pot was decorated, a paste of white coral lime was applied to the pattern which had the effect of making the delicate patterning stand out against the reddish-brown clay. Types of patterns range from simple to complex geometric forms, and include anthropomorphic face designs (image, top of page) found on Talepakemalai in the Mussau island group (see map above). The anthropomorphic (human form) pattern was a characteristic of early Lapita pottery, and is not present on pottery found in the upper (and therefore newer) archaeological layers of sites further east in Polynesia.



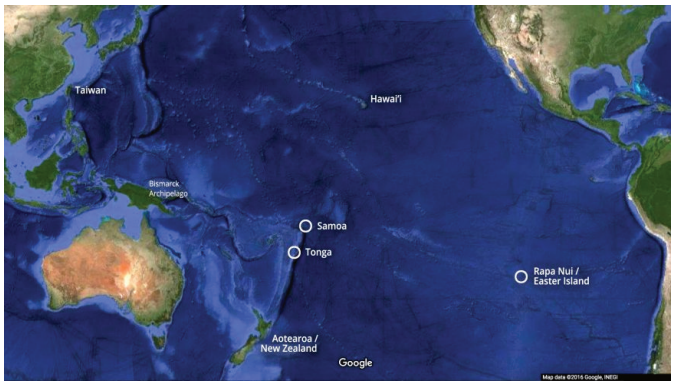
Terracotta fragments, n.d., Lapita people, red-slip earthenware (Department of Anthropology, University of Auckland, CC BY-NC-ND 3.0)

Archaeologists contend that those responsible for decorating the pots used a very restricted range of motifs and combined these in specific ways on particular areas of the pots. In other words, the ancient people who decorated the pots followed the rules of a defined design system. As Kirch notes "although we may never know what was in the minds of those potters and design-makers, we can understand in a more formal or structural sense their system of art and design, and use this as a tool for tracing the history of Lapita pottery in time and space."[3]



Painted Barkcloth (Masi kesa), late 19th–early 20th century, Lau Islands, Fiji, 85.1 x 419.1 cm (Metropolitan Museum of Art) "The repeating geometric motifs of many tapa cloths at times resemble those seen on pottery produced by the Lapita peoples, who were the ancestors of present-day Polynesians." <http://www.metmuseum.org/art/collection/search/310412>

A major breakthrough in the analysis of the Lapita design system came in the 1970s when Māori archaeologist Sydney Moko Mead developed a coherent formal system to categorize the design elements and motifs found on Lapita pottery. Mead's system drew inspiration from linguistic analysis and has a set of components that form the building blocks of the "grammar" of the Lapita design system. These include: design elements, motifs, zone markers, and design fields. Even though the design system changed incrementally through time and within specific geographical areas as people moved across the Pacific, the underlying structural patterns and rules of the system remained the same. From an analytical point of view, the systemized grammar of design has meant that potsherds found in one site can be categorized and compared with others found in multiple other sites to provide evidence of the movement of the Lapita people in particular timeframes. What's more, vestiges of the design motifs and the grammar of the system are apparent in contemporary tattooing, barkcloth decoration and other art forms throughout contemporary Remote Oceania (image, below left).



Map, © Google

An extraordinary story

As the Lapita people moved east past the Bismarck archipelago they likely reached the Samoan and Tongan Island groups around 800 B.C.E. They then paused for 1200 years when another phase of colonization began, and people headed toward the most distant reaches of the Polynesian triangle (this stretches from Hawaii in the north to Aotearoa (New Zealand) in the south, and Rapa Nui (Easter Island) in the east). People arrived in Hawai'i by c. 1000 C.E., and Rapa Nui/Easter Island and Aotearoa/New Zealand by about 1200 C.E. For the most part, the further east the Lapita people headed, the simpler their patterns became. The most recent potsherds, found in the most easterly and south westerly locales, are minimally decorated. It seems that within a couple of hundred years of arriving in what are now Samoa and Tonga (see map above), Lapita pottery and its distinctive design decoration had all but disappeared. When Europeans arrived in the Pacific in the 1700s and 1800s, the ocean going long-distance seafaring canoes were gone, but the knowledge of distant islands and oral histories of voyaging remained. Archaeologists are still actively working to untangle the history of this early pottery, and with each successive discovery, to add to the extraordinary story of the Lapita people.

[1] In his seminal essay "Our Sea of Islands" <https://scholarspace.manoa.hawaii.edu/bitstream/10125/12960/1/v6n1-148-161-dialogue.pdf>, Tongan scholar Epeli Hau'ofa asserted, "There is a gulf of difference between viewing the Pacific Islands as 'islands in a far sea" (as has been historically constructed by Europeans) to "a sea of islands." Whereas the former emphasizes remoteness, the latter reinstates the ocean as a connector between all the people and islands of the Pacific; an oceanic highway in a region rich in resources. Epeli Hau'ofa, "Our Sea of Islands," *A New Oceania: Rediscovering Our Sea of Islands* (Suva, Fiji: The University of the South Pacific, 1993), pp, 2-16.

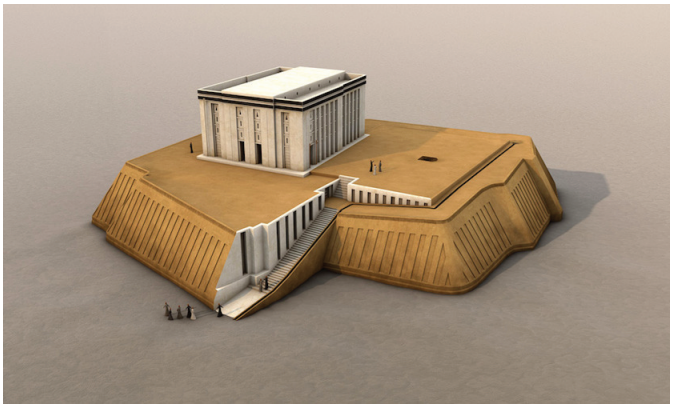
[2] Kirch 2010.

[3] Kirch 1997, p. 126.

Ancient Mediterranean

12. White Temple and its Ziggurat

Dr. Senta German



Digital reconstruction of the White Temple and ziggurat, Uruk (modern Warka), c. 3517-3358 B.C.E. © artefacts-berlin.de; scientific material: German Archaeological Institute

A gleaming temple built atop a mud-brick platform, it towered above the flat plain of Uruk.

Visible from a great distance

Uruk (modern Warka in Iraq)—where city life began more than five thousand years ago and where the first writing emerged—was clearly one of the most important places in southern Mesopotamia. Within Uruk, the greatest monument was the Anu Ziggurat on which the White Temple was built. Dating to the late 4th millennium B.C.E. (the Late Uruk Period, or Uruk III) and dedicated to the sky god Anu, this temple would have towered well above (approximately 40 feet) the flat plain of Uruk, and been visible from a great distance—even over the defensive walls of the city.

Ziggurats

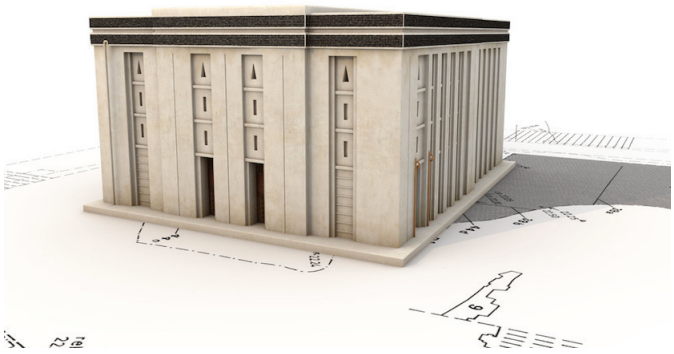
A ziggurat is a built raised platform with four sloping sides—like a chopped-off pyramid. Ziggurats are made of mud-bricks—the building material of choice in the Near East, as stone is rare. Ziggurats were not only a visual focal point of the city, they were a symbolic one, as well—they were at the heart of the theocratic political system (a theocracy is a type of government where a god is recognized as the ruler, and the state officials operate on the god's behalf). So, seeing the ziggurat towering above the city, one made a visual connection to the god or goddess honored there, but also recognized that deity's political authority.

Excavators of the White Temple estimate that it would have taken 1500 laborers working on average ten hours per day for about five years to build the last major revetment (stone facing) of its massive underlying terrace (the open areas surrounding the White Temple at the top of the ziggurat). Although religious belief may have inspired participation in such a project, no doubt some sort of force (*corvée* labor—unpaid labor coerced by the state/slavery) was involved as well.

The sides of the ziggurat were very broad and sloping but broken up by recessed stripes or bands from top to bottom (see digital reconstruction, above), which would have made a stunning pattern in morning or afternoon sunlight. The only way up to the top of the ziggurat was via a steep stairway that led to a ramp that wrapped around the north end of the Ziggurat and brought one to the temple entrance. The flat top of the ziggurat was coated with bitumen (asphalt—a tar or pitch-like material similar to what is used for road paving) and overlaid with brick, for a firm and waterproof foundation for the White temple. The temple gets its name for the fact that it was entirely white washed inside and out, which would have given it a dazzling brightness in strong sunlight.



Archaeological site at Uruk (modern Warka) in Iraq (photo: SAC Andy Holmes (RAF)/MOD, Open Government Licence v1.0) <https://commons.wikimedia.org/wiki/File:Uruk_Archaealogical_site_at_Warka,_Iraq_MOD_45156521.jpg>



Digital reconstruction of the two-story version of the White Temple, Uruk (modern Warka), c, 3517-3358 B.C.E. © artefacts-berlin.de; scientific material: German Archaeological Institute

The White Temple

The White temple was rectangular, measuring 17.5 x 22.3 meters and, at its corners, oriented to the cardinal points. It is a typical Uruk "high temple (*Hochtempel*)" type with a tri-partite plan: a long rectangular central hall with rooms on either side (plan). The White Temple had three entrances, none of which faced the ziggurat ramp directly. Visitors would have needed to walk around the temple, appreciating its bright façade and the powerful view, and likely gained access to the interior in a "bent axis" approach (where one would have to turn 90 degrees to face the altar), a typical arrangement for Ancient Near Eastern temples.



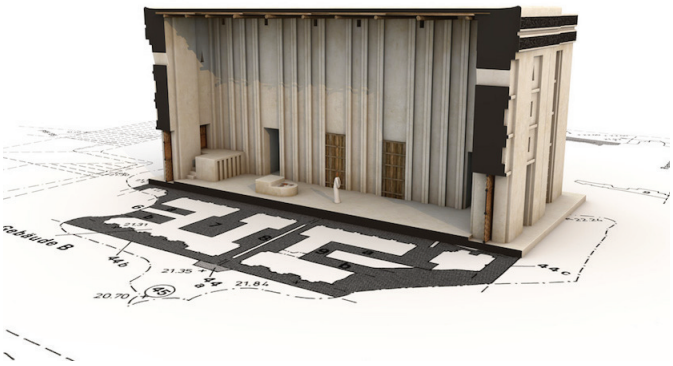
Interior view of the two-story version of the "White Temple," Digital reconstruction of the White Temple, Uruk (modern Warka), c, 3517-3358 B.C.E. © artefacts-berlin.de; scientific material: German Archaeological Institute

The north west and east corner chambers of the building contained staircases (unfinished in the case of the one at the north end). Chambers in the middle of the northeast room suite appear to have been equipped with wooden shelves in the walls and displayed cavities for setting in pivot stones which might imply a solid door was fitted in these spaces. The north end of the central hall had a podium accessible by means of a small staircase and an altar with a fire-stained surface. Very few objects were found inside the White Temple, although what has been found is very interesting. Archaeologists uncovered some 19 tablets of gypsum on the floor of the temple—all of which had cylinder seal impressions and reflected temple accounting. Also, archaeologists uncovered a foundation deposit of the bones of a leopard and a lion in the eastern corner of the Temple (foundation deposits, ritually buried objects and bones, are not uncommon in ancient architecture).



Remains of the Anu Ziggurat, Uruk (modern Warka), c. 3517-3358 B.C.E. (photo: Geoff Emberling, by permission) <https://www.flickr.com/photos/emberling/8609236153/in/photostream/>

To the north of the White Temple there was a broad flat terrace, at the center of which archaeologists found a huge pit with traces of fire (2.2 x 2.7m) and a loop cut from a massive boulder. Most interestingly, a system of shallow bitumen-coated conduits were discovered. These ran from the southeast and southwest of the terrace edges and entered the temple through the southeast and southwest doors. Archaeologists conjecture that liquids would have flowed from the terrace to collect in a pit in the center hall of the temple.



Section through the central hall of the "White Temple," digital reconstruction of the interior of the two-story version White Temple, Uruk (modern Warka), c. 3517-3358 B.C.E. © artefacts-berlin.de; scientific material: German Archaeological Institute

13. Palette of King Narmer

Dr. Amy Calvert



Palette of King Narmer, from Hierakonpolis, Egypt, Predynastic, c. 3000-2920 B.C.E., slate, 2′ 1″ high (Egyptian Museum, Cairo)

Vitally important, but difficult to interpret

Some artifacts are of such vital importance to our understanding of ancient cultures that they are truly unique and utterly irreplaceable. The gold mask of Tutankhamun was allowed to leave Egypt for display overseas; the *Narmer Palette*, on the other hand, is so valuable that it has never been permitted to leave the country.

Discovered among a group of sacred implements ritually buried in a deposit within an early temple of the falcon god Horus at the site of Hierakonpolis (the capital of Egypt during the pre-dynastic period), this large ceremonial object is one of the most important artifacts from the dawn of Egyptian civilization. The beautifully carved palette, 63.5 cm (more than 2 feet) in height and made of smooth grayish-green siltstone, is decorated on both faces with detailed low relief. These scenes show a king, identified by name as Narmer, and a series

of ambiguous scenes that have been difficult to interpret and have resulted in a number of theories regarding their meaning.

The high quality of the workmanship, its original function as a ritual object dedicated to a god, and the complexity of the imagery clearly indicate that this was a significant object, but a satisfactory interpretation of the scenes has been elusive.

What was the palette used for?

The object itself is a monumental version of a type of daily use item commonly found in the Predynastic period—palettes were generally flat, minimally decorated stone objects used for grinding and mixing minerals for cosmetics. Dark eyeliner was an essential aspect of life in the sun-drenched region; like the dark streaks placed under the eyes of modern athletes, black cosmetic around the eyes served to reduce glare. Basic cosmetic palettes were among the typical grave goods found during this early era.

In addition to these simple, purely functional, palettes however, there were also a number of larger, far more elaborate palettes created in this period. These objects still served the function of being a ground for grinding and mixing cosmetics, but they were also carefully carved with relief sculpture. Many of the earlier palettes display animals —some real, some fantastic—while later examples, like the Narmer palette, focus on human actions. Research suggests that these decorated palettes were used in temple ceremonies, perhaps to grind or mix makeup to be ritually applied to the image of the god. Later temple ritual included elaborate daily ceremonies involving the anointing and dressing of divine images; these palettes likely indicate an early incarnation of this process.

A ceremonial object, ritually buried

The *Palette of Narmer* was discovered in 1898 by James Quibell and Frederick Green. It was found with a collection of other objects that had been used for ceremonial purposes and then ritually buried within the temple at Hierakonpolis.

Temple caches of this type are not uncommon. There was a great deal of focus on ritual and votive objects (offerings to the God) in temples. Every ruler, elite individual, and anyone else who could afford it, donated items to the temple to show their piety and increase their connection to the deity. After a period of time, the temple would be full of these objects and space would need to be cleared for new votive donations. However, since they had been dedicated to a temple and sanctified, the old items that needed to be cleared out could not simply be thrown away or sold. Instead, the general practice was to bury them in a pit under the temple floor. Often, these caches include objects from a range of dates and a mix of types, from royal statuary to furniture.

The "Main Deposit" at Hierakonpolis, where the Narmer Palette was discovered, contained many hundreds of objects, including a number of large relief-covered ceremonial mace-heads, ivory statuettes, carved knife handles, figurines of scorpions and other animals, stone vessels, and a second elaborately decorated palette (now in the Ashmolean Museum at Oxford) known as the *Two Dogs Palette*.

Conventions that remain the same for thousands of years

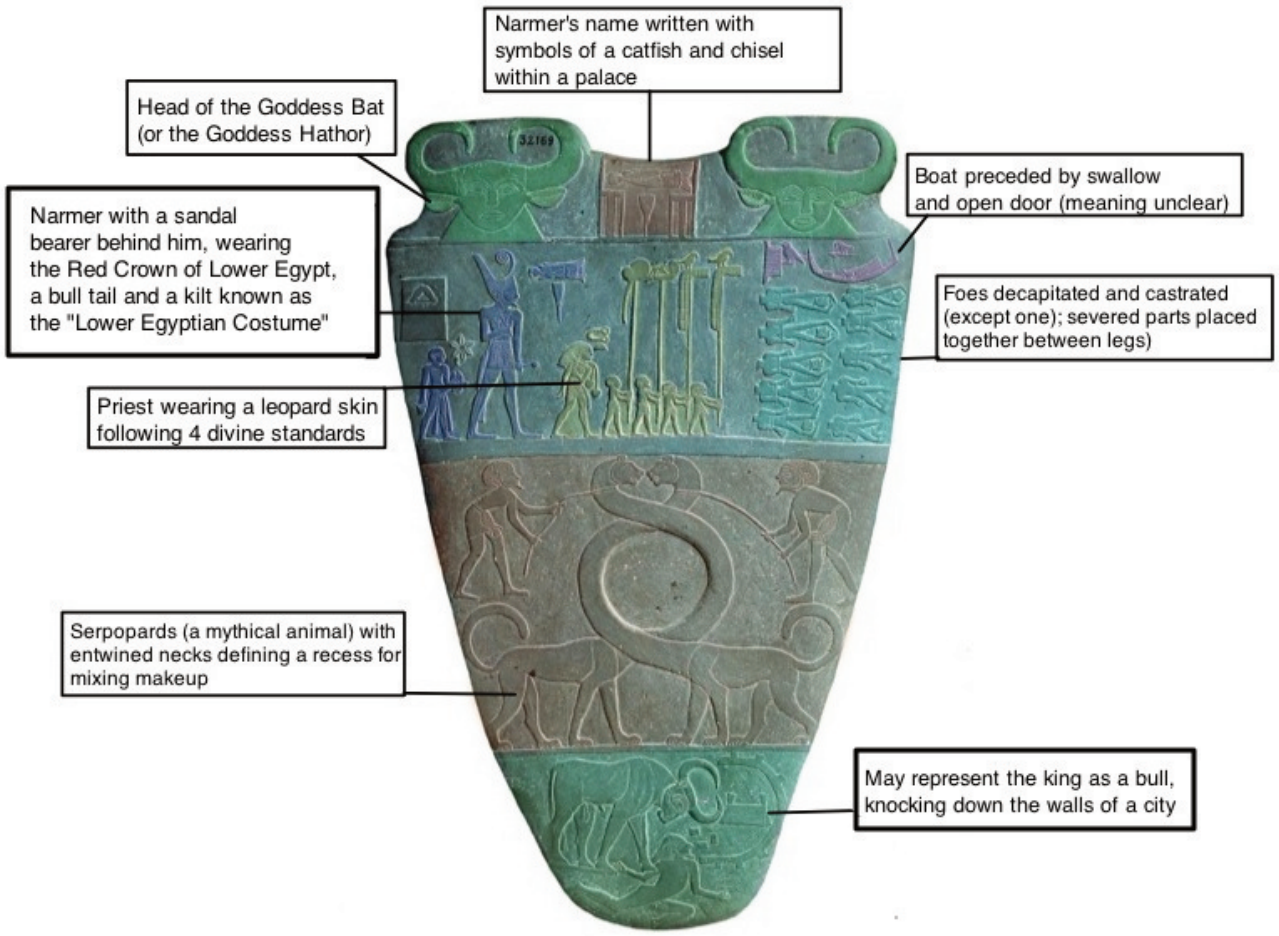
There are several reasons the *Narmer Palette* is considered to be of such importance. First, it is one of very few such palettes discovered in a controlled excavation. Second, there are a number of formal and iconographic characteristics appearing on the Narmer palette that remain conventional in Egyptian two-dimensional art for the following three millennia. These include the way the figures are represented, the scenes being organized in regular horizontal zones known as registers, and the use of hierarchical scale to indicate relative importance of the individuals. In addition, much of the regalia worn by the king, such as the crowns, kilts, royal beard, and bull tail, as well as other visual elements, such as the pose Narmer takes on one of the faces where he grasps an enemy by the hair and prepares to smash his skull with a mace, continue to be utilized from this time all the way through the Roman era.



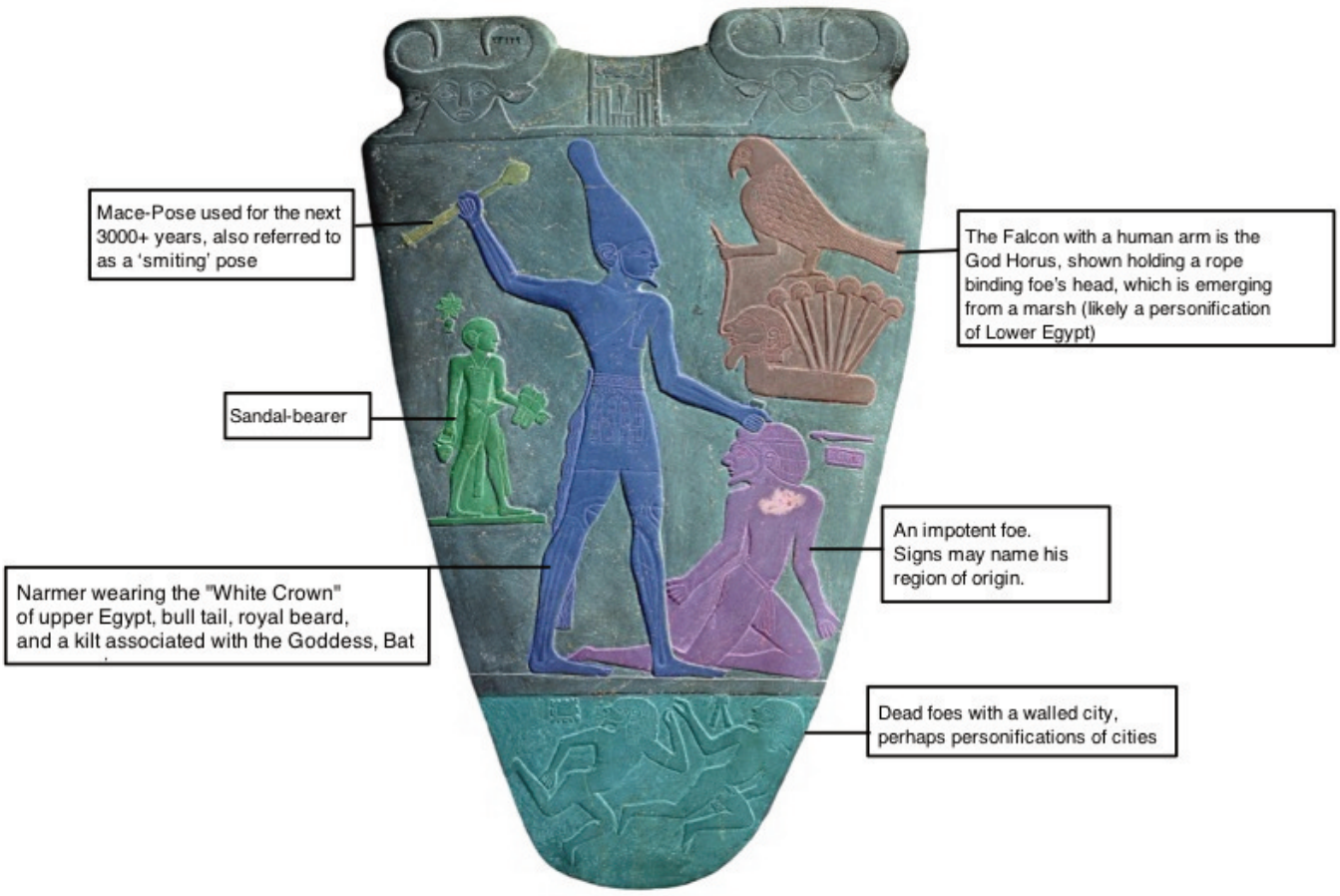
Two Dogs Palette, Hierakonpolis, Egypt c.3100 B.C.E. (Ashmolean Museum, University of Oxford)

What we see on the palette

The king is represented twice in human form, once on each face, followed by his sandal-bearer. He may also be represented as a powerful bull, destroying a walled city with his massive horns, in a mode that again becomes conventional—pharaoh is regularly referred to as “Strong Bull.”



In addition to the primary scenes, the palette includes a pair of fantastic creatures, known as serpopards—leopards with long, snaky necks—who are collared and controlled by a pair of attendants. Their necks entwine and define the recess where the makeup preparation took place. The lowest register on both sides include images of dead foes, while both uppermost registers display hybrid human-bull heads and the name of the king. The frontal bull heads are likely connected to a sky goddess known as Bat and are related to heaven and the horizon. The name of the king, written hieroglyphically as a catfish and a chisel, is contained within a squared element that represents a palace facade.



Possible interpretation: unification of Upper and Lower Egypt

As mentioned above, there have been a number of theories related to the scenes carved on this palette. Some have interpreted the battle scenes as a historical narrative record of the initial unification of Egypt under one ruler, supported by the general timing (as this is the period of the unification) and the fact that Narmer sports the crown connected to Upper Egypt on one face of the palette and the crown of Lower Egypt on the other—this is the first preserved example where both crowns are used by the same ruler. Other theories suggest that, rather than an actual historical representation, these scenes were purely ceremonial and related to the concept of unification in general.



Detail, Palette of King Narmer, from Hierakonpolis, Egypt, Predynastic, c. 3000-2920 B.C.E., slate, 2′ 1″ high (Egyptian Museum, Cairo)

Another interpretation: the sun and the king

More recent research on the decorative program has connected the imagery to the careful balance of order and chaos (known as ma'at and isfet) that was a fundamental element of the Egyptian idea of the cosmos. It may also be related to the daily journey of the sun god that becomes a central aspect in the Egyptian religion in the subsequent centuries.

The scene, showing Narmer wearing the Lower Egyptian Red Crown* (with its distinctive curl), depicts him processing towards the decapitated bodies of his foes. The two rows of prone bodies are placed below an image of a high-prowed boat preparing to pass through an open gate. This may be an early reference to the journey of the sun god in his boat. In later texts, the Red Crown is connected with bloody battles fought by the sun god just before the rosy-fingered dawn on his daily journey and this scene may well be related to this. It is interesting to note that the foes are shown as not only executed, but rendered completely impotent—their castrated penises have been placed atop their severed heads.



Detail, Palette of King Narmer, from Hierakonpolis, Egypt, Predynastic, c. 3000-2920 B.C.E., slate, 2′ 1″ high (Egyptian Museum, Cairo)

On the other face, Narmer wears the Upper Egyptian White Crown* (which looks rather like a bowling pin) as he grasps an inert foe by the hair and prepares to crush his skull. The White Crown is related to the dazzling brilliance of the full midday sun at its zenith as well as the luminous nocturnal light of the stars and moon. By wearing both crowns, Narmer may not only be ceremonially expressing his dominance over the unified Egypt, but also the early importance of the solar cycle and the king's role in this daily process.

This fascinating object is an incredible example of early Egyptian art. The imagery preserved on this palette provides a peek ahead to the richness of both the visual aspects and religious concepts that develop in the ensuing periods. It is a vitally important artifact of extreme significance for our understanding of the development of Egyptian culture on multiple levels.

*The Red Crown of Lower Egypt and the White Crown of Upper Egypt were the earliest crowns worn by the king and are closely connected with the unification of the country that sparks full-blown Egyptian civilization. The earliest representation of them worn by the same ruler is on the *Narmer Palette*, signifying that the king was ruling over both areas of the country. Soon after the unification, the fifth ruler of the First Dynasty is shown wearing the two crowns simultaneously, combined into one. This crown, often referred to as the Double Crown, remains a primary crown worn by pharaoh throughout Egyptian history. The separate Red and White crowns, however, continue to be worn as well and retain their geographic connections. There are a number of Egyptian words used for these crowns (nine for the White and 11 for the Red), but the most common—deshret and hedjet—refer to the colors red and white, respectively. It is from these identifying terms that we take their modern name. Early texts make it clear that these crowns were believed to be imbued with divine power and were personified as goddesses.

14. Standing Male Worshipper

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the Metropolitan Museum of Art, New York City.



Standing male worshipper, 2750–2600 B.C.E., Early Dynastic period II (Sumerian), Excavated at Tell Asmar (ancient Eshnunna), Iraq, alabaster (gypsum), shell, black limestone; 11-5/8 inches (29.5 cm) high (The Metropolitan Museum of Art) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pmbNCG>

Steven: Almost 5,000 years ago somebody carefully buried a small group of alabaster figures in the floor of a temple.

Beth: And we're looking at one of those figures now. The Metropolitan Museum of Art calls this a standing male worshipper. He was buried along with 11 other figures for a total of 12, most of them male.

Steven: We're looking at one of the smaller figures. They range from just under a foot to almost three feet.

Beth: The temple where these were buried was in a city called Eshnunna in the northern part of ancient Mesopotamia.

Steven: What is now called Tell Asmar. The figures from Tell Asmar are widely considered to be the great expression of early dynastic Sumerian art. And we think the temple was dedicated to the god Abu.

Beth: At this time, the third millennium B.C.E., in this area around the Tigris and Euphrates Rivers, some of the earliest cities in the world emerged and writing emerged. This is a watershed in human history. The cities had administrative buildings, temples, palaces, many of which have been unearthed by archeologists.

Steven: This is the transitional period right after the Bronze Age, the tail end of the Neolithic, when civilizations are founded in the great river valleys around the world. And he's adorable.

Beth: He is adorable. His wide eyes and his sense of attentiveness are very appealing I think but of course, he wasn't meant to be looking at us. He was meant to be attentive to a statue, a sculpture of a god who was believed to be embodied in the sculpture.

Steven: In fact, we believe that the person for whom this was a kind of stand-in was also embodied in this figurine.

Beth: So an elite member of ancient Sumerian culture paid to have this sculpture made and placed before the god to be a kind of stand-in to perhaps continually offer prayers, to be continually attentive to the god.

Steven: His hands are clasped together, he stands erect, his shoulders are broad so there is a sense of frontality.

Beth: Even though he is carved on both sides he was meant to be seen from the front. Although that term "meant to be seen" is a funny one.

Steven: Well he was meant to be seen by a God. You can see that the hair is parted at the center of the scalp and comes down in wavelets or perhaps braids that spiral down and then frame the central beard which is quite formal and cascades down in a series of regular waves. His hands are clasped just below the beard. His shoulders are really broad, his upper arms very broad and then there's very fine incising at the bottom of his skirt.

Beth: But it's odd to me how cylindrical the bottom part of his body is and how flattened out the torso is.



Standing male worshipper (detail), Tell Asmar (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/p6HVDC>

Steven: If you look at the face carefully, you can see that the very large eyes are in fact inlaid shell and in the center, the pupils are black limestone. And you can also see that there is an incising of the eyebrows that might have originally been inlaid as well.

Beth: This is really different from Egyptian culture which emerges at the same time. In Egyptian culture, the sculptures primarily represent the pharaoh—the king—and indicate his divinity, but in the ancient Near East, we have these votive images of worshippers but not so much of the kings, at least during this early dynastic period. The figures at Tell Asmar that were unearthed are very similar. They're not meant to be portraits of a specific person but a symbol of that person.

Steven: But he does look very humble, his mouth is closed, his lips are sealed together and of course he is wonderfully attentive.

Beth: And the fact that his hands are clasped I think makes him seem more humble as well.

Steven: There are some interesting subtle choices that whoever carved this made. Look at the way that the skirt extends out and attaches itself to the forearms a bit wider than we would expect.

Beth: And the torso it's just this almost V-shape. There is a sense of geometric patterning here and not the naturalistic forms of the body.

Steven: If you look at the back of the figure you can see that there is a little cleft that's been carved in horizontally. And there's also what seems to be the indication perhaps of a tied belt that hangs down.

Beth: You understand I think the artist's decision not to make a naturalistic figure because a naturalistic figure before the god might give a sense of someone just visiting, just passing through but this idea of a static, symmetrical, frontal, wide-eyed figure gives a sense of timelessness of a figure that is forever offering prayers to the god.

Watch the video <https://youtu.be/DKMWS9qJ_1U>.



Standing male worshipper (back), Tell Asmar (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/p6HD78>

15. Seated Scribe from Saqqara

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



Seated Scribe, c. 2620-2500 B.C.E., c. 4th Dynasty, Old Kingdom, Egypt, painted limestone with rock crystal, magnesite, and copper/arsenic inlay for the eyes and wood for the nipples, found in Saqqara (Musée du Louvre, Paris) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/JLSev4>

This is the transcript of a conversation conducted at the Musée du Louvre, Paris.

Steven: We're in the Egyptian Collection in the Louvre, in Paris, and we're looking at the Seated Scribe. This goes back to the Old Kingdom.

Beth: So this is more than 4,000, almost 5,000 years old, and what draws people to this relatively small sculpture is how lifelike it is, given how old it is.

Steven: It's painted, which adds to its lifelike quality.

Beth: And that was not unusual for ancient Egyptian sculpture, although the amount of pigment and coloration that survives here is rather unique.

Steven: With a few exceptions, the sculpture is painted limestone. The exceptions are the nipples, which are wooden dowels, and the eyes.

Beth: The eyes are incredibly lifelike.



Seated Scribe (detail of face), Saqqara (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/LhURKC>

Steven: And that's because they're made of two different types of stone: crystal, which is polished on the front, and then an organic material is added to the back that functions both as an adhesive but also to color the iris. And there's also an indentation carved to represent the pupil. All of this comes together to create a sense of alertness, a sense of awareness, a sense of intelligence, that is quite present. It collapses the 4,500 years between when the sculpture was made and today.

Beth: He's not idealized the way that we would see a figure of a pharaoh—the Egyptians considered pharaohs to be gods and would never have represented the pharaoh in this relaxed, cross-legged position and with the rolls of fat that help make him more human.

Steven: He looks so relaxed, almost like he's just exhaled.

Beth: That's true, but there is also a real formality here. He's very frontal. He's meant to be seen- pretty much exclusively- from the front and there's almost a complete symmetry to his body.

Steven: The exception being his hands. His right would have originally held a brush or a pen and his left holds a rolled piece of papyrus that he's writing on, which is interesting because it suggests the momentary even though the Egyptians are so concerned with the eternal. You said a moment ago that he's intended to be seen from the front, but that raises an interesting question: Was this sculpture meant to be seen at all?

Beth: Well, he was found in a necropolis southwest of Cairo in a place called Saqqara, an important Old Kingdom necropolis, and we don't know his exact findspot, so we don't know as much about him as we would have if we did. But you're right, this is a funerary sculpture meant for a tomb.

Steven: We would know more about him if the base on which he sits was not cut. It probably would have originally included his name and his titles.

Beth: What's interesting is that the hieroglyph for "scribe" is quite pictographic and shows a writing instrument—a pen, a pot of water, and cakes of pigment. Scribes were very highly regarded in Egyptian culture. They were one of the very few people who could read and write. It's impossible to know how much of a portrait this is because we don't have this man in front of us, we don't know the degree to which this sculpture resembles him.



Seated Scribe (hands), Saqqara, (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/JLSenZ>

Steven: The sculpture's been carved with real delicacy. The fingers are long and elegant, the fingernails are carefully inscribed.

Beth: And he has very pronounced high cheekbones.

Steven: The only clothing he wears is a kilt, which has been painted white. His skin is a pretty rich red-brown, and the hair and the rims of his eyes are accentuated with black.

Beth: It is wonderful to have this sculpture reaching out to us from more than 4,000 years ago.

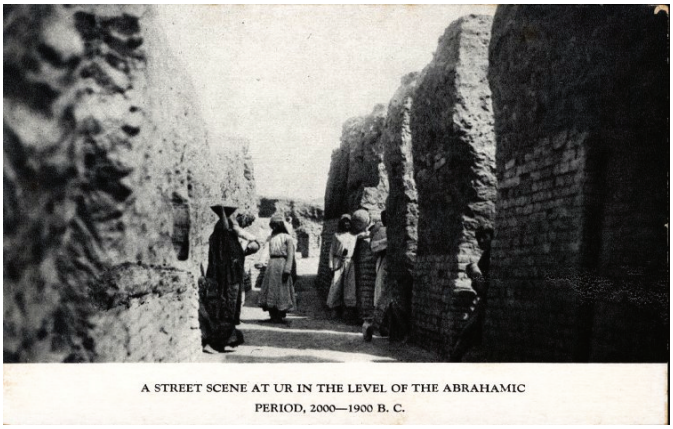
Watch the video. <https://youtu.be/IKkcop-dlUY>

16. Standard of Ur from the Royal Tombs at Ur

The British Museum

The city of Ur

Known today as Tell el-Muqayyar, the "Mound of Pitch," the site was occupied from around 5000 B.C.E. to 300 B.C.E. Although Ur is famous as the home of the Old Testament patriarch Abraham (Genesis 11:29-32), there is no actual proof that Tell el-Muqayyar was identical with "Ur of the Chaldees." In antiquity, the city was known as Urim.



Postcard; printed; photograph showing archaeological excavations at Ur, with Arab workmen standing for scale in the excavated street of an early second millennium BC residential quarter. © The Trustees of the British Museum Postcard; printed; photograph showing archaeological excavations at Ur, with Arab workmen standing for scale in the excavated street of an early second millennium B.C.E. residential quarter © Trustees of the British Museum

The main excavations at Ur were undertaken from 1922-34 by a joint expedition of The British Museum and the University Museum, Pennsylvania, led by Leonard Woolley. At the center of the settlement were mud brick temples dating back to the fourth millennium B.C.E. At the edge of the sacred area, a cemetery grew up which included burials known today as the Royal Graves. An area of ordinary people's houses was excavated in which a number of street corners have small shrines. But the largest surviving religious buildings, dedicated to the moon god Nanna, also include one of the best-preserved ziggurats and were founded in the period 2100-1800 B.C.E. For some of this time, Ur was the capital of an empire stretching across southern Mesopotamia. Rulers of the later Kassite and Neo-Babylonian empires continued to build and rebuild at Ur. Changes in both the flow of the River Euphrates (now some ten miles to the east) and trade routes led to the eventual abandonment of the site.

The royal graves of Ur

Close to temple buildings at the center of the city of Ur, sat a rubbish dump built up over centuries. Unable to use the area for building, the people of Ur started to bury their dead there. The cemetery was used between about 2600-2000 B.C.E. and hundreds of burials were made in pits. Many of these contained very rich materials.

In one area of the cemetery, a group of sixteen graves was dated to the mid-third millennium. These large, shaft graves were distinct from the surrounding burials and consisted of a tomb, made of stone, rubble, and bricks, built at the bottom of a pit. The layout of the tombs varied, some occupied the entire floor of the pit and had multiple chambers. The most complete tomb discovered belonged to a lady identified as Pu-abi from the name carved on a cylinder seal found with the burial.



Cylinder seal of Pu-abi, from Ur, c. 2600 B.C.E., lapis lazuli, 4.9 x 2.6 cm (The British Museum) Cylinder seal of Pu-abi, c. 2600 B.C.E., lapis lazuli, 4.9 x 2.6 cm, from Ur © Trustees of the British Museum

The majority of graves had been robbed in antiquity but where evidence survived the main burial was surrounded by many human bodies. One grave had up to seventy-four such sacrificial victims. It is evident that elaborate ceremonies took place as the pits were filled in that included more human burials and offerings of food and objects. The excavator, Leonard Woolley thought the graves belonged to kings and queens. Another suggestion is that they belonged to the high priestesses of Ur.

The *Standard of Ur*

This object was found in one of the largest graves in the Royal Cemetery at Ur, lying in the corner of a chamber above the right shoulder of a man. Its original function is not yet understood.



Peace (detail), The Standard of Ur, 2600-2400 B.C.E., shell, red limestone, lapis lazuli, and bitumen (original wood no longer exists), 21.59 x 49.53 x 12 cm, Ur © Trustees of the British Museum

Leonard Woolley, the excavator at Ur, imagined that it was carried on a pole as a standard, hence its common name. Another theory suggests that it formed the soundbox of a musical instrument. When found, the original wooden frame for the mosaic of shell, red limestone and lapis lazuli had decayed, and the two main panels had been crushed together by the weight of the soil. The bitumen acting as glue had disintegrated and the end panels were broken. As a result, the present restoration is only a best guess as to how it originally appeared.



War (detail), The Standard of Ur, 2600-2400 B.C.E., shell, red limestone, lapis lazuli, and bitumen (original wood no longer exists), 21.59 x 49.53 x 12 cm, Ur © Trustees of the British Museum

The main panels are known as "War" and "Peace." "War" shows one of the earliest representations of a Sumerian army. Chariots, each pulled by four donkeys, trample enemies; infantry with cloaks carry spears; enemy soldiers are killed with axes, others are paraded naked and presented to the king who holds a spear.

The "Peace" panel depicts animals, fish and other goods brought in procession to a banquet. Seated figures, wearing woolen fleeces or fringed skirts, drink to the accompaniment of a musician playing a lyre. Banquet scenes such as this are common on cylinder seals of the period, such as on the seal of the "Queen" Pu-abi, also in the British Museum (see image above).

Queen's Lyre

Leonard Woolley discovered several lyres in the graves in the Royal Cemetery at Ur. This was one of two that he found in the grave of "Queen" Pu-abi. Along with the lyre, which stood against the pit wall, were the bodies of ten women with fine jewelry, presumed to be sacrificial victims, and numerous stone and metal vessels. One woman lay right against the lyre and, according to Woolley, the bones of her hands were placed where the strings would have been.



Queen's Lyre (reconstruction), 2600 B.C.E., wooden parts, pegs and string are modern; lapis lazuli, shell and red limestone mosaic decoration, set in bitumen and the head (but not the horns) of the bull are ancient; the bull's head in front of the sound box is covered with gold; the eyes are lapis lazuli and shell and the hair and beard are lapis lazuli; the significance of the beard is not known; panel on front depicts lion-headed eagle between gazelles, bulls with plants on hills, a bull-man between leopards and a lion attacking a bull; edges of the sound-box decorated with inlay bands; eleven gold-headed pegs for the strings, 112.5 x 73 x 7 cm (body) © Trustees of the British Museum

The wooden parts of the lyre had decayed in the soil, but Woolley poured plaster of Paris into the depression left by the vanished wood and so preserved the decoration in place. The front panels are made of lapis lazuli, shell and red limestone originally set in bitumen. The gold mask of the bull decorating the front of the sounding box had been crushed and had to be restored. While the horns are modern, the beard, hair and eyes are original and made of lapis lazuli. This musical instrument was originally reconstructed as part of a unique "harp-lyre," together with a harp from the burial, now also in The British Museum. Later research showed that this was a mistake. A new reconstruction, based on excavation photographs, was made in 1971-72.

© Trustees of the British Museum

16. Standard of Ur from the Royal Tombs at Ur

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the British Museum, London.



Standard of Ur with viewers, c. 2600-2400 B.C.E., shell, limestone, lapis lazuli, and bitumen, 21.59 x 49.5 x 12 cm (British Museum) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/caenpj>

Steven: On the back of the US dollar bill there is an emblem of an eagle. In its talons you have arrows, of course, a symbol of war. But on the other side, you have an olive branch, a symbol of peace.

Beth: That's not so different than this object that we're looking at that's nearly 4,500 years old, an object known is the Standard of Ur, which comes from the city-state of Ur, which is now in present day Iraq…

Steven: …in Mesopotamia, really the birthplace of civilization, and Ur is one of the great early cities. The word "standard" is a little misleading because a standard is really a flag that's often brought into battle. And the original excavator of this hypothesized that perhaps this was on a pole originally and was brought into battle. But in truth, we have no idea.

Beth: So often, when we're in a museum, and we're talking about ancient objects, we're talking about objects that had been buried, but buried just because of the passage of time. And here, we're looking at objects that were *intentionally* buried. They were part of what seems to have been an elaborate burial ritual. These were excavated in the 1920s and the early 1930s by a man named Leonard Woolley, who discovered about 16 tombs that he called "royal tombs."

Steven: Again, we really don't know. But what we do know is that we see fabulously expensive objects.

Beth: And one of those valuable objects was the object we call today the Standard of Ur, which is small but quite beautiful and elaborately decorated.

Steven: Historians have thought that perhaps this is a sound box for a musical instrument. Others have thought it might have contained something important, perhaps even the currency that was used to pay for warfare. We simply don't know.

Beth: So that's one of the wonderful things about this object is that it tells us so much, and at the same time, it tells us so little.

Steven: So let's start off with just a simple description. So we have this object that is small enough so that it could easily be carried.

Beth: One long side seems to represent a scene of peace and prosperity.

Steven: It's divided into three registers, and it's framed with beautiful pieces of shell. Now, this is important because it really does show us the long distance trade that this culture was involved with. You've got blue lapis lazuli that came from mines in Afghanistan. You have a red stone that would come from India. And you've got the shells, which would have come from the gulf just to the south of what is now Iraq. And it reminds us that these first great cities were possible because agriculture had been successful. In the river valley between the Tigris and Euphrates, it was possible to grow a surplus of food that allowed for an organization of society where not everybody had to be in the field all the time. Once there was enough food, some people could devote their lives to being rulers, and some, to becoming artists or artisans.



Standard of Ur (side with peace), c. 2600-2400 B.C.E., shell, limestone, lapis lazuli, and bitumen, 21.59 x 49.5 x 12 cm (British Museum) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/caepSW>

Beth: And some to priests, right? You had a whole organization of society with different people performing different roles that was suddenly possible.

Steven: And you can see that organization represented in the three registers here. The most important, wealthiest, most powerful figures are towards the top. And then, we have the common laborers down at the bottom.

Beth: And it's really typical in ancient Near Eastern art, for us to see scenes divided into registers.

Steven: So let's start at the bottom and move up. I see a human figure bearing a heavy bag.

Beth: And that's really what we have along the entire bottom register, figures who seem to be bringing things to a destination. We see animals, figures carrying things across their shoulders or on their backs.

Steven: Just above that, you can see a number of people leading more clearly identifiable animals. You can see somebody herding along what looks like a sheep or a ram. You see a bull in front of that being led by two people. And then, perhaps goats, perhaps sheep, ahead of that, and another bull. These are people that might be bringing these animals to sacrifice. They might be bringing them as a kind of taxation. We really don't know. But people have hypothesized that this is showing a kind of collection, perhaps for the king, for the city. The register at the top clearly shows one figure that's more important than the rest. The king is larger, in fact so large that his head breaks into the pictorial frame.

Beth: And he also wears different clothing that helps to identify him.



Standard of Ur (detail of ruler, side with peace), c. 2600-2400 B.C.E., shell, limestone, lapis lazuli, and bitumen, 21.59 x 49.5 x 12 cm (British Museum) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/caeppS>

Steven: He's seated on a chair that is interesting because it's got three straight legs and one leg that seems to be the leg of an animal.

Beth: Some of the objects that we see here are objects that were also found in the burials. But I don't think they found a chair that resembles that. That would be fun to see.

Steven: One of the objects that has been found, however, are the cups that so many of the figures here are holding. And so clearly, these figures are joining the king in some libation. They're drinking—perhaps beer, perhaps wine. We're not sure.

Beth: There's some kind of celebration going on. Some festivity or perhaps a religious ceremony.



Standard of Ur (detail of drinking figures, side with peace), c. 2600-2400 B.C.E., shell, limestone, lapis lazuli, and bitumen, 21.59 x 49.5 x 12 cm (British Museum) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/caeoxu>

Steven: It's worth noting that even the secondary figures here, that is the figures who are seated but are not the king, are larger than the servants that surround them that are standing. And so even within the register, you have a hierarchy that shows the relative importance of three levels of society.

Beth: And then we have two figures at the far end, who seem to be entertaining the seated figures who were drinking. One is playing a harp and another figure on the far right, perhaps singing.

Steven: Let's go to the other side. It's a very different story.

Beth: So again, we have a scene divided into three registers. But here, we see terrible scenes of violence.

Steven: We see a rendering of what is pretty clearly warfare. There are four chariots that are pulled by what seem to be four male donkeys. On the back of each chariot seem to be a driver, as well as a warrior. The figure towards the rear, you'll notice, is holding either a spear or an ax. And then being trampled by the horses, perhaps felled by those weapons, are the enemy. If you look closely, you can see some extraordinary detail. Look at one of the men that has been felled under the horse, you can see his wounds. You can see blood flowing. And if you look closely you can notice the mechanism of the actual wheels of the chariots. There's a kind of specific engineering that's being rendered here.



Standard of Ur (side with war), c. 2600-2400 B.C.E., shell, limestone, lapis lazuli, and bitumen, 21.59 x 49.5 x 12 cm (British Museum) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/caemU9>

Beth: One of the most interesting things about the bottom panel is a kind of naturalism in the battle that seems to be taking place.

Steven: You seem to move from a walk to a kind of canter to a full gallop.

Beth: On the other hand, some elements are really symbolic, like the felled enemies that you were talking about before. I don't think we're meant to assume that there were actually just four people who died in this battle. That's the number we see. But clearly, that's symbolic of many more.

Steven: The middle register shows a line of soldiers readied for battle. They are in full garb. They're wearing helmets. And these helmets have, again, been found in the so-called royal tombs.



Standard of Ur (detail of chariot and soldiers, scene of war), c. 2600-2400 B.C.E., shell, limestone, lapis lazuli, and bitumen, 21.59 x 49.5 x 12 cm (British Museum, London) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/caesis>

Beth: What's wonderful about these soldiers is their regular placement. That gives you a real sense of an army that's sort of marching along.

Steven: You get a sense of order. You get a sense of structure. You get a sense of real discipline. But towards the middle of that register, you see the actual battle taking place. And you see these soldiers victorious, slaying their enemies. On the right side of that middle register, you see soldiers that are perhaps being captured.

Beth: And our eye in the top register goes immediately to the large figure at the center, which is obviously, once again, the king, his head, again, breaks the decorative border along the top, on the left, a chariot and soldiers and on the right, other soldiers or attendants bringing to the king prisoners of war. And we can tell that these are prisoners of war because they're naked. They've been stripped. And they're wounded and bleeding.

Steven: So there's the sense of their humiliation, their enslavement, and the great victory of the king. It's interesting to look closely at the stylistic conventions of the rendering of the figures. Just about everybody's seen in perfect profile. We see one eye. And that one eye is not so much looking forward as looking out.



Standard of Ur (detail of vanquished, side with war), c. 2600-2400 B.C.E., shell, limestone, lapis lazuli, and bitumen, 21.59 x 49.5 x 12 cm (British Museum, London) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/caesDy>

Beth: Right, it's sort of frontal, on the side of the face.

Steven: That's right. In a way that is familiar from Egyptian art, we see the shoulders squared with the picture plane. And we see feet pushing in one direction rather than being seen in perspective.

Beth: So we can use our visual detective work, but there's still so much that's a mystery.

Steven: What it does tell us, though, is that the way that we tell a story, the way that we tell one over time, the way that we organize our society, even now, in the twenty-first century, has a lot in common with the third millennium B.C.E.

Watch the video. <https://youtu.be/Nok4cBt0V6w>



Standard of Ur (detail of ruler, scene of war), c. 2600-2400 B.C.E., shell, limestone, lapis lazuli, and bitumen, 21.59 x 49.5 x 12 cm (British Museum, London) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/caemaj>

17. Great Pyramids of Giza

Dr. Amy Calvert



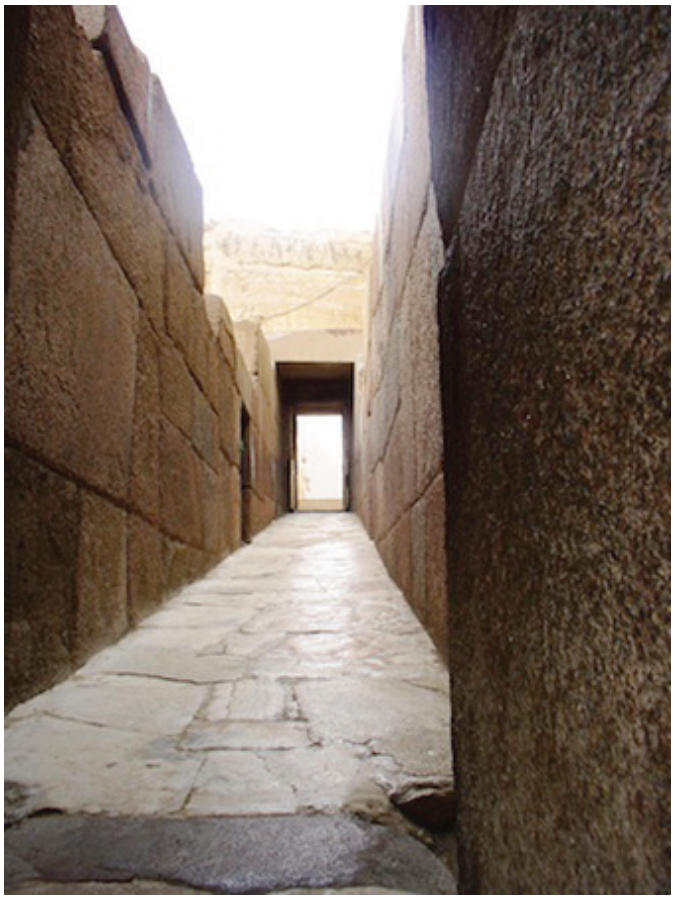
Pyramid of Khafre (Photo: Dr. Amy Calvert)

One of the Seven Wonders of the ancient world

The last remaining of the Seven Wonders of the ancient world, the great pyramids of Giza are perhaps the most famous and discussed structures in history. These massive monuments were unsurpassed in height for thousands of years after their construction and continue to amaze and enthrall us with their overwhelming mass and seemingly impossible perfection. Their exacting orientation and mind-boggling construction have elicited many theories about their origins, including unsupported suggestions that they had extra-terrestrial impetus. However, by examining the several hundred years prior to their emergence on the Giza plateau, it becomes clear that these incredible structures were the result of many experiments, some more successful than others, and represent an apogee in the development of the royal mortuary complex.

Three pyramids, three rulers

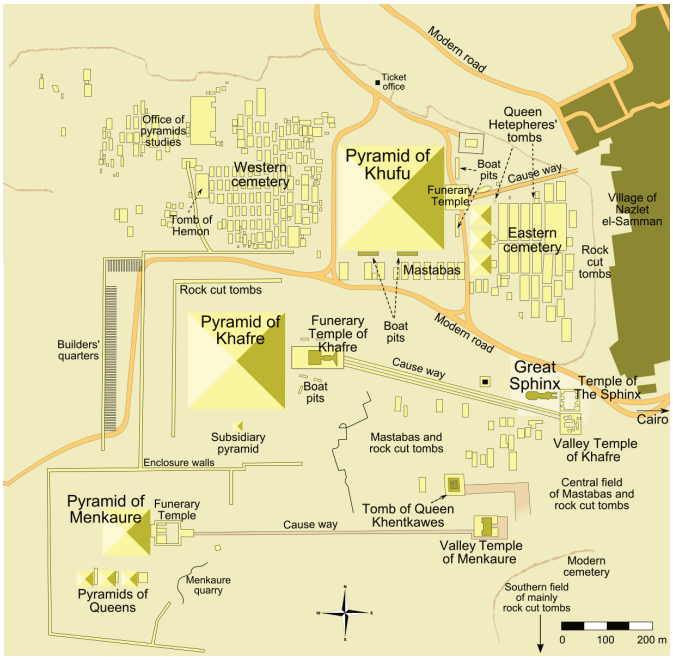
The three primary pyramids on the Giza plateau were built over the span of three generations by the rulers Khufu, Khafre, and Menkaure. Each pyramid was part of a royal mortuary complex that also included a temple at its base and a long stone causeway (some nearly 1 kilometer in length) leading east from the plateau to a valley temple on the edge of the floodplain.



View up the causeway from Khafre's valley temple towards his pyramid (Photo: Dr. Amy Calvert)

Other (smaller) pyramids, and small tombs

In addition to these major structures, several smaller pyramids belonging to queens are arranged as satellites. A major cemetery of smaller tombs, known as mastabas (Arabic for 'bench' in reference to their shape—flat-roofed, rectangular, with sloping sides), fills the area to the east and west of the pyramid of Khufu and were constructed in a grid-like pattern for prominent members of the court. Being buried near the pharaoh was a great honor and helped ensure a prized place in the afterlife.



Giza Pyramid Complex (graphic: MesserWoland, CC BY-SA 3.0) <https://en.wikipedia.org/wiki/File:Giza_pyramid_complex_(map).svg>

A reference to the sun

The shape of the pyramid was a solar reference, perhaps intended as a solidified version of the rays of the sun. Texts talk about the sun's rays as a ramp the pharaoh mounts to climb to the sky—the earliest pyramids, such as the Step Pyramid of Djoser at Saqqara—were actually designed as a staircase. The pyramid was also clearly connected to the sacred ben-ben stone, an icon of the primeval mound that was considered the place of initial creation. The pyramid was considered a place of regeneration for the deceased ruler.

Construction

Many questions remain about the construction of these massive monuments, and theories abound as to the actual methods used. The workforce needed to build these structures is also still much discussed. Discovery of a town for workers to the south of the plateau has offered some answers. It is likely that there was a permanent group of skilled craftsmen and builders who were supplemented by seasonal crews of approximately 2,000 conscripted peasants. These crews were divided into gangs of 200 men, with each group further divided into teams of 20. Experiments indicate that these groups of 20 men could haul the 2.5-ton blocks from quarry to pyramid in about 20 minutes, their path eased by a lubricated surface of wet silt. An estimated 340 stones could be moved daily from quarry to construction site, particularly when one considers that many of the blocks (such as those in the upper courses) were considerably smaller.



View up the side of Khufu's pyramid showing scale of the core blocks (Photo: Dr. Amy Calvert)

Backstory

We are used to seeing the pyramids at Giza in alluring photographs, where they appear as massive and remote monuments rising up from an open, barren desert. Visitors might be surprised to find, then, that there is a golf course and resort only a few hundred feet from the Great Pyramid, and that the burgeoning suburbs of Giza (part of the greater metropolitan area of Cairo) have expanded right up to the foot of the Sphinx. This urban encroachment and the problems that come with it—such as pollution, waste, illegal activities, and auto traffic—are now the biggest threats to these invaluable examples of global cultural heritage.

The pyramids were inscribed into the UNESCO World Heritage List in 1979, and since 1990, the organization has sponsored over a dozen missions to evaluate their status. It has supported the restoration of the Sphinx, as well as measures to curb the impact of tourism and manage the growth of the neighboring village. Still, threats to the site continue: air pollution from waste incineration contributes to the degradation of the stones <http://weekly.ahram.org.eg/News/16610.aspx>, and the massive illegal quarrying of sand on the neighboring plateau has created holes large enough to be seen on Google Earth. Egypt's 2011 uprisings and their chaotic political and economic aftermath also negatively impacted tourism, one of the country's most important industries, and the number of visitors is only now beginning to rise once more <https://www.reuters.com/article/us-egypt-tourism/egypt-has-high-hopes-for-tourism-despite-grim-statistics-setbacks-idUSKCN0X70BP>.

UNESCO has continually monitored these issues, but its biggest task with regard to Giza has been to advocate for the rerouting of a highway <http://whc.unesco.org/en/soc/1809> that was originally slated to cut through the desert between the pyramids and the necropolis of Saqqara to the south. The government eventually agreed to build the highway north of the pyramids. However, as the Cairo metropolitan area (the largest in Africa, with a population of over 20 million) continues to expand, planners are now proposing a multilane tunnel to be constructed underneath the Giza Plateau. UNESCO and ICOMOS are calling <http://whc.unesco.org/en/soc/3641> for in-depth studies of the project's potential impact, as well as an overall site management plan for the Giza pyramids that would include ways to halt the continued impact of illegal dumping and quarrying.

As massive as they are, the pyramids at Giza are not immutable. With the rapid growth of Cairo, they will need sufficient attention and protection if they are to remain intact as key touchstones of ancient history.

Backstory by Dr. Naraelle Hohensee

17. a. Pyramid of Khufu

Dr. Amy Calvert



Pyramid of Khufu, c. 2551-2528 B.C.E. (photo: Dr. Amy Calvert)

Size

The Great Pyramid, the largest of the three, was built by the pharaoh Khufu and rises to a height of 146 meters (481 feet) with a base length of more than 230 meters (750 feet) per side. The greatest difference in length among the four sides is a mere 4.4 cm (1 ¾ inches) and the base is level within 2.1 cm (less than an inch), an astonishing engineering accomplishment.

Construction: inner core stones, and outer casing stones

The pyramid contains an estimated 2,300,000 blocks, some of which are upwards of 50 tons. Like the pyramids built by his predecessor Snefru and those that followed on the Giza plateau, Khufu's pyramid is constructed of inner, roughly hewn, locally quarried core stones, which is all we see today, and angled, outer casing blocks laid in even horizontal courses with spaces filled with gypsum plaster.

The fine outer casing stones, which have long since been removed, were laid with great precision. These blocks of white Tura limestone would have given the pyramid a smooth surface and been quite bright and reflective. At the very top of the pyramid would have sat a capstone, known as a pyramidion, that may have been gilt. This dazzling point, shining in the intense sunlight, would have been visible for a great distance.



Detail of core blocks of Khufu's pyramid, c. 2551-2528 B.C.E. (photo: Dr. Amy Calvert)

Interior

The interior chambers and passageways of Khufu's pyramid are unique and include a number of enigmatic features. There is an unfinished subterranean chamber whose function is mysterious as

well as a number of so-called 'air shafts' that radiate out from the upper chambers.



Entrance, Pyramid of Khufu, c. 2551-2528 B.C.E. (photo: Olaf Tausch, <https://commons.wikimedia.org/wiki/File:Pyramid_of_Khufu_-_Entrance.jpg> CC BY 3.0)

These have recently been explored using small robots, but a series of blocking stones have obscured the passages. When entering the pyramid, one has to crawl up a cramped ascending chamber that opens suddenly into a stunning Grand Gallery. This corbelled passage soars to a height of 8.74 m (26 feet) and leads up to the King's Chamber, which is constructed entirely from red granite brought from the southern quarries at Aswan.

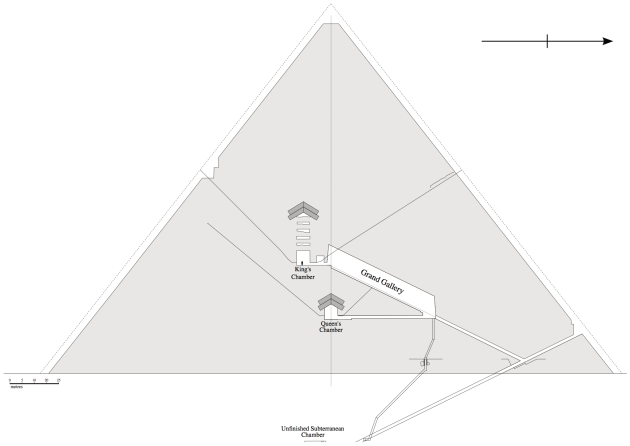


Diagram of the interior of the Pyramid of Khufu (graphic: Jeff Dahl, CC-BY-SA-4.0) <https://commons.wikimedia.org/wiki/File:Great_Pyramid_Diagram.svg>

Above the King's Chamber are five stress-relieving chambers of massive granite blocks topped with immense cantilevered blocks forming a pent roof to distribute the weight of the mountain of masonry above it. The king's sarcophagus, also carved from red granite, sits empty at the exact central axis of the pyramid. This burial chamber was sealed with a series of massive granite blocks and the entrance to the shaft filled with limestone in an effort to obscure the opening.

Boats for the afterlife

Khufu's mortuary complex also included seven large boat pits. Five of these are located to the east of the pyramid and were a sort of model; these brick-lined boat-shaped elements were probably intended for use in the afterlife to transport the king to stellar destinations. Boat burials and models of this type had a long history in royal mortuary contexts—a fleet of 14 such pits, containing actual boats averaging 18-19 meters (60 feet) in length encased inside, were discovered at a Dynasty 1 mortuary enclosure in Abydos, the cemetery of Egypt's earliest kings. Often, however, as with Khufu, the pits were simply boat-shaped models rather than containing actual boats.



Reconstructed funerary boat of Khufu (Photo: Dr. Amy Calvert)

In addition to these model boat pits, however, on the south side of the pyramid, Khufu had two massive, rectangular stone-lined pits that contained completely disassembled boats. One of these has been removed and reconstructed in a special museum on the south side of the pyramid. This cedar boat measures 43.3 meters (142 feet) in length and was constructed of 1,224 separate pieces stitched together with ropes. These boats appear to have been used for the funerary procession and as ritual objects connected to the last earthly voyage of the king and were then dismantled and interred.

17. b. Pyramid of Khafre and the Great Sphinx

Dr. Amy Calvert



Pyramid of Khafre, c. 2520-2494 (photo: Dr. Amy Calvert)

Size and appearance

The second great pyramid of Giza, that was built by Khufu's second son Khafre, has a section of an outer casing that still survives at the very top (and which would have entirely covered all three of the great pyramids at Giza). Although this monument appears larger than that of his father, it is actually slightly smaller but was constructed 10 m (33 feet) higher on the plateau.

Interior

The interior is much simpler than that of Khufu's pyramid, with a single burial chamber, one small subsidiary chamber, and two passageways. The mortuary temple at the pyramid base was more complex than that of Khufu and was filled with statuary of the king–over 52 life-size or larger images originally filled the structure.

Valley temple

Khafre's valley temple, located at the east end of the causeway leading from the pyramid base, is beautifully preserved. It was constructed of megalithic blocks sheathed with granite and floors of polished white calcite. Statue bases indicate that an additional 24 images of the pharaoh were originally located in this temple.



Pillars in Valley Temple of Khafre (photo: Dr. Amy Calvert)

The Great Sphinx

Right next to the causeway leading from Khafre's valley temple to the mortuary temple sits the first truly colossal sculpture in Egyptian history: the Great Sphinx. This close association indicates that this massive depiction of a recumbent lion with the head of a king was carved for Khafre.



The Great Sphinx (photo: Dr. Amy Calvert)

The Sphinx is carved from the bedrock of the Giza plateau, and it appears that the core blocks used to construct the king's valley temple were quarried from the layers of stone that run along the upper sides of this massive image.

Khafre

The lion was a royal symbol as well as being connected with the sun as a symbol of the horizon; the fusion of this powerful animal with the head of the pharaoh was an icon that survived and was often used throughout Egyptian history. The king's head is on a smaller scale than the body. This appears to have been due to a defect in the stone; a weakness recognized by the sculptors who compensated by elongating the body.

Directly in front of the Sphinx is a separate temple dedicated to the worship of its cult, but very little is known about it since there are no Old Kingdom texts that refer to the Sphinx or its temple. The temple is similar to Khafre's mortuary temple and has granite pillars forming a colonnade around a central courtyard. However, it is unique in that it has two sanctuaries—one on the east and one on the west—likely connected to the rising and setting sun.



Head and torso (detail), Khafre enthroned, from Giza, Egypt, c. 2520-2494 B.C.E., diorite. 5' 6 inches high (Egyptian Museum, Cairo) (photo: Jon Bodsworth, CC0) <https://commons.wikimedia.org/wiki/File:Khafre_statue.jpg>

17. c. Pyramid of Menkaure

Dr. Amy Calvert



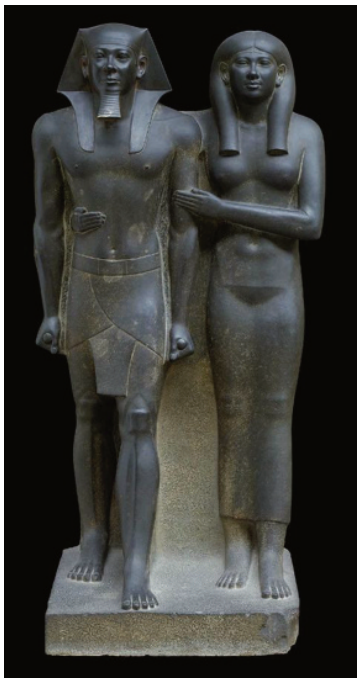
Pyramid of Menkaure (Photo: Dr. Amy Calvert)

The third of the major pyramids at Giza belongs to Mekaure. This is the smallest of the three, rising to a height of 65 meters (213 feet), but the complex preserved some of the most stunning examples of sculpture to survive from all of Egyptian history. Mekaure's pyramid chambers are more complex than those of Khafre and include a chamber carved with decorative panels and another chamber with six large niches. The burial chamber is lined with massive granite blocks.



Pyramid of Menkaure, chamber with niches (photo: John Bodsworth) <https://commons.wikimedia.org/wiki/File:15_menkaure_chamber_with_five_niches.jpg>

His black stone sarcophagus, also carved with niched panels, was discovered inside but was lost at sea as it was being transported to England.



King Menkaure (Mycerinus) and queen, 2490-2472 B.C.E., Greywacke, overall: 142.2 x 57.1 x 55.2 cm, 676.8 kg / 56 x 22 1/2 x 21 3/4 inches, 1492.1 pounds (Museum of Fine Arts, Boston)

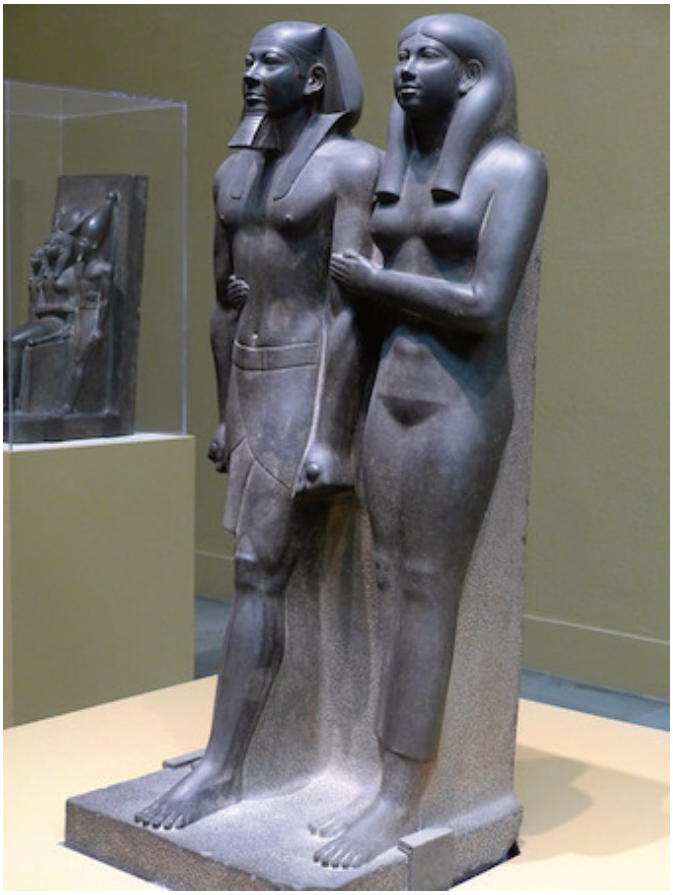
Within Menkaure's mortuary and valley temples, neither of which were completed before his death, excavation revealed a series of statues of the king.

The stunning diad of the king with his primary queen, Khamerernebty II (now in the Museum of Fine Arts, Boston), as well as a number of triads showing the king being embraced by various deities, were discovered in the valley temple and were originally set up surrounding the open court.

This temple was still an active place of cult late in the Old Kingdom and was almost entirely rebuilt at the end of the 6th dynasty after it was heavily damaged by a flood.

18. King Menkaure and Queen

Dr. Amy Calvert



King Menkaure (Mycerinus) and queen, 2490–2472 B.C.E., greywacke, 142.2 x 57.1 x 55.2 cm (Museum of Fine Arts, Boston) (photo: tutincommon, CC BY-NC 2.0) <https://www.flickr.com/photos/10647023@N04/15105479211>

Serene ethereal beauty, raw royal power, and evidence of artistic virtuosity have rarely been simultaneously captured as well as in this breathtaking, nearly life-size statue of the pharaoh Menkaure and a queen. Smooth as silk, the meticulously finished surface of the dark stone captures the physical ideals of the time and creates a sense of eternity and immortality even today.

Undoubtedly, the most iconic structures from Ancient Egypt are the massive and enigmatic Great Pyramids that stand on a natural stone shelf, now known as the Giza plateau, on the south-western edge of modern Cairo. The three primary pyramids at Giza were constructed during the height of a period known as the Old Kingdom and served as burial places, memorials, and places of worship for a series of deceased rulers–the largest belonging to King Khufu, the middle to his son Khafre, and the smallest of the three to his son Menkaure.

Pyramids are not stand-alone structures. Those at Giza formed only a part of a much larger complex that included a temple at the base of the pyramid itself, long causeways and corridors, small subsidiary pyramids, and a second temple (known as a valley temple) some distance from the pyramid. These Valley Temples were used to perpetuate the cult of the deceased king and were active places of worship for hundreds of years (sometimes much longer) after the king's death. Images of the king were placed in these temples to serve as a focus for worship—several such images have been found in these contexts, including the magnificent seated statue of Khafre, now in the Egyptian Museum in Cairo.

On January 10, 1910, excavators under the direction of George Reisner, head of the joint Harvard University-Museum of Fine Arts, Boston, Expedition to Egypt, uncovered an astonishing collection of statuary in the Valley Temple connected to the Pyramid of Menkaure. Menkaure's pyramid had been explored in the 1830s (using dynamite, no less). His carved granite sarcophagus was removed (and subsequently lost at sea), and while the Pyramid Temple at the base was in only mediocre condition; the Valley Temple, was—happily—basically ignored.



Giza plateau (photo: kairoinfo4u, CC BY-NC-SA 2.0) <https://www.flickr.com/photos/manna4u/7164541911/in/photostream/>



Head and torso (detail), Khafre enthroned, from Giza, Egypt, c. 2520-2494 B.C.E., diorite. 5' 6 inches high (Egyptian Museum, Cairo)

Reisner had been excavating on the Giza plateau for several years at this point; his team had already explored the elite cemetery to the west of the Great Pyramid of Khufu before turning their attention to the Menkaure complex, most particularly the barely-touched Valley Temple.

In the southwest corner of the structure, the team discovered a magnificent cache of statuary carved in a smooth-grained dark stone called greywacke or schist. There were a number of triad statues—each showing 3 figures—the king, the fundamentally important goddess Hathor, and the personification of a nome (a geographic designation, similar to the modern idea of a region, district, or county). Hathor was worshiped in the pyramid temple complexes along with the supreme sun god Re and the god Horus, who was represented by the living king. The goddess's name is actually 'Hwt-hor', which means "The House of Horus," and she was connected to the wife of the living king and the mother of the future king. Hathor was also a fierce protector who guarded her father Re; as an "Eye of Re" (the title assigned to a group of dangerous goddesses), she could embody the intense heat of the sun and use that blazing fire to destroy his enemies.



George Reisner and Georg Steindorff at Harvard Camp, looking east toward Khufu and Khafre pyramids, 1935, photo by Albert Morton Lythgoe (Giza archives) <http://www.gizapyramids.org/media/view/People/1104/74359?t:state:flow=1e7a3d47-5dea-492d-8c27-9700aeedeca4>

There were 4 complete triads, one incomplete, and at least one other in a fragmentary condition. The precise meaning of these triads is uncertain. Reisner believed that there was one for each ancient Egyptian nome, meaning there would have originally been more than thirty of them. More recent scholarship, however, suggests that there were originally 8 triads, each connected with a major site associated with the cult of Hathor. Hathor's prominence in the triads (she actually takes the central position in one of the sculptures) and her singular importance to kingship lends weight to this theory.



Four greywacke triads, Menkaure valley temple, S magazines, corridor III 4, photo: 1908 (The Giza Archives). View of one of the triads in the Museum of Fine Arts, Boston <http://www.mfa.org/collections/object/king-menkaura-the-goddess-hathor- and-the-deified-hare-nome-138424>

In addition to the triads, Reisner's team also revealed the extraordinary dyad statue of Menkaure and a queen that is breathtakingly singular. The two figures stand side-by-side on a simple, squared base and are supported by a shared back pillar. They both face to the front, although Menkaure's head is noticeably turned

to his right—this image was likely originally positioned within an architectural niche, making it appear as though they were emerging from the structure. The broad-shouldered, youthful body of the king is covered only with a traditional short pleated kilt, known as a shendjet, and his head sports the primary pharaonic insignia of the iconic striped nemes headdress (so well known from the mask of Tutankhamun) and an artificial royal beard.



Menkaure flanked by Hathor (left) and nome goddess (Egyptian Museum, Cairo) (photo: public domain) <https://commons.wikimedia.org/wiki/File:Menkaura.jpg>

In his clenched fists, held straight down at his sides, Menkaure grasps ritual cloth rolls. His body is straight, strong, and eternally youthful with no signs of age. His facial features are remarkably individualized with prominent eyes, a fleshy nose, rounded cheeks, and full mouth with protruding lower lip.

Menkaure's queen provides the perfect female counterpart to his youthful masculine virility. Sensuously modeled with a beautifully proportioned body emphasized by a clinging garment, she articulates ideal mature feminine beauty. There is a sense of the individual in both faces. Neither Menkaure nor his queen are depicted in the purely idealized manner that was the norm for royal images. Instead, through the overlay of royal formality we see the depiction of a living person filling the role of pharaoh and the personal features of a particular individual in the representation of his queen.

Menkaure and his queen stride forward with their left feet—this is entirely expected for the king, as males in Egyptian sculpture almost always do so, but it is unusual for the female since they are generally depicted with feet together. They both look beyond the present and into timeless eternity, their otherworldly visage displaying no human emotion whatsoever.



Heads (detail), King Menkaure (Mycerinus) and queen, 2490–2472 B.C.E., greywacke, 142.2 x 57.1 x 55.2 cm (Museum of Fine Arts, Boston), photo: 1910 (The Giza Archives)

The dyad was never finished—the area around the lower legs has not received a final polish, and there is no inscription. However, despite this incomplete state, the image was erected in the temple and was brightly painted—there are traces of red around the king's ears and mouth and yellow on the queen's face. The presence of paint atop the smooth, dark greywacke on a statue of the deceased king that was originally erected in his memorial temple courtyard brings an interesting suggestion—that the paint may have been intended to wear away through exposure and, over time, reveal the immortal, black-fleshed "Osiris" Menkaure.

Unusual for a pharaoh's image, the king has no protective cobra (known as a *uraeus*) perched on his brow. This notable absence has led to the suggestion that both the king's nemes and the queen's wig were originally covered in precious metal and that the cobra would have been part of that addition.



Heads and torsos (detail), King Menkaure (Mycerinus) and queen, 2490–2472 B.C.E., greywacke, 142.2 x 57.1 x 55.2 cm (Museum of Fine Arts, Boston), photo: 1910 (The Giza Archives)

Based on comparison with other images, there is no doubt that this sculpture shows Menkaure, but the identity of the queen is a different matter. She is clearly a royal female. She stands at nearly equal height with the king and, of the two of them, she is the one who is entirely frontal. In fact, it may be that this dyad is focused on the queen as its central figure rather than Menkaure. The prominence of the royal female—at equal height and frontal—in addition to the protective gesture she extends has suggested that, rather than one of Mekaure's wives, this is actually his queen-mother. The function of the sculpture in any case was to ensure rebirth for the king in the Afterlife.



King Menkaure (Mycerinus) and queen, 2490–2472 B.C.E., greywacke, 142.2 x 57.1 x 55.2 cm (Museum of Fine Arts, Boston), photo: 1910 (The Giza Archives)

19. Law Code Stele of King Hammurabi

Dr. Senta German

Law is at the heart of modern civilization and is often based on principles listed here nearly 4,000 years ago.

Hammurabi of the city-state of Babylon conquered much of northern and western Mesopotamia and by 1776 B.C.E., he is the most far-reaching leader of Mesopotamian history, describing himself as "the king who made the four quarters of the earth obedient." Documents show Hammurabi was a classic micro-manager, concerned with all aspects of his rule, and this is seen in his famous legal code, which survives in partial copies on this stele in the Louvre and on clay tablets (a stele is a vertical stone monument or marker often inscribed with text or with relief carving). We can also view this as a monument presenting Hammurabi as an exemplary king of justice.

What is interesting about the representation of Hammurabi on the legal code stele is that he is seen as receiving the laws from the god Shamash, who is seated, complete with thunderbolts coming from his shoulders. The emphasis here is Hammurabi's role as a pious theocrat, and that the laws themselves come from the god.



Law Code Stele of King Hammurabi (Babylonian), 1792-1750 B.C.E., basalt, 225 x 65 cm (Musée du Louvre, Paris) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/UZJhik>

19. Law Code Stele of King Hammurabi

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



Law Code Stele of King Hammurabi (Babylonian), 1792-1750 B.C.E., basalt, 225 x 65 cm (Musée du Louvre, Paris) (photo: Steven Zucker, <https://flic.kr/p/UZJhik> CC BY-NC-SA 2.0)

This is the transcript of a conversation conducted at the Musée du Louvre, Paris.

Steven: We're in the Louvre, in Paris, looking at one of their most famous objects. This is the Law Code Stele of King Hammurabi.*Beth:* It's interesting to me that this is one of the most popular objects to look at here (it was made in the Babylonian Kingdom which is now in Iraq) and I think it's because of our modern interest and reliance on law as the founding principles of a civilization. And this is such an ancient object, this is nearly 4,000 years old.

Steven: A stele is a tall carved object. This one is carved in relief at the top, and then below that, and on all sides, we have inscribed cuneiform (script that is used on the stele). It's written in the language of Akkadian (which is the court language of the Babylonians).

Beth: Which was used for official government decrees.

Steven: But that's the language. The script is cuneiform. It's divided into three parts. There's a prologue, which talks about the scene that's being represented at the top, the Investiture of Hammurabi. What we see is the king on the left, he's smaller, and he's facing the god, Shamash. This is the sun god, the god of justice.

Beth: And we can tell he's a god because of the special horned crown that he wears and the flames or light that emanate from his shoulders.

Steven: We can think of this as a kind of divine light, the way that in so much Christian imagery, we see a halo.

Beth: And we have that composite view that we often see in Ancient Egyptian and Ancient Near-Eastern art, where the shoulders are frontal but the face is represented in profile.

Steven: Shamash sits on a throne, and if you look closely you can see under his feet the representation of mountains that he rises from each day. He's giving to the king a scepter and a ring, these are signs of power. Hammurabi is demonstrating here that these are divine laws.

Steven: That his authority comes from Shamash.

Beth: So we have more than 300 laws here.

Steven: And they're very particular. Scholars believe that they weren't so much written by the king as listed from judgments that have already been meted out.



Law Code Stele of King Hammurabi (detail of top), (Musée du Louvre, Paris) (photo: Steven Zucker, <https://flic.kr/p/UWVkDq> CC BY-NC-SA 2.0)



Law Code Stele of King Hammurabi (detail of mountains), (Musée du Louvre, Paris) (photo: Steven Zucker, <https://flic.kr/p/UBaotJ> CC BY-NC-SA 2.0)

Beth: They're legal precedents, and they take the form of announcing an action and its consequences. So if you do X, Y is the consequence.

Steven: So, for example, if a man builds a house and the house falls on the owner, the builder is put to death. So there's a kind of equivalence, and this might remind us of the Biblical law of, "An eye for an eye" or a tooth for a tooth." Which is also found on the stele, and it's important and interesting to note that the stele predates that Biblical text. The last part of the text, what is often referred to as the epilogue, speaks to the posterity of the king, of the importance of his rule and the idea that he will be remembered for all time.

Beth: This is certainly not a unique stele in terms of recording laws, but it does survive largely intact. When it was discovered, it was broken only into three parts, which you can still see today.

Steven: These laws, almost 4,000 years old, tell us a tremendous amount about Babylonian culture, about what was important to them. So many of these laws deal with agricultural issues, issues of irrigation, and are clearly expressing points of tension in society.

Beth: A lot of them have to do with family life, too, and the king is, after all, responsible for the peace and prosperity and feeding of his people. And the stele is such a wonderful reminder that Mesopotamia was such an advanced culture. Here, almost 4,000 years ago, we have cities that are dependent on good crop yields, that require laws to maintain civil society. And a reminder of the debt that the world owes to the ancient civilizations of Mesopotamia and the area that is seeing so much conflict now.

Watch the video <https://youtu.be/JO9YxZYd0qY>.

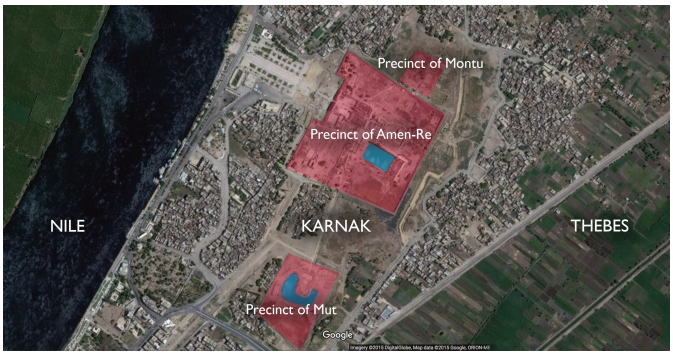
20. Temple of Amun-Re and Hypostyle Hall

Dr. Elizabeth Cummins



View of sphinxes, the first pylon, and the central east-west aisle of Temple of Amon-Re, Karnak in Luxor, Egypt (photo: Mark Fox, CC: BY-NC 2.0)

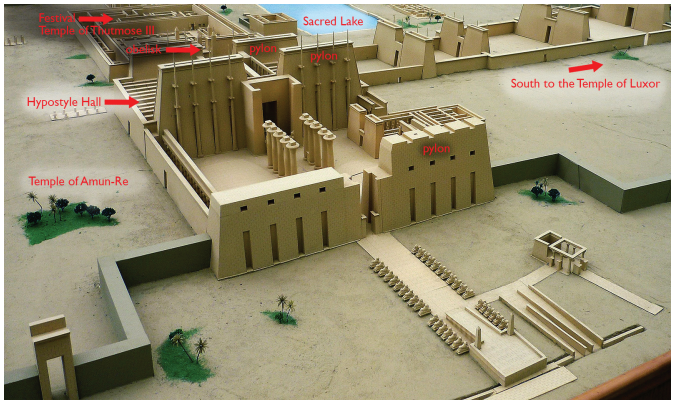
The massive temple complex of Karnak was the principal religious center of the god Amun-Re in Thebes during the New Kingdom (which lasted from 1550 until 1070 B.C.E.). The complex remains one of the largest religious complexes in the world. However, Karnak was not just one temple dedicated to one god—it held not only the main precinct to the god Amun-Re—but also the precincts of the gods Mut and Montu. Compared to other temple compounds that survive from ancient Egypt, Karnak is in a poor state of preservation but it still gives scholars a wealth of information about Egyptian religion and art. About the New Kingdom, Amun-Re, Mut, and Montu



Google Earth View of Karnak (© Google)

"The Most Select of Places"

The site was first developed during the Middle Kingdom (2055-1650 B.C.E.) and was initially modest in scale but as new importance was placed on the city of Thebes, subsequent pharaohs began to place their own mark on Karnak. The main precinct alone would eventually have as many as twenty temples and chapels.[1] Karnak was known in ancient times as "The Most Select of Places" (*Ipet-isut*) and was not only the location of the cult image of Amun and a place for the god to dwell on earth but also a working estate for the priestly community who lived on site. Additional buildings included a sacred lake, kitchens, and workshops for the production of religious accoutrements.



Model of the Precinct of Amon-Re, Karnak (photo: Rémih, CC: BY-SA 3.0)



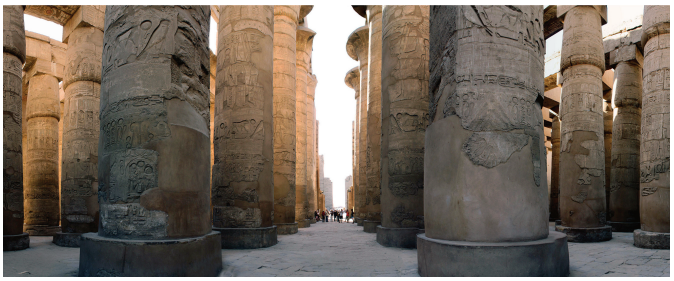
"Tent pole" columns, Festival Temple of Thutmose III, c. 1479-25 B.C.E., sandstone, mud brick, paint, Karnak, at Luxor, Egypt (photo: Dennis Jarvis, CC: BY-SA 2.0) <https://www.flickr.com/photos/archer10/2217355182/>

The main temple of Amun-Re had two axes— one that went north/south and the other that extended east/west. The southern axis continued towards the temple of Luxor and was connected by an avenue of ram-headed sphinxes.

While the sanctuary was plundered for stone in ancient times, there are still a number of unique architectural features within this vast complex. For example, the tallest obelisk in Egypt stood at Karnak and was dedicated by the female pharaoh Hatshepsut who ruled Egypt during the New Kingdom. Made of one piece of red granite, it originally had a matching obelisk that was removed by the Roman emperor Constantine and re-erected in Rome. Another unusual feature was the Festival Temple of Thutmose III, which had columns that represented tent poles, a feature this pharaoh was no doubt familiar with from his many war campaigns.

Hypostyle hall

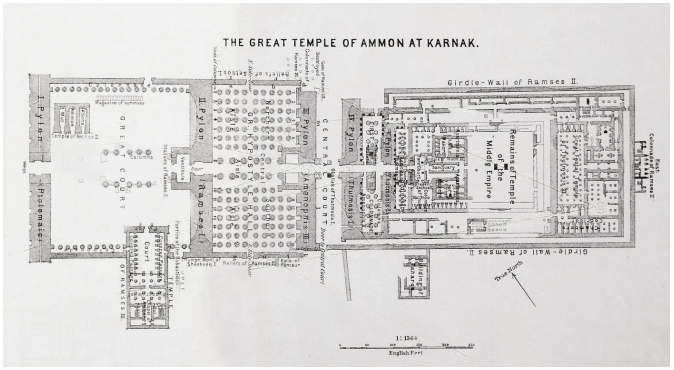
One of the greatest architectural marvels of Karnak is the hypostyle hall built during the Ramesside period (a hypostyle hall is a space with a roof supported by columns). The hall has 134 massive sandstone columns with the center twelve columns standing at 69 feet. Like most of the temple decoration, the hall would have been brightly painted and some of this paint still exists on the upper portions of the columns and ceiling today. With the center of the hall taller than the spaces on either side, the Egyptians allowed for clerestory lighting (a section of wall that allowed light and air into the otherwise dark space below). In fact, the earliest evidence for clerestory lighting comes from Egypt. Not many ancient Egyptians would have had access to this hall since the further one went into the temple, the more restricted access became.



Hypostyle Hall, c. 1250 B.C.E. (hall), 18th and 19th Dynasties, New Kingdom, sandstone and mud brick, Karnak, at Luxor, Egypt (photo: Blalonde, public domain) <https://commons.wikimedia.org/ wiki/File:Karnakpanorama.jpg>

Temple as cosmos

Conceptually, temples in Egypt were connected to the idea of *zep tepi*, or "the first time," the beginnings of the creation of the world. The temple was a reflection of this time when the mound of creation emerged from the primeval waters. The pylons, or gateways in the temple, represent the horizon and as one moves further into the temple, the floor rises until it reaches the sanctuary of the god, giving the impression of a rising mound, like that during creation. The temple roof represented the sky and was often decorated with stars and birds. The columns were designed with lotus, papyrus, and palm plants in order to reflect the marsh-like environment of creation. The outer areas of Karnak, which was located near the Nile River, would flood during the annual inundation—an intentional effect by the ancient designers no doubt, in order to enhance the temple's symbolism.[2]



Plan of the Temple of Amon-Re, Karnak

[1] R. Wilkinson, *The Complete Temples of Ancient Egypt* (New York, Thames & Hudson, 2000), p. 154.
[2] R. Wilkinson, *The Complete Temples of Ancient Egypt* (New York, Thames & Hudson, 2000), p. 77.

21. Mortuary Temple of Hatshepsut

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



Large Kneeling Statue of Hatshepsut, c. 1479–1458 B.C.E., Dynasty 18, New Kingdom (Deir el-Bahri, Upper Egypt), granite, 261.5 x 80 x 137 cm (The Metropolitan Museum of Art) (photo: Steven Zucker, <https://flic.kr/p/vBk6rj>, CC BY-NC-SA 2.0)

This is the transcript of a conversation conducted in the Metropolitan Museum of Art, New York City.

Steven: We're in the Metropolitan Museum of Art in New York City in the section devoted to the art of Ancient Egypt. And we're looking at an enormous, granite sculpture.

Beth: This is a sculpture of the female pharaoh Hatshepsut.

Steven: We think of pharaohs, that is, ancient Egyptian kings, as male. And of course, the vast majority were. There had been a long tradition in ancient Egypt of women assuming enormous authority in the position of regent, that is as a mother or a member of the royal

family who would reign until a male ruler reached the age where they could actually assume power.

Beth: Those women were very powerful but Hatshepsut is unusual. She assumes the authority of king, of pharaoh. She created a whole mythology around her kingship that described her divine birth, the way that an oracle had predicted that she would become king. She ruled Egypt for more than two decades. She commissioned a remarkable number of temples, of sculptures. She was interested in the power of art to convey royal authority.

Steven: And no building speaks to the authority of the king more than the mortuary temple.

Beth: The sculpture that we're looking at was actually made for this mortuary temple. There anywhere from six or eight or ten of these kneeling figures. There were also representations of Hatshepsut as a sphinx which lined the center of the lower courtyard of her mortuary temple.

Steven: And that temple is an extraordinary place. It is built directly against this vast cliff face.

Beth: I can't think of a more dramatic environment for architecture. Those cliffs are towering and their organic qualities are in such contrast to the regular order and structure of the built environment.

Steven: This is hewn right from the living rock.

Beth: And that sense of permanence, that sense of stability that is expressed by that wall of living rock is a perfect expression of the very sense of stability that we think Hatshepsut and her dynasty were trying to reassert after a period of instability. This was the beginning of the New Kingdom.

Steven: In ancient Egyptian history, we talk about three major periods… the Old Kingdom, the Middle Kingdom, and the New Kingdom, and these periods are separated by periods we call Intermediate Periods.

Beth: These were periods of relative chaos, often when Egypt was divided in its rule or was ruled by external rulers.

Steven: The representations of kingship in ancient Egyptian art are almost two millennia old by the time we get to Hatshepsut and so what she can do is adopt those forms to show herself as king. These forms were easily recognizable. That is symmetry, its embeddedness in the stone, we see that there is no space between her arms and her torso or between her legs. There is a real sense of timelessness but there are also more specific symbols.

Beth: The headcloth that she wears is a symbol of the king that would have originally been a cobra.

Steven: We have the beard that we associate with kingship.

Beth: We're talking about a visual language here. And this visual language of kingship was male. In fact, there is no word for queen in the Egyptian language. The term is king's wife, or king's mother.

Steven: Her body is represented in a relatively masculine way. Her breasts are deemphasized, for example. She has broad shoulders.



Large Kneeling Statue of Hatshepsut, c. 1479–1458 B.C.E., Dynasty 18, New Kingdom (Deir el-Bahri, Upper Egypt), granite, 261.5 x 80 x 137 cm (The Metropolitan Museum of Art) (photo: Steven Zucker <https://flic.kr/p/uWVXeh>, CC BY-NC-SA 2.0)

Beth: The inscriptions that were on many of these sculptures use a feminine form and so the representation itself is masculine but the identifying words, the hieroglyphs identify her as female. About 20 years after Hatshepsut died, the pharaoh she had been co-ruler with systematically destroyed all images of Hatshepsut.

Steven: That would not have been an easy matter. You wouldn't have simply toppled the sculpture. It would have shattered into so many pieces. This made of granite, incredibly hard stone. It would have been very difficult to produce and it would have been very difficult to destroy.

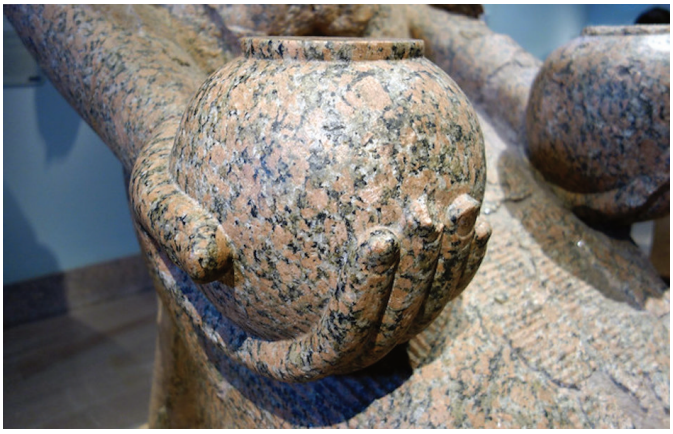
Beth: Well, and not only that but Hatshepsut had commissioned hundreds of images of herself. So it would have taken a long time to destroy these sculptures. This was an intentional act, but we're not really sure why this happened.

Steven: We do know that the fragments were discovered in the early twentieth-century thanks to an excavation undertaken by the Metropolitan Museum of Art which is why they are here. And what we're seeing is a series of monumental sculptures that have been put back together but some of this is guesswork. We don't know if one particular fragment goes with one sculpture versus another.

Beth: So when we look at those sculptures, we see her in a range of positions. In some, she is kneeling. In some, she is standing. In some, she is seated. In some, she is represented as a sphinx. A king only would kneel of course to a god. That really helps us place this sculpture along the processional path.

Steven: So once a year, there was a ritual involving a sculpture of a god. Now we have to remember that for Egyptians, the sculpture of the god was the embodiment of the god and temples were houses for a god. So once a year the sculpture of the primary god, Amun-Re, was taken from the temple in Thebes on the eastern side of the Nile.

Beth: And carried across the river on a ceremonial barque, on a shrine that was shaped like a boat.



Large Kneeling Statue of Hatshepsut (detail of bowls) (The Metropolitan Museum of Art) (photo: Steven Zucker, <https://flic.kr/p/vUkomT> CC BY-NC-SA 2.0)

Steven: As though he were traveling literally across the Nile from the eastern side, the land of the living, toward the land of the dead, and he would be carried up this causeway toward the temple and his primary shrine in the mortuary temple at the very top center.

Beth: And that sculpture would have been spent one night in that shrine before it would have been returned across the river.

Steven: And so it makes sense then that you would have this representation of Hatshepsut on her knees making an offering, these two bowls or jars that she holds are an offering to the god because the god passed in front of these sculptures who are not just sculptures but embodiments of Hatshepsut.

Beth: It's interesting how the scholarship that surrounds this ruler has changed. Early in the twentieth century, for example, the destruction of the images of this ruler was associated with the idea that she was out of place, that she was a usurper, and she was seen very much in a negative light. She is seen much more sympathetically now, in the early twenty-first century.

Steven: And there were women before Hatshepsut who asserted themselves as kings, and there were a few women after her, but Hatshepsut had enormous power, enormous influence, the sculptures, the architecture that she commissioned set an important standard and inspiration for all the later work of the New Kingdom. Imagine walking past these enormous sculptures of Hatshepsut.

Beth: This is all about the procession. This is all about pageantry. This is all about expressing power as the king.

Steven: Kneeling like this is not something you can do for more than a minute or two. It's hard on the toes. It's hard on the knees. So this is a position that someone would only take very temporarily and yet there is something very eternal about the sculpture, something very permanent. This is not a figure who engages us, who is in the world, but who lives in the eternal. This is an image of a king who is also a god.

Watch the video <https://youtu.be/pZOUV_rTyj0>.

22. Akhenaton, Nefertiti, and three daughters

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the Staatliche Museen zu Berlin.



House Altar depicting Akhenaten, Nefertiti and Three of their Daughters, limestone, New Kingdom, Amarna period, 18th dynasty, c.1350 BCE (Ägyptisches Museum/Neues Museum, Staatliche Museen zu Berlin) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cFNVLo>

Steven: So around 1350 B.C.E., everything changed in Egyptian art.

Beth: When we think about Egyptian art, we don't think of change.

Steven: That's true. The Old Kingdom, the Middle Kingdom, the New Kingdom, and the transitional periods between—art is consistent for almost 3,000 years. But there is this radical break right around 1350. And it's because the ruler, Akhenaten, changes the state religion.

Beth: He changes it from the worship of the god Amun to a new god, a sun god, called Aten. So he actually changes his own name to Akhenaten, which means Aten is pleased. The key is he makes him and his wife the only representatives of Aten on earth. And so he upsets the entire priesthood of Egypt by making him and his wife the only ones with access to this new god, Aten.

Steven: And in fact, after Akhenaten dies, Egypt will return to its traditional religion. So this period is a very brief episode in Egyptian history, but it also marks a real shift in style. And this small stone plaque that we're looking at, this sunken relief carving—which would have been placed in a private domestic environment—is a perfect example of those stylistic changes.

Beth: Right. It would have been an altar in someone's home, where they would have seen Akhenaten and his wife Nefertiti and their relationship to the god Aten. This has always been one of my favorite sculptures. It's so informal, compared to most Egyptian art. We really have a sense of a couple and their relationship with one another and their relationship with their children. And love and domesticity.

Steven: So let's take a close look. On the left, you have Akhenaten himself. This is the pharaoh of Egypt, the supreme ruler. You can see that he's holding his eldest daughter, and he's actually getting ready to kiss her. He seems to be holding her very tenderly, supporting her head, holding her under the thighs. She seems to be, perhaps, pointing back to her mother at the same moment.

Beth: We see Nefertiti holding another daughter on her lap, pointing back to Akhenaten, and yet a third daughter, the youngest one, on her shoulder, playing with her earring. And I think it's immediately apparent that there's something wrong with their anatomy. If we look at the children, or we look at Nefertiti or Akhenaten, we see swollen bellies, very thin arms, and elongated skulls, forms that have made historians wonder whether there was something medically wrong with Akhenaten.

Steven: In fact, we don't think that there was. We think that this is a purely stylistic break. It was meant to distinguish this new age, this new religion, from Egypt's past.

Beth: Egyptian art had been dominated by rectilinear forms. Here, Akhenaten seems to be demanding this new style dominated by curvilinear forms.

Steven: Look at the careful attention to the drapery. There is a softness throughout that is an absolute contrast to the traditions of Egyptian art. But in some ways, there are elements of traditional Egyptian sculpture.



House Altar depicting Akhenaten, Nefertiti and Three of their Daughters (Ägyptisches Museum/Neues Museum, Staatliche Museen zu Berlin) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cFNSME>

Beth: Right. We still see a composite view of the body. A profile view of the face, but a frontal view of the eye.

Steven: Right. Or one hip is facing us. But the shoulders are squared with us. So as much of the body is exposed to us as possible, while the figures are still in profile. So let's take a look at some of the iconography here. This little panel really tells us a lot. God is present. Aten is present, here rendered as the sun disk. And from that sun–which has a small cobra in it, which signifies that this is the supreme deity, the only deity. Akhenaten was a monotheist. And this was in such contrast to the pantheon of gods that traditional Egyptian religion counted on. Here Akhenaten says, no, there is only one true god. So we can see the cobra. We can see the sun disk. And then we can see rays of light that pour down. And if you look closely, you can see hands at the ends of those rays, except for the rays that terminate right at the faces of the king and queen. And there, you see not only hands but also ankhs, the Egyptian sign of life. And so it's as if Aten is giving life to these two people, and these two people alone.



House Altar depicting Akhenaten, Nefertiti and Three of their Daughters (Ägyptisches Museum/Neues Museum, Staatliche Museen zu Berlin) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cFNP87>

Beth: Those rays of light are holding those ankhs right at the noses, the breath of life for Akhenaten and Nefertiti. We can see in the throne of Nefertiti symbols of both Upper and Lower Egypt, indicating that Nefertiti is the queen of both.

Steven: Akhenaten himself is sitting on a simpler throne. It does give a sense of her importance and the fact that they would rule Egypt together.

Watch the video <https://youtu.be/ryycDVWXDvc>.

23. Tutankhamun's tomb, innermost coffin

Dr. Elizabeth Cummins

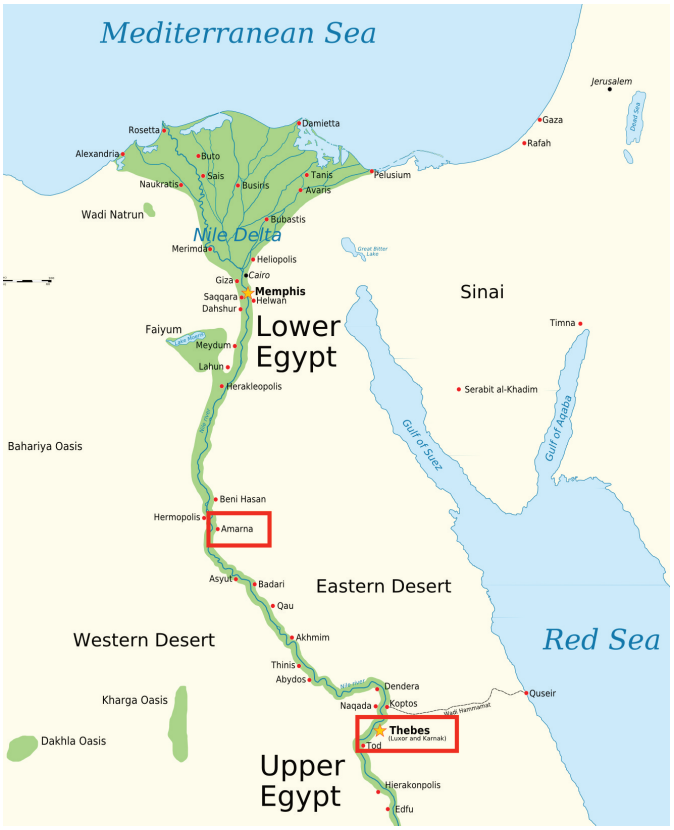


Harry Burton, Howard Carter with Innermost Coffin of Tutankhamun, 1922 (Tutankhamun Archive, Griffith Institute, University of Oxford)

Nearly lost to history

Tutankhamun was only the age of nine when he became king of Egypt during the 18th dynasty of the New Kingdom (c. 1332–1323 B.C.E.). His story would have been lost to history if it were not for the discovery of his tomb in 1922 by the archaeologist Howard Carter in the Valley of the Kings. His nearly intact tomb held a wealth of objects that give us unique insights into this period of ancient Egyptian history.

Tutankhamun ruled after the Amarna age, when the pharaoh Akhenaten, Tutankhamun's probable father, turned the religious attention of the kingdom to the worship of the god Aten, the sun disc. Akhenaten moved his capital city to the site of Akhetaten (also known as Amarna), in Middle Egypt—far from the previous pharaoh's capital. After Akhenaton's death and the rule of a short-lived pharaoh, Smenkhkare, Tutankhamen shifted the focus of the country's worship back to the god Amun and returned the religious center back to Thebes.



Map of Ancient Egypt (modified) (original image: Jeff Dahl <https://commons.wikimedia.org/wiki/File:Ancient_Egypt_main_map.png>)

Tutankhamun married his half-sister, Ankhesenamun, but they did not produce an heir. This left the line of succession unclear. Tutankhamun died at the young age of eighteen, leading many scholars to speculate on the manner of his death—chariot accident, murder by a blow to the head, and even a hippopotamus attack! The answer is still unclear. Tutankhamun's much-older advisor (and possible step-grandfather), Ay, married the widowed Ankhesenamun and became pharaoh.



Valley of the Kings, Egypt (photo: Troels Myrup, CC BY-NC-ND 2.0)

The tomb

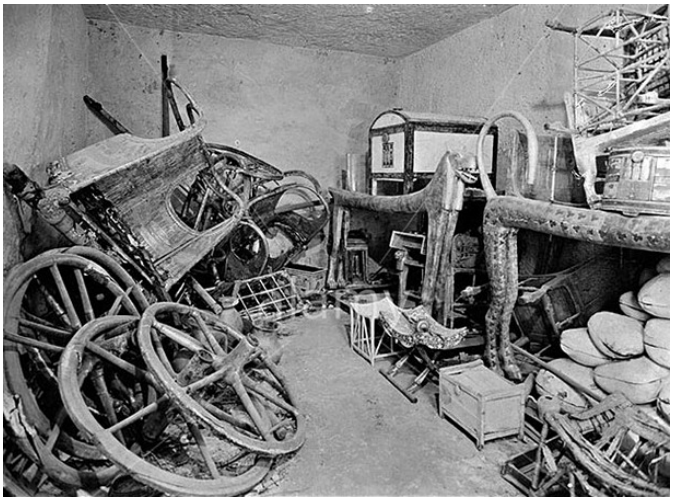
During the early twentieth century, Howard Carter, a British Egyptologist, excavated for many years in the Valley of the Kings—a royal burial ground located on the west bank of the ancient city of Thebes. He was running out of money to support his archaeological digs when he asked for funding for one more season from his financial backer, the fifth Earl of Carnarvon. Lord Carnarvon granted him one more year—and what a year it was!



Lord Carnarvon with Carter during his initial visit to the tomb, 1922 (photo: Keystone Press Agency Ltd., 1922)

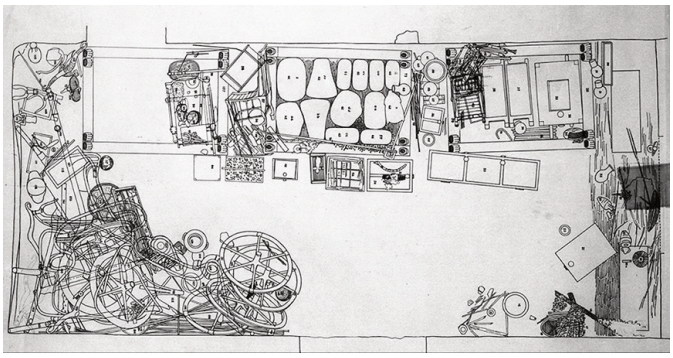
At the beginning of November 1922, Carter came upon the first of twelve steps of the entrance that led to the tomb of Tutankhamun. He quickly recovered the steps and sent a telegram to Carnarvon in England so they could open the tomb together. Carnarvon departed for Egypt immediately and on November 26, 1922, they made a hole in the entrance of the antechamber in order to look in. Carter states:

> At first I could see nothing, the hot air escaping from the chamber causing the candle flame to flicker, but presently, as my eyes grew accustomed to the lights, details of the room within emerged slowly from the mist, strange animals, statues, and gold –everywhere the glint of gold. [Howard Carter and A. C. Mace, *The Tomb of Tut-ankh-amen* (New York City: Cooper Square Publishers. 1933), (vol. 1) pp.95-96.]



Harry Burton, View of tomb interior, 1922 (Tutankhamun Archive, Griffith Institute, University of Oxford)

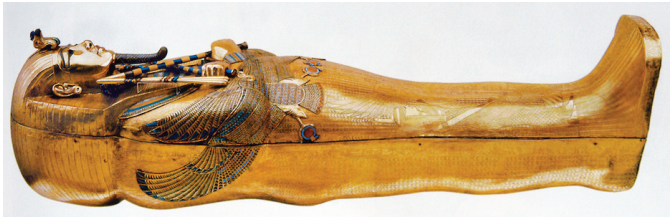
The task of cataloging the finds was an immense undertaking for the team. Carter spent a decade systematically recording the finds and having them photographed.



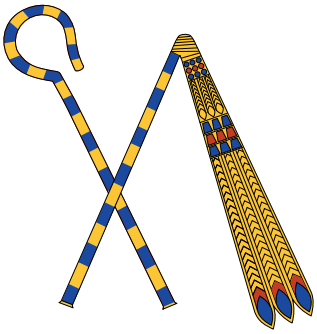
Howard Carter, Drawing of Tutankhamun's tomb (Tutankhamun Archive, Griffith Institute, University of Oxford)

The innermost coffin

Tutankhamun's sarcophagus (a box-like stone container) held not one but three coffins in which to hold the body of the king. The outer two coffins were crafted in wood and covered in gold along with many semiprecious stones, such as lapis lazuli and turquoise. The inner coffin, however, was made of solid gold. When Howard Carter first came upon this coffin, it was not the shiny golden image we see in the Egyptian museum today (below). In his excavation notes, Carter states, it was "covered with a thick black pitch-like layer which extended from the hands down to the ankles (top image). This was obviously an anointing liquid which had been poured over the coffin during the burial ceremony and in great quantity (some two buckets full)." [N. Reeves, *The Complete Tutankhamun* (London: Thames and Hudson, 1990), pp. 108-109.]



Tutankhamun's tomb, innermost coffin, New Kingdom, 18th Dynasty, c. 1323 B.C.E., gold with inlay of enamel and semiprecious stones (Egyptian Museum, Cairo)



Egyptian crook and flail (image: Jeff Dahl <https://commons.wikimedia.org/wiki/Category:Crook_and_flail#/media/File:Crook_and_flail.svg>)

The image of the pharaoh is that of a god. The gods were thought to have skin of gold, bones of silver, and hair of lapis lazuli—so the king is shown here in his divine form in the afterlife. He holds the crook and flail, symbols of the king's right to rule. The goddesses Nekhbet (vulture) and Wadjet (cobra), inlaid with semiprecious stones, stretch their wings across his torso. Beneath these goddesses are two more—Isis and Nephthys—etched into the gold lid.

The death mask of Tutankhamun

The death mask (right) is considered one of the masterpieces of Egyptian art. It originally rested directly on the shoulders of the mummy inside the innermost gold coffin. It is constructed of two sheets of gold that were hammered together and weighs 22.5 pounds (10.23 kg). Tutankhamen is depicted wearing the striped nemes headdress (the striped head-cloth typically worn by pharaohs in ancient Egypt) with the goddesses Nekhbet and Wadjet depicted again protecting his brow. He also wears a false beard that further connects him to the image of a god as with the inner coffin. He wears a broad collar, which ends in terminals shaped as falcon heads. The back of the mask is covered with Spell 151b from the Book of the Dead, which the Egyptians used as a road map for the afterlife. This particular spell protects the various limbs of Tutankhamun as he moves into the underworld.



Death Mask from innermost coffin, Tutankhamun's tomb, New Kingdom, 18th Dynasty, c. 1323 B.C.E., gold with inlay of enamel and semiprecious stones (Egyptian Museum, Cairo) (photo: Roland Unger, CC BY-SA 3.0) <https://en.wikipedia.org/wiki/Tutankhamun#/media/File:Tuthankhamun_Egyptian_ Museum.jpg>

24. Last judgment of Hu-Nefer

The British Museum

Hunefer: An ancient Egyptian official

Hunefer and his wife Nasha lived during the Nineteenth Dynasty, in around 1310 B.C.E.. He was a "Royal Scribe" and "Scribe of Divine Offerings." He was also "Overseer of Royal Cattle," and the steward of King Sety I. These titles indicate that he held prominent administrative offices and would have been close to the king. The location of his tomb is not known, but he may have been buried at Memphis.

Hunefer's high status is reflected in the fine quality of his Book of the Dead, which was specially produced for him. This, and a Ptah-Sokar-Osiris figure, inside which the papyrus was found, are the only objects which can be ascribed to Hunefer. The papyrus of Hunefer is characterized by its good state of preservation and the large, and clear vignettes (illustrations) are beautifully drawn and painted. The vignette illustrating the "Opening of the Mouth" ritual is one of the most famous pieces of papyrus in The British Museum collection, and gives a great deal of information about this part of the funeral.

Page from the *Book of the Dead* of Hunefer



Page from the Book of the Dead of Hunefer, c. 1275 B.C.E., 45.7 x 83.4 cm (frame), Thebes, Egypt © Trustees of the British Museum

The centerpiece of the upper scene is the mummy of Hunefer, shown supported by the god Anubis (or a priest wearing a jackal mask). Hunefer's wife and daughter mourn, and three priests perform rituals. The two priests with white sashes are carrying out the Opening of the Mouth ritual. The white building at the right is a representation of the tomb, complete with portal doorway and small pyramid. Both these features can be seen in real tombs of this date from Thebes. To the left of the tomb is a picture of the stela which would have stood to one side of the tomb entrance. Following the normal conventions of Egyptian art, it is shown much larger than normal size, in order that its content (the deceased worshipping Osiris, together with a standard offering formula) is absolutely legible.

At the right of the lower scene is a table bearing the various implements needed for the Opening of the Mouth ritual. At the left is shown a ritual, where the foreleg of a calf, cut off while the animal is alive, is offered. The animal was then sacrificed. The calf is shown together with its mother, who might be interpreted as showing signs of distress.

Page from the *Book of the Dead* of Ani



Page from the Book of the Dead of Ani, c. 1275 B.C.E., 19th Dynasty, 44.5 x 30.7 cm, Thebes, Egypt © Trustees of the British Museum

The scene reads from left to right. To the left, Anubis brings Hunefer into the judgment area. Anubis is also shown supervising the judgment scales. Hunefer's heart, represented as a pot, is being weighed against a feather, the symbol of Maat, the established order of things, in this context meaning 'what is right'. The ancient Egyptians believed that the heart was the seat of the emotions, the intellect and the character, and thus represented the good or bad aspects of a person's life. If the heart did not balance with the feather, then the dead person was condemned to non-existence, and consumption by

the ferocious "devourer," the strange beast shown here which is part-crocodile, part-lion, and part-hippopotamus.

However, as a papyrus devoted to ensuring Hunefer's continued existence in the Afterlife is not likely to depict this outcome, he is shown to the right, brought into the presence of Osiris by his son Horus, having become "true of voice" or "justified." This was a standard epithet applied to dead individuals in their texts. Osiris is shown seated under a canopy, with his sisters Isis and Nephthys. At the top, Hunefer is shown adoring a row of deities who supervise the judgment.

© Trustees of the British Museum

24. Last judgment of Hu-Nefer

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted in the British Museum.



Hu-Nefer's Judgment in the presence of Osiris, Book of the Dead (detail of Thoth left of Hu-nefer), 19th Dynasty, New Kingdom, c. 1275 B.C.E., papyrus, Thebes, Egypt (British Museum), (photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/9395528047/in/photostream/> CC BY-NC-SA 2.0)

Steven: We're in the British Museum in London, in a room that is filled with ancient Egyptian mummies, and as a result, it's also filled with modern children.

Beth: And tourists. It's a great room—there's great stuff here.

Steven: We're looking at a fragment of a scroll that is largely ignored.

Beth: It's a papyrus scroll.

Steven: A papyrus is a reed that grows in the Nile Delta, that was made into a kind of paper-like substance, and actually was probably the single most important surface for writing right up into the Middle Ages.

Beth: We're looking at a written text of something that we call the "Book of the Dead," which the ancient Egyptians had other names for, but which was an ancient text that had spells, and prayers, and incantations—things that the dead needed in the afterlife.

Steven: This is a tradition that goes all the way back to the Old Kingdom (c.2649-2150 B.C.E), writing that we call pyramid texts. These were a sense of instructions for the afterlife, and then later, in the Middle Kingdom (c.2030-1640 B.C.E.), we have coffin texts—writing on coffins—and then even later, in the New Kingdom (c.1550-1070 B.C.E.), we have scrolls like this that we call the "Books of the Dead."

Beth: Sometimes the texts were written on papyrus, like the one we are looking at, sometimes they were written on shrouds that the dead were buried in… These were really important texts that were originally just for kings in the Old Kingdom, but came to be used by people who were not just part of the royal family, but still people of high rank, and that's what we're looking at here. This text was found in the tomb of someone named Hu-Nefer, a scribe.

Steven: A scribe had a priestly status, so we are dealing here with somebody who was literate, who occupied a very high station in Egyptian culture. And we actually see representations of a man who had died, who was buried with this text. If you look on the left edge of the scroll at the top, you can see a crouching figure in white, Hu-Nefer, who is speaking to a line of crouching deities (gods) professing the good life that he lived—that he's earned a place in the afterlife.



Hu-Nefer's Judgment in the presence of Osiris, Book of the Dead (scale detail with Anubis right and Ammit left), 19th Dynasty, New Kingdom, c. 1275 B.C.E., papyrus, Thebes, Egypt (British Museum) (photo: Steven Zucker <https://www.flickr.com/photos/profzucker/9395530653/in/photostream/>, CC BY-NC-SA 2.0)

Beth: Well, what we have below is a scene of judgment: whether Hu-Nefer has lived a good life and deserves to live into the afterlife. And we see Hu-Nefer again, this time standing on the far left…

Steven: …and we can recognize him because he's wearing the same white robe.

Beth: He's being led by the hand, by a god with a jackal head, Anubis, a god that is associated with the dead, with mummification, with cemeteries. And he's carrying an ankh in his left hand.

Steven: …a symbol of eternal life, and that's exactly what Hu-Nefer is after.

Beth: If we continue to move toward the right, we see that jackal-headed god again, Anubis, this time crouching and adjusting a scale…

Steven: …making sure that it is exactly balanced. On the left side, we see the heart of the dead…

Beth: …so the heart is on one side of the scale, on the other side there's a feather. The feather belongs to Ma'at, who we also see at the very top of the scale. We can see a feather coming out of her head. Now, Ma'at is a deity associated with divine order—with living an ethical, ordered life.

Steven: And in this case, the feather is lower, the feather is *heavier*. Hu-Nefer has lived an ethical life, and therefore is brought into the afterlife.



Hu-Nefer's Judgment in the presence of Osiris, Book of the Dead, 19th Dynasty, New Kingdom, c. 1275 B.C.E., papyrus, Thebes, Egypt (British Museum) (photo: Steven Zucker <https://www.flickr.com/photos/profzucker/9398300970/in/photostream/>, CC BY-NC-SA 2.0)

Beth: So he won't be devoured by that evil-looking beast next to Anubis. That's Ammit, who has the head of a crocodile, the body of a lion, and the hind-quarters of a hippopotamus. He's waiting to devour Hu-Nefer's heart, should he be found to have *not* lived an ethical life, *not* lived according to Ma'at.

Steven: The Egyptians believed that only if you lived the ethical life, only if you pass this test, would you be able to have access to the afterlife. It's not like the Christian conception, where you have an afterlife for everybody, no matter if they were blessed or sinful—that is, you either go to Heaven or you go to Hell. Here, you only go to the afterlife if you have been found to be ethical.

Beth: The next figure that we see is another deity, this time with the head of an ibis, of a bird. This is Thoth, who is reporting the proceedings of what happens to Hu-Nefer, and in this case, reporting that he has succeeded and will move on to the afterlife.

Steven: I love the representation of Thoth. He is so upright, and his arm is stretched out, rendered in such a way that we trust him that he's going to get this right.

Beth: Next, we see Hu-Nefer yet again, this time being introduced to one of the supreme gods in the Egyptian pantheon, Osiris. And he's being introduced to Osiris by Osiris' son, Horus.



Hu-Nefer's Judgment in the presence of Osiris, Book of the Dead, 19th Dynasty, New Kingdom, c. 1275 B.C.E., papyrus, Thebes, Egypt (British Museum) (photo: Steven Zucker <https://www.flickr.com/photos/profzucker/9398304912/in/photostream/>, CC BY-NC-SA 2.0)

Steven: Horus is easy to remember, Horus is associated with a falcon, and here has a falcon's head. Horus is the son of Osiris and holds in his left hand an ankh, which we saw earlier, and again, that's a symbol of eternal life. He is introducing him to Osiris as you said, who is in this fabulous enclosure, speaking to the importance of this deity.

Beth: He's enthroned, he carries symbols of Egypt, and he sits behind a lotus blossom, a symbol eternal life. On top of that lotus blossom are Horus' four children, who represent the four cardinal points: North, South, East, and West.

Steven: The children of Horus are responsible for caring for the internal organs that would be placed in canopic jars, so they have a critical responsibility for keeping the dead preserved.

Beth: We see Horus again, but symbolized as an eye. Now remember, Horus is represented as a falcon—as a bird—and so here, even though he's the symbol of the eye, he has talons instead of hands, and those carry an ostrich feather, also a symbol of eternal life.

Steven: The representation of the eye of Horus has to do with another ancient Egyptian myth, the battle between Horus and Seth, but that's another story.

Beth: Now, behind Osiris, we see two smaller standing female figures, one of whom is Isis, Osiris's wife, the other is her sister, Nephthys, who's a guardian of the afterlife and mother of Anubis, the figure who we saw at the very beginning leading Hu-Nefer into judgment.

Steven: Notice the white platform that those figures are standing on. That represents natron (sodium carbonate decahydrate, sodium

bicarbonate, sodium chloride and sodium sulfate), the natural salts that were deposited in the Nile. They were used by the ancient Egyptians to dry out all of the mummies that are in this room, so that they could be preserved.

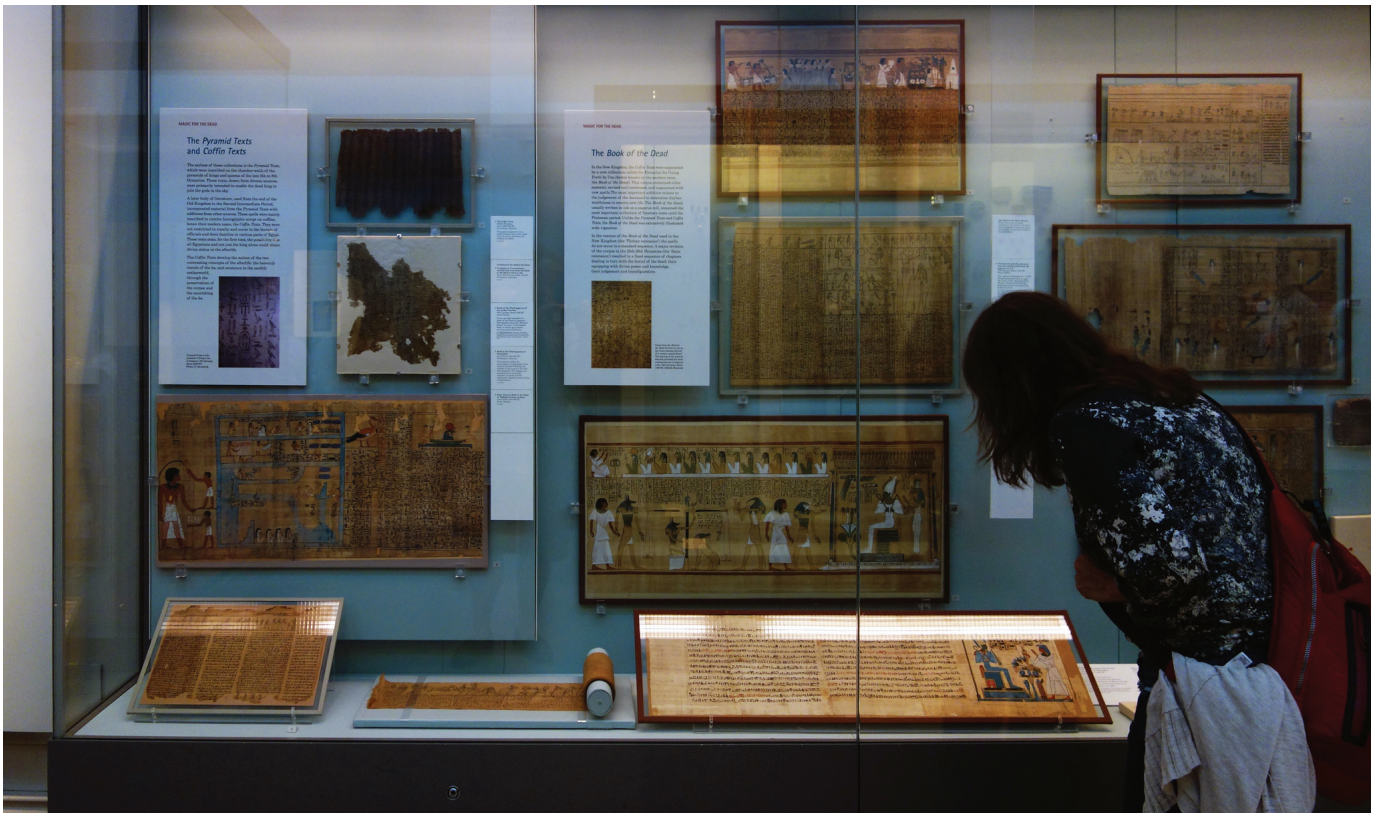
Beth: Actually, the word "preservation" is really key to thinking about Egyptian culture generally, because this is a culture whose forms, whose representations and art, remain remarkably the same for thousands of years. Even though there are periods of instability—or even just before this, we had the Amarna Period, where we saw a very different way of representing the human figure—what we see here, these forms look very familiar to us, because this is the typical way that the ancient Egyptians represented the human figure.

Steven: Even though this is a painting from the New Kingdom (c.1550-1070 B.C.E.), these forms would have been recognizable to Egyptians thousands of years earlier in the Old Kingdom (c.2649-2150 B.C.E.).

Beth: And we see that mixture that we see very often in ancient Egyptian art: of words—of hieroglyphs—of writing and images.

Steven: I love the mix, in our modern culture we really make a distinction between written language and the visual arts, and here in ancient Egypt, there really is this closer relationship, this greater sense of integration.

Watch the video <https://youtu.be/WceVwMdN0eE>.



Case with scrolls (British Museum) (photo: Steven Zucker <https://www.flickr.com/photos/profzucker/ 9398304912/in/photostream/>, CC BY-NC-SA 2.0)

25. Lamassu, citadel of Sargon II, Dur Sharrukin

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted in the Musée du Louvre, Paris.



Winged human-headed bull (lamassu or shedu), Neo-Assyrian Period, reign of Sargon II (721-705 B.C.E.) Khorsabad, ancient Dur Sharrukin, Assyria, Iraq, gypseous alabaster, 4.20 x 4.36 x 0.97 m, excavated by P.-E. Botta 1843-44 (Musée du Louvre), (photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/14395898789/in/photostream/> CC BY-NC-SA 2.0)

Steven: Ancient Mesopotamia is often credited as the cradle of civilization, that is, the place where farming and cities began. It makes it seem so peaceful, but this was anything but the case. In fact, it was really a series of civilizations that conquered each other.

Beth: We're in a room in the Louvre filled with sculpture from the Assyrians, who controlled the ancient Near East from about 1000 B.C.E. to around 500 B.C.E.

Steven: And these sculptures, in particular, come from the palace of Sargon II, and were carved at the height of Assyrian civilization in the eighth century B.C.E.

Beth: So this is modern-day Khorsabad.

Steven: In Iraq.

Beth: And various Assyrian kings established palaces at different cities. So there were palaces at Nimrid and Assur before this, and after, there will be a palace at Nineveh, but these sculptures come from an excavation from modern-day Khorsabad.

Steven: The most impressive sculptures that survive are the guardian figures that protected the city's gates, and protected the gates of the citadel itself. That is the area within which were both the temple and the royal palace.

Beth: So at each of these various gates, there were guardian figures that were winged bulls with the heads of men.

Steven: We think they were called lamassu.

Beth: As figures that stood at gateways, they make sense. They're fearsome, they look powerful. They could also be an expression of the power of the Assyrian king.

Steven: They are enormous, but even they would have been dwarfed by the architecture. They would have stood between huge arches. In fact, they had some structural purpose. It's interesting to note that each of these lamassu is actually carved out of monolithic stone, that is, there are no cuts here. These are single pieces of stone, and in the ancient world, it was no small task to get these stones in place.

Beth: Well, and apparently, there were relief carvings in the palace that depicted moving these massive lamassu into place. So it's important to remember that the lamassu were the gateway figures, but the walls of the palace were decorated with relief sculpture showing hunting scenes and other scenes indicating royal power.

Steven: This is a lamassu that was actually a guardian for the exterior gate of the city. It's in awfully good condition.

Beth: Well my favorite part is the crown. It's decorated with rosettes,

and then double horns that come around toward the top center, and then on top of that, a ring of feathers.

Steven: It's really delicate for such a massive and powerful creature. The faces are extraordinary. First of all, just at the top of the forehead, you can see kind of incised wavy hair that comes just below the crown, and then you have a connected eyebrow.

Beth: And then the ears are the ears of a bull that wear earrings.

Steven: Actually quite elaborate earrings.

Beth: The whole form is so decorative.

Steven: And then there's that marvelous, complex representation of the beard. You see little ringlets on the cheeks of the face, but then as the beard comes down, you see these spirals that turn downward and then are interrupted by a series of horizontal bands.



Winged human-headed bull (lamassu or shedu), (Musée du Louvre)(photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/14579177351/in/photostream/> CC BY-NC-SA 2.0)

Beth: Then the wings, too, form this lovely decorative pattern up the side of the animal, and then across it's back.

Steven: In fact, across the body itself there are ringlets as well, so we get a sense of the fur of the beast. And then under the creature, and around the legs, you can see inscriptions in cuneiform.

Beth: Some of which declares the power of the king…

Steven: …and damnation for those that would threaten the king's work, that is, the citadel.

Beth: What's interesting too is that these were meant to be seen both from a frontal view and a profile view.

Steven: Well if you count up the number of legs, there's one too many. There are five.

Beth: Right, two from the front, and four from the side, but of course, one of the front legs overlaps, and so there are five legs.

Steven: What's interesting is that when you look at the creature from the side, you actually see that it's moving forward, but when you look at it from the front, those two legs are static so the beast is stationary. And think about what this means for a guardian figure at a gate. As we approach, we see it still, watching us as we move, but if we belong, if we're friendly, and were allowed to pass this gate, as we move through it, we see the animal itself move.

Beth: And then we have this combination of these decorative forms that we've been talking about with a sensitivity to the anatomy of this composite animal. His abdomen swells, and his hindquarters move back, and then we can see the veins, and muscles, and bones in his leg.



Winged human-headed bull (lamassu or shedu),(Musée du Louvre), (photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/14602592413/in/photostream/> CC BY-NC-SA 2.0)

Steven: So there really is this funny relationship between the naturalistic and the imagination of this culture.

Beth: And the decorative, but all speaking to the power, the authority of the king and the fortifications of this palace, and this city.

Steven: They are incredibly impressive. It would be impossible to broach the citadel without being awestruck by the power of this civilization.

Watch the video <https://youtu.be/2GrvBLKaRSI>.

Backstory

The lamassu in museums today (including the Louvre, shown in our video, as well the British Museum, The Metropolitan Museum of Art, and National Museum of Iraq in Baghdad, and others) came from various ancient Assyrian sites located in modern-day Iraq. They were moved to their current institutional homes by archaeologists who excavated these sites in the mid nineteenth century. (The Louvre sculptures were excavated by P.-E. Botta in 1843-44.) However, many ancient Assyrian cities and palaces—and their gates, with intact lamassu figures and other sculptures—remain as important archaeological sites in their original locations in Iraq.

In 2015, a chilling video circulated online showed people associated with ISIS destroying ancient artifacts in both the museum in Mosul, Iraq and at the nearby ancient archaeological site of ancient Nineveh. Their targets included the lamassu figures that stood at one of the many ceremonial gates to this important ancient Assyrian city. Scholars believe that this particular gate, which dates to the reign of Sennacherib around 700 B.C.E., was built to honor the god Nergal, an Assyrian god of war and plague who ruled over the underworld. Islamic State representatives claimed that these statues were "idols" that needed to be destroyed. The video features footage of men using jackhammers, drills, and sledgehammers to demolish the lamassu.

The Nergal gate is only one of many artifacts and sites that have been demolished or destroyed by ISIS over the past decade. Despite the existence of other examples in museums around the world, the permanent loss of these objects is a permanent loss to global cultural heritage and to the study of ancient Assyrian art and architecture.

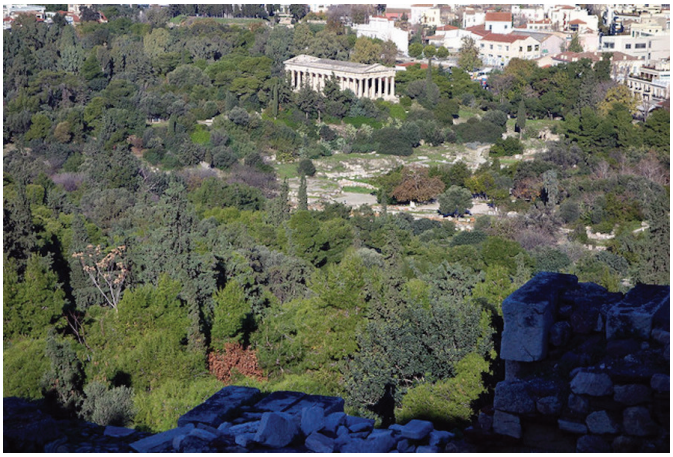
Watch the 2015 video and read more <https://www.nytimes.com/2015/02/27/world/middleeast/historians-pore-over-isis-video-of-smashed-statues-for-clues-to-whats-been-lost.html>.

Backstory by Dr. Naraelle Hohensee.

26. The Athenian Agora

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



View of the Athenian Agora from the Acropolis (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pNySws>

This is the transcript of a conversation conducted in Athens.

Beth: We're overlooking the Agora, the most important public space in Athens in the fifth century B.C.E.

Steven: Up the sacred way, at the top of the Acropolis were the sacred sites of Athens, here at the base was the place of public discourse, the heart of the Athenian experiment in democracy.

Beth: In the fifth century we see this opening up of the ability of the citizenry to participate in the government. But Athens was not the kind of democracy that we think of in the West. The citizens of Athens didn't vote for their representatives in the government but participated directly. With an election, anyone who's a great speaker, or someone who's particularly wealthy could become politically powerful, and so offices were held by rotation, instead of by election.

Steven: There were few positions that were voted on. Those were positions where particular skills were required. For instance, Pericles was re-elected to be the general some 15 times.

Beth: He was essentially the leader or the president of Athens during about a 30-year period. But it's important to remember what we mean by the ideas of democracy that were started and formulated here.

Steven: Well, they were extremely limited. In order to be able to take part in public life to take part in governmental decision making, you had to be a citizen, and in order to be a citizen, you had to be male, and you had to be Athenian. In fact, Pericles, the great Athenian general, would tighten up the rules, so both of your parents had to be Athenian in order for you to be able to participate.

Beth: Right inside the museum, we can see examples of democracy in action. There are primitive machines for choosing who would sit on the juries.

Steven: We also see inscriptions in small pieces of pottery that were used to vote to ostracize public leaders that were seen to have become corrupt.

Beth: And so if one citizen was seen to be usurping power, the citizens could vote to ostracize him, and he would have to actually leave Athens. So this is a good reminder that there were a lot of checks in place against any one person assuming too much political power.

Steven: But importantly, it was during the fifth century, that the philosophy behind democratic rule was set forth, and probably the most famous expression of that was written by the historian Thucydides, who chronicled the Peloponnesian War, that is the war between the Athenians and the Spartans, and Thucydides recounts in his history a funeral oration Pericles gave during the early stages of the war with Sparta.

Beth: "If we look to our laws, they afford equal justice to all in their private differences. If to social standing advancement in public life falls to reputation for capacity, class considerations not being allowed to interfere with merit. Nor again does poverty bar the way. If a man is able to serve the state, he is not hindered by the obscurity of his condition."

Steven: So what Pericles by way of Thucydides is laying out here, is this notion of a meritocracy, and that no able person's ability is lost due to having been born without wealth.

Beth: And the idea of equality before the law. These are fundamental



Model of the Athenian Agora in the Agora Museum showing the 2nd century C.E. (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/q3NZTf>

principles to western ideas of democracy. It's no wonder that we look back to Athens in the fifth century B.C.E. and heroize it may be a bit too much sometimes.

Steven: Well, especially considering how fragile it was, and how limited it was, and how short-lived it was.

Beth: So this is a space that started out as a place for a market, as a place of buying and selling, and gradually during the archaic and then the classical period, became a place of government with administrative buildings, and also some sacred spots as well, although the primary sacred spot was of course on the Acropolis.

Steven: We also have increasingly substantial structures built in the fifth century in the Agora, and one of the most important is called the Stoa. People would have conducted business here. Political discussions might have taken place here. All kinds of civic life. Once a year, a great procession would make its way through the Agora and up to the sacred mount.

Beth: This is the main religious festival in Athens, dedicated to Athena, the goddess who is the protectress of the city. So we can imagine as we look over the Agora, a procession of Athenians making their way up to the Parthenon.

Steven: I love to look over the Agora, and to imagine the great philosopher Socrates walking through here, causing trouble, asking questions.

Beth: Asking uncomfortable questions that would ultimately make him an enemy of the Athenian state.

Steven: And lead to his execution.

Watch the video <https://youtu.be/TYXCcTchLnI>.

27. Anavysos Kouros (youth)

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



Anavysos Kouros, c. 530 B.C.E., marble, 6′ 4″ (National Archaeological Museum, Athens) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/m7rHAo>

This is the transcript of a conversation conducted at the National Archaeological Museum, Athens.

Steven: We're in the National Archaeological Museum in Athens looking at the Anavysos Kouros.

Beth: A sculpture from the Archaic period, the sixth century B.C.E. in ancient Greece.

Steven: It's about life-size, a little bit larger, and the idea of monumental sculpture of an ideal male youth is a very powerful motif in Greek culture.

Beth: Thousands of these figures were produced. We give them the generic name of kouros, or "youth." They could be used as grave markers, as offerings in sanctuaries, and sometimes, though more rarely, they represented a god, usually the god Apollo.

Steven: Some art historians think that perhaps these monumental sculptures were inspired by contact with ancient Egypt.

Beth: Well, you can see the resemblance to Egyptian sculpture very easily.

Steven: And look at the traces of the original paint in the hair, on the eyes, it really gives us a sense of what this would have looked like initially.

Beth: So one of the things that happens when you talk about the kouros figures is that you compare them to one another because they're of a type, but there's also the tendency to compare them to human bodies. How lifelike is it, or how far from being lifelike is it?

Steven: In the earlier kouros, you have a greater sense of stiffness, of abstraction of the human body, where forms are represented almost as symbols rather than as an articulation of what we see in the human body.

Beth: And in those earlier figures, too, you have the sense of the body corresponding to a block of stone, so you have four very distinct views. This particular kouros shows us the way that during the sixth century, during the Archaic period, the figures become more natural, more lifelike, more rounded, less blocky.

Steven: Well, look at the swelling of the calves, of the hips, of the abdomen. and certainly of the arms and the cheeks. In earlier figures, what we saw was a sort of inscribing in the stone, almost as if you were drawing into the stone, whereas here you have modeling in the round.

Beth: And in some earlier figures, we see a hard line where the torso meets the legs, and here that's been softened, so there's a more gradual transition.

Steven: And the forms of the face are more integrated. In fact, the forms of the entire body, one piece to the next, one part of the body to the next, is more integrated. So you see a more natural flow of the cheeks, to the sides of the face, to the temples, to the forehead. But there's still continuity with these older standing nude figures: the left leg is out, both knees are locked, the weight is evenly distributed on both legs. We still have traditional braiding of the hair, we still have that traditional headband—and those wonderful curls underneath it.



Detail, Anavysos Kouros, c. 530 B.C.E., marble (National Archaeological Museum, Athens) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/m7qDpZ>

Beth: And still, that "Archaic smile," which speaks of a figure that transcends this world, that has a sense of aristocratic nobility, and in fact this figure was set up by an aristocratic family as a grave marker to their son, who died in war. There were often inscriptions of the bases of the kouros figures, and there was a base with an inscription found near the find spot of this particular figure…

Steven: …that was probably from about the same period, and some art historians think that it belongs to this sculpture, some don't. But in any case, it's instructive.

Beth: The inscription reads "Stay and mourn at the monument of dead Kroisos, who raging Ares slew as he fought in the front ranks." So just to unpack that a little bit, Kroisos would be the name of the figure—

Steven: The man who died.

Beth: And Ares is the god of war. So this is obviously a youth who fell in battle, which is the most noble way to die, the way to die that's associated with the ancient Greek heroes that we read about in the Iliad.



Detail, Anavysos Kouros, c. 530 B.C.E., marble (National Archaeological Museum, Athens) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/m7rBz5>

Steven: And look at the sense of potential, of this life that was cut short, but at this moment of greatest strength, of greatest beauty. And it's important to recognize that this is not a portrait, this is not a specific individual. There's a reference to an individual here, but the body that's being represented is an ideal, it is a perfected body. And as with so many of these standing male figures, the artist has had to leave a little bit of a bridge attaching the hands to the hips in order to strengthen the object.

Beth: Or else the limbs could easily break off.

Steven: This figure was found in 1936 and was spirited out of Greece, and was recovered by the Greek Police in Paris, and brought back a year later.

Beth: The intention was to sell it on the market outside of Greece.

Steven: And this has been a continuous problem, grave robbing of antiquities in Greece and in other countries because the market is so strong. It's created not only a black market, for stolen objects, but also a market for forgeries, which has complicated archaeological study.

Beth: But the good thing about this figure was that he was found, he was returned to Greece, and we can all see him here in the Archaeological Museum in Athens.

Watch the video. <https://www.youtube.com/watch?v=v1_pCZBVWuY>



Detail, Anavysos Kouros, c. 530 B.C.E., marble (National Archaeological Museum, Athens) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/m7rCT7>

28. Peplos Kore from the Acropolis

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted in the Acropolis Museum, Athens.



Peplos Kore, c. 530 B.C.E., from the Acropolis, Athens, Greece (Acropolis Museum, Athens) (photo: Marsyas, CC BY-SA 2.5) <https://commons.wikimedia.org/wiki/Category: Peplos_Kore#/media/File:ACMA_679_Kore_1.JPG>

Beth: We're looking at a figure known as the Peplos Kore in the Acropolis Museum in Athens. Now this is one of the funny things that happens in art history. Things get named based on original thoughts about something. But then when later research is done that name doesn't really work anymore.

Steven: But we keep the name because everybody knows it by that name.

Beth: Exactly.

Steven: So this is known as the Peplos Kore because we originally thought she was simply wearing a peplos which is an ancient Greek costume, a rectangle of cloth often linen that is pinned at the shoulders and then falls down.

Beth: A kore is a type of figure that was found throughout ancient Greece. It's a female figure that's clothed and the counterpart to the male kouros who was nude.

Steven: Kore simply means young woman in Greek.

Beth: Both korai and kouroi were found in great numbers during the Archaic period which is the period just before the classical.

Steven: It's a small sculpture and it was found on the Acropolis.

Beth: Korai figures were generally offerings to the goddess Athena brought interestingly in many cases by men.

Steven: But recent research suggests that this may not be a representation of a young woman at all. This might be a goddess.

Beth: This figure is clothed in a very unusual way.

Steven: Among all of the sculptures of young women that were found on the Acropolis, this is the only one dressed in this way. Now art historians are actively arguing about what it is that she's wearing. Some still hold to the idea of the peplos. Some suggest that it is a chiton underneath the peplos. Some say that there's a cape above. So there's any number of possibilities. It has also been researched into the original coloration of the figure, which helps us understand her costume.

Beth: Because what she is wearing is so unusual and is similar to sculptures of goddesses, there is some conjecture recently, very carefully researched conjecture that this may in fact not be an offering—which is what's true of most korai on the Acropolis—but that this is a goddess herself, perhaps Artemis or Athena.

Steven: Well Artemis is really important. She was the goddess of the hunt.

Beth: And she often carried a bow and arrow. And what's so frustrating about this sculpture is that we don't have what she was carrying which would settle once and for all a lot of questions about who she was.

Steven: Well clearly she had her left arm straight out, bent at the elbow…

Beth: …which was characteristic of most of the representations of these young women.

Steven: But in this case we think she might have been holding a bow with her left hand, and we can see in her right hand a fist, which is drilled in such a way that it could easily have held an arrow. So she may well be Artemis, the goddess the Romans would later call Diana. Let's take a close look at the figure. We can see that there are a lot of holes crowning her head. She probably wore a metal diadem, a kind of metal crown with rays that would have come up, which certainly suggests her divinity.

Beth: And it wasn't unusual for these female figures to wear crowns or to wear other kinds of jewelry that were represented either in paint or as metal that was applied to the sculpture.

Steven: We can also see that there's a rod that rises right out of top of her head and some art historians have suggested that there might have been a crescent above the diadem. And as you said, we can see holes for bronze earrings which would have been there originally. Her face would have been more complexly painted. Only the red really survives, but we think that there was likely some black around the eyes and around the eyebrows, as well as red and perhaps some more subtle colors as well.

Beth: The sculpture has indicated not only her breasts and her waist, but also a subtle sense of her legs underneath that very heavy drapery. There's a little bit of a sense of movement in the figure.

Steven: This is very much an Archaic figure.

Beth: She does wear that "Archaic smile."

Steven: But we have to remember that that smile was not meant to be an expression of emotion of happiness but rather a symbol of well being.



Peplos Kore, c. 530 B.C.E., from the Acropolis, Athens, Greece (Acropolis Museum, Athens) (photo: Marsyas, CC BY-SA 2.5) <https://commons.wikimedia.org/wiki/Category: Peplos_Kore#/media/File:ACMA_679_Kore_2.JPG>

Beth: And that smile gives us the figure a sense of being transcendent, a sense of being ideal, of not engaging in the world of emotion and difficulty, but somehow rising above all that. So that makes sense for a figure that was a goddess, or for a figure that represented ideal femininity.

Steven: And I think that was probably really beautifully expressed when this sculpture was new and still brightly painted. We found traces of paint in the band at the bottom of the cloth that hangs down over her abdomen. And then in the front of her garment it seems to part just in the middle of her torso.

Beth: We see representation of embroidery, of decorative patterns, and of animals.

Steven: Right, we see sphinx, we see horses; there are representations of perhaps goats. All of which is visible only under special lighting and is no longer visible to the eye…

Beth: …and perhaps suggests fecundity or fertility. It's very difficult to know.

Steven: What we *do* know is that she is one of the most exceptional figures from the Archaic period. We're lucky she survived for all of these years.

Watch the video. <https://www.youtube.com/watch?v=RjpT4Apgda8>



Peplos Kore plaster cast and reconstruction (Cambridge Museum of Classical Archaeology) (photo: Zde, CC BY-SA 4.0) <https://tinyurl.com/y6q9k6t5>

29. Sarcophagus of the Spouses

Dr. Jeffrey Becker



Sarcophagus of the Spouses, c. 520 B.C.E., Etruscan, painted terracotta, 3 feet 9-1/2 inches x 6 feet 7 inches, found in the Banditaccia necropolis, Cerveteri (Museo Nazionale di Villa Giulia in Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pNA6fi>

The *Sarcophagus of the Spouses* is an anthropoid (human-shaped), painted terracotta sarcophagus found in the ancient Etruscan city of Caere (now Cerveteri, Italy). The sarcophagus, which would have originally contained cremated human remains, was discovered during the course of archaeological excavations in the Banditaccia necropolis of ancient Caere during the nineteenth century and is now in Rome. The sarcophagus is quite similar to another terracotta sarcophagus from Caere depicting a man and woman that is presently housed in the Louvre Museum in Paris; these two sarcophagi are contemporary to one another and are perhaps the products of the same artistic workshop.

The sarcophagus depicts a reclining man and woman on its lid. The pair rests on highly stylized cushions, just as they would have done at an actual banquet. The body of the sarcophagus is styled so as to resemble a kline (dining couch). Both figures have highly stylized hair, in each case plaited with the stylized braids hanging rather stiffly at the sides of the neck. In the female's case, the plaits are arranged so

as to hang down in front of each shoulder. The female wears a soft cap atop her head; she also wears shoes with pointed toes that are characteristically Etruscan. The male's braids hang neatly at the back, splayed across the upper back and shoulders. The male's beard and the hair atop his head is quite abstracted without any interior detail. Both figures have elongated proportions that are at home in the archaic period in the Mediterranean.



Upper bodies (detail), Sarcophagus of the Spouses, c. 520 B.C.E., Etruscan, painted terracotta, 3 feet 9-1/2 inches x 6 feet 7 inches, found in the Banditaccia necropolis, Cerveteri (Museo Nazionale di Villa Giulia in Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pNA6ga>



Feet and shoes (detail), Sarcophagus of the Spouses, c. 520 B.C.E., Etruscan, painted terracotta, 3 feet 9-1/2 inches x 6 feet 7 inches, found in the Banditaccia necropolis, Cerveteri (Museo Nazionale di Villa Giulia in Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/p9aKiC>

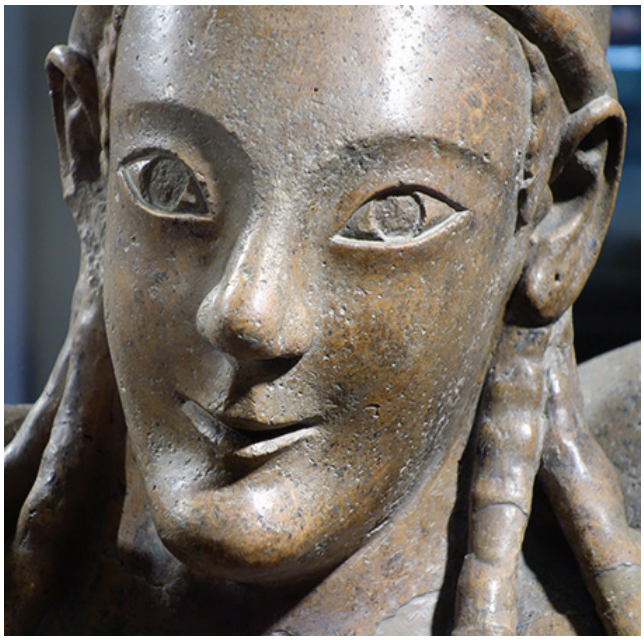
A banquet

The *Sarcophagus of the Spouses* has been interpreted as belonging to a banqueting scene, with the couple reclining together on a single dining couch while eating and drinking. This situates the inspiration for the sarcophagus squarely in the convivial (social) sphere and, as we are often reminded, conviviality was central to Etruscan mortuary rituals. Etruscan funerary art—including painted tombs—often depicts scenes of revelry, perhaps as a reminder of the funeral banquet that would send the deceased off to the afterlife or perhaps to reflect the notion of perpetual conviviality in said afterlife. Whatever the case, banquets provide a great deal of iconographic fodder for Etruscan artists.



Banquet Plaque (detail) from Poggio Civitate, early 6th century B.C.E., Etruscan, terracotta (Antiquarium di Poggio Civitate Museo Archeologico, Murlo, Italy) (photo: sailko, <http://commons.wikimedia.org/wiki/File:Lastra_di_rivestimento_fittile_con_scena_di_banchetto,_murlo,_antiquarium_di_poggio_civitate,_VI_sec._ac..JPG.> CC BY-SA 3.0)

In the case of the sarcophagus it is also important to note that at Etruscan banquets, men and women reclined and ate together, a circumstance that was quite different from other Mediterranean cultures, especially the Greeks. We see multiple instances of mixed gender banquets across a wide chronological range, leading us to conclude that this was common practice in Etruria. The terracotta plaque from Poggio Civitate, Murlo (above), for instance, that is roughly contemporary to the sarcophagus of the spouses shows a close iconographic parallel for this custom. This cultural custom generated some resentment—even animus—on the part of Greek and Latin authors in antiquity who saw this Etruscan practice not just as different, but took it as offensive behavior. Women enjoyed a different and more privileged status in Etruscan society than did their Greek and Roman counterparts.



Female's face (detail), Sarcophagus of the Spouses, c. 520 B.C.E., Etruscan, painted terracotta, 3 feet 9-1/2 inches x 6 feet 7 inches, found in the Banditaccia necropolis, Cerveteri (Museo Nazionale di Villa Giulia in Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pNA6hx>



Seated statue of Zeus from Poseidonia (Paestum) c. 530 B.C.E., terracotta (Museo Archeologico Nazionale di Paestum) (photo: Dave & Margie Hill, CC BY-SA 2.0) <http://commons.wikimedia.org/wiki/File:Paestum_ Museum_%286120763666%29.jpg>

Technical achievement

The *Sarcophagus of the Spouses* is a masterwork of terracotta sculpture. Painted terracotta sculpture played a key role in the visual culture of archaic Etruria. Terracotta artwork was the standard for decorating the superstructure of Etruscan temples and the coroplastic (terracotta) workshops producing these sculptures often displayed a high level of technical achievement. This is due, in part, to the fact that ready sources of marble were unknown in archaic Italy. Even though contemporary Greeks produced masterworks in marble during the sixth century B.C.E., terracotta statuary such as this sarcophagus itself counts as a masterwork and would have been an elite commission. Contemporary Greek colonists in Italy also produced high-level terracotta statuary, as exemplified by the seated statue of Zeus from Poseidonia (later renamed Paestum) that dates c. 530 B.C.E.

Etruscan culture

In the case of the Caeretan sarcophagus, it is an especially challenging commission. Given its size, it would have been fired in multiple pieces. The composition of the reclining figures shows awareness of Mediterranean stylistic norms in that their physiognomy reflects an Ionian influence (Ionia was a region in present-day Turkey, that was a Greek colony)—the rounded, serene faces and the treatment of hairstyles would have fit in with contemporary Greek styles. However, the posing of the figures, the angular joints of the limbs, and their extended fingers and toes reflect local practice in Etruria. In short, the artist and his workshop are aware of global trends while also catering to a local audience. While we cannot identify the original owner of the sarcophagus, it is clear that the person(s) commissioning it would have been a member of the Caeretan elite.



Male's face (detail), Sarcophagus of the Spouses, c. 520 B.C.E., Etruscan, painted terracotta, 3 feet 9-1/2 inches x 6 feet 7 inches, found in the Banditaccia necropolis, Cerveteri (Museo Nazionale di Villa Giulia in Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pNwQZc>

The *Sarcophagus of the Spouses* as an object conveys a great deal of information about Etruscan culture and its customs. The convivial theme of the sarcophagus reflects the funeral customs of Etruscan society and the elite nature of the object itself provides important information about the ways in which funerary custom could reinforce the identity and standing of aristocrats among the community of the living.

29. Sarcophagus of the Spouses

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



Sarcophagus of the Spouses, c. 520 B.C.E., Etruscan, painted terracotta, 3 feet 9-1/2 inches x 6 feet 7 inches, found in the Banditaccia necropolis, Cerveteri (Museo Nazionale di Villa Giulia in Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pNA6fi>

This is the transcript of a conversation conducted at Museo Nazionale Etrusco di Villa Giulia, Rome.

Steven: We're in the Etruscan Museum in Rome and we're looking at one of the most important objects ever found in an Etruscan tomb—and there were a lot of Etruscan tombs.

Beth: Well, this is the primary way we know about Etruscan culture. They left us no literature, no history. But we have a lot of their artwork, which is found in tombs, and a lot of those objects have inscriptions.

Steven: This is the Sarcophagus of the Spouses. There were two well known versions of this: one is in Paris at the Louvre and the other is here in Rome. So this is a large ceramic container and the two figures are essentially a lid that can be lifted off.

Beth: The Etruscans occupied the area of northern Italy and it's an interesting time because at the same moment there are Romans who are occupying the city of Rome and south of that there are Greek colonies.

Steven: But the Romans were not yet Rome as we know it. They were just beginning and in fact they were ruled by Etruscan kings.

Beth: Right, and it wasn't until 509 that the Romans ousted the last Etruscan king. And this dates from slightly earlier than that.

Steven: So let's look at the couple.

Beth: Well, they're incredibly life-like, and this is surprising because when we think about ancient Greek sculpture from this time—we might think of the kouros figures—which are very stiff, where the limbs are very close to the body. And here immediately we notice the figures moving out into our space, extending their arms.



Sarcophagus of the Spouses, c. 520 B.C.E., Etruscan, painted terracotta, 3 feet 9-1/2 inches x 6 feet 7 inches, found in the Banditaccia necropolis, Cerveteri (Museo Nazionale di Villa Giulia in Rome), (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pNA6ga>

Steven: The figures represented in Archaic Greek art are also separate. You think of the male kouros figure or the female kore. Those are free-standing figures that stand alone and here we have two figures that embrace, that lie next to each other, where there's a tremendous sense of intimacy.

Beth: In ancient Greek culture there are no monumental tombs like the ones we find in Etruscan culture. There are similarities and there are differences between these two cultures that are closely communicating with one another.

Steven: One of the most important differences is that this is made in terracotta, that is this is clay. Whereas the Greeks preferred mostly marble, but increasingly would work in bronze. This would have been modeled as a complete object and then most likely, when it had begun to dry, what potters call the leather-hard stage, it's likely that the artist would've burnished the object, that is smoothed it, with a hard surface to create a glossy sheen. Then it would have been cut in half, likely, because the object is so large, it might not have fit in the kiln. And so this would have been fired in four pieces: both the lid and the base, on both sides.

Beth: So we mentioned the way that the figures' arms are outstretched and the way the figures move into our space. Likely they were holding objects relating to a banquet. We see banqueting scenes often on the walls in frescoes in Etruscan tombs.

Steven: Or as some art historians have conjectured, it's possible that the woman was holding a perfume bottle. It's also possible that one of the figures was holding a pomegranate, which is a symbol of the eternal.

Beth: There is a sense of sociability here and it might remind us of scenes we see on Greek pottery, of figures at a banquet, the symposium… And when we see that in Greek pottery, those are male figures. But here we have a couple: he's got his arm around her. But we're not supposed to see these as portraits; this is not the way this man and women look. But instead, like the "Archaic smile," we have features that are stylized.

Steven: These are clearly not rendered from the observation of a model. So we have found literally thousands of Etruscan tombs.

Beth: This was found in a necropolis, that is a cemetery called Banditaccia, at Cerveteri, Italy.

Steven: This was one of the principle cities of the Etruscans.

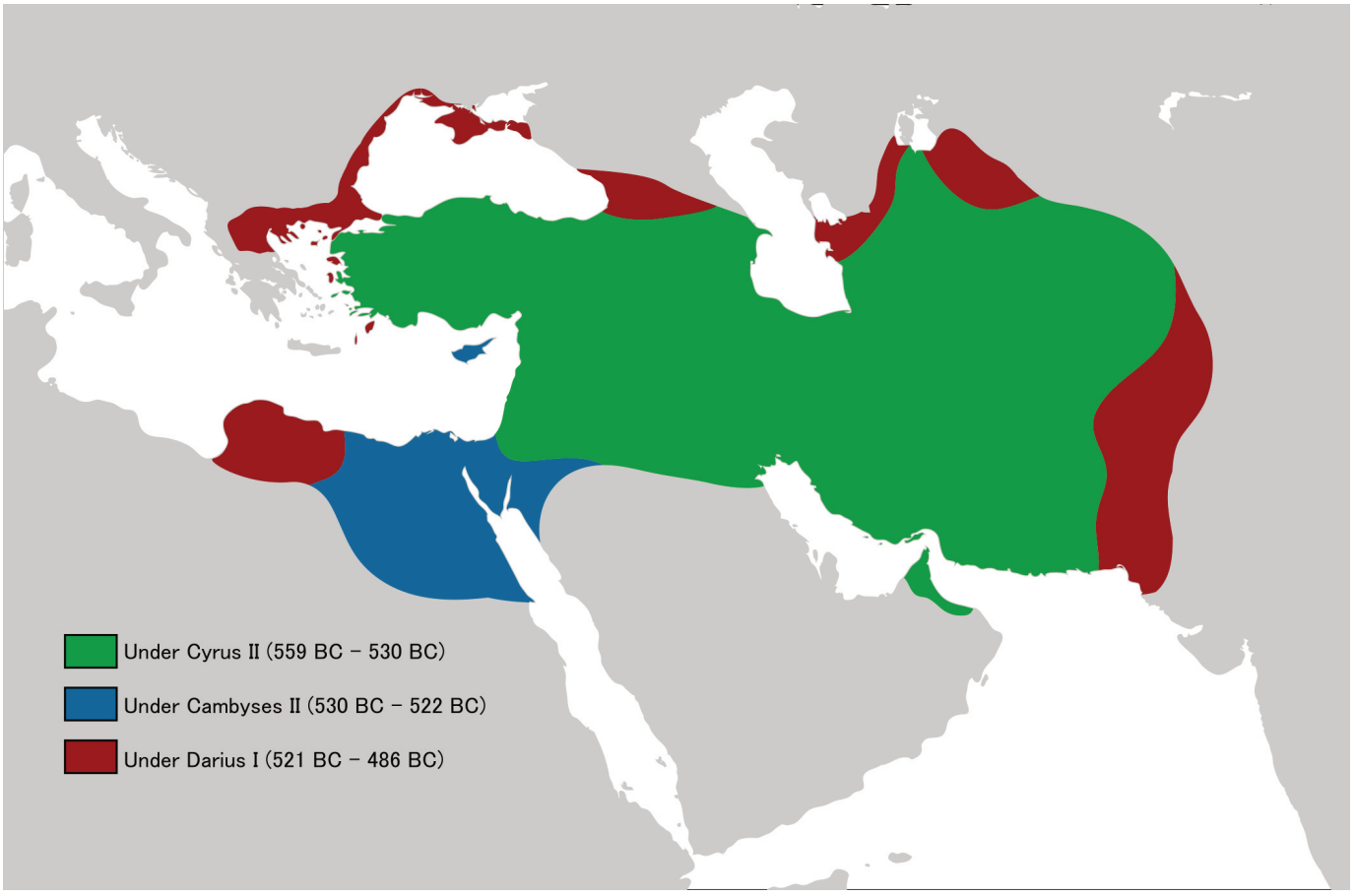
Beth: It was found, broken into 400 pieces, and reassembled. And you can see when you look closely which pieces have been filled in by conservators and which pieces are original to the sculpture.

Steven: And if you look closely you can see the discs of the pupils are hollows and it's likely that something was originally inlaid there. It's really quite extraordinary how lucky we are to have such an intact object.

Watch the video <https://youtu.be/XmirNCA_Lj4>.

30. Audience Hall (apadana) of Darius and Xeres

Dr. Jeffrey Becker



Growth of the Achaemenid Empire under different kings (graphic: Ali Zifan, CC BY-SA 4.0) <https://tinyurl.com/yxuno9ql>

By the early fifth century B.C.E., the Achaemenid (Persian) Empire ruled an estimated 44 percent of the human population of planet Earth. Through regional administrators the Persian kings controlled a vast territory which they constantly sought to expand. Famous for monumental architecture, Persian kings established numerous monumental centers, among those is Persepolis (today, in Iran).

The great audience hall of the Persian kings Darius and Xerxes presents a visual microcosm of the Achaemenid empire—making clear, through sculptural decoration, that the Persian king ruled over all of the subjugated ambassadors and vassals (who are shown bringing tribute in an endless eternal procession).



Kylix depicting a Greek hoplite slaying a Persian inside, by the Triptolemos painter, 5th century B.C.E. (National Museums of Scotland)

The Achaemenid Empire (First Persian Empire) was an imperial state of Western Asia founded by Cyrus the Great and flourishing from c. 550-330 B.C.E. The empire's territory was vast, stretching from the Balkan peninsula in the west to the Indus River valley in the east. The Achaemenid Empire is notable for its strong, centralized bureaucracy that had, at its head, a king and relied upon regional satraps (regional governors).

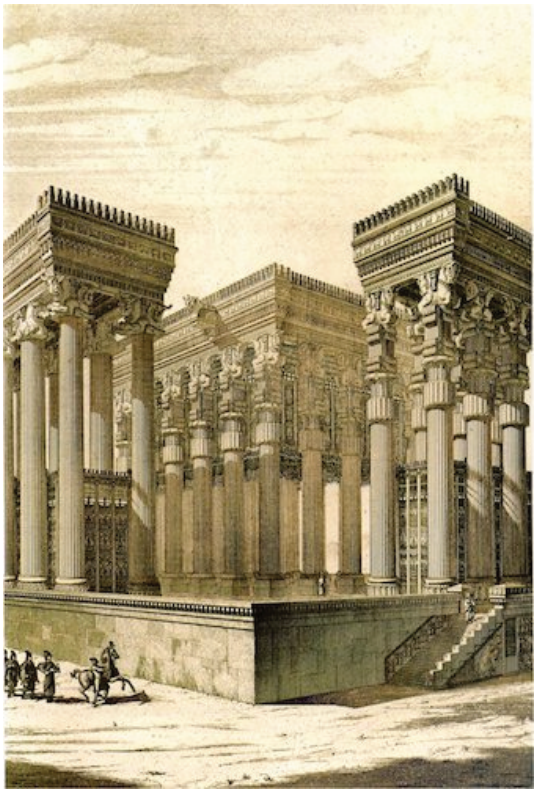
A number of formerly independent states were made subject to the Persian Empire. These states covered a vast territory from central Asia and Afghanistan in the east to Asia Minor, Egypt, Libya, and Macedonia in the west. The Persians famously attempted to expand their empire further to include mainland Greece but they were ultimately defeated in this attempt. The Persian kings are noted for their penchant for monumental art and architecture. In creating monumental centers, including Persepolis, the Persian kings employed art and architecture to craft messages that helped to reinforce their claims to power and depict, iconographically, Persian rule.

Persepolis, the ceremonial capital of the Achaemenid Persian empire (c. 550-330 B.C.E.), lies some 60 km northeast of Shiraz, Iran. The earliest archaeological remains of the city date to c. 515 B.C.E. Persepolis, a Greek toponym meaning "city of the Persians", was known to the Persians as Pārsa and was an important city of the ancient world, renowned for its monumental art and architecture. The site was excavated by German archaeologists Ernst Herzfeld, Friedrich Krefter, and Erich Schmidt between 1931 and 1939. Its remains are striking even today, leading UNESCO to register the site as a World Heritage Site in 1979.

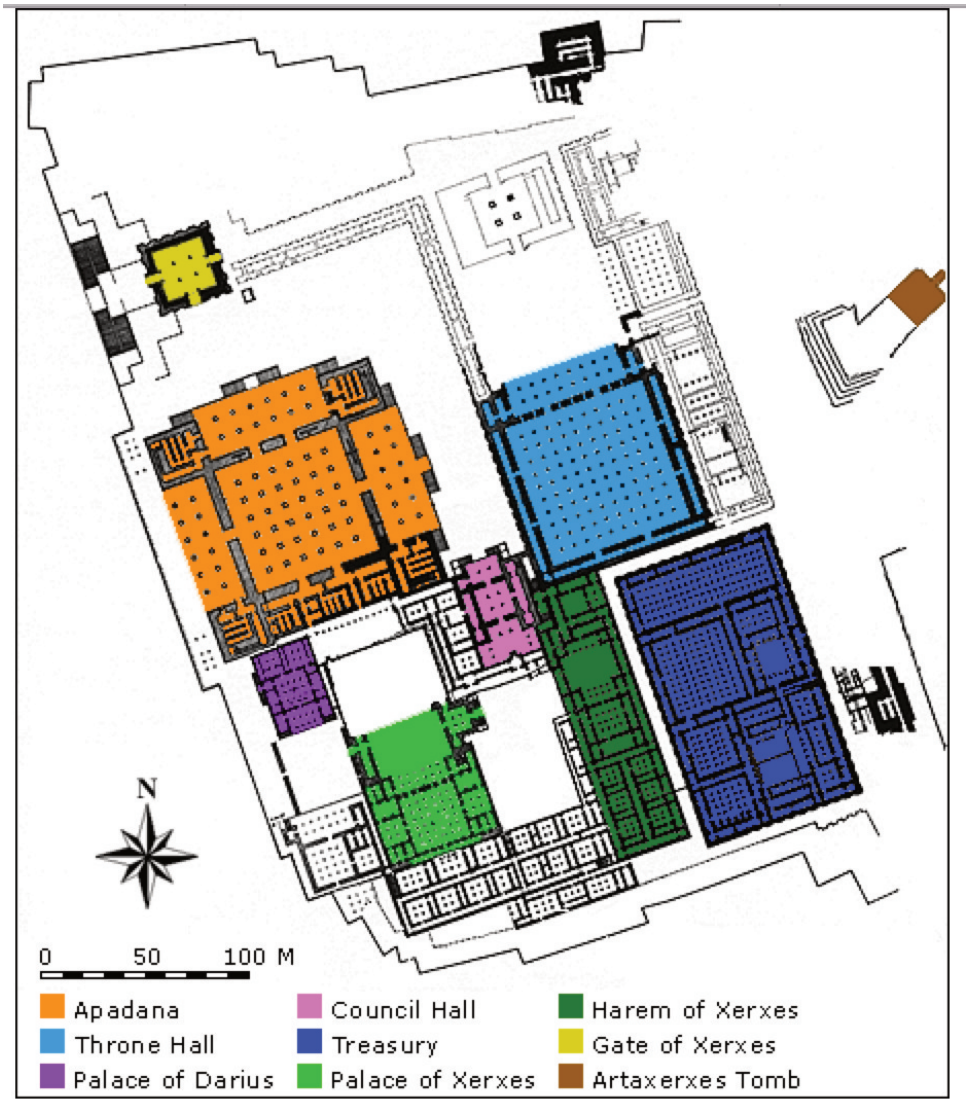


Apādana, Persepolis (Fars, Iran), c. 520-465 B.C.E. (photo: Alan Cordova, CC BY-NC-ND 2.0) <https://www.flickr.com/photos/acordova/13361330595>

Persepolis was intentionally founded in the Marvdašt Plain during the later part of the sixth century B.C.E. It was marked as a special site by Darius the Great (reigned 522-486 B.C.E.) in 518 B.C.E. when he indicated the location of a "Royal Hill" that would serve as a ceremonial center and citadel for the city. This was an action on Darius' part that was similar to the earlier king Cyrus the Great who had founded the city of Pasargadae. Darius the Great directed a massive building program at Persepolis that would continue under his successors Xerxes (r. 486-466 B.C.E.) and Artaxerxes I (r. 466-424 B.C.E.). Persepolis would remain an important site until it was sacked, looted, and burned under Alexander the Great of Macedon in 330 B.C.E.



19th century reconstruction of the Apādana, Persepolis (Fars, Iran) by Charles Chipiez



Plan of Persepolis (photo: University of Chicago) <https://oi.uchicago.edu/collections/photographic-archives/persepolis/plan-persepolis-terrace>

Darius' program at Persepolis including the building of a massive terraced platform covering 125,000 square meters of the promontory. This platform supported four groups of structures: residential quarters, a treasury, ceremonial palaces, and fortifications. Scholars continue to debate the purpose and nature of the site. Primary sources indicate that Darius saw himself building an important stronghold. Some scholars suggest that the site has a sacred connection to the god Mithra (Mehr), as well as links to the Nowruz, the Persian New Year's festival. More general readings see Persepolis as an important administrative and economic center of the Persian empire.

The Apādana palace is a large ceremonial building, likely an audience hall with an associated portico. The audience hall itself is hypostyle in its plan, meaning that the roof of the structure is supported by columns. Apādana is the Persian term equivalent to the Greek hypostyle (Ancient Greek: ὑπόστυλος hypóstȳlos). The footprint of the Apādana is c. 1,000 square meters; originally 72 columns, each standing to a height of 24 meters, supported the roof (only 14 columns remain standing today). The column capitals assumed the form of either twin-headed bulls (above), eagles or lions, all animals represented royal authority and kingship.



Bull Capital from Persepolis, Apādana, Persepolis (Fars, Iran), c. 520-465 B.C.E. (National Museum of Iran) (photo: s1ingshot) <flick.kr/p/x4CL23>

The king of the Achaemenid Persian empire is presumed to have received guests and tribute in this soaring, imposing space. To that end a sculptural program decorates monumental stairways on the north and east. The theme of that program is one that pays tribute to the Persian king himself as it depicts representatives of 23 subject nations bearing gifts to the king.

The monumental stairways that approach the Apādana from the north and the east were adorned with registers of relief sculpture that depicted representatives of the twenty-three subject nations of the Persian empire bringing valuable gifts as tribute to the king. The sculptures form a processional scene, leading some scholars to conclude that the reliefs capture the scene of actual, annual tribute processions—perhaps on the occasion of the Persian New Year–that took place at Persepolis. The relief program of the northern stairway was perhaps completed c. 500-490 B.C.E. The two sets of stairway reliefs mirror and complement each other. Each program has a central scene of the enthroned king flanked by his attendants and guards.



East stairway, Apādana, Persepolis (Fars, Iran), c. 520-465 B.C.E.

Noblemen wearing elite outfits and military apparel are also present. The representatives of the twenty-three nations, each led by an attendant, bring tribute while dressed in costumes suggestive of their land of origin. Margaret Root interprets the central scenes of the enthroned king as the focal point of the overall composition, perhaps even reflecting events that took place within the Apādana itself.

The relief program of the Apādana serves to reinforce and underscore the power of the Persian king and the breadth of his dominion. The motif of subjugated peoples contributing their wealth to the empire's central authority serves to visually cement this political dominance. These processional scenes may have exerted influence beyond the Persian sphere, as some scholars have discussed the possibility that Persian relief sculpture from Persepolis may have influenced Athenian sculptors of the fifth century B.C.E. who were tasked with creating the Ionic frieze of the Parthenon in Athens. In any case, the Apādana, both as a building and as an ideological tableau, make clear and strong statements about the authority of the Persian king and present a visually unified idea of the immense Achaemenid empire.



An Armenian tribute bearer carrying a metal vessel with Homa (griffin) handles, relief from the eastern stairs of the Apādana in Persepolis (Fars, Iran), c. 520-465 B.C.E. (photo: Aryamahasattva, CC BY-SA 3.0) <https://commons.wikimedia.org/wiki/File:Hay_pers.jpg>

31. Temple of Minerva (Veii), sculpture of Apollo

Dr. Laurel Taylor



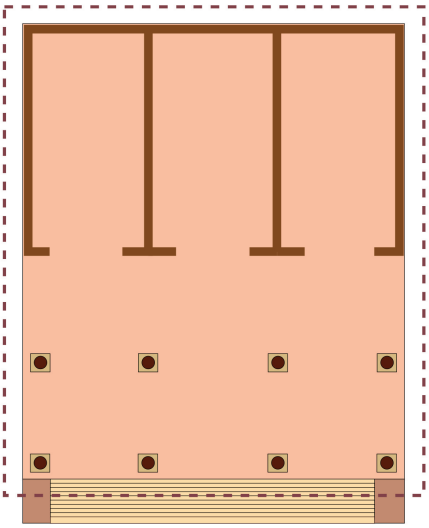
Among the early Etruscans, the worship of the gods and goddesses did not take place in or around monumental temples as it did in early Greece or in the ancient Near East, but rather, in nature. Early Etruscans created ritual spaces in groves and enclosures open to the sky with sacred boundaries carefully marked through ritual ceremony.

Around 600 B.C.E., however, the desire to create monumental structures for the gods spread throughout Etruria, most likely as a result of Greek influence. While the desire to create temples for the gods may have been inspired by contact with Greek culture, Etruscan religious architecture was markedly different in material and design. These colorful and ornate structures typically had stone foundations but their wood, mud-brick and terracotta superstructures suffered far more from exposure to the elements. Greek temples still survive today in parts of Greece and southern Italy since they were constructed of stone and marble but Etruscan temples were built with mostly ephemeral materials and have largely vanished.

How do we know what they looked like?

Despite the comparatively short-lived nature of Etruscan religious structures, Etruscan temple design had a huge impact on Renaissance architecture and one can see echoes of Etruscan, or 'Tuscan,' columns (doric columns with bases) in many buildings of the Renaissance and later in Italy. But if the temples weren't around during the fifteenth and sixteenth centuries, how did Renaissance builders know what they looked like and, for that matter, how do we know what they looked like?

Fortunately, an ancient Roman architect by the name of Vitruvius wrote about Etruscan temples in his book *De architectura* in the late first century B.C.E. In his treatise on ancient architecture, Vitruvius described the key elements of Etruscan temples and it was his description that inspired Renaissance architects to return to the roots of Tuscan design and allows archaeologists and art historians today to recreate the appearance of these buildings.



Typical Etruscan temple plan (graphic: FinnWikiNo)

Archaeological evidence for the Temple of Minerva

The archaeological evidence that does remain from many Etruscan temples largely confirms Vitruvius's description. One of the best explored and known of these is the Portonaccio Temple dedicated to the goddess Minerva (Roman=Minerva/Greek=Athena) at the city of Veii about 18 km north of Rome. The tufa-block foundations of the Portonaccio temple still remain and their nearly square footprint reflects Vitruvius's description of a floor plan with proportions that are 5:6, just a bit deeper than wide.

The temple is also roughly divided into two parts—a deep front porch with widely-spaced Tuscan columns and a back portion divided into three separate rooms. Known as a triple cella, this three-room configuration seems to reflect a divine triad associated with the temple, perhaps Menrva as well as Tinia (Jupiter/Zeus) and Uni (Juno/Hera).

In addition to their internal organization and materials, what also made Etruscan temples noticeably distinct from Greek ones was a high podium and frontal entrance. Approaching the Parthenon with its low rising stepped entrance and encircling forest of columns would have been a very different experience from approaching an Etruscan temple high off the ground with a single, defined entrance.



Aplu (Apollo of Veii), from the roof of the Portonaccio Temple, Veii, Italy, c. 510-500 B.C.E., painted terra-cotta, 5 feet 11 in high (Museo Nazionale Etrusco di Villa Giulia, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rvY274>

Sculpture

Perhaps most interesting about the Portonaccio temple is the abundant terracotta sculpture that still remains, the volume and quality of which is without parallel in Etruria. In addition to many terracotta architectural elements (masks, antefixes, decorative details), a series of over life-size terracotta sculptures have also been discovered in association with the temple. Originally placed on the ridge of temple roof, these figures seem to be Etruscan assimilations of Greek gods, set up as a tableau to enact some mythic event.

Apollo of Veii

The most famous and well-preserved of these is the *Aplu (Apollo of Veii)*, a dynamic, striding masterpiece of large scale terracotta sculpture and likely a central figure in the rooftop narrative. His counterpart may have been the less well-preserved figure of Hercle (Hercules) with whom he struggled in an epic contest over the Golden Hind, an enormous deer sacred to Apollo's twin sister Artemis. Other figures discovered with these suggest an audience watching the action. Whatever the myth may have been, it was a completely Etruscan innovation to use sculpture in this way, placed at the peak of the temple roof—creating what must have been an impressive tableau against the backdrop of the sky.



Detail, Aplu (Apollo of Veii), from the roof of the Portonaccio Temple, Veii, Italy, c. 510-500 B.C.E., painted terra-cotta, 5 feet 11 in high (Museo Nazionale Etrusco di Villa Giulia, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rw55He>

An artist by the name of Vulca?

Since Etruscan art is almost entirely anonymous it is impossible to know who may have contributed to such innovative display strategies. We may, however, know the name of the artist associated with the workshop that produced the terracotta sculpture. Centuries after these pieces were created, the Roman writer Pliny recorded that in the late sixth century B.C.E., an Etruscan artist by the name of Vulca was summoned from Veii to Rome to decorate the most important temple there, the temple of Jupiter Optimus Maximus. The technical knowledge required to produce terracotta sculpture at such a large scale was considerable and it may just have been the master sculptor Vulca whose skill at the Portonaccio temple earned him not only a prestigious commission in Rome but a place in the history books as well.

31. Temple of Minerva (Veii), sculpture of Apollo

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the Museo Nazionale di Villa Giulia, Rome.



Model, Etruscan temple of the 6th century B.C.E. as described by Vitruvius (Museo Nazionale di Villa Giulia, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rvY2w2>

Steven: The ancient Etruscans built temples that in some ways looked like Greek and Roman temples but are also distinct.

Beth: But when we look at them from the front, they certainly look like ancient Greek temples. But they're really different.

Steven: For one thing, the Etruscans did not use the Greek orders—that is Doric, or Ionic, or Corinthian. For another, they had very deep porches, and the temples tended to be more square.

Beth: And they're not made of stone the way ancient Greek temples were.

Steven: We're looking at the fragments of four large-scale terracotta figures from the temple at Veii, which was a principle city of the Etruscans. And we're seeing them in the Etruscan museum in Rome.

Beth: In ancient Greek architecture, we might expect to see figures like these occupying the pediment. But instead, these figures lined the rooftop.

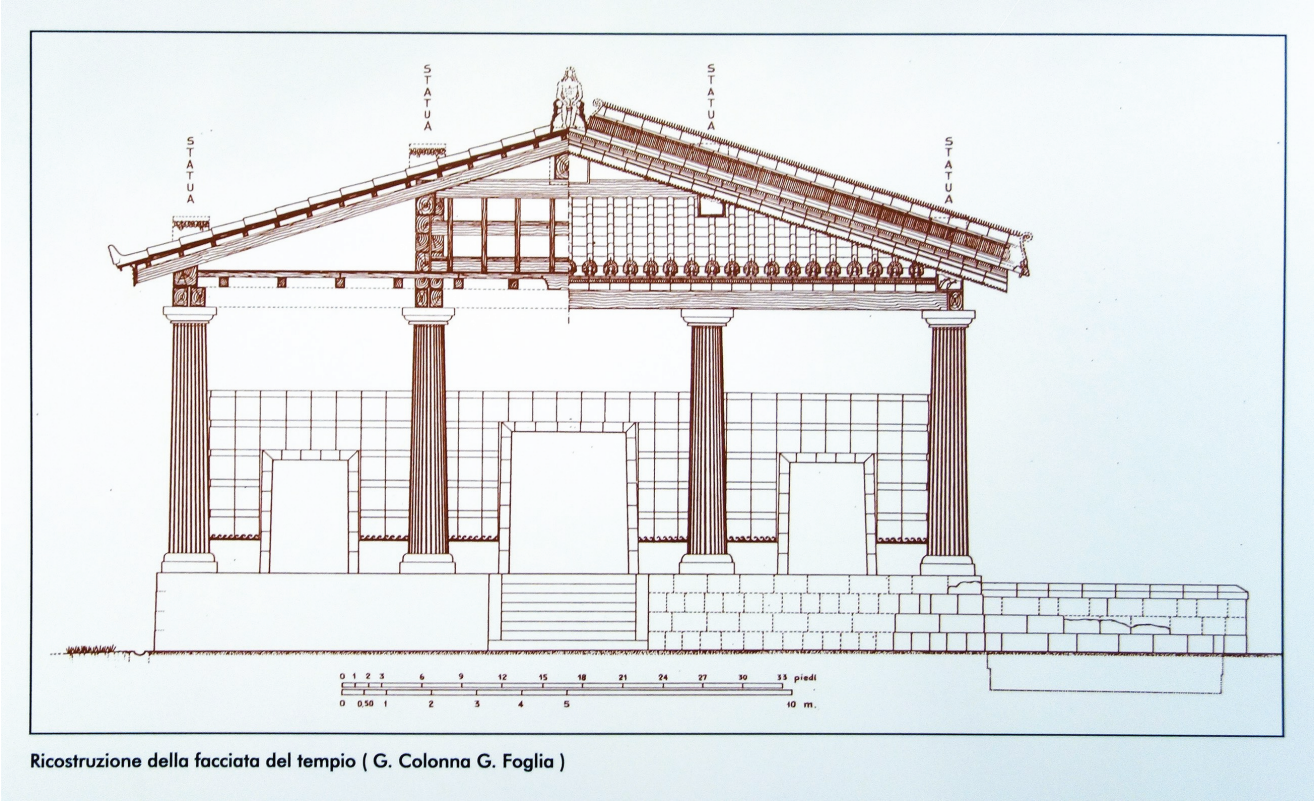
Steven: And like ancient Greek sculpture, they were very highly painted.



Hercle (Hercules) with the Golden Hind and Apulu (Apollo of Veil), from the roof of the Portonaccio Temple, Italy, c. 510-500 B.C.E., painted terracotta, 5′ 11″ high (Museo Nazionale di Villa Giulia, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/AnzRcX>

Beth: So it's such an interesting moment in Italy in the sixth century. We have Greek colonies in the south of Italy, we have the Romans in Rome although ruled by Etruscan kings, and then up in the northern part of Italy we have a confederacy of about a dozen Etruscan city states. So Italy is a complicated place in the sixth century B.C.E.

Steven: These are slightly larger than life. And although they were placed equidistantly, they do enact a specific scene.



Reconstruction of an Etruscan Temple of the 6th century according to Vitruvius (graphic: G. Colonna, G. Foglia)



Map of Italy in the 6th century B.C.E.



Hercle (Hercules) with the Golden Hind from the roof of the Portonaccio temple, Italy, c. 510-500 B.C.E., painted terracotta, 5′ 11″ high (Museo Nazionale di Villa Giulia, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/AJaA6F>

Beth: This is a scene from ancient Greek mythology. It's the third labor of Hercules. Hercules is sent out to capture a very large deer with golden horns. Now, this deer is very special to the goddess Artemis. And actually the idea is that the person who sent Hercules on this labor wants to annoy Artemis.



Antonio Tempesta, Hercules and the Hind of Mount Cerynea, 1608, etching, 5 3/16 x 7 1/16 in (Metropolitan Museum of Art)

Steven: So then she punishes Hercules. Now Hercules is known in the original Greek as Herakles. And he's shown here with the golden hind under him. He has been able to capture it, and now he's being confronted by both Artemis and her brother Apollo.

Beth: They want the deer back.

Steven: And so Hercules promises to release it once he shows it to the king, who sent him on this labor.

Beth: Something we find in Etruscan sculpture is this sense of movement and liveliness. We see that in the sarcophagus of the spouses, for example. And we see that here with the figure of Apollo, who is striding forward. And Hercules too, whose body is leaning forward and whose knee is raised. We see that sense of musculature and animation.



Aplu (Apollo of Veii) from the roof of the Portonaccio Temple, Veii, Italy, c. 510-500 B.C.E., painted terracotta, 5′ 11″ (Museo Nazionale di Villa Giulia, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rvY274>

Steven: These are terracotta—that is, they're clay. So they would have been modeled in an additive process.

Beth: Apollo wears that "Archaic smile" that we're used to seeing from the kouros figures. But he's still very different than the Greek figures. His smile is a little bit more animated, his proportions of his body are different.



Aplu (Apollo of Veii) bust detail, from the roof of the Portonaccio Temple, Veii, Italy, c. 510-500 B.C.E., painted terra-cotta, 5′ 11″ high (Museo Nazionale di Villa Giulia, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rw55He>

Steven: And the look on this face is not one that is looking out into a generalized space; he is catching the eye of Hercules. He is engaged directly, and therefore engages us.

Beth: And just like their faces are stylized, their bodies are also highly stylized. There's almost a sense of twisting at the hips and the shoulders are overly rounded and broad. This is not a naturalistic depiction of the body.

Steven: And the artist seems to favor detail. For instance, look at the way that the drapery falls flat, creating these lovely little loops. And look at the marvelous detail of the feet. This is such a tease, because here we have this engaging, lively sculpture from a culture whose literature has been lost, about whom we know so little.



Aplu (Apollo of Veii), bottom detail, from the roof of the Portonaccio Temple, Veii, Italy, c. 510-500 B.C.E., painted terra-cotta, 5′ 11″ high (Museo Nazionale di Villa Giulia, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0)

Watch the video. <https://youtu.be/GLgrt_4WnMY>

32. Tomb of the Triclinium

Dr. Jeffrey Becker



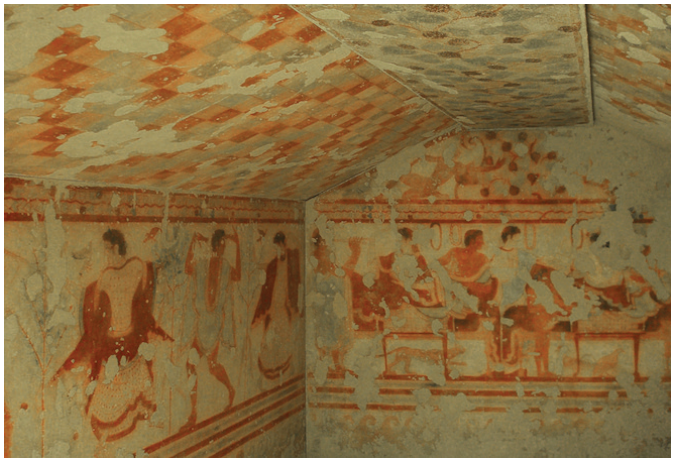
Etruscan civilization, 750-500 B.C.E. (photo: NormanEinstein, CC BY-SA 3.0) Based on a map from The National Geographic Magazine Vol.173 No.6 (June 1988).

Elaborate funerary rituals

Funerary contexts constitute the most abundant archaeological evidence for the Etruscan civilization. The elite members of Etruscan society participated in elaborate funerary rituals that varied and changed according to both geography and time.

The city of Tarquinia (known in antiquity as *Tarquinii* or *Tarch(u)na*), one of the most powerful and prominent Etruscan centers, is known for its painted chamber tombs. The Tomb of the Triclinium belongs to this group and its wall paintings reveal important information about not only Etruscan funeral culture but also about the society of the living.

An advanced Iron Age culture, the Etruscans amassed wealth based on Italy's natural resources (particularly metal and mineral ores) that they exchanged through medium- and long-range trade networks.



Tomb of the Triclinium, c. 470 B.C.E. (Etruscan chamber tomb, Tarquinia, Italy)

Tomb of the Triclinium

The *Tomb of the Triclinium* (Italian: *Tomba del Triclinio*) is the name given to an Etruscan chamber tomb dating c. 470 B.C.E. and located in the Monterozzi necropolis of Tarquinia, Italy. Chamber tombs are subterranean rock-cut chambers accessed by an approach way (dromos) in many cases. The tombs are intended to contain not only the remains of the deceased but also various grave goods or offerings deposited along with the deceased. The *Tomb of the Triclinium* is composed of a single chamber with wall decorations painted in fresco. Discovered in 1830, the tomb takes its name from the three-couch dining room of the ancient Greco-Roman Mediterranean, known as the triclinium.

A banquet

The rear wall of the tomb carries the main scene, one of banqueters enjoying a dinner party (above). It is possible to draw stylistic comparisons between this painted scene that includes figures reclining on dining couches (*klinai*) and the contemporary fifth century B.C.E. attic pottery that the Etruscans imported from Greece.

The original fresco is only partially preserved; although it is likely that there were originally three couches, each hosting a pair of reclining diners, one male and one female. Two attendants—one male, one female—attend to the needs of the diners. The diners are dressed in bright and sumptuous robes, befitting their presumed elite status. Beneath the couches, we can observe a large cat, as well as a large rooster and another bird.



Barbiton player on the left wall (detail), Tomb of the Triclinium, c. 470 B.C.E., Etruscan chamber tomb, Tarquinia, Italy (photo: The Yorck Project) <https://commons.wikimedia.org/wiki/File:Etruskischer_Meister_001.jpg>

Music and dancing

Scenes of dancers occupy the flanking left and right walls. The left wall scene contains four dancers—three female and one male—and a male musician playing the barbiton, an ancient stringed instrument similar to the lyre (left).

Common painterly conventions of gender typing are employed—the skin of females is light in color while male skin is tinted a darker tone of orange-brown. The dancers and musicians, together with the feasting, suggest the overall convivial tone of the Etruscan funeral. In keeping with ancient Mediterranean customs, funerals were often accompanied by games, as famously represented by the funeral games of the Trojan Anchises as described in book 5 of Vergil's epic poem, the *Aeneid*. In the *Tomb of the Triclinium,* we may have an allusion to games as the walls flanking the tomb's entrance bear scenes of youths dismounting horses, variously described as being either apobates (participants in an equestrian combat sport) or the Dioscuri (mythological twins).



Two dancers on the right wall (detail), Tomb of the Triclinium, c. 470 B.C.E., Etruscan chamber tomb, Tarquinia, Italy (photo: The Yorck Project) <https://commons.wikimedia.org/wiki/File:Etruskischer_Meister_002.jpg>

The tomb's ceiling is painted in a checkered scheme of alternating colors, perhaps meant to evoke the temporary fabric tents that were erected near the tomb for the actual celebration of the funeral banquet.

The actual paintings were removed from the tomb in 1949 and are conserved in the Museo Nazionale in Tarquinia. As their state of preservation has deteriorated, watercolors made at the time of discovery have proven very important for the study of the tomb.

Interpretation

The convivial theme of the *Tomb of the Triclinium* might seem surprising in a funereal context, but it is important to note that the Etruscan funeral rites were not somber but festive, with the aim of sharing a final meal with the deceased as the latter transitioned to the afterlife. This ritual feasting served several purposes in social terms. At its most basic level the funeral banquet marked the transition of the deceased from the world of the living to that of the dead; the banquet that accompanied the burial marked this transition and ritually included the spirit of the deceased, as a portion of the meal, along with the appropriate dishes and utensils for eating and drinking, would then be deposited in the tomb. Another purpose of the funeral meal, games, and other activities was to reinforce the socio-economic position of the deceased person and his/her family: a way to remind the community of the living of the importance and standing of these people and thus tangibly reinforce their position in contemporary society. This would include, where appropriate, visual reminders of socio-political status, including indications of wealth and civic achievements, notably public offices held by the deceased.

33. Niobid Painter, Niobides Krater

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



Niobid Painter, "Niobid Krater," Attic red-figure calyx-krater, c. 460-50 B.C.E., 54 x 56 cm (Musée du Louvre) (photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/14086211296/in/photostream/> CC BY-NC-SA 2.0)

This is the transcript of a conversation conducted in the Musée du Louvre, Paris.

Beth: We're in the Louvre and we're looking at a large ancient Greek vase that dates from the middle of the fifth century B.C.E. It's by an artist that we call the "Niobid Painter."

Steven: Now a calyx-krater is a large punchbowl basically. The ancient Greeks used it to mix wine and water. Their wine was pretty strong.

Beth: Now the Niobid Painter is known for this particular vase, which shows on the back of it a terrible scene about a mortal woman named Niobe. Niobe had 14 children. Seven daughters and seven sons and she bragged about them as being more numerous and more beautiful than the children of the goddess Leto.

Steven: That was a bad idea. You never want to display that kind of hubris to a god or a goddess, and in this case, Leto's children happen to be the god Apollo (right central female figure above) and the goddess Artemis (left central male figure above). Now Apollo is associated with the arts, with music especially, with the sun perhaps, and Artemis is the goddess of the hunt. Both of those children here exact revenge for their mother.

Beth: The Greeks were often concerned about mortals displaying hubris, displaying pride. Here we see Apollo and Artemis killing Niobe's poor children.

Steven: According to the myth they murdered all 14 of the children. Here we see Artemis reaching back into her quiver for yet another arrow. We see Apollo drawing his bow back and we see the children littering the field.



Niobid Painter, Niobid Krater (dying female Niobid), Attic red-figure calyx-krater, c. 460-50 B.C.E., 54 x 56 cm (Musée du Louvre) (photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/14086238696/in/photostream/> CC BY-NC-SA 2.0)

Beth: These figures still have a kind of stiffness that I associate with the early Classical and I think that's especially obvious in the figure of Apollo who strides forward but doesn't seem to have the sense of movement that would be entirely natural given what he's doing.

Steven: This is red-figure painting and that means that we're seeing bodies that are part of the red clay of the pot silhouette by a black background. It allows for a tremendous amount of detail. For instance in Apollo's body the tension to his abdomen, to his face. We see Artemis also with very delicate rendering of the folds of her drapery. Notice that both the goddess and the god are rendered in perfect profile whereas the dying children are more frontal or at 3/4 turn.

Beth: There is a stiffness there.

Steven: This is a period that we call the Severe Style and it's just this moment when the Archaic is becoming the Classical that we know, for instance from the sculptures of the Acropolis.

Beth: The other thing that's so obvious here is that where Greek vases before this had the figures on a single ground line. The figures occupy different levels. It seems as though the artist, the Niobid Painter, was attempting to give us some sense of an illusion of space with some figures in the foreground and some in the background although they're all the same size.

Steven: That's right, there's no diminishing sense of scale but we can get a sense of the idea that there are different ground plans when we look at the tree on the upper right of the scene. Let's go around to the other side because we have a very different image in contrast to the violence of the back. Here in the center, in the place of honor on the vase, the hero Herakles. Herakles was part mortal, part god. He's identifiable because he holds a club and because he has a lion skin.

Beth: Now notice that he's in the middle of the vase literally. His feet don't touch the ground line. He's in the middle and figures are placed all around him. Again, that idea of the artist suggesting a sense of depth. Art historians think that this shows the influence of Greek wall painting, none of which survived.

Steven: In fact, we think that this vase might be a kind of copying of wall painting by an artist whose name we know, Polygnotus who painted both in Athens and at the Sanctuary of Delphi, North of Athens.

Beth: He was credited as being the first artist to paint figures in depth.

Steven: What we may be seeing on this vase is an attempt to translate that wall painting here onto a vase. That would be an extraordinary thing since virtually no Ancient Greek wall painting has survived.

Beth: What's going on here? What is Herakles doing? Why is he surrounded by all of these warriors some of whom are reclining, some of whom are standing and what is Athena doing over to the left of him?

Steven: One of the more prominent theories suggest that this is not actually a representation of the god Herakles so much as a representation of a sculpture of the god Herakles. That is, this is a painting of the sculpture of the mythic figure. What's happening is that Greek soldiers are coming to honor Herakles asking him for protection before they go into battle.

Beth: Right. At the very end of the Archaic period, in 490 B.C.E., the Greeks battled the Persians and against overwhelming odds defeated the enormous Persian army. This may show Athenian soldiers asking for Herakles' protection before the battle at Marathon.

Steven: If you look very closely it's almost impossible to see there may be barely visible incised lines that suggest that Herakles is actually standing on a podium which would support the idea that this was the sculpture of the god rather than the god amongst these men.



Niobid Painter, Niobid Krater (Apollo), (Musée du Louvre) (photo: Steven Zucker,<https://www.flickr.com/photos/profzucker/14109359775/in/photostream/> CC BY-NC-SA 2.0)

Beth: The relaxation expressed by the figures is remarkable to me especially the figure reclining at the bottom who seems to be pulling himself up using the leverage of his spears.

Steven: That relaxation is in such contrast to the violence of the murders on the other side of the vase. It's a great reminder of the way that Greeks love to contrast the active against the passive, the complex against the plain and to draw sharp contrast in both imagery, and in their technique.

Beth: Art historian conjecture that the style that the figures on different levels comes from Greek wall painting, and we know about Greek wall painting from writers who celebrated it. The subject matter that we see here is still very much a mystery and the relationship of these two stories to one another is still very uncertain.

Watch the video. <https://smarthistory.org/niobid-krater/>.

34. Doryphoros (Spear Bearer)

Dr. Beth Harris and Dr. Steven Zucker



Polykleitos, Doryphoros (Spear-Bearer) or Canon, Roman marble copy of a Greek bronze, c. 450-440 B.C.E. (Museo Archaeologico Nazionale, Naples) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cNYY17>

When we study ancient Greek art, so often we are really looking at ancient Roman art, or at least their copies of ancient Greek sculpture (or paintings and architecture for that matter). Basically, just about every Roman wanted ancient Greek art. For the Romans, Greek culture symbolized a desirable way of life—of leisure, the arts, luxury, and learning.

The popularity of ancient Greek art for the Romans

Greek art became the rage when Roman generals began conquering Greek cities (beginning in 211 B.C.E.) and returned triumphantly to Rome not with the usual booty of gold and silver coins, but with works of art. This work so impressed the Roman elite that studios were set up to meet the growing demand for copies destined for the villas of wealthy Romans. The *Doryphoros* was one of the most sought after and most copied Greek sculptures.

Bronze versus marble

For the most part, the Greeks created their free-standing sculpture in bronze, but because bronze is valuable and can be melted down and reused, sculpture was often recast into weapons. This is why so few ancient Greek bronze originals survive, and why we often have to look at ancient Roman copies in marble (of varying quality) to try to understand what the Greeks achieved.

Why sculptures are often incomplete or reconstructed

To make matter worse, Roman marble sculptures were buried for centuries, and very often we recover only fragments of a sculpture that have to be reassembled. This is the reason you will often see that sculptures in museums include an arm or hand that are modern recreations, or that ancient sculptures are simply displayed incomplete.

The *Doryphoros (Spear-Bearer)* in the Naples museum (image above) is a Roman copy of a lost Greek original that we think was found, largely intact, in the provincial Roman city of Pompeii.*

The canon

The idea of a canon, a rule for a standard of beauty developed for artists to follow, was not new to the ancient Greeks. The ancient Egyptians also developed a canon. Centuries later, during the Renaissance, Leonardo da Vinci investigated the ideal proportions of the human body with his *Vitruvian Man*.

Polykleitos's idea of relating beauty to ratio was later summarized by Galen, writing in the second century,

> Beauty consists in the proportions, not of the elements, but of the parts, that is to say, of finger to finger, and of all the fingers to the palm and the wrist, and of these to the forearm, and of the forearm to the upper arm, and of all the other parts to each other.

* Recent scholarship suggests that the *Doryphoros* sculpture in the Naples museum may not have been found in a Palestra at Pompeii. See Warren G. Moon, ed., *Polykleitos, The Doryphoros and Tradition*, University of Wisconsin Press, 1995.

34. Doryphoros (Spear Bearer)

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the Museo Archeologico Nazionale in Naples.



Polykleitos, Doryphoros (Spear-Bearer) or The Canon, c. 450-40 B.C.E., ancient Roman marble copy found in Pompeii of the lost bronze original, 211 cm (Museo Archeologico Nazionale di Napoli) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cNYY17>

Steven: What is perfect? Well, the ancient Greeks thought the human body was perfect but, for them, it was not an individual that was perfect. It was almost mathematical precision, where the proportions of every part of the body were perfect in relation to the others.

Beth: We're looking at an ancient Roman copy of a Greek bronze original by the great artist, Polykleitos, who sought out to demonstrate just that. What would perfect ideal beauty be, thinking about the mathematical relationship of each part of the human body to the other, and in relationship to the whole?

Steven: This is a sculpture called the *Doryphorus*. "Doryphorus" means a spear-bearer, and he would have, originally, been holding a bronze spear. We call it the *Doryphorus*. Polykleitos apparently called it "Canon," not to mean a piece of armament, but a kind of idealized form that could be studied and replicated. That is a set of ideas that you followed.

Beth: The idea that you could create a perfect human form, based on math, was really part of a bigger set of ideas for the Greeks. If we think about Pythagoras, for example, Pythagoras discovered that harmony in music was based on the mathematical relationship between the notes.

Steven: In fact, Pythagoras tried to understand the origin of all beauty through ratio and, so, it follows that the Greeks would be looking for that in one of the forms that they felt were most beautiful, that is the human body. The Greeks would perform their athletics nude, celebrating the body and its physical abilities. But, even when they represented figures in noble pursuits, like this figure, we have a figure whose clothes have been taken off. This is not because soldiers went into battle nude in ancient Greece, but because this sculpture is not about warfare. It's not a portrait of an individual. This is a sculpture that is about the perfection of the human form.

Beth: This was found in a palestra in Pompeii, a place where athletes would work out, perhaps as a kind of inspiration for them.

Steven: So, that's another layer of meaning. The Romans loved Greek art and had it copied in marble very often, and even in a city like Pompeii, we found thousands of sculptures that are copies of ancient Greek originals. This is based on a sculpture that is at the very beginning of the Classical period, before the Parthenon sculptures, but it's after the Archaic figures, it's after the standing figure that we know as the kouros. Here, the Greeks have turned away from the stiff renderings that had been so characteristic of the Archaic, and have, instead, begun to examine the human body and understand its physiognomy, this is one of the classic expressions of contrapposto.

Beth: The *Doryphorus* stands on his right foot, his left leg is relaxed, the right leg is weight-bearing, but the left hand would have been weight-bearing the spear. Similarly, the right arm is relaxed, so there's a sense of counterbalancing and harmony in the composition of the body.

Steven: In a kouros figure, you have both feet firmly planted, although one leg is forward, but, nevertheless, if you were to draw a line between the ankles, they would still be horizontal to the floor.



Polykleitos, Doryphoros (Spear-Bearer) or The Canon (Museo Archeologico Nazionale di Napoli) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cNYVnj>

Beth: And, in a kouros, the figure is symmetrical.

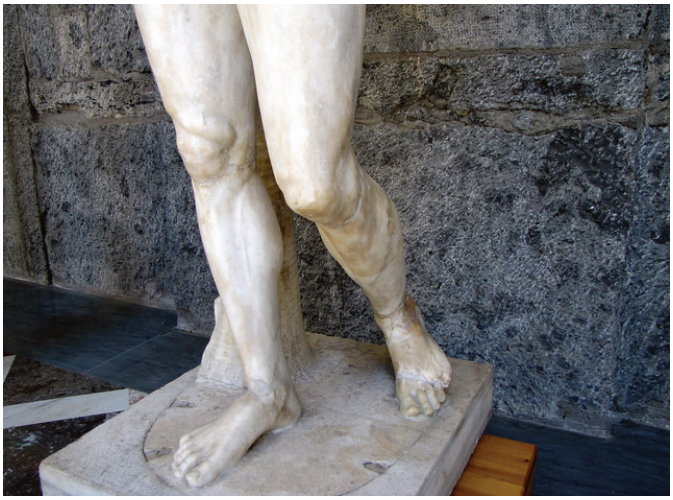
Steven: Here, both of those things have changed, and you see that his left ankle is up, and so you have a tilt of that axis, the axis of the knees are tilted in the opposite way. The hips are parallel to the axes of the knees, but also tipped, and then look at what happens as a result of that. In those earlier figures, there was perfect symmetry and a perfect line that could be drawn down the center of the body. Here, there's a gentle *S* curve, and you can see, for instance, that his right side is compressed, compared to the left side because the left hip is literally hanging down over that free leg. It's not being supported.

Beth: To complete that sense of balance and harmony, Polykleitos turned the head slightly, breaking that symmetry of the Archaic kouros figures. With the invention of contrapposto by the Greeks, in the fifth century B.C.E., we would have, for the first time in Western art history, figures who seem fully alive, as though they move in the world. They're like us.

Steven: This is a sculpture that is, for all of the complexity of what we've just discussed, is simply walking, but the mechanics of the human body walking are incredibly complicated, and here we have a civilization that not only was interested in understanding, through careful observation, how the body moved, but was interested, culturally, in capturing that. We have a society that puts human potential at the center.

Beth: And creates figures who are not transcendent, who don't exist in a separate world, but who exist in our world. They are, in a way, ideal mirrors of ourselves.

Watch the video. <https://youtu.be/EAR9RAMg9NY>



Polykleitos, Doryphoros (Spear-Bearer) or The Canon (Museo Archeologico Nazionale di Napoli) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cNYWHf>

35. a. The Parthenon, Athens

The British Museum



Iris, from the west pediment of the Parthenon, c. 438-432 B.C.E., marble, 135 cm high, Athens, Greece © Trustees of the British Museum

Athens and democracy

By around 500 B.C.E. 'rule by the people,' or democracy, had emerged in the city of Athens. Following the defeat of a Persian invasion in 480-479 B.C.E., mainland Greece and Athens, in particular, entered into a golden age. In drama and philosophy, literature, art, and architecture Athens were second to none. The city's empire stretched from the western Mediterranean to the Black Sea, creating enormous wealth. This paid for one of the biggest public building projects ever seen in Greece, which included the Parthenon.

The temple known as the Parthenon was built on the Acropolis of Athens between 447 and 438 B.CE. It was part of a vast building program masterminded by the Athenian statesman Perikles. Inside the temple stood a colossal statue representing Athena, patron goddess of the city. The statue, which no longer exists, was made of gold and ivory and was the work of the celebrated sculptor Pheidias.

Parthenon sculptures

The building itself was decorated with marble sculptures representing scenes from Athenian cult and mythology. There are three categories of architectural sculpture. The frieze (carved in low relief) ran high up around all four sides of the building inside the colonnades. The metopes (carved in high relief) were placed at the same level as the frieze above the architrave surmounting the columns on the outside of the temple. The pediment sculptures (carved in the round) filled the triangular gables at each end.

Although the building was to undergo a number of changes, it remained largely intact until the seventeenth century. The early Christians turned the temple into a church, adding an apse at the east end. It was probably at this time that the sculptures representing the birth of Athena were removed from the centre of the east pediment and many of the metopes were defaced. The Parthenon served as a church until Athens was conquered by the Ottoman Turks in the fifteenth century, when it became a mosque. In 1687, during the Venetian siege of the Acropolis, the defending Turks were using the Parthenon as a store for gunpowder, which was ignited by the Venetian bombardment. The explosion blew out the heart of the building, destroying the roof and parts of the walls and the colonnade.

The Venetians succeeded in capturing the Acropolis, but held it for less than a year. Further damage was done in an attempt to remove sculptures from the west pediment, when the lifting tackle broke and the sculptures fell and were smashed. Many of the sculptures that were destroyed in 1687, are now known only from drawings made in 1674, by an artist probably to be identified as Jacques Carrey.

Marble metope from the Parthenon

The sculpted decoration of the Parthenon included ninety-two metopes showing scenes of mythical battle. Those on the south flank of the temple included a series featuring human Lapiths in mortal combat with Centaurs. The Centaurs were part-man and part-horse, thus having a civil and a savage side to their nature. The Lapiths, a neighboring Greek tribe, made the mistake of giving the Centaurs wine at the marriage feast of their king, Peirithoos. The Centaurs

attempted to rape the women, with their leader Eurytion trying to carry off the bride. A general battle ensued, with the Lapiths finally victorious.

Here a young Lapith holds a Centaur from behind with one hand, while preparing to deliver a blow with the other. The composition is perfectly balanced, with the protagonists pulling in opposite directions, around a central space filled by the cascading folds of the Lapith's cloak.



Marble metope from the Parthenon, c. 447-438 B.C.E., 172 cm tall, Acropolis, Athens © Trustees of the British Museum

Fragment from the frieze

This block was placed near the corner of the west frieze of the Parthenon, where it turned onto the north. The horsemen have been moving at some speed, but are now reining back so as not to appear to ride off the edge of the frieze. The horseman in front twists around to look back at his companion and raises a hand (now missing) to his head. This gesture, repeated elsewhere in the frieze, is perhaps a signal. Although mounted riders can be seen here, much of the west frieze features horsemen getting ready for the cavalcade proper, shown on the long north and south sides of the temple.



Horsemen from the west frieze of the Parthenon, c. 438-432 B.C.E., 100cm tall, Acropolis, Athens © Trustees of the British Museum

Pediment sculpture

The east pediment of the Parthenon showed the birth of goddess Athena from the head of her father Zeus. The sculptures that represented the actual scene are lost. Zeus was probably shown seated, while Athena was striding away from him fully grown and armed.

Only some of the figures ranged on either side of the lost central group survive. They include these three goddesses, who were seated to the right of centre. From left to right, their posture varies in order to accommodate the slope of the pediment that originally framed them. They are remarkable for their naturalistic rendering of anatomy blended with a harmonious representation of complex draperies.



Figures of three goddesses from the east pediment of the Parthenon, c. 438-432 B.C.E., 233 cm long, Acropolis, Athens © Trustees of the British Museum

The figure on the left is on the point of rising and tucks her right foot in to lever herself up. To the right another figure cradles a companion reclining luxuriously in her lap. They are perhaps, from left to right, Hestia, goddess of the hearth and home, Dione, and her daughter Aphrodite. However, another suggestion is that the two figures on the right are the personification of the Sea (Thalassa) in the lap of the Earth (Gaia).

© Trustees of the British Museum

35. a. The Parthenon, Athens

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



Iktinos and Kallikrates, Parthenon, Acropolis, Athens, 447 – 432 B.C.E. (photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/12045021564/in/photostream/> CC BY-NC-SA 2.0)

This is the transcript of a conversation conducted at the Acropolis in Athens.

Steven: We're looking at the Parthenon. This is a huge marble temple to the goddess Athena.

Beth: We're on the top of a rocky outcropping in the city of Athens very high up overlooking the city, overlooking the Aegean Sea.

Steven: Athens was just one of many Greek city-states and almost everyone had an acropolis. That is, had a fortified hill within its city because these were warring states.

Beth: In the fifth century, Athens was the most powerful city-state and that's the period that the Parthenon dates to.

Steven: This precinct became a sacred one rather than a defensive one. This building has had a tremendous influence not only because it becomes the symbol of the birth of democracy, but also because of its extraordinary architectural refinement. The period when this was built in the fifth century is considered the High Classical moment and for so much of Western history, we have measured our later achievements against this perfection.

Beth: It's hard not to recognize so many buildings in the West. There's certainly an association especially to buildings in Washington D.C. and that's not a coincidence.

Steven: Because this is the birthplace of democracy it was a limited democracy but democracy nevertheless.

Beth: There was a series of reforms in the fifth century in Athens that allowed more and more people to participate in the government.

Steven: We think that the city of Athens had between 300,000 and 400,000 inhabitants, and only about 50,000 were actually considered citizens. If you were a woman, obviously, if you were a slave you were not participating in this democratic experiment.

Beth: This is a very limited idea of democracy.

Steven: This building is dedicated to Athena and, in fact, the city itself is named after her and of course there's a myth. Two gods vying for the honor of being the patron of this city.

Steven: Those two gods are Poseidon and Athena. Poseidon is the god of the sea and Athena has many aspects. She's the goddess of wisdom, she is associated with war. A kind of intelligence about creating and making things.

Steven: Both of these gods gave the people of this city a gift and then they had to choose. Poseidon strikes a rock and from it springs forth the saltwater of the sea. This had to do with the gift of naval superiority.

Beth: Athena offered, in contrast, an olive tree. The idea of the land of prosperity, of peace. The Athenians chose Athena's gift. There actually is a site here on the acropolis where the Athenians believed you could see the mark of the trident from Poseidon where he struck the ground and also the tree that Athena offered.

Steven: Actually the modern Greeks have replanted an olive tree in that space. Let's talk about the building. It is really what we think of when we think of a Greek temple but the style is specific. This is a Doric temple.

Beth: Although it has Ionic elements which we'll get to.

Steven: The Doric features are really easy to identify. You have massive columns with shallow broad flutes the vertical lines. Those columns go down directly into the floor of the temple which is called the stylobate and at the top, the capitals are very simple. There's a little flare that rises up to a simple rectangular block called an abacus. Just above that are triglyphs and metopes.



Iktinos and Kallikrates, Parthenon, Acropolis, Athens, 447 – 432 B.C.E. (photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/12045021564/in/photostream/> CC BY-NC-SA 2.0)

Beth: It's important to say that this building was covered with sculpture. There was sculpture in the metopes, there was sculpture in the pediments and in an unprecedented way a frieze that ran all the way around four sides of the building just inside this outer row of columns that we see. Now, this is an Ionic feature. Art historians talk about how this building combines Doric elements with Ionic elements.

Steven: In fact, there were four Ionic columns inside the west end of the temple.

Beth: When the citizens of Athens walked up the sacred way perhaps for religious procession or festival. They encountered the west end and they walked around it either on the north or south sides to the east and the entrance. Right above the entrance in the sculptures of the pediment, they could see the story of Athena and Poseidon vying to be the patron of the city of Athens. On the frieze just inside they saw themselves perhaps at least in one interpretation involved in the Panathenaic Procession, the religious procession in honor of the goddess Athena. This was a building that you walked up to, you walked around and inside was this gigantic sculpture of Athena.

Steven: These were all sculptures that we believe were overseen by the great sculptor Phidias and one of my favorite parts are the metopes. Carved with scenes that showed the Greeks battling various enemies either directly or metaphorically. The Greeks battling the Amazons, the Greeks against the Trojans, the Lapiths against the Centaurs, and the Gigantomachy. The Greek gods against the Titans.

Beth: All of these battles signified the ascendancy of Greece and of the Athenians of their triumphs. Civilization over barbarism, rational thought over chaos.

Steven: You've just hit on the very meaning of this building. This is not the first temple to Athena on this site. Just a little bit to the right as we look at the east end there was an older temple to Athena that was destroyed when the Persians invaded. This was a devastating blow to the Athenians.

Beth: One really can't overstate the importance of the Persian War for the Athenian mindset that created the Parthenon. Athens was invaded and beyond that, the Persians sacked the Acropolis, sacked the sacred site, the temples. Destroyed the buildings.

Steven: They burned them down. In fact, the Athenians took a vow that they would never remove the ruins of the old temple to Athena.

Beth: So they would remember it forever.

Steven: But a generation later they did.

Beth: They did, well there was a piece that was established with the Persians and some historians think that that allowed them to renege that vow and Pericles, the leader of Athens embarked on this enormous, very expensive building campaign.

Steven: Historians believe that he was able to fund that because the Athenians had become the leaders of what is called the Delian League. An association of Greek city-states that paid a kind of tax to help protect Greece against Persia but Pericles dipped into that treasury and built this building.

Beth: This alliance of Greek city-states, their treasure, their tax money, their tribute was originally located in Delos hence the Delian League, but Pericles managed to have that treasure moved here to Athens and actually housed in the Acropolis. The sculpture of Athena herself which was made of gold and ivory Phidias said if we need money we can melt down the enormous amount of gold that decorates this sculpture of Athena.

Steven: Since that sculpture doesn't exist any longer we know somebody did that. We need to imagine this building not pristine and white but rather brightly colored and also a building that was used. This was a storehouse. It was the treasury and so we have to imagine that it was absolutely full of valuable stuff.

Beth: In fact, we have records that give us some idea of what was stored here. We think about temples or churches or mosques as places where you go in to worship. That's not how Greek religion work. There usually was an altar on the outside where sacrifices were made and the temple was the house of the god or goddess, but with the Parthenon art historians and archeologists have not been able to locate an altar outside so we've wondered what was this building? One answer is it was a treasury.

Steven: It also functions symbolically. It is up on this hill. It commands this extraordinary view from all parts of the city, and so it was a symbol of both the city's wealth and power.

Beth: It's a gift to Athena. When you make a gift to your patron goddess you want visitors to be awed by the image of the goddess that was inside and of her home.

Steven: This isn't any goddess. This is the goddess of wisdom so the ability of man to understand our world and its rules mathematically, and then to express them in a structure like this is absolutely appropriate.

Beth: Iktinos is a supreme mathematician. I mean we know that the Greeks even in the archaic period before this were concerned with ideal proportions.

Steven: Pythagoras.

Beth: Or the sculptor Polykleitos and his sculpture of the Doryphoros

searching for perfect proportions and harmony and using mathematics as the basis for thinking that through.

Steven: We have that here.

Beth: To an unbelievable degree.

Steven: What's extraordinary is that its perfection is an illusion based on a series of subtle distortions that actually correct for the imperfections of our sight. That is the Greeks recognize that human perception was itself flawed and that they needed to adjust for it in order to give the visual impression of perfection. Their mathematics and their building skills were precise enough to be able to pull this off.

Beth: Every stone was cut to fit precisely.

Steven: When we look at this building we assume it's rectilinear, it's full of right angles, and in fact, there's hardly a right angle in this building.

Beth: There's another interpretation of these tiny deviations that these deviations give the building a sense of dynamism. The sense of the organic that otherwise, it would seem static and lifeless. The Greeks had used this idea that art historians call *entasis* before in other buildings- slight adjustments. For example, columns bulge toward the center. This is not new but the degree to which it's used here and the subtlety in the way it's used is unprecedented.

Steven: For instance, in those Doric columns you can see that there's a taper and you assume that it's a straight line but the Greeks wanted ever so slight a sense of the organic. That the weight of the building was being expressed in the bulge, the entasis of the column about a third of the way from the bottom. In this case, every single column bulges only 11/16th of an inch the entire length of that column. The way that the Greeks pulled this off is they would bring column drums up to the site. They would carefully carve the base and the top and then they would carve in between.

Beth: We see this slight deviation in the columns but we also see it not only vertically but also horizontally in the building.

Steven: That's right. You assume that the stylobate, the floor of the temple, is flat but it's not. Rainwater would run off it because the edges are lower than the center.



Iktinos and Kallikrates, Parthenon, Acropolis, Athens, 447 – 432 B.C.E. (photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/12045040624/in/photostream/> CC BY-NC-SA 2.0)

Beth: But only very, very slightly lower.

Steven: Across the long side of the temple the center rises only 4 3/8 of an inch and on the short side of the temple on the east and the west side the center rises only by 2 3/8 inches. What happens is it cracks. Our eye would naturally see a straight line seem as if it rises up at the corners a little bit so it seems to us to be perfectly flat. The columns are all leaning in a little bit.

Beth: You would expect the columns to be equidistant from one another but in fact, the columns on the edges are slightly closer to one another than the columns in the center of each side.

Steven: Architectural historians have hypothesized that the reason for this is because the column at the edge is in the sense an orphan. It doesn't have anything past it. Therefore, it would seem to be less substantial. If we could make that column a little bit closer to the one next to it it might compensate and it would have an even sense of density across the building.

Beth: Placing of the columns closer together on the edges create a problem in the levels above. One of the rules of the Doric Order is that there had to be a triglyph right above the center of a column or in between each column.

Steven: They also wanted the triglyphs to be at the very edge so one triglyph would abut against another triglyph at the corner of the building. If in fact, you're placing your columns closer together you can actually solve for that problem, you can avoid the stretch of the metope in between those triglyphs that would result, but because the columns are placed so close together they had the opposite problem which is to say that the metopes at the ends of the building would be too slender. What Phidias has done in concert with Iktinos and Kallikrates the architects is to create sculptural metopes that are widest in the center just like the spaces between the columns and actually the metopes themselves gradually become thinner as you move to the edges so that you can't really even perceive the change without measuring.



Iktinos and Kallikrates, Parthenon, Acropolis, Athens, 447 – 432 B.C.E. (photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/12045021564/in/photostream/> CC BY-NC-SA 2.0)

Beth: The general proportions of the building can be expressed mathematically as X = Y x 2 + 1. Across the front, we see eight columns and along the sides 17 columns. That ratio also governs the spacing between the columns and its relationship to the diameter of a column. Math is everywhere.

Steven: If we look at the plan of the structure we see the exterior colonnade on all four sides. On the east and west end, it's actually a double colonnade and on the long sides, inside the columns a solid

masonry wall. You can enter rooms on the east-west only. The west has a smaller room with the four Ionic columns within it but the east room was larger and held the monumental sculpture of Athena. It's interesting. The system that was used to create a volt that was high enough to enclose a sculpture that was almost 40 feet high was unique. There was a U shape of interior columns at two storeys. They were Doric and they surrounded the goddess. The sculpture is now lost but the building is almost lost as well. Here we come to one of the great tragedies of western architecture. This building survived into the seventeenth century and was in pretty good shape for 2000 years and it's only in the modern era that it became a ruin.

Beth: First it was as we know an ancient Greek temple for Athena then it became a Greek Orthodox church then a Roman catholic church and then a mosque In a war between the Ottomans who were in control of Greece at this moment in history in the seventeenth century and the Venetians. The Venetians attacked the Parthenon, the Ottomans used the Parthenon to hold ammunition, gunpowder. Gunpowder exploded from the inside basically ripping the guts out of the Parthenon.

Steven: Then to add insult to injury in the eighteenth century, Lord Elgin received permission from the Turkish government to take sculptures that had already fallen off the temple and bring them back to England. The lion's share of the great sculptures by Phidias are now in London. Greece recently has built a museum just down the hill from the Acropolis specifically intended to house these sculptures should the British ever release them.

Beth: Some have argued that Elgin saved the sculptures that would have been further damaged had he not removed them, but what to do about the future is uncertain.

Steven: At least one theory states that this building was paid for by plundered treasury from the Delian League so there's a long history of contested ownership.

Beth: As we stand here very high up on the Acropolis overlooking the Aegean Sea, islands beyond and mountains on this glorious day, I can't help but imagine standing inside the Parthenon between those columns which we can't do today.

Steven: The site is undergoing tremendous restoration. There are cranes, the scaffolding to maintain the ruin and not let it fall into worst disrepair.

Beth: But if we could stand there what would it feel like?

Steven: There is this beautiful balance between the theoretical and the physical. The Greeks thought about mathematics as the way that we could understand the divine and here it is in our world.

Beth: There's something about the Parthenon that is both an offering to Athena, the protector of Athens, but also something that's a monument to human beings, to the Athenians, to their brilliance, and by extension, I suppose in the modern era human spirit generally.

Watch the video <https://youtu.be/tWDflkBZC6U>

35.a. i. Phidias, Parthenon sculpture (pediments, metopes and frieze)

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the British Museum.



Phidias(?), Parthenon pediment sculptures, c. 438-432. (British Museum, London) (photo: Steven Zucker, <https://flic.kr/p/LeBQHu> CC BY-NC-SA 2.0)

Steven: High atop the natural fortification that is the Acropolis in Athens is the sacred center of the city and some of the most celebrated buildings in all of western history. The most famous is the Parthenon dedicated to the Virgin Goddess Athena.

Beth: We're talking about the 5th century B.C.E. in ancient Athens. This is a period we refer to as the classical period, the high point of Greek culture, and all of this comes right after an important Greek victory over the Persian Empire.

Steven: The Persians controlled an enormous area. Athens and in fact all of Greece, which was then divided into a series of distinct city-states, was tiny in comparison. But miraculously Athens was able to decisively defeat the Persians in 479 B.C.E.

Beth: For many art historians the Classical period of ancient Greece is a result of the incredible optimism and confidence, some would say overconfidence, of the Athenians in this period after the defeat of the Persians.

Steven: And the Parthenon is often seen as the physical embodiment of that confidence, and while the building was constructed the sculptures, which are every bit as important as the building itself, took a few more years to finish.

Beth: So we're here in the British Museum, which houses together with the Acropolis Museum in Athens and a few sculptures in the Louvre, the vast majority of sculpture that was made for the Parthenon. These were overseen by the famous sculptor Phidias and sometimes we refer to the style of the sculpture that we see here as Phidian. There are three primary locations where we find sculpture on the Parthenon. Most obviously in the pediment, the triangular area at the very top of the temple, on both the east and west sides. Below that, there're spaces called metopes, in-between triglyphs. And lastly, in the frieze. That is a band of continuous sculpture. The Parthenon is an interesting building because it combines both Doric and Ionic elements. The triglyphs and metopes are typical Doric elements, while the frieze is considered a typical element of Ionic temples.

Steven: What we see here in London or the examples in Athens or in Paris are marbles that have lost all their color. And it's important to remember that all of these sculptures would have been very high up but were originally brightly colored and this would have helped their visibility. And that's especially true for the frieze, which would have been atop the interior colonnade and so would have been seen in shadow.

Beth: When the Athenians approached the Parthenon on top of the Acropolis, they approached the west side and walked around either the north or south sides to the east where the entrance was.

Steven: And that means that they would have seen the west pediment first, and then the east pediment. This building is 2,500 years old and it has suffered terribly and so has the sculpture. And so what we're seeing is the result of the terrible abuse that this building has suffered over many centuries.

Beth: In many ways, we're lucky that anything survives for us to look at. So let's start with the rest pediment. The subject there is the

competition between Poseidon and Athena to be the patron deity of the city of Athens.

Steven: But we know who wins because the city is named after Athena and, sadly, almost nothing survives from the west pediment.

Beth: On the east pediment the story of the birth of Athena.

Steven: And so right in the center of the pediment, at its point, would have been the God Zeus giving birth to his daughter Athena, who was born full-grown from his head.

Beth: Sadly those central figures are lost. What we have on either side are the figures who were present, some of whom are reacting to the birth of Athena.

Steven: The pediment is traditionally read from left to right and it begins with the dawn, the god Helios at his chariot representing the rising sun.



Phidias(?), Parthenon pediment sculptures, c. 438-432. (British Museum, London) (photo: Steven Zucker, <https://flic.kr/p/27gZ4ff> CC BY-NC-SA 2.0)

Beth: Athena was born at sunrise so this makes sense.

Steven: The baseline of the pediment functions as a horizon line. It's a brilliant interpretation of the space and it allows us to imagine the figures rising up.

Beth: And then we have the gods and goddesses on Mount Olympus present for the birth of Athena.

Steven: One of the figures that is in the best condition is the nude figure that we think is likely the God Dionysos, the God of Wine. And if it is, he looks like he is appropriately lounging perhaps with a cup of wine in his hand.

Beth: That Greek love of the human body, particularly the male nude, and the articulation of the anatomy and the muscles of the body.

Steven: And while we see this figure at rest, the artist has been careful to represent his body in such a way that we know his strength.

Beth: As we approach the middle of the pediment where we would have seen the birth of Athena, it appears as though there's some acknowledgment of the action that's taking place in the center of the pediment. We have a standing figure who seems to be moving away as though in surprise at the event that's taking place.

Steven: The figure to her left, even though the head has been lost seems taken aback. She seems to be directly reacting. Her body seems to be jerking away. And so there is this sense of the momentary.

Beth: Dionysos and the other seated figure perhaps haven't yet noticed the momentous event of the birth of Athena.

Steven: On the right side, we have the famous group, the three goddesses. And here we see the Greeks' extraordinary ability to render not only the human body but the forms of clothing that both obscure and reveal the body below it. For example, in the figure at the right, who is reclining, if you look at the way that the cloth wraps around her upper thigh it is bunched up and so we know the thigh is far below that cloth. At the same time, the torsion of that cloth reveals the musculature underneath.

Beth: But this isn't the way that drapery really looks. This is the Phidian style that we associate with this Classical moment in ancient Greece where the drapery acts almost like water flowing around the body.



Phidias(?), Parthenon pediment sculptures, c. 438-432. (British Museum, London) (photo: Steven Zucker, <https://flic.kr/p/27gZ9Db> CC BY-NC-SA 2.0)

Steven: Some of it is carved very deeply so that you get these black rich shadows. There's a nobility and a sense of luxury. These are beings without care. And then finally, at the extreme right corner, we have this brilliant form of a horse's head.

Beth: And so on one side we have the rising of the day with Helios and his chariot. Here we have the end of the day with the Goddess of the Moon.

Steven: And whereas the horses at dawn are full of energy and here the horse looks exhausted. Its mouth, its nostrils seem almost to be resting on the edge of the building.

Beth: Just below the pediment we find a band occupied by triglyphs and metopes, and on each of the four sides we find four mythic battles.

Steven: So each side of the building represents its own story, and here at the British Museum, the Lapiths against the Centaurs. And all four of these stories are really stand-ins for the way that the Greeks saw themselves in relation to their enemy, the Persians. That is, that the Greeks stood for civilization, for order, and the Persians to the east represented a kind of disorder, a kind of chaos and barbarism.

Beth: The story between the Lapiths and the Centaurs begins at a wedding, where the Centaurs have had too much to drink.

Steven: They weren't used to drinking at all and they decided to make off with the Lapith women. What we're seeing is the battle that

resulted. In several of the metopes, the Centaurs are victorious. In one extraordinary metope, we see a Lapith who has been killed by a Centaur. The Centaur rises up on his hind legs in victory, and the Lapith, whose body is so beautifully rendered, lies below. The body even in its damaged state shows the nobility of the Greeks and the Greeks' love for the human body.

Beth: In another metope, we see the victorious Lapith, who has got a Centaur by the neck pulling him back, while the Centaur himself seems to be reaching to his back, perhaps to a wound inflicted by the Lapith. And what I'm struck by in both of these metopes is the way that the figures almost break the bound of the metope creating diagonal forms that have an incredible amount of energy.

Steven: Look at how the beauty of that torso is highlighted against the rhythmic folds of the drape behind. This is clearly fiction. In the middle of battle, you don't have a perfectly splay drape. But for the sculptor, the subject was clearly the beauty of the body. Look at the way the Lapith's left leg pushes out at a diagonal as he tries to get a foothold to help support him as he pulls back the Centaur's body almost like it was a bow. You get a sense of the enormous energy that's being expanded here.



Phidias(?), Parthenon pediment sculptures, c. 438-432. (British Museum, London) (photo: Steven Zucker, <https://flic.kr/p/JHyRiR> CC BY-NC-SA 2.0)

Beth: The center of this composition is empty and the figures frame that center creating these arcs that pull against one another.

Steven: This particular Lapith is virtually a freestanding sculpture but the Parthenon is also rightly known for a shallower relief sculpture. It would have been seen not on the outside of the temple but just inside the exterior columns.

Beth: So let's go have a look at the justly famous frieze from the Parthenon. We should say that no one is entirely certain what the frieze represents but there is a general consensus that the frieze represents the Panathenaic procession. That is an important yearly procession that went up the sacred way to the Acropolis in honor of the Goddess Athena.

Steven: And the procession would make its way to one of the most sacred objects in all of Athens, an ancient olive wood statue of the Goddess Athena. This is extraordinarily rare. In almost every other ancient Greek temple context we see images from Greek mythology, we don't see representations of Greeks of their own day.

Beth: What we're seeing is an idealized image of the Athenians as though they projected themselves into the realm of the gods. And we know that the Athenians were incredibly self-confident. They had defeated the Persians against all odds and so this surely must have something to do with the way they imagined themselves on the frieze.

Steven: Close to the beginning of the frieze on the west front, you see preparations for the procession. Look at the two figures on horseback. Look how easily they ride on those horses that seem full of energy. The figure on the right pulls his horse back and leans back himself.

Beth: The figure on the left turns back to look at him as his horse scallops forward. The naturalism in the movement here is an amazing artistic achievement.

Steven: This would have been brightly painted and in fact, the background would have been a brilliant blue.

Beth: And there were also metal attachments where appropriate.

Steven: And in fact, you can see three holes across the head of the horse on the right, which would have originally held the bridle.

Beth: Look at the figures. Their bodies are ideal and athletic. They move easily.

Steven: There's also great attention to the structures of the body itself. The people who carved this stone understood the musculature, understood the bone structure of the human body. There're 60 horses on both the north and the south side. There's incredible variety and rhythm as these horses overlap and move across this ribbon of stone.

Beth: Look at the overlapping legs of the horses, you can almost hear them galloping. But as animated as the horses are, the men themselves seem calm and noble.

Steven: We're seeing almost all of their faces in perfect profile, which the Greeks believed was the noblest way of representing a face. Their mouths were closed as a representation of their sense of calm and control. And these were attributes that the Greeks revered. And here, like on the metopes, we're seeing an expression of the Greeks' ability to control nature, to control these powerful animals.



Phidias(?), Parthenon pediment sculptures, c. 438-432. (British Museum, London) (photo: Steven Zucker, <https://flic.kr/p/25BuvsA> CC BY-NC-SA 2.0)

Beth: The next group that we see are charioteers and actually there was a chariot competition as part of the Panathenaic procession.

Steven: In addition to the chariots, there're animals that have been brought for sacrifice. Now, as we wrap around the building towards the east end, the energy that had existed with the horsemen calms and slows, and then here the series of women who walk solemnly forward. We see large seated figures. These are the gods and goddesses of

Mount Olympus but interspersed with smaller representations of standing humans.

Beth: And so we can differentiate the gods and goddesses from mortal humans by their size.

Steven: But it's extraordinary that the Athenians are placing themselves in the immediate company of the gods.

Beth: We see two figures, an older male figure, and a younger smaller figure, the gender of which has been debated, and they seem to be folding a garment. We understand this as the peplos, which was regularly woven to clothe the sacred olivewood sculpture of Athena.

Steven: And the figure immediately to the right is Athena but she has got her back to the peplos. And look how beautifully she is rendered, even here in this badly damaged relief sculpture. You can see her easy stance on that chair.

Beth: We again see that very stylized drapery that clings her right calf and her thighs and outlines her breasts and cascades and bunches up at her hips.

Steven: I love the way Hephaistos turns around and looks back over his right shoulder to address her.

Beth: We should say that although there's general agreement that this is the Panathenaic procession, there are many anomalies. For example, the fact that the Athenians are putting themselves together with the gods, and this has led art historians to look for alternative readings.

Steven: These sculptures are 2500 years old. It's no wonder that there are persistent questions. No matter what is being represented here, there is a consensus that these are some of the finest sculptures from classical antiquity.

Beth: And so it's no wonder that the government of Greece and the Acropolis Museum are demanding the return of these beautiful marbles.

Steven: But it's such a complicated issue. When in the early 19th century Lord Elgin removed these marbles and transported them to London, he had permission from the adamant authorities.

Beth: But that permission was limited and interpreted very liberally by Lord Elgin.

Steven: What do we do with museums like the British Museum, like the Louvre in Paris, which are fundamentally the result of imperialism.

Beth: When the countries in Europe were imperial powers and the objects were often taken forcefully or not entirely legally.

Steven: The question is, what do we do now?

Watch the video <https://youtu.be/uF_W0jQ7bi0>

35. a. ii. Plaque of the Ergastines

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the Musée du Louvre, Paris.



Plaque of the Ergastines, 445-438 B.C.E., Pentelic marble (Attica), 0.96 x 2.07 m, fragment from the frieze on the east side of the Parthenon (Musée du Louvre, Paris) (photo: Steven Zucker, <https://flic.kr/p/nMj59Y> CC BY-NC-SA 2.0)

Steven: We're in the Louvre in Paris, and we're looking at a fragment of the frieze from the Parthenon on the Acropolis in Athens, Greece.

Beth: Some of this frieze is in the Acropolis Museum, in Athens. Some of it is here, in Paris, and most of it is in the British Museum, in London. In fact, the scene just to the right is in the British Museum in London.

Steven: In this case, the word frieze, refers to a band of sculpture that's about three feet tall, that wrapped around the entire Parthenon, just inside the first colonnade. It would have been really hard to see because it would have been in shadow. Here, we see no traces of paint, but originally, this would have been very brightly colored. We think that the background was blue. We think there were highlights of gold on the figures. They would have been garishly painted, to our eyes. It's important to remember that we would have been looking up at this. It would have been quite high, and so we're seeing it much closer than originally intended.

Beth: Historians generally agree that this represents the Pan-Athenaic Procession. All the citizens of Athens gathered in a procession, made their way up the sacred way to the Acropolis, this high point in the city, where the great temple to Athena, the Parthenon stood.

Steven: Young women would have woven a woolen peplos to clothe the statue of Athena. These were especially regarded young women that came from leading families in Athens.

Beth: Now, the peplos, this garment, was not for the colossal sculpture of Athena that was inside the Parthenon, but this was an ancient sculpture that was very sacred that stood in a temple right next to the Parthenon.

Steven: That's the Erechtheion.

Beth: And so, a new garment was woven and given to this ancient olivewood sculpture of Athena.

Steven: The Pan-Athenaic Procession, as represented in the frieze on the Parthenon shows not only the procession of these young women bringing the peplos but also animals being brought for sacrifice; libations. All the things you need for an important ancient ceremony.

Beth: The interesting thing about the frieze is that it seems to show a contemporary event. That is, it's not a mythological event, which was the normal decoration for a temple, but something from the civic life from Athens, and remember Athens is a democracy at this moment in the fifth century. The citizens of Athens look beautiful, noble, heroic.

Steven: Well, the nobility is so clear in this fragment. We see these women solemnly processing. They're interrupted by two male figures but look of the clarity of the carving. There such solemnity; there such a sense of reverence.

Beth: Of dignity; one immediately gets a sense that this is a religious procession in honor of Athena, the goddess, the patron of the city of Athens.

Steven: This is the High Classical moment, and it's beautifully represented here. There's a sense of balance, of idealism. In fact, this kind of art was considered so perfect, that through much of the rest of Western history, we see more modern cultures looking back to

Classical Greece, and trying to achieve, again, what had been achieved in the fifth century B.C.E.

Beth: Phidias, who we generally think of as in charge of the sculptural program on the Parthenon, developed a style that we see here. Very intricate folds following the forms of the body. We see it in flatter areas move around the breasts of the women, but also very curvilinear folds at the edges of the peplos where it's folded over and belted, and still other areas where it falls in very straight lines that might remind us of the fluting of a column.

Steven: The figures are standing in contrapposto, that is, for the young women, in general, their left leg is the weight-bearing leg. Their right leg is moving forward, and we can see the knee breaking the fall of the drapery. So, there is this alternation between movement and the static.

Beth: Look at the gracefulness of the figure on the far right. Look at how she's walking to her right, but turns her body to the left, and seems to address a companion behind her. These figures may have carried ceremonial objects that they're offering to the male figures, or the male figures may be giving something to them. The precise narrative is unclear.



Plaque of the Ergastines, 445 – 438 B.C.E., Pentelic marble (Attica), 0.96 x 2.07 m, fragment from the frieze on the east side of the Parthenon (Musée du Louvre, Paris) (photo: Steven Zucker, <https://flic.kr/p/nMjh9Y> CC BY-NC-SA 2.0)

Steven: In fact, some art historians even question whether or not this is the Pan-Athenaic Procession. It's important before we end, to acknowledge the fact that the Greek government has asked that both the British Museum and the Louvre return these marvels to Greece. Just at the foot of the Parthenon, the city of Athens has built a magnificent new museum to house these sculptures should they ever be returned.

Watch the video <https://youtu.be/zU9qSQi1E68>.

35. b. Victory adjusting her sandal, Temple of Athena Nike

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



View of the Temple of Athena Nike, 421-05 B.C.E., marble, Acropolis, Athens (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/kCg9uF>

This is the transcript of a conversation conducted at the Acropolis Museum, Athens.

Steven: When you walk up this sacred way to the Acropolis, right before you go through the gate house (the propylaea), you see a small, beautiful Ionic temple, the Temple to Athena Nike.

Beth: And inside it, as is typical of Greek temples, was a sculpture of the goddess of Athena Nike: that is, an Athena associated with victory and battle. Nike means victory.

Steven: This is a very constrained space, and at some point people were worried about falling off, and so they added a railing—a

parapet—and it was carved with a series of small figures. In fact, the parapet itself is no more than about four feet tall.

Beth: And so a parapet is a kind of railing, and a space where you can walk, but these didn't face the people on the inside, these faced the walkway up.

Steven: What we see carved in fairly high relief are a series of Nikes, that is, winged figures of victory.

Beth: The most famous one is the "Nike Adjusting Her Sandal."



Nike Adjusting Her Sandal, from the south side of the parapet of the Temple of Athena Nike, Acropolis, Athens, Greece, c. 410 B.C.E., marble, 3′ 6″ high (Acropolis Museum, Athens) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/kCgnfF>

Beth: I've never been clear whether she's taking her sandal off or putting her sandal on.

Steven: I think she's taking it off. I think she's undoing the knot, and the sandal will slip off. And that's because she will be walking on sacred ground.

Beth: So we have a figure that's by definition "off balance." She's lifting one foot up to undo the tie on her sandal. She's got her other leg bent, she leans forward, but her left arm comes up to help her balance, and you can see the wing just behind her left arm.

Steven: Actually, there's two wings if you look. And it's a good thing she's got them because, presumably, it's those wings that are helping her maintain her balance. Yeah, it's so interesting because in the High Classical period, we see a great deal of attention paid to making figures seem, relaxed and even and balanced.And yet here we have somebody as you said, who is inherently awkward.

Beth: So if you think, for example, back to the Doryphoros, the quintessential Classical sculpture, there is a sense of one side of the body balancing the other in contrapposto. And you're right, here we have an intentional interest in the form that's out of balance.

Steven: Now this dates to about 410, and so we're on the other side, of the century, and we can see that the artist has taken the Classical handling of the relationship between the body and the drapery, and accentuated it.

Beth: And by the "Classical" treatment of the drapery, you're referring to the style of Phidias, whose work we see in the sculptures of the Parthenon. Where we have drapery that clings to the forms of the body and creates very intricate folds.

Steven: But not quite this revealing. This is among the most erotic works of art that we find on the Acropolis.

Beth: In the figures in the Parthenon, for example, the pediment sculptures, we see the drapery following the forms of the body and cascading around it.

Steven: You can see that especially in the so-called "Three Goddesses."



Phidias, Parthenon, detail of the East Pediment Sculpture (Hestia, Dione, Aphrodite?), c. 438-432 B.C.E., marble (British Museum, London) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/8AmfhU>

Beth: Exactly! But here, there's a sense of that drapery being transparent, where we can really see the nude body underneath it.

Steven: Well look at the way her left thigh is exposed, her breasts are exposed, her abdomen is so transparent to us, but then look at the way

that the folds gather on her arm, just beautifully and actually you can see that the artist has created little peaks in that drapery, giving us a sense of the weight of the cloth.



Nike Adjusting Her Sandal (detail), from the south side of the parapet of the Temple of Athena Nike, Acropolis, Athens, Greece, c. 410 B.C.E., marble (Acropolis Museum, Athens) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/kCi69u>

Beth: Her right shoulder is nude, but her left shoulder is clothed. We have access to the body in either case. And then we see what art historians call "chain folds," as though, if you imagine holding up a chain in the way that it drapes, and falls down with the pull of gravity, drawing attention with the shadows there to the space between her legs. There's clear eroticism here. The "Nike Adjusting Her Sandal" is only one of many panels along the parapet. In another panel we see two Nikes, or Nikai, coaxing an animal to sacrifice. And in other panels we see Nike figures, who are offering trophies to a military victory.

Steven: So all of this, within the context of the Acropolis, within the context of the Parthenon, the importance of military victories. And not long after not only did the victory of the Persians, but also the very destructive war with Sparta, the Peloponnesian War.

Beth: Right, and Sparta being Athens' long-time nemesis.

Watch the video. <https://www.youtube.com/watch?v=B4HXrb8cPQI>



Nikes leading a bull to the altar, from the parapet of the Temple of Athena Nike, Acropolis, Athens, Greece, c. 410 B.C.E., marble, 3′ 6″ high (Acropolis Museum, Athens) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/kCfZx4>

36. Grave stele of Hegeso

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



Grave stele of Hegeso, c. 410 B.C.E., marble and paint, from the Dipylon Cemetary, Athens, 5′ 2″ (National Archaeological Museum, Athens) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rtP4vh>

This is the transcript of a conversation conducted at the National Archaeological Museum in Athens.

Steven: At the end of the fifth century B.C.E.—the end of the very brief period that we call the High Classical moment—there was a resurgence of funerary sculpture in Athens.

Beth: In fact, we're standing in a room in the National Archaeological Museum in Athens that's filled with grave markers, most of them in the form of what art historians called stele, or upright slabs decorated with relief sculptures.

Steven: Not so different from what we in the modern world would recognize as a gravestone.

Beth: Exactly. Interestingly, there was a disappearance of this type of monument during that High Classical moment, and then we see it reappear.

Steven: What we do have in the High Classical moment is most of the great sculptors working on the sculptural program of the Parthenon and the other buildings of the Acropolis. But we see private sculpture begin to re-emerge. That is, sculpture that is not part of a program of the state.

Beth: Exactly. Before the Classical period, in the Archaic period, there were kore and kouros, the male and female figures that were set up by the elite Greek families as funerary markers, but during the period of democracy in Athens, the state was primary and not wealthy families.

Steven: You see this resurgence especially in the cemeteries just outside of the city gates of Athens.

Beth: That's where this particular sculpture was found, which is called the grave stele of Hegeso. Hegeso is the woman who is shown seated, opening a box of jewelry presented to her by her servant, and examining a necklace, which is no longer there, but which was once represented in paint.



Grave stele of Hegeso (lower section), c. 410 B.C.E., marble and paint, from the Dipylon Cemetary, Athens, 5′ 2″ (National Archaeological Museum, Athens) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rtP4KA>

Steven: There is such a precise rendering of the chair that she sits on.

Beth: Don't forget women's sphere was the home. Women were not allowed to be citizens of Athens. Hegeso is shown in a domestic setting. We see plasters on either side and a pediment above, on which we see an inscription that says, "Hegeso, daughter of Proxenos." Women in ancient Greece led very circumscribed lives that were defined by their relationships with men: first their fathers, then their husbands.

Steven: But I think that what I find most compelling is its quiet reverence. This is so much in keeping with the tradition of the High Classical that we see in Parthenon sculpture.

Beth: So this is a style that resembles very closely the kind of carving that we see on the figures on the Parthenon Frieze. Drapery that very closely follows the form of the body that creates elaborate folds and swirls that have a visual interest in their own right. The drapery that bunches up between her two arms and around her belly and between her breasts are beautiful passages of sculpting.



Grave stele of Hegeso (detail), c. 410 B.C.E., marble and paint, from the Dipylon Cemetary, Athens, 5′ 2″ (National Archaeological Museum, Athens) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qz7iyj>

Steven: Her foot is resting on a foot rest so that there is no part of her is actually touching the ground. We see beautiful representation of her foot foreshortened and wearing a sandal. Look at the very delicate veil that falls to the right of the shoulder or the way in which the drapes around her legs fall on the far side of the chair. And yet the drape by her waist falls on this side of the chair. So although we have this very shallow space, we have the full width of the body. For all of this really vivid carving, this is a quiet image that is absolutely appropriate to the solemn mood of a grave stele.



Grave stele of Hegeso (detail), c. 410 B.C.E., marble and paint, from the Dipylon Cemetary, Athens, 5′ 2″ (National Archaeological Museum, Athens) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rewvvJ>

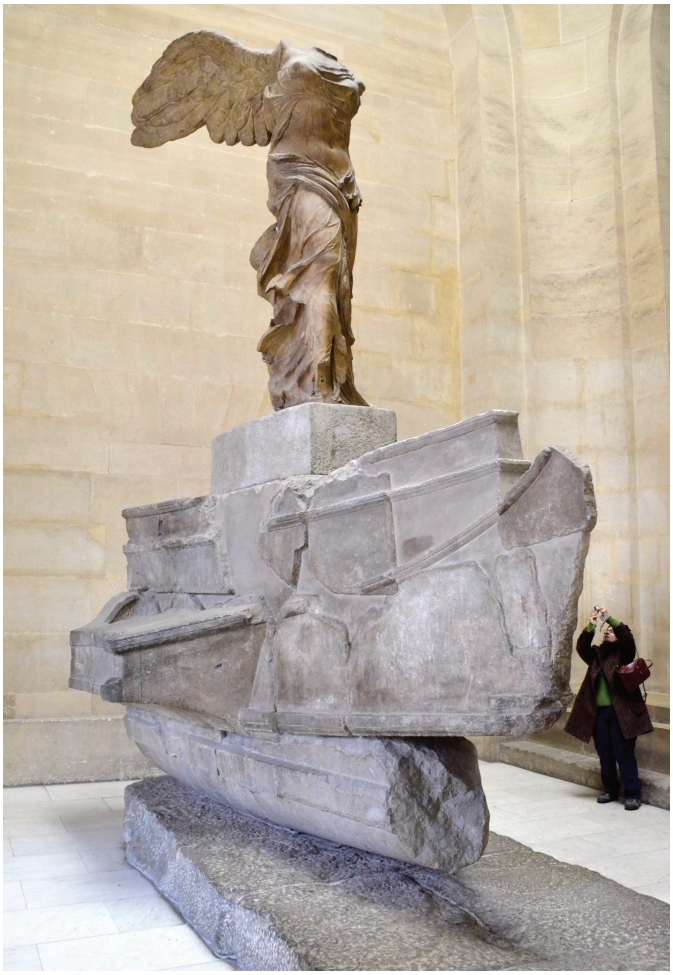
Watch the video. <https://youtu.be/YUzsxLi43gE>

37. Winged Victory of Samothrace

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the Musée du Louvre, Paris.



Nike of Samothrace, Lartos marble (ship), Parian marble (figure), c. 190 B.C.E., 3.28 meters high (Louvre, Paris) (photo: SpirosK photography, CC BY-SA 2.0) <https://flic.kr/p/cDV2SG>

Steven: We're in the Louvre at the top of one of the grand staircases. And we're looking at the "Nike of Samothrace," that dates to the second century C.E., or after Christ.

Beth: So we're in the Hellenistic period. And the sculpture is nine feet high, so it's really large.

Steven: It's called the "Nike of Samothrace" because it was found on the island in the north of the Aegean which is called Samothrace. It was found in a sanctuary in the harbor that actually faces in such a way the predominant wind that blows off the coast actually seems to be enlivening her drapery.

Beth: So she never stood on the prow of a real boat.

Steven: No, she stood on the prow of a stone ship that was within a temple environment.

Beth: So she's the goddess of victory. She's a messenger goddess who spreads the news of victory.

Steven: In fact, there are some reconstructions of what the sculpture would've originally looked like that show her as literally a herald with a horn. This is an image that will have an enormous impact on Western art. But you had mentioned the Hellenistic before. And so gone is all of that very reserved, high classical style. And in its place is a kind of voluptuousness, is a kind of windswept energy that is full of motion and full of emotion.

Beth: I feel as though she moves in several directions at the same time. She's grounded by her legs but strides forward. Her torso lifts up. Her abdomen twists. Her wings move back. One can almost feel the wind around her, whipping her, pulling back that drapery that flows out behind her, swirling around her abdomen, where it really reminds us of, actually, the sculptures of hundreds of years earlier on the Parthenon frieze.

Steven: Yes, exactly. But instead of the quiet, relaxed attitude of the gods on Mount Olympus, you have instead this sense of energy and a goddess that's responding, in this case, to actually natural forces.

Beth: The environment.

Steven: Absolutely, just as we would stand there, very likely having the wind whip around us.

Beth: And that drapery that clings to her body and creates so many creases and folds that play against the light, and the different texture of her wings—the marble is really made to do so many different things in terms of texture.

Steven: So here is a culture that has studied the body, celebrated the body, and then is willing then to use the body for tremendous expressive force.

Watch the video <https://youtu.be/TPM1LuW3Y5w>.



Nike of Samothrace, (Louvre, Paris) (photo: Carole Raddato, CC BY-SA 2.0) <https://flic.kr/p/byyHyk>

38. Great Altar of Zeus and Athena at Pergamon

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



The Pergamon Altar, c. 200-150 B.C.E., 35.64 x 33.4 meters (Pergamon Museum, Berlin) (photo: Jan Mehlich, CC BY-SA 2.5) <https://tinyurl.com/yxohqyje>

This is the transcript of a conversation held in the Pergamon Museum, Berlin.

Steven: I love Greek sculpture. I love the Archaic. I love the Classical and all of its restraint and harmony. But I have to tell you, I really love the Hellenistic. And the reason I do is because of two fragments from

a great frieze from Pergamon. One has Athena at its center, and one has Zeus.

Beth: And I can see why you love these sculptures. They combine what's most wonderful about ancient Greek sculpture—the love of the body. But also the sense of expressiveness and drama, which we associate so much with the Hellenistic.

Steven: The Hellenistic refers to the last period of Greek art, the last phase of Greek art after the death of Alexander the Great. Now Alexander, whose father had been a king in northern Greece, in Macedonia, had been able to conquer all of Greece, and ultimately, conquer an enormous territory well beyond Greece's original borders.

Beth: And in so doing, he expanded the influence of Greek culture across a much wider area.



Detail with Alexander the Great, Alexander Mosaic, c. 100 B.C.E., tessera mosaic from the House of the Faun, Pompeii (Museo Archeologico Nazionale, Naples) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dw1w67>



Athena frieze looking up, the Pergamon Altar (Gigantomachy), c. 200-150 B.C.E. (Pergamon Museum, Berlin) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/fdd5tp>

Steven: That's right. He, in a sense, Hellenized this area, or made it Greek. His expanded territory reached from the ancient civilization of Egypt all the way to the border between Persia and India to the Indus Valley itself. It was an enormous territory. But after he died, his empire was divided among his four generals. And one of those generals saw a hill top near the coast of Turkey, which he believed was an important defensive position, and there founded the garrison of Pergamon that became, ultimately, the kingdom of Pergamon.

Beth: And those are the people that built this fabulous altar and sculpted this fabulous frieze. So what's going on here is a battle between the giants and the gods and goddesses of Mount Olympus. We're witnessing a celestial battle of enormous proportions.

Steven: This is the great mythic battle, where the giants battle the Olympian gods for supremacy of the Earth and the universe. So let's take a close look at it. Let's start with the fragment that has Athena at its center. She is graceful and beautiful, even as she battles a ferocious giant, a Titan.

Beth: It's clear who's going to win. Athena looks totally in control. She's grabbed Alcyoneus by the hair, pulling him out of the Earth, disempowering him. His mother, on the other side, completely unable to help him. Although she's wild with fear over what's about to happen to her son.

Steven: Look at the way the artist, whoever it is, has actually constructed this image. My eye starts with Athena herself, where her head would have been. My eye rides down that beautiful arm until it's grasped almost tenderly by Alcyoneus. It continues around his elbow, and then across his face, and down his chest. I notice that one of Athena's snakes is biting him on his right side. My eye then sweeps down that gorgeous curve that is his body, his torso, that leads into his leg. But it's slowed down by almost the staccato of the intersections of the deeply carved drape that belongs to Athena. And of course, that all leads us right back to Alcyoneus' mother.

Beth: So it's as though Athena, this powerful, in control goddess, is bracketed on either side by these passionate, wild figures who are being defeated. And at the same time, Athena is being crowned by winged Nike, who comes from behind with a the crown for her head. So there's really a sense here of figures coming from behind, of figures coming from below, of something that's completely in flux, something that's completely in motion with an incredible sense of drama.

Steven: It's as if the entire surface of this marble is swirling in a kind of counterclockwise motion around Athena's shield, which is at its very center. It is full of diagonals, which activates the surface. It is full of the deepest carving that creates this brilliant contrast between the highlights of the exposed bodies and the dark shadows behind them.



Zeus Frieze, looking up, The Pergamon Altar (Gigantomachy), c. 200-150 B.C.E. (Pergamon Museum, Berlin) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/fdt16S>

Beth: But what's also amazing to me is the complexity of the positions of their bodies. Athena, who moves toward the left, keeps her arm to the right. And then Alcyoneus lifts his head up, twists his shoulders. His legs spill back behind him. And we're really talking about virtuoso sculpting here of the human body.

Steven: Imagine what this would have looked like when it was painted. We think so often about Greek sculpture as being just this brilliant white marble. But we have to remember that all of this was brilliantly painted. Let's take a look at the fragment with Zeus at its center.

Beth: Like Athena, he seems composed and totally in control. Even as he rushes forward, we have no doubt that he is the victor here.

Steven: So Zeus is an enormously powerful figure. We have this beautiful exposed chest and abdomen and this wildly, almost living drapery that seems to whip around his legs. And he is taking on not one, but three giants at the same moment.

Beth: But luckily, he's the king of the gods. So he's got things like eagles and thunderbolts to help him out.

Steven: That's right. If you look at the upper right, you can see that an eagle, Zeus' emblem, is taking on the elder Titan. As the eagle is preoccupying that giant, Zeus is able to turn his attention to the giant at his feet, who is on his knees and is shortly going to be vanquished. You can see that on Zeus' other side, he has just finished putting away a giant who almost seems to be sitting on a rock. He's got stuck in his thigh what looks like a torch, but is actually the way that the Greeks represented Zeus' thunderbolts.

Beth: Ouch. That has to hurt.

Steven: It does. There's a sense of heroism, a sense of balance, even as there is a sense of the momentary and a kind of excitement that really pulls us in. The story of the gods and the giants is a story that was really important to the Greeks. It was really a set of symbols that spoke of the Greeks fear, but also optimism that they could overcome chaos.

Beth: So this battle is really a metaphor for the victory of Greek culture over the unknown, over the chaotic forces of nature.

Steven: Right. It also represents their military victories over cultures that they didn't understand and that they feared. Let's walk up the stairs of the Great Altar into the most sacred part, where the fire, presumably to Zeus, would have been lit and where sacrifices might have been offered. You had mentioned earlier that the figures seem to almost spill out away from the wall. That's most clearly seen as we walk up the stairs. There are moments when the figures that are carved in this high relief actually rest a knee on the stairs—and actually enter our space. For instance, one of the sea nymphs, whose legs actually end in the tail of a great serpent, coils her tail on one of the stairs. There is this wonderful way in which they literally pour out into our world.



Stairs at left, the Pergamon Altar, c. 200-150 B.C.E. (Pergamon Museum, Berlin) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/d7M8fu>

Beth: And so this whole drama is unfolding around us, moving into our space. And it must have been an amazing thing to have seen.

Steven: One of the questions that comes to mind is why are these sculptures here in Berlin? And the answer can be found in the political ambitions of Prussia at the time. They very much wanted to be the equal of the French and the British. And that meant, in part, to have great museums that express the civilizations of the past, so they could be, in a sense, the inheritors of the great classical tradition, which was so revered in the nineteenth century. Berlin, in some ways, wanted to be the new Rome.

Beth: And so one of the great things about being in the Pergamon Museum in Berlin is that instead of just putting what remains of the frieze on wall, they've reconstructed the altar and as much of the frieze as possible. And so we really get a sense of what this was like in the city of Pergamon, in the third century B.C.E.



Stairs at right, the Pergamon Altar, c. 200-150 B.C.E. (Pergamon Museum, Berlin) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/d7M7XW>

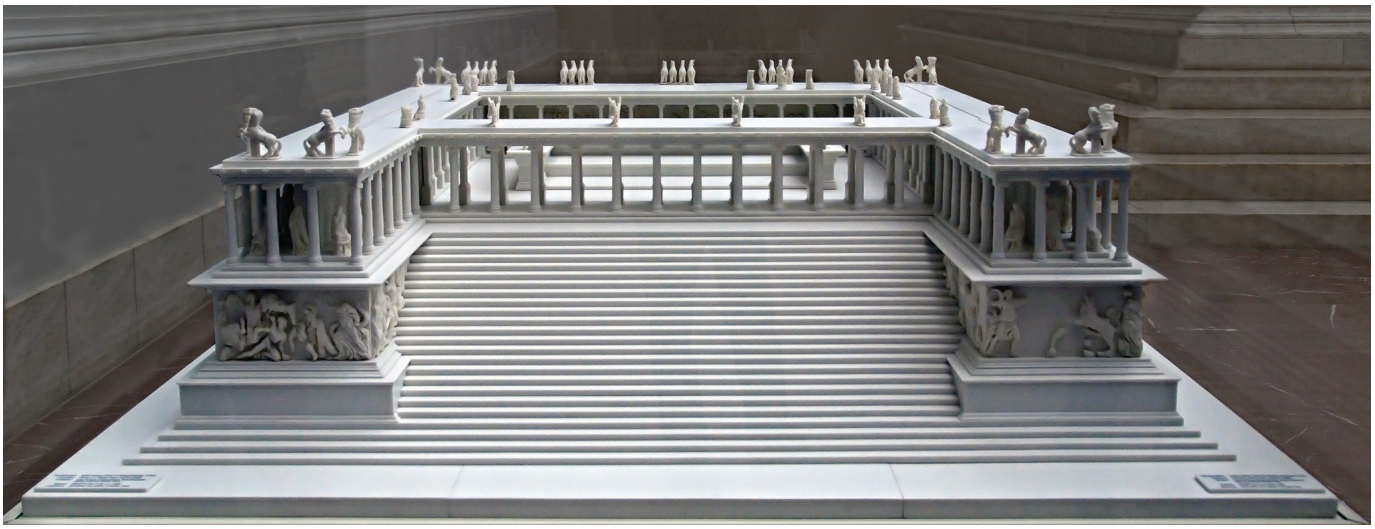


Left of stairs, the Pergamon Altar, c. 200-150 B.C.E. (Pergamon Museum, Berlin) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/d7M8X3>

Steven: Right. And so if this was the third century, we would be on the Acropolis, this hill top, in the city of Pergamon, about 20 miles from the coast, in what is now Turkey. We would walk up this hill. And we would find the Altar of Zeus surrounded by a great library that is reported to have had 200,000 scrolls, a garrison for soldiers, a royal palace for the king.

Beth: And so this whole drama is unfolding around us, moving into our space. And it must have been an amazing thing to have seen in the second century B.C.E.

Watch the video. <https://www.youtube.com/watch?v=L3SIooVHV8E>



A model of the Altar of Zeus from Pergamon (Pergamon Museum, Berlin) (photo: youngrobv, CC BY-NC 2.0) <https://flic.kr/p/4vRRev>

39. House of the Vettii, Pompeii

Dr. Jeffrey Becker

Buried by a volcanic eruption two thousand years ago, this Roman house was the epitome of wealth and style.



View of the Forum with Mount Vesuvius in the distance, Pompeii (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://www.flickr.com/people/profzucker/>

The ancient city may be quiet now, its life ended by a fantastic cataclysm nearly two thousand years ago, but the remains of houses, decorations, and the objects of daily life whisper to us about the lives of the ancient people who inhabited Pompeii before the eruption of Mount Vesuvius. Domestic spaces, in particular, offer a rich resource for examining ancient lives that, in some cases, ended abruptly. Pompeii was thriving up until the moment of its destruction and in studying its life interrupted, we arrive at important insights about what it was like to live in the Roman Mediterranean.

Overview

The House of the Vettii or Casa dei Vettii (VI xv,1) is a Roman townhouse (*domus*) located within the ruined ancient city of Pompeii, Italy. A volcanic eruption destroyed Pompeii in the year 79 C.E., thus preserving extraordinary archaeological remains of the Roman town as it was at the time of its cataclysmic destruction. Those remains constitute a nearly unparalleled resource for the study of the Roman world.



Fourth style wall paintings (from a room off the peristyle), House of the Vettii, Pompeii (photo: Lady Erin, <https://www.flickr.com/photos/erint/2692255918>, CC BY-NC-ND 2.0)

Domus architecture

Beginning with the Renaissance interest in all things classical, architectural historians and archaeologists have been debating the form and function of ancient Roman houses for several hundred years. The interest in the domestic architectural form was fueled further by the re-discovery, in the middle of the eighteenth century, of Pompeii, Herculaneum, and other sites destroyed by Vesuvius.

A house is, of course, a dwelling—but it is also a stage on which the rituals of daily life and social hierarchy would be performed. During the time of the Roman Republic (fifth through first centuries B.C.E.), ranking aristocratic families (patricians) used domestic display as a way to reinforce their social position, and as a way to advance their own fortunes, as well as those of their dependents and clients (*clientes*), within the community. Since Republican society operated on the basis of this patron-client relationship, the *domus* played a key part in the reinforcement of social hierarchy as the patron (*patronus*) would receive his clients (*clientes*) in the atrium of his *domus* each business day. While visiting with the patron, each client would get an eyeful of the patron's household wealth, thus applying implicit pressure on the patron to ensure that his house was tasteful and fashionable.

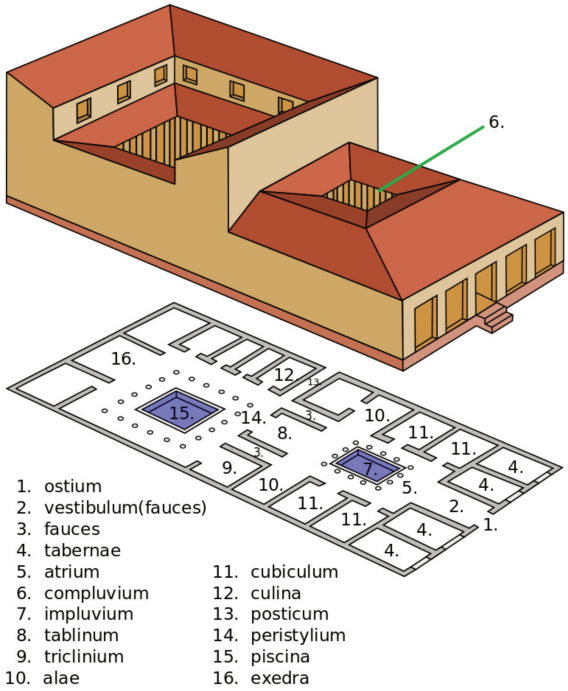


Street view, House of the Vettii, Pompeii (photo: Mark L. Brack, <https://www.flickr.com/photos/psulibscollections/5978093894/in/photolist-5K8hC-by2542-a7gi3o-a7dpFB-864Pny-861Cna-a7gi37-dbovAc-db9yEZ-864PqE-864N4E-865GB3-7PAaoU> 1995, posted by Penn State University, CC BY-NC 2.0)

The patron-client system revolved around asymmetrical social relationships whereby lower ranking clients were bound to their patrons by the qualities of trust (*fides*) and dutifulness (*pietas*). Governed by ancestral custom (*mos maiorum*), clients would seek support and favors from the patron; in turn, the patron provided protection, support, and benefaction, collectively known as *patrocinium*. This system had changed somewhat by the time of the brothers Vettii, and it is unclear to what extent the patron-client system factored in their lives or in their own domestic sphere.

In his treatise on Roman architecture, the first century B.C.E. author Vitruvius outlines the key elements, proportions, and aesthetics of the Roman house, creating what has been treated as a canonical recommendation for domestic architecture of the period. The Vitruvian canon (or standard) proposes a range of plans, suggesting strongly that the organization of interior space was important in Roman architectural theory (*De Architectura* 6.3.3-6). Although the plan of the Roman *domus* does reflect the canonical aspects described by Vitruvius, we also see enormous variation with modifications and remodeling undertaken over time.

The standard house (*domus*) plan has several key architectural elements. Generally entered from the street via a narrow doorway (*fauces*), the large centralized reception hall (*atrium*) is flanked by wings (*alae*) and often bounded by bedrooms (*cubicula*). The office of the head of household (*paterfamilias*), known as the tablinum, links the public part of the house (*pars urbana*) to the private part of the house (*pars rustica*). This latter area often focuses on an open, colonnaded courtyard (peristylium) and serves as the center of family life, with the kitchen (*culina*), dining room(s) (*triclinium* or *oecus*), and often a small garden (*hortus*). Many houses also had a second level that may have contained additional sleeping spaces and perhaps storage.

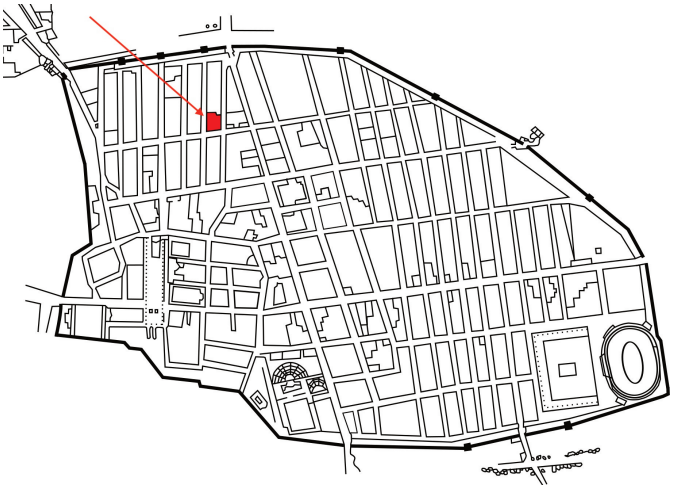


Standard plan of an ancient Roman Domus (graphic: PureCore, CC BY-SA 3.0) <https://commons.wikimedia.org/wiki/File:Domus_romana_Vector002.svg>

Excavation and identification

The House of the Vettii was excavated between late 1894 and early 1896. The artifacts that were recovered allowed for the identification of the house's putative owners, Aulus Vettius Conviva and his brother, Aulus Vettius Restitutus. Both men have been identified as former slaves or freedmen (liberti). The Vettii had risen to some prominence; Conviva was an augustalis—the top civic office for which a freedman would be eligible. In the construction and decoration of their house, the brothers display a mindset not uncommon among the newly rich. Two strongboxes (arca – essentially lockable boxes for storing valuables)—concrete signs of wealth—were placed prominently in the large atrium so that visitors would be sure to notice them.

The strongboxes, paired with a painting of the god Priapus in the vestibule, serve to underscore the wealth of the brothers Vettii. This painting, which shows Priapus weighing his own phallus against a bag of money, may represent the socio-economic ambitions of the Vettii and perhaps indicates that those ambitions were different from those of high-ranking citizen families. This is interesting when we consider that achieving the status of *augustalis* likely indicates that Conviva made a large donation to a public works project in Pompeii.



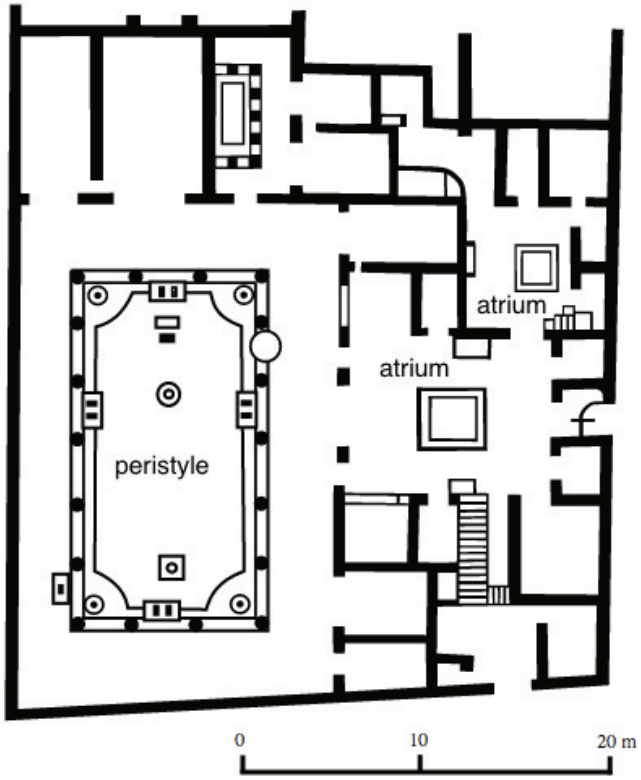
Plan of Pompeii, with location of the House of the Vettii (graphic: MaxViol, CC BY-SA 3.0) <https://commons.wikimedia.org/wiki/File:House_of_the_Vettii_(Pompeii)_location.svg>

The plan of the house

The House of the Vettii covers an area of approximately 1,100 square meters. The construction of the house and its decorations belong to the final period of Pompeii's occupation and therefore provides important evidence of the aesthetics of the city on the eve of its destruction.



View through atrium to the peristyle (photo: Peter Stewart, CC BY-NC 2.0) <https://flic.kr/p/4GQCkA>



Plan, House of the Vettii, Late Republican-Early Imperial domus, destroyed 79 C.E. (graphic: M.Vitale, CC BY-SA 3.0) <https://commons.wikimedia.org/wiki/File:Casa_dei_vetti_-_planimetria.svg>

The house was built atop the remains of an earlier house that survives, in part, in the form of the wings (*alae*) and a doorway. The plan of the House of the Vettii has two large central halls (*atria*) and, significantly, lacks an office space (*tablinum*). Entry to the house was gained from the east by way of a vestibule that granted admission to the larger atrium. The stone-lined basin for collecting rainwater (*impluvium*) lies at the center of the atrium. This larger atrium communicates directly with the peristyle (an open courtyard surrounded by fluted Doric columns) by means of a set of folding doors. The smaller atrium was the focus of the service portion of the house, while the peristyle and its well-appointed rooms were meant for entertainment and dining.

Wall paintings

The decorative schema of the House of the Vettii provides important evidence for trends in domestic decoration in the final years of Pompeii's occupation. Since Pompeii suffered a major earthquake in 62 C.E. that caused significant destruction, the chronology of the wall paintings and other decorations in the House of the Vettii has been a topic of debate since the house's discovery.



Frescoes in the atrium, House of the Vettii, Pompeii (photo: Irene Norman, CC BY-NC 2.0) <https://flic.kr/p/8Pw6eo>

Most art historians point to the house's decorative schema as being representative of a key transitional phase, between the Third and Fourth styles of Pompeian wall painting. Some scholars consider it among the finest examples of the Fourth Style at Pompeii. Paul Zanker sees the Fourth Style wall paintings as being imitations of higher art forms, reckoning that the chosen pictures aim to turn the rooms into picture galleries (*pinacothecae*).

The atrium is richly decorated, as are the rooms opening onto the peristyle. Two of these were in the course of being painted at the time of destruction, while the other three are richly appointed with Fourth Style wall painting. The largest of these, a dining room, is decorated in panels of red and black with an exceptionally fine motif of erotes or putti (mythological winged gods associated with love) engaged in various occupations (image below). The central panel pictures that were likely set into the walls do not survive. Overall, the scheme of wall painting in the house of the Vettii suggests an attempt at forward-looking interior decoration on the part of the owners.



detail of Fourth Style wall painting in the Triclinium, House of the Vettii, Pompeii (photo: Lady Erin, , CC BY-NC-ND 2.0) <https://flic.kr/p/56QngH>

The evidence furnished by the House of the Vettii offers key insights into the domestic architecture and interior decoration in the last days of the city of Pompeii. The house itself is architecturally significant not only because of its size but also because of the indications it gives of important changes that were underway in the design of Roman houses during the third quarter of the first century C.E.

40. Alexander Mosaic, House of the Faun, Pompeii

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker



Alexander Mosaic, c. 100 B.C.E., tessera mosaic from the House of the Faun, Pompeii, 8′ 11″ x 16′ 9″ (the mosaic may be based on a lost painting by Philoxenos of Eretria, The Battle of Issus, c. 315 B.C.E.) (Museo Archeologico Nazionale, Naples) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dw1wph>

This is the transcript of a conversation conducted at Museo Archeologico Nazionale, Naples.

Steven: In baseball, in soccer, sometimes sports announcers will look for the turning point of the game. And the scene that we're looking at—a battle, not a sport, and in fact, one of the most important battles in ancient history—is at that particular turning point, the moment when the great ruler of Persia turns and flees under the onslaught of the great Greek general Alexander. (Note: scholars continue to debate whether the mosaic depicts the Battle of Issus, in 333 B.C.E or Gaugamela, in 331 B.C.E.)

Beth: Darius, the king of the Persians, has just ordered his troops to retreat.



Alexander Mosaic, detail with Darius III's Chariot, c. 100 B.C.E., tessera mosaic from the House of the Faun, Pompeii (Museo Archeologico Nazionale, Naples) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dvUWs8>

Steven: So there's tremendous tension at this moment because we have this reversal of momentum. We can feel, still, the momentum that is moving in from the right because we can still see the Persian guards' spears facing towards the Greeks. But just at that moment, one of the largest objects in this mosaic, the chariot, is being spun around. And the tension and the torsion that's required for that is creating this tremendous sense of dynamism.

Beth: On the ground, we see the wounded and the dying.

Steven: One of my favorite details is the reflection of one of the Persian soldiers in his own shield.

Beth: He's looking at himself fallen in battle, perhaps about to die. I think my favorite part is the horse that's part of the team leading Darius's chariot. Almost all four hooves are off the ground. As it's being pulled toward the left, its head turns to the right.

Steven: There is this almost frenetic quality to this image.

Beth: And you have a sense of confidence when you look at Alexander's face as he heads toward Darius. Darius looks fearful as he gestures toward Alexander. It looks to me as though Darius is almost pleading for the lives of his soldiers.

Steven: Well, there is a look both of surprise and worry and of seeking compassion. I think that that's exactly right. Alexander is known ultimately for his compassion, at least towards Darius's family.

Beth: And Alexander is the great Greek general, the founder of an enormous empire.

Steven: Well, that's right. He not only unifies Greece, but he will then move south into Egypt. He moves east into Persia, and he gets to the Indus Valley itself. So he puts under Greece's control an enormous area of the known world. And all of these details are rendered in tiny pieces of stone and glass.



Detail, Alexander Mosaic, c. 100 B.C.E. (Museo Archeologico Nazionale, Naples) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dw1w67>

Beth: So we're looking at a mosaic that we think is based on an ancient Greek painting. We hope it's based on an ancient Greek painting because almost nothing of ancient Greek painting survives. And Pliny talked about how amazing Greek painting was.

Steven: Well, it's true. When we think of Greek art, we think of Greek sculpture. We might think of Greek architecture. Perhaps we think of Greek vase painting. But you're absolutely right. In the ancient world, literature tells us that what the Greeks did better than anything was wall painting. We just don't have any.

Beth: So maybe this gives us some idea.

Steven: But I do find it really interesting that the mosaic is almost empty at the top and is so much weighted down towards the bottom. Especially when we remember that this was based on a painting that would have been on a wall. And so this was intended to be seen vertically, at least initially. At least, that's our best guess.

Beth: Art historians link this mosaic to a literary description of an ancient Greek painting by an artist named Philoxenos. And in this literary source by Pliny, Philoxenos is said to have created a painting of the Battle of Alexander and Darius.

Steven: But here's the problem. There were probably lots of paintings of that subject.

Beth: And we know for certain that there, for example, was a woman artist who painted this subject in ancient Greece, as well.

Steven: This was an incredibly important confrontation between these two generals, between these two civilizations. I'm sure there were many more.

Beth: But this is what we have, and this is what was found. And we have it because of the eruption of Mount Vesuvius in 79 C.E., which preserved under a layer of volcanic ash the city of Pompeii.

Steven: Including this mosaic.

Beth: This was found on the floor between two peristyles, that is, between two open courtyards that were surrounded by columns in the largest and most elaborately decorated mansion in Pompeii, often called the House of the Faun after a bronze sculpture of a faun that was found there. (The original mosaic was uncovered at the House of the Faun in 1841 and moved to Naples two years later. A replica mosaic was installed at the House of the Faun in 2005.)

Steven: And the mosaic itself is of extraordinary quality. So it's not surprising that we find it in such a lavish environment as the House of the Faun. There are apparently a million and a half pieces of stone and glass that make up this mosaic.



Alexander Mosaic replica, installed 2005, House of the Faun, Pompeii (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dw1rxC>

Beth: And the quality is not just in the fineness of the materials, but in the incredible naturalism of what we see here, which is what the ancient Greeks were known for. We have forms that, even with these tiny pieces of stone, we have a sense of modeling, of the use of light and dark to create a sense of three-dimensional forms. If we look at the horses or the faces of the figures, we see the turn of the face, the anatomy of the body.

Steven: And look at the foreshortening of the animals—for instance, of the horses.

Beth: That ancient Greek knowledge of the human body, of how it moves through space, is so clear here.

Steven: And of course, all of this speaks to the Romans' regard for the achievement of ancient Greek art.

Beth: Sometimes it seems as though everyone in Pompeii wanted to imitate the ancient Greeks, to own copies of ancient Greek sculptures, ancient Greek paintings. There was a real mania, as in Rome itself, for ancient Greek culture.

Watch the video. <https://www.youtube.com/watch?v=51UA1T89MzU>



Alexander Mosaic, detail with dying horse, c. 100 B.C.E., tessera mosaic from the House of the Faun, Pompeii (Museo Archeologico Nazionale, Naples) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dw1tEw>

41. Seated Boxer (or Boxer at Rest)

A CONVERSATION

Dr. Steven Zucker and Dr. Beth Harris

This is the transcript of a conversation conducted at the Palazzo Massimo, Rome.



Apollonius, Boxer at Rest, 1st century B.C.E. (may be a copy of a 4th century sculpture), bronze (Palazzo Massimo, Museo Nazionale Romano) (photo: Steven Zucker <https://www.flickr.com/photos/profzucker/7808850358/in/photostream/> CC BY-NC-SA 2.0)

Steven: Almost always when we look at Greek sculpture we're looking at Roman copies, we're looking at marble copies of what had once been bronze, but bronze is expensive and it's reusable. So, for the 2000 years since these objects were made, there was ample opportunity for them to be melted down, but once in a while we find a Greek original.

Beth: We're looking at the seated Boxer, a Greek Hellenistic sculpture from about 100 B.C.E. Hellenistic refers to this period after Alexander the Great.

Steven: This is the last phase of ancient Greek art because the Hellenistic will end when the Roman's conquer Greece. Because it's bronze we have an opportunity to understand how the Greek's constructed their large scale sculpture. This is lost wax casting and it would be chase so you could actually carve into portions and we can see that especially in the beard and in the hair, so those lines are cut into the surface.

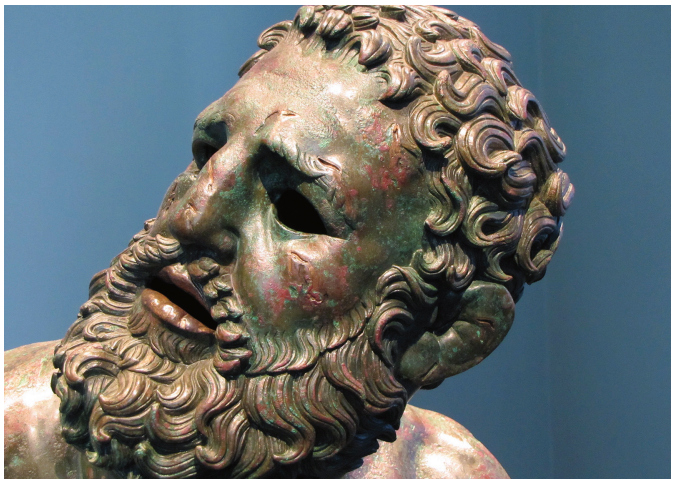
Beth: So the sculpture is hollow in other words.

Steven: We can see that if you look into the eyes and if you look into the mouth, you can see the hollowness. Now, originally there would have been eyes– they're missing. They probably would have been ivory or some sort of glass paste, something reflective and highly polished, but yes, we can see that this is quite thin. If we knocked on it, it would ring like a bell.

Beth: A few moments ago as we were looking at it, there was standing in the very place that he seems to be looking and I almost felt like he was in actual dialogue with someone.

Steven: He has that tremendous sense of presence, doesn't he?

Beth: He does. During this Hellenistic period, we see a real expansion of the subject matter that we usually think of as Greek art. Usually, we think about the ideal, beautiful, nude, athletic, young figures.



Apollonius, Boxer at Rest, 1st century B.C.E. (may be a copy of a 4th century sculpture), bronze, Palazzo Massimo, Museo Nazionale Romano. (photo: Steven Zucker <https://flic.kr/p/cU3pxs>, CC BY-NC-SA 2.0)

Steven: This is an athletic figure, but he's not young and he's not beautiful in the traditional sense.

Beth: When I look at him I find parts of him beautiful, but his face is certainly not.

Steven: The beauty comes from our understanding of his life, of his suffering. Instead of through the elegance and perfection of his body, he's muscular, he's powerful, but he's defeated.

Beth: There's definitely a sense of pathos—this sculpture engages us emotionally.

Steven: The artist has been careful to make sure that we feel sympathy. He's inlaid copper into parts of his face where he's defined wounds so that the copper functions almost like a more red color against the bronze and we can see him bleeding.

Beth: Boxing in Ancient Greece focused mainly to the head or to the face, and that's why his body looks still so very beautiful and perfect. When I said before, I still find him ideally beautiful, I was thinking about the incredible muscles in his torso. He's still really thin and athletic, but the face is such a contrast and also his hands all wrapped in leather. The face and the hands ground him in a kind of, the reality of a moment.

Steven: That's especially true with his posture. You can see that he's not simply seated, his torso is collapsing, his head is down, he's looking up but you can feel the exhaustion. You can also see the way in which his body has been beaten, the broken nose, the gashes in his face and look at his ear which is swollen and distorted.



Apollonius, Boxer at Rest, 1st century B.C.E. (may be a copy of a 4th century sculpture), bronze, Palazzo Massimo, Museo Nazionale Romano. (photo: Steven Zucker <https://www.flickr.com/photos/profzucker/7808851024/in/photostream/>, CC BY-NC-SA 2.0)

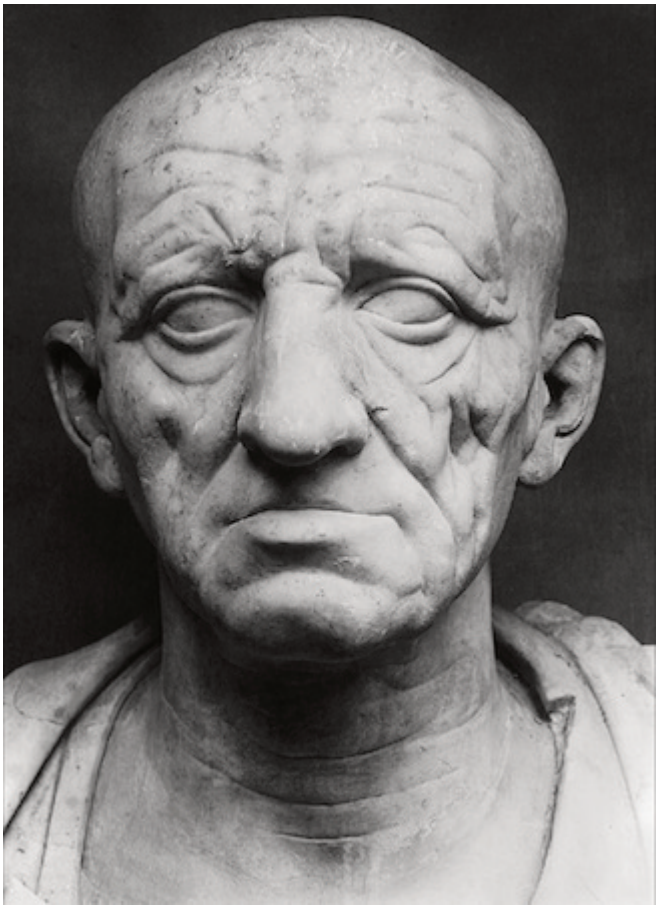
Beth: We rarely see seated figures in the Classical period in Greek art; the figures are standing, they're noble, they exist in the world in that heroic way. Just by virtue of just being seated, there's a humility and humanity to the figure.

Steven: There's also an informality. His right leg is out and up on the heel. His left leg is splayed out slightly under the weight of his arm. This is a man who would like to lie down. This is a period in Greek art when there really is an interest in pathos, in moving beyond the heroic, moving beyond the traditional subjects of the ancient world and really beginning to explore a much wider variety. It's fascinating. It is this incredibly sophisticated moment.

Watch the video <https://youtu.be/FvsSPJoJB3k>.

42. Head of a Roman Patrician

Dr. Jeffrey Becker



Head of a Roman Patrician from Otricoli, c. 75-50 BCE, marble (Palazzo Torlonia, Rome)

Seemingly wrinkled and toothless, with sagging jowls, the face of a Roman aristocrat stares at us across the ages. In the aesthetic parlance of the Late Roman Republic, the physical traits of this portrait image are meant to convey the seriousness of mind (*gravitas*) and the virtue (*virtus*) of a public career by demonstrating the way in which the subject literally wears the marks of his endeavors. While this representational strategy might seem unusual in the post-modern world, in the waning days of the Roman Republic it was an effective means of competing in an ever more complex socio-political arena.

The portrait

This portrait head, now housed in the Palazzo Torlonia in Rome, Italy, comes from Otricoli (ancient Ocriculum) and dates to the middle of the first century B.C.E. The name of the individual depicted is now unknown, but the portrait is a powerful representation of a male aristocrat with a hooked nose and strong cheekbones. The figure is frontal without any hint of dynamism or emotion—this sets the portrait apart from some of its near contemporaries. The portrait head is characterized by deep wrinkles, a furrowed brow, and generally an appearance of sagging, sunken skin—all indicative of the veristic style of Roman portraiture.

Verism

Verism can be defined as a sort of hyperrealism in sculpture where the naturally occurring features of the subject are exaggerated, often to the point of absurdity. In the case of Roman Republican portraiture, middle age males adopt veristic tendencies in their portraiture to such an extent that they appear to be extremely aged and careworn. This stylistic tendency is influenced both by the tradition of ancestral *imagines* as well as deep-seated respect for family, tradition, and ancestry. The *imagines* were essentially death masks of notable ancestors that were kept and displayed by the family. In the case of aristocratic families these wax masks were used at subsequent funerals so that an actor might portray the deceased ancestors in a sort of familial parade (Polybius *History* 6.53.54). The ancestor cult, in turn, influenced a deep connection to family. For Late Republican politicians without any famous ancestors (a group famously known as 'new men' or 'homines novi') the need was even more acute—and verism rode to the rescue. The adoption of such an austere and wizened visage was a tactic to lend familial gravitas to families who had none—and thus (hopefully) increase the chances of the aristocrat's success in both politics and business. This jockeying for position very much characterized the scene at Rome in the waning days of the Roman Republic and the Otricoli head is a reminder that one's public image played a major role in what was a turbulent time in Roman history.

43. Augustus of Primaporta

Dr. Julia Fischer

Nothing was more important to a Roman emperor than his image. Today, politicians think very carefully about how they will be photographed. Think about all the campaign commercials and print ads we are bombarded with every election season. These images tell us a lot about the candidate, including what they stand for and what agendas they are promoting. Similarly, Roman art was closely intertwined with politics and propaganda. This is especially true with portraits of Augustus, the first emperor of the Roman Empire; Augustus invoked the power of imagery to communicate his ideology.



Augustus of Primaporta, 1st century C.E., marble, 2.03 meters high (Vatican Museums) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cxt9Gq>

Augustus of Primaporta

One of Augustus' most famous portraits is the so-called *Augustus of Primaporta* of 20 B.C.E. (the sculpture gets its name from the town in Italy where it was found in 1863). At first glance, this statue might appear to simply resemble a portrait of Augustus as an orator and general, but this sculpture also communicates a good deal about the emperor's power and ideology. In fact, in this portrait Augustus shows himself as a great military victor and a staunch supporter of Roman religion. The statue also foretells the 200 year period of peace that Augustus initiated, called the Pax Romana.



Detail, Augustus of Primaporta, 1st century C.E., marble (Vatican Museums) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cxtfpN>

Recalling the Golden Age of ancient Greece

In this marble freestanding sculpture, Augustus stands in a contrapposto pose (a relaxed pose where one leg bears weight). The emperor wears military regalia and his right arm is outstretched, demonstrating that the emperor is addressing his troops. We immediately sense the emperor's power as the leader of the army and a military conqueror.

Delving further into the composition of the Primaporta statue, a distinct resemblance to Polykleitos' *Doryphoros*, a Classical Greek sculpture of the fifth century B.C.E., is apparent. Both have a similar contrapposto stance and both are idealized. That is to say that both Augustus and the Spear-Bearer are portrayed as youthful and flawless individuals: they are perfect. The Romans often modeled their art on Greek predecessors. This is significant because Augustus is essentially depicting himself with the perfect body of a Greek athlete: he is youthful and virile, despite the fact that he was middle-aged at the time of the sculpture's commissioning. Furthermore, by modeling the *Primaporta* statue on such an iconic Greek sculpture created during the height of Athens' influence and power, Augustus connects himself to the Golden Age of that previous civilization.



Doryphoros (Spear Bearer), Roman copy after an original by the Greek sculptor Polykleitos from c. 450-440 B.C.E., marble, 6'6" (Archaeological Museum, Naples) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cNYY17>

The cupid and dolphin

So far the message of the *Augustus of Primaporta* is clear: he is an excellent orator and military victor with the youthful and perfect body of a Greek athlete. Is that all there is to this sculpture? Definitely not! The sculpture contains even more symbolism. First, at Augustus' right leg is cupid figure riding a dolphin.

The dolphin became a symbol of Augustus' great naval victory over Mark Antony and Cleopatra at the Battle of Actium in 31 B.C.E., a conquest that made Augustus the sole ruler of the Empire. The cupid astride the dolphin sends another message too: that Augustus is descended from the gods. Cupid is the son of Venus, the Roman goddess of love. Julius Caesar, the adoptive father of Augustus, claimed to be descended from Venus and therefore Augustus also shared this connection to the gods.



Detail, Augustus of Primaporta, 1st century C.E., marble (Vatican Museums) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cxtdKb>

The breastplate

Finally, Augustus is wearing a cuirass, or breastplate, that is covered with figures that communicate additional propagandistic messages. Scholars debate over the identification over each of these figures, but the basic meaning is clear: Augustus has the gods on his side, he is an international military victor, and he is the bringer of the Pax Romana, a peace that encompasses all the lands of the Roman Empire.

In the central zone of the cuirass are two figures, a Roman and a Parthian. On the right, the enemy Parthian returns military standards. This is a direct reference to an international diplomatic victory of Augustus in 20 B.C.E. when these standards were finally returned to Rome after a previous battle.



Detail of breastplate, Augustus of Primaporta, 1st century C.E., marble (Vatican Museums) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cxt5MN>



Detail of figures on breastplate, Augustus of Primaporta, 1st century C.E., marble (Vatican Museums) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cxt6P1>

Surrounding this central zone are gods and personifications. At the top are Sol and Caelus, the sun and sky gods respectively. On the sides of the breastplate are female personifications of countries conquered by Augustus. These gods and personifications refer to the Pax Romana. The message is that the sun is going to shine on all regions of the Roman Empire, bringing peace and prosperity to all citizens. And of course, Augustus is the one who is responsible for this abundance throughout the Empire.

Beneath the female personifications are Apollo and Diana, two major deities in the Roman pantheon; clearly Augustus is favored by these important deities and their appearance here demonstrates that the emperor supports traditional Roman religion. At the very bottom of the cuirass is Tellus, the earth goddess, who cradles two babies and holds a cornucopia. Tellus is an additional allusion to the Pax Romana as she is a symbol of fertility with her healthy babies and the overflowing horn of plenty.

Not simply a portrait

The Augustus of Primaporta is one of the ways that the ancients used art for propagandistic purposes. Overall, this statue is not simply a portrait of the emperor, it expresses Augustus' connection to the past, his role as a military victor, his connection to the gods, and his role as the bringer of the Roman Peace.



Detail of figures on breastplate, Augustus of Primaporta, 1st century C.E., marble (Vatican Museums) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cxt941>

43. Augustus of Primaporta

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the Vatican Museums, Rome.



Augustus of Primaporta, 1st century C.E. (Vatican Museums) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cxt7Ru>

Steven: Many people have portraits of their husband.

Beth: That's true. And this was found in the villa of Livia. And Livia was Augustus' wife. And it was found in her villa, the Villa at Prima Porta.

Steven: Most people now have just a photograph of their husband in their home, not a full-scale marble sculpture.

Beth: Not usually.

Steven: But that's exactly what Livia had.

Beth: Except that, although this was found there in her home, these sculptures had enormous political significance. I mean, they were filled with Roman political ideology, as was so much ancient Roman art.

Steven: Well, this was probably a copy of a bronze [scultpure], which would have been used in a much more public environment.

Beth: And probably many, many copies were made and this is just one that has happened to survive. It was important for the emperor to distribute his image throughout the empire, so many copies were made of images of the emperor.

Steven: This is long before photography, of course, and so most people would never actually get to see the emperor. So you distributed the likeness, and in a sense, the attributes of the ruler through sculpture and through painting.

Beth: And likeness is a good word, because it's like Augustus but not exactly Augustus. Because surely this is idealized. He's made to look younger, and more handsome, more athletic. But we can identify his features across many different sculptures.

Steven: Augustus is a complicated figure. He says that he is re-establishing the Senate, but he does that as a strategy to, in fact, consolidate power to become Rome's first true emperor.

Beth: That's right. He does that at quite a young age, whereas the rulers of the ancient Roman Republic were old, experienced men. There was an age requirement for holding office during the Republic. In this new era, ushered in by Augustus, he wants to communicate a very different image of the emperor, one where he is more god-like. He's youthful, and he's more transcendent.

Steven: So we have the ruler of the empire, who is using this sculpture as a way of communicating how he wants to be understood—in a sense, what he wants to represent to his public, to those whom he rules.

Beth: The identity that he wants to portray and communicate is god-like, and very much recalling the ancient Greeks, the golden age of Pericles, of fifth century B.C.E. in Athens.

Steven: So how does he to do that? Well, for one thing, the proportions of his body follow the canon that is, a sculpture that we now call the *Doryphoros* by Polykleitos from ancient Greece, a sculpture that showed the beauty of the body. Here, he's taking on that Greek ideal.



Detail of Cupid, Augustus of Primaporta, 1st century C.E., marble (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cxtdKb>

Beth: In a way, he's saying, "I am going to create a 'Golden Age' just like the Golden Age of Greece from the fifth century B.C.E. So I'm going to show myself like the famous sculpture from that period."

Steven: He's then moving on to show us that he has what it takes to do that. For one thing, down at his ankle pulling at his hem is Cupid.

Beth: Cupid was the son of the goddess Venus. Augustus traced his ancestry back to Aeneas, the founder of Rome. Aeneas was the son of Venus. So by putting Cupid down there, we're meant to remember that Augustus is descended from a goddess.

Steven: So Augustus is saying that he is actually, in part, divine.

Beth: Not only did he say he was descended from Venus through Aeneas, but he also said he was the son of the god Julius Caesar.

Steven: That's an actual human being who has been deified, made it into a god subsequently.

Beth: Right, by Augustus. He's got god written all over him. And in fact, he literally does on his breastplate, where we see the god of the sky and the goddess of the earth. And so all of the divine forces come together here for Augustus' rule.

Steven: This breastplate is probably a thick leather cuirass. It is embossed with scenes that are almost a kind of personal resumé. The most important scene shows the Romans reclaiming their standards from the Parthians.



Detail of figures on breastplate, Augustus of Primaporta, 1st century C.E., marble (Vatican Museums) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/cxt5MN>

Beth: Augustus had defeated this older enemy of Rome, the Parthians, who had taken their standards in an earlier battle. So the fact that the Parthia's are shown here returning the standards is a significant gesture of defeat and acknowledgment of the power of Rome.

Steven: So we have a man that is of divine origin, a brilliant military leader, and shown ennobled in the tradition of the great ancient Greeks. This is tremendously powerful visual propaganda.

Watch the video <https://youtu.be/3i8iou6tXqY>.

44. Colosseum (Flavian Amphitheater)

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the Colosseum in Rome.



Flavian Amphitheater (Colosseum), 70-80 AD. Rome, Italy. (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/7Y8YoS>

Valentina: Imagine how beautiful it must have been, this square with all these monumental arches, carved with travertine, and all the statues, and beautiful fountains spilling out water, reflecting the light on the travertine.

Beth: So we might think about this more like the way we think today about Lincoln Center.

Valentina: Exactly.

Beth: With fountains in the middle and gleaming stone.

Steven: Should we start off by talking a little bit about the structure and how it was built?

Valentina: You have to imagine the Colosseum as a gigantic donut. The inside is the arena. "Arena" originally in Latin meant sand. On the floor where gladiators were fighting, they used sand to absorb blood and body fluids, like a gigantic cat litter box. Between different fights, they could simply clean very easily. The original name of this building was not "Colosseum." "Colosseum" is a nickname given later, not because it was a colossal monument, but because it was located in the proximity of a colossal statue, originally of Nero, that was part of the decoration of his house. And so with time, the nickname was given by this proximity. Originally, it was actually a Flavian Amphitheater. And this is something very typical, even if you think about American monuments. You have the Lincoln Center. You have the Rockefeller Center. They are connected to the name of the family that paid for the building. The Flavian family paid for the building of the Colosseum. Flavian Amphitheater is just a technical name for the shape. It simply means, in Greek, "a double theater."

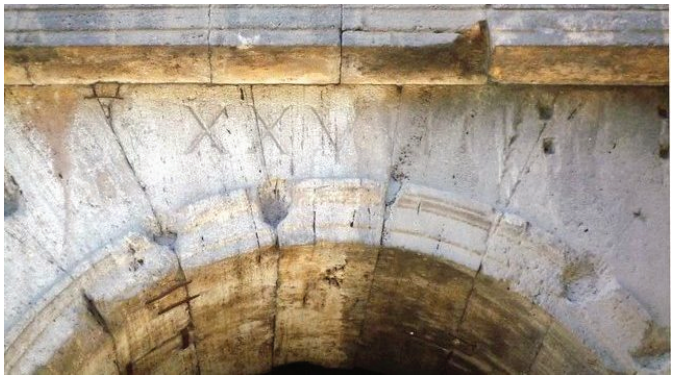
Steven: The original Greek theaters were actually semicircles with a flat end by the stage. And so this is really just fitting those two together.

Valentina: By using arches and concrete, Romans were able to build an amphitheater, even a double theater, with seats on a flat surface. The engineering behind it is absolutely astonishing considering that it was only built in 10 years. The Colosseum could hold between 50,000 and 80,000 people. If you look at the actual top part of each of the ground-floor arches, you see a Roman number. They are very dark and dilapidated. You can see a 23, and then there's a 24, and there is a 25. They're progressive. And this number would have been written on the ticket and given to the people. It's like a modern stadium. You would have an assigned seat.

Beth: A gate number.

Valentina: Also, the seat, because it was extremely important for the Romans. And the seats were assigned according to their status. So you had the most important people close to the arena, and the least important— being the women—on the top floor. You have three stories of arches, and then another story, a fourth floor, with windows. So it's closed with small windows inside it. And if you look at these arches, the arches are framed by columns. At the bottom part, you

have what's called Tuscanic. It's similar to Doric, but it's more a local, Italic style.



Flavian Amphitheater (Colosseum), 70-80 AD. Rome, Italy (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/7Y8Yh9>

Steven: It's even a little simpler than Doric, it seems.

Valentina: Yeah, it's also the base. Doric columns do not have a base, while Tuscanic columns do have a base.

Steven: And they're not fluted, as well.

Valentina: No. Then you go to the Ionic columns on the second story. The Ionic columns, actually, were considered the most feminine of the columns. Their proportions were more slender with the volutes on the top.

Steven: And the women sat higher, as well.

Valentina: Exactly. On the top floor, you've got the Corinthian. They are based on the acanthus plant. And it's indigenous in Rome. You can find it in many gardens. It's very nice with these green leaves. And so it's an imitation of a piece of stone covered with leaves of grass. Inside of each of the arches on the second and third floor, there would be a statue. On the top floor, there would have been probably bronze shields, alternating the windows. Again, we imagine the Colosseum as a donut. The outside circle was done with blocks of travertine. The inside of the donut was done with a core of concrete.

Steven: The Romans had really perfected concrete, and really were the first to use it as this real structural material. That was critical for their ability to create structures of this size. Also something like the Pantheon.

Valentina: The development of concrete was crucial for two main reasons. The first one is if you work with cut stone– marble, travertine, even tufa stone—you need specialized workers because you need to know how to cut the stone. If you cut it the wrong way, the stone will crumble into your hands. With concrete, it made it possible for unspecialized workers to produce something more sturdy. At the same time, it's less expensive. To quarry blocks of marble is not cheap. Concrete could be assembled everywhere. You just need a little mortar and few pieces of stone to make aggregate and water. So it's very easy, but at the same time, it's more elastic. With concrete, you get a sort of elasticity and then you can mold space. Because it's something liquid, you can simply mold it the way you want it.

Beth: And so the idea would be to take a wooden framework that framed out the space that you wanted, and then to pour concrete into that wooden mold.

Valentina: Exactly. And then it would be covered with the decoration. It could be bricks, stucco, whatever you wanted.

Steven: So it really allowed for far more monumental structures, and that would then be economically, and physically, feasible.

Valentina: And less expensive and quick. 10 years to build the Colosseum is quite an accomplishment because they used mostly concrete.

Beth: Also thinking about architecture in a new way, in terms of shaping an interior space.



Flavian Amphitheater (Colosseum), 70-80 AD. Rome, Italy. (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/7Y8Yu7>

Valentina: Particularly the interior because if you look at Greek architecture, the inside of a Greek temple is quite narrow. If you think about the Pantheon, you are in this amazing sphere. That's why they really invented it– they are molding not the outside, but inside, to be able to produce a vault that could permit a space free of standing columns in the middle to support the roof.

Beth: Moving away from post and lintel architecture to an interior space.

Steven: Which really, in a sense, almost doubled the architectural vocabulary and created an advancement over a system that had existed for thousands of years.

Valentina: Romans employed concrete on such a scale that permitted them to build wherever they wanted. They were not forced by space. Greeks could not build a theater wherever they wanted. They needed

a slope. So what if you were living in a city without slopes? No theater for you, right? Romans were able to create a theater, or an amphitheater, or a circus, or a bath complex wherever they wanted.

Steven: It's true that the Greeks seemed to use natural features in a more passive way, whereas the Romans seemed to shape the landscape much more aggressively. You talked about the fact that there had been a lake here. Let's drain the lake. We're putting a building here. Nature becomes in the service of man rather than vice versa.

Valentina: That's actually a very good point. The fact is that they wanted to be able to shape their space.

Beth: It's the idea of urban planning—you could build a city the way you wanted to, and not just be subject to the landscape that was there.

Steven: But I think there's this really important way in which the Romans were thinking of themselves as powers in the landscape, having that sort of dominance. It seems to me that the Romans shaped, in a way, that speaks that notion of their own inherent strength.

Valentina: What was different about Roman society—they were not racist in the sense they were looking at the color of your skin—it was a multicultural society. There were Romans from Africa, Romans from Turkey, Romans from Germany. What made it different was if were you a citizen or not. If you were not a citizen, you were nobody. But if you were a citizen, then the color of your skin was not important.

Steven: But there were fine distinctions, even within citizenship?

Valentina: Of course, there were social classes. An interesting aspect was that you could move along the social scale. While for Greeks, you could not even acquire citizenship. It was extremely rare to obtain citizenship. For the Romans, even a slave could become first a free man. And then his children will become a full citizen of Rome. It's like America, if you think about America, like second-generation immigrants. It's the same idea. They realized that just being able to move and being able to give people a chance in life could make all the difference in the economy.

Watch the video <https://youtu.be/9wguQaBYKec>.

45. Forum and Column of Trajan, Rome

Dr. Jeffrey Becker



Marble bust of Trajan, c. 108-117 C.E., 68.5 cm high (The British Museum) (photo: Chris Stroup, <https://www.flickr.com/photos/60668967@N00/4478755537> CC BY-NC-ND 2.0)

Trajan tasked his architect with moving an entire hill to make room for this extravagant public space. Marcus Ulpius Traianus, now commonly referred to as Trajan, reigned as Rome's emperor from 98 until 117 C.E. A military man, Trajan was born of mixed stock—part Italic, part Hispanic—into the *gens Ulpia* (the Ulpian family) in the Roman province of Hispania Baetica (modern Spain) and enjoyed a career that catapulted him to the heights of popularity, earning him an enduring reputation as a "good emperor."

Trajan was the first in a line of adoptive emperors that concluded with Marcus Aurelius. These emperors were chosen for the "job" based not on bloodlines, but on their suitability for rule; most of them were raised with this role in mind from their youth. This period is often regarded as the height of the Roman empire's prosperity and stability. The ancient Romans were so fond of Trajan that they officially bestowed upon him the epithetical title *optimus princeps* or "the best first-citizen." It is safe to say that the Romans felt Trajan was well worth celebrating—and celebrate him they did. A massive architectural complex—referred to as the Forum of Trajan (Latin: *Forum Traiani* or, less commonly, *Forum Ulpium*) was devoted to Trajan's career and, in particular, his great military successes in his wars against Dacia (now Romania).

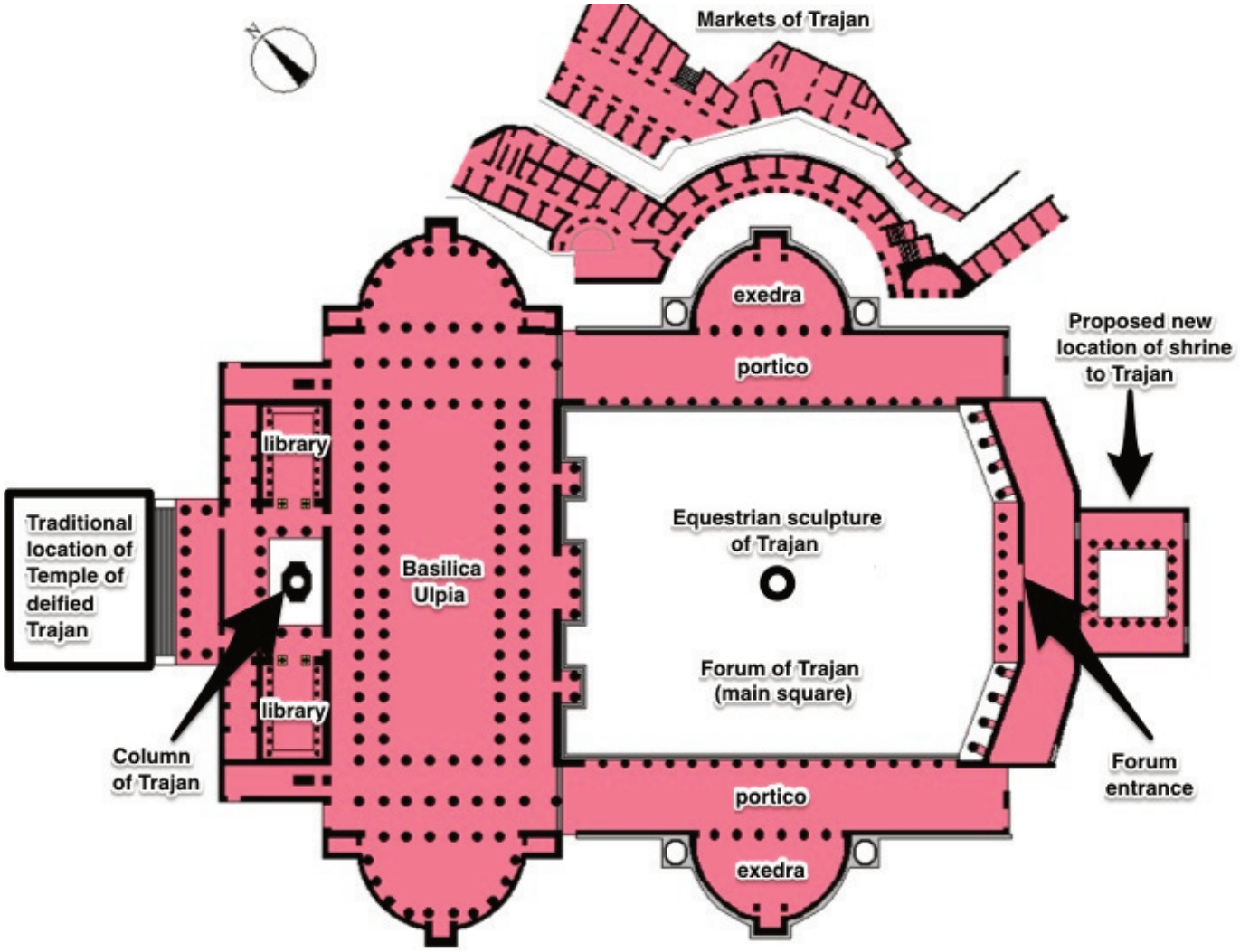
Unique under the heavens

The Forum of Trajan was the final, and largest, of Rome's complex of so-called "Imperial fora"—dubbed by at least one ancient writer as "a construction unique under the heavens" (Amm. Marc. 16.10.15). *Fora* is the Latin plural of *forum*—meaning a public, urban square for civic and ritual business. A series of Imperial fora <https://www.khanacademy.org/humanities/ancient-art-civilizations/roman/beginners-guide-rome/a/imperial-fora> , beginning with Iulius Caesar, had been built adjacent to the earlier Roman Forum <https://www.khanacademy.org/humanities/ancient-art-civilizations/roman/beginners-guide-rome/a/forum-romanum-the-roman-forum> by a series of emperors. The Forum of Trajan was inaugurated in 112 C.E., although construction may not have been complete, and was designed by the famed architect Apollodorus of Damascus.



View from the Markets of Trajan of the remains of the eastern exedra and the eastern portico of the main square of the Forum of Trajan, looking toward the Basilica Ulpia (in the upper left) (photo, <https://commons.wikimedia.org/wiki/File:ForoTraianoPorticoEsedraEst.jpg> CC BY-SA 3.0)

The Forum of Trajan is elegant—it is rife with signs of top-level architecture and decoration. All of the structures, save the two libraries (which were built of brick), were built of stone. There is a great deal of exotic, imported marble and many statues, including gilded examples. The forum was composed of a main square (measuring c. 200 x 120 meters) that was flanked by porticoes (an extended, roofed colonnade), as well as by exedrae (semicircular, recessed spaces) on the eastern (above) and western sides.



Plan of the Forum of Trajan. Note that the traditional site of the temple of the deified Trajan is shown, but is replaced by a shrine located at the southern side of the forum's main square (following R. Meneghini) (image: CC BY-SA 3.0, annotated by Smarthistory) <https://commons.wikimedia.org/wiki/File:Forum_Traianii_map.PNG>

A contested element of the reconstruction of the forum complex is a temple dedicated to the deified Trajan (the deceased emperor had been declared a god). Traditional reconstructions place this temple behind the column, although a recent reconstruction favored by Dr. Roberto Meneghini does not agree with this conjecture, instead preferring to place a shrine to the deified Trajan at the southern end of the forum abutting the retaining wall of the neighboring Forum of Augustus. Scholars continue to debate the nature and position of this temple.

The main structure at the center of the forum complex is the massive Basilica Ulpia, and beside that stood two libraries that flanked the Column of Trajan, an honorific monument bearing an elaborate program of sculpted relief.



Remains of the Basilica Ulpia (photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/15907675366> CC BY-NC-SA 2.0)

Paved in white marble: The forum square (*Area Fori*)

The main square of the forum was once a vast space, screened by architecture on all sides and paved in white marble. Several rows of trees, and perhaps rows of statues, ran parallel to the porticoes. Entry to the forum square was from the south, by way of a triumphal arch surmounted by a statue of Trajan riding in a triumphal chariot. Although the arch itself is no longer extant, it is depicted on a coin issued c. 112-115 C.E. (below).



Gold coin (aureus) struck at Rome c. 112-115 C.E. (19 mm, 7.13 g, 7h). The legend reads "IMP TRAIANO AVG GER DAC P M TR P COS VI P P ("To the emperor Trajan Augustus Germanicus Dacicus, Pontifex Maximus, [holder of] tribunician power, in his sixth consulship, father of his country." The coins depicts a laureate Trajan (draped, and cuirassed bust right) seen from behind on the observe side. On the reverse, the Arcus Traiani of the Forum of Trajan is seen. This is presented as a hexastyle building facade, crowned by a frontal chariot drawn by six horses. Three figures stand to the left and right, while four statues occupy niches in the arches below. The reverse legend reads "FORVM TRAIAN[A]" (image; <http://www.cngcoins.com/Coin.aspx?CoinID=155528>)

The forum square (116 x 95 meters) has an overriding martial theme, reminding viewers and visitors that the forum was constructed from the proceeds (*manubiae*) of Trajan's successful military campaigns against the Dacians (101–102, 105–106 C.E.). The porticoes were decorated with statuary and military standards (official emblems of the legions), as described by the ancient author Aulus Gellius: "All along the roof of the colonnades of the forum of Trajan gilded statues of horses and representations of military standards are placed, and underneath is written *Ex manubiis* [from the spoils of war] …" (*Attic Nights* 13.25.1).

The decorative program also included statues of captured Dacian prisoners (right) and, it seems, statues of notable Roman statesmen and generals that were set in the intercolumnar spaces of the porticoes.

At the center of the Forum square stood a bronze equestrian statue of Trajan, the *Equus Traiani*. While the statue itself does not survive, the occasion of a visit to Rome by Constantius II (in 357 C.E.) preserves a mention of the famous equestrian: "So he [Constantius II] abandoned all hope of attempting anything like it, and declared that he would and could imitate simply Trajan's horse, which stands in the middle of the court with the emperor on its back." (Ammianus Marcellinus 16.10.15) We also see the equestrian statue depicted on a silver denarius struck at Rome c. 112-114/5 C.E. (right).



Captured Dacian, 106-112 (Vatican Museum) (photo: Steven Zucker, <https://www.flickr.com/people/profzucker/CC BY-NC-SA 2.0)



Silver coin, Denarius (19mm, 3.35 g, 7h), struck 112-114/115 C.E IMP TRAIANO AVG GER DAC P M TR P COS VI P P, laureate bust right, drapery on far shoulder S P Q R OPTIMO PRINCIPI, equestrian statue of Trajan facing left, holding spear and sword (or small Victory) (image; <https://commons.wikimedia.org/wiki/File:TRAIANUS_RIC_II_291_732081.jpg>)

The massive Basilica Ulpia

As an architectural type, the basilica is uniquely Roman and served various civic and juridical purposes. The habit of planners from the first century B.C.E. onwards had been to prefer to use the basilica as a framing device, so as to have it communicate with the flanks of a forum square. We see this in many cases, although with some variation. In the case of the Forum of Trajan, the massive and monumental Basilica Ulpia is constructed at the northern edge of the open courtyard. It thus serves to bisect the complex, with the portico-lined courtyard lying to its east and the libraries and the Column of Trajan to its west.



Remains of the Basilica Ulpia in the foreground, and the Column of Trajan in the middle ground (photo: Steven Zucker, <https://www.flickr.com/photos/profzucker/15907672666> CC BY-NC-SA 2.0)

The basilica is massive—its overall length is some 169 meters and the interior nave is 25 meters wide. It is apsidal at both ends, with a raised central floor, and the main hall has a double surround of columns (96 in total) that were probably of white or yellow marble, in the Corinthian order. The basilica was also famous in antiquity for its gilded bronze roof tiles, as commented on by Pausanias, who remarked that the building was "worth seeing not only for its general beauty but especially for its roof made of bronze" (*Description of Greece* 5.12.6).



Artist's view of exterior elevation (J. Gaudet, 1867)

The Markets of Trajan (dedicated c. 110 C.E.)

Adjacent to the Forum of Trajan is a separate architectural complex attributed to Trajan that is commonly referred to as the Markets of Trajan. This multi-level commercial complex was built against the flank of the Quirinal Hill which had to be excavated for the purpose. The complex of the markets takes its planning cue from the eastern hemicycle of the Forum of Trajan. The ruins of the markets today preserve 170 rooms and the complex covers a space of approximately 110 by 150 meters; its walls stood to 35 meters above the level of the pavement of the Forum of Trajan. The original extension is hard to ascertain, based in part upon subsequent re-use and construction in the Medieval period (and later). The archaeologist Corrado Ricci (1858-1934) cleared the ruins in the twentieth century, but the markets themselves have received comparatively less attention than the adjacent forum.



Apollodorus of Damascus, The Markets of Trajan, 112 C.E. the Militia Tower is visible in the center, rising above the markets (photo: Vašek Vinklát, <https://www.flickr.com/photos/vendin/11571932285> CC BY-NC-SA 2.0)

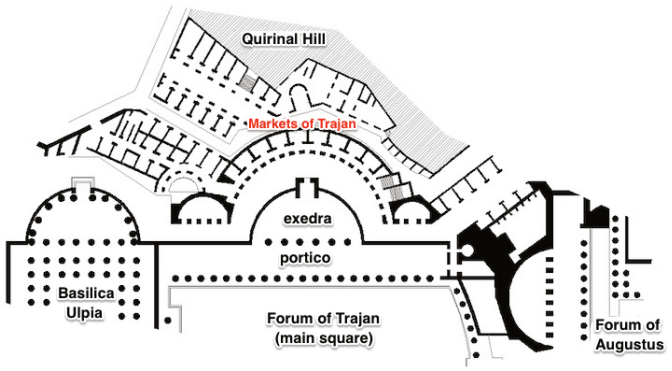


Apollodorus of Damascus, The Markets of Trajan, 112 C.E. (photo: Steven Zucker, <https://www.flickr.com/people/profzucker/> CC BY-NC-SA 2.0) The function of the markets was mercantile—indeed the markets may have been designed to relocate shops (tabernae) and offices that were displaced by the Trajanic building project. The ground floor offices (at the forum level) were likely occupied by cashiers of the imperial treasury (arcarii caesariani), while upper-level rooms may have been leased out or used by imperial officials associated with the grain dole (annona).

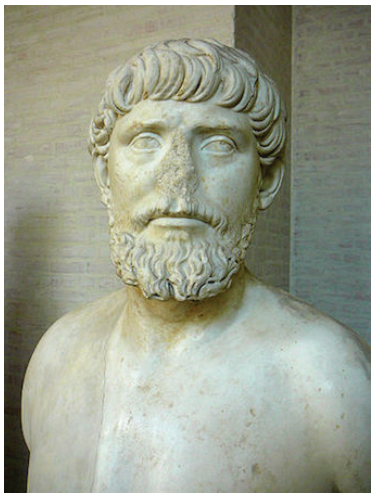
The great, vaulted market hall (below) is an ambitious and brilliant design—just as with the rest of the complex, reflecting the skills of the designer/architect who executed the project. The medieval Militia Tower (*Torre delle Milizie*) (twelfth century) and the now-demolished convent of Santa Caterina a Magnanapoli utilized portions of the structure of the market's buildings.



Apollodorus of Damascus, The Markets of Trajan (Market Hall), 112 C.E. (photo: Steven Zucker, <https://www.flickr.com/people/profzucker/> CC BY-NC-SA 2.0)



Plan of the Markets of Trajan (in relation to the Forum of Trajan)



Portrait considered to be that of Apollodorus of Damascus (Munich Glyptothek) (photo: Gun Powder Ma, <https://commons.wikimedia.org/wiki/File:Apollodorus_ of_ Damascus,_Greek_Architect_and_Engineer._Pic_01.jpg>, CC BY-SA 3.0)

The architect – Apollodorus of Damascus

Apollodorus of Damascus was a military engineer and architect who was active during the first quarter of the second century C.E. He accompanied the emperor Trajan on his campaigns in Dacia and is famous for building a bridge across the Danube river that was both described by ancient authors and depicted in art. The relief from the Column of Trajan depicts the bridge in the background (see below). Built c. 105 C.E., the segmental arch bridge was the first across the lower Danube and allowed Roman soldiers to cross the river easily. Apollodorus, who is described as "the master-builder of the whole work" is credited with the project (Procopius, *Buildings*, 4.6.11-14; tr. H.B. Dewing). Upon return from the Dacian Wars, Apollodorus is thought to have been the architect behind the project that produced the Forum and Column of Trajan, as well as the adjacent markets. A textual tradition is preserved by Cassius Dio that has Apollodorus running afoul of (and being executed by) Hadrian, Trajan's successor, although it is unclear whether credence should be given to this story (Cassius Dio, *Roman History*, 69.4; tr. Cary).

Significance of the "construction unique under the heavens"

The Forum of Trajan earned a great deal of praise in antiquity—and it has been the focus of scholarly study perhaps since 1536 when Pope Paul III ordered the first clearing of the area around the base of the Column of Trajan. Paul III would then protect the column itself in 1546 by appointing a caretaker to look after it. The seventeenth and eighteenth centuries saw various artists and architects produce renderings and plans of the forum and its monuments. Among the most famous of these are those of Dosio (c. 1569) and Etiénne Du Pérac (1575). In terms of public architecture in Imperial Rome, the Forum of Trajan complex is a crowning achievement in its vast monumentality. The execution of its sophisticated and elegant design surpassed all of its predecessors in the complex of forum spaces in the city. The value of vast public spaces in the city of Rome cannot be underestimated. For the average city dwellers accustomed to narrow, dim, crowded streets the soaring, the gleaming open space of the forum, bounded by elaborate architecture and sculpture, would have had a powerful psychological effect. The fact that the monuments glorified a revered leader also served to create and reinforce important ideological messages among the Romans. Overall the role of public architecture in the Roman city, and the Roman consciousness is an important reminder of the ways in which Romans used built space to establish and perpetuate messages about identity and ideology.



Vestigi delle antichita di Roma, Tiuoli, Pozzuolo et altri luochi, 1606 (Ægidio Sadeler engravings of reduced copies of Du Pérac's Vestigi dell'antichità di Roma) (Getty Research Institute)

The enduring ruins, in this case, cleared initially by the excavations sponsored by the Fascist regime of Benito Mussolini, stand as strong, and stark, reminders of these Roman realities. Modern viewers still extract and reinforce ideas about identity-based on looking at and visiting the ruins. Even with these ruins we still come away with an idea about Trajan's greatness and his martial accomplishments. We might, then, judge the architectural program to be a great success—so successful that a great many of our own public monuments still operate on the basis of conventions established in antiquity.

45. a. Forum of Trajan, Rome

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the Imperial Fora in Rome.



Trajan's Forum, view from the Markets of Trajan, designed by Apollodorus of Damascus, dedicated 112 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pZxL1g>

Steven: We're standing at a terrace looking out over Rome and more specifically, over the Imperial Fora.

Beth: A forum is something that you could find in any Roman city. It's a civic space.

Steven: It was an administrative center, it was a commercial center, and it was a political and social center.

Beth: So there was a long tradition of forums going back to the period of ancient Rome and Republic and that's what we see in this space called the Roman Forum today.

Steven: And then Julius Caesar starts a new tradition. He builds his own forum.

Beth: The main area of the forum got too busy and Caesar wanted to showcase his own political power and so beginning with Caesar, we get a series of forums built by various emperors.

Steven: There were quite a number. There was the Forum of Augustus. There was the Forum of Domitian, which became the Forum of Nerva.

Beth: Including the one we're looking over now which is the Forum of Trajan.

Steven: But Trajan had a problem. The real estate was already filled with the fora of the previous emperors. And so he turned to his architect, his engineer, Apollodorus of Damascus. And Apollodorus was tasked with removing the hill that was in the way or at least a good portion of it in order to build the forum. Unfortunately, what we see now are the foundations and the ruins and the walls of medieval houses that were built on that earlier classical structure.

Beth: Perhaps archaeologists in the future will one day decide to dig deeper and to discover what remains of the Forum of Trajan. But we can see an area that was excavated that was Trajan's and that's the area of the Basilica Ulpia.

Steven: Trajan's Forum is almost the size of all of the Imperial Fora put together.

Beth: It was incredibly extravagant. There was an enormous ceremonial entranceway that led into the space of the forum.

Steven: We think that at the top was a sculpture of a chariot pulled by six horses with Emperor Trajan followed by the Goddess of Victory.

Beth: Then once you enter the space of the forum, within the center was an equestrian sculpture, a sculpture showing Trajan on a horse. To get an idea of what that looked like, we can think of the equestrian sculpture of Marcus Aurelius that survived.

Steven: This enormous space would be flanked by huge sloped areas which are called exedrae. But as we look forward, we would look at one flank of the largest basilica in Rome, the Basilica Ulpia.

Beth: Imagine a public space filled with niches with sculpture in them, relief carvings, free-standing sculpture commemorating the great emperors and politicians, and military leaders of ancient Rome.

Steven: There were beautiful colored marbles in the paving stones as well as in the structures themselves. And that's beautifully

exemplified by the Basilica Ulpia. Now, it's called the Basilica Ulpia because that's Trajan's family name.

Beth: When we look out, we can at least see part of the enormous basilica. There would have been columns on all sides.

Steven: And they would have extended beyond the area that has been excavated.



Apollodorus of Damascus, The Forum and Markets of Trajan, dedicated 112 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qeGZEW>

Beth: And then beyond that, you went through yet another entranceway. There were two libraries on either side; one for Greek literature and one for Roman literature. And in the middle was the Column of Trajan. The Column of Trajan looks really lonely today, but there were buildings surrounding it.

Steven: In fact, the Greek and Latin library were designed with porches, so that you can get a great view of the relief carving on the Column of Trajan. The Column of Trajan is in extraordinarily good condition considering that the rest of this area has been destroyed.

Beth: Trajan expanded the Roman Empire to it's largest borders. He was a great military general. When you look at the Column of Trajan, the point was to see the story of Trajan's great military exploits, specifically the two campaigns which lasted over several years where he defeated the Dacians. Trajan was obviously proud of his military endeavors and his expansion of the empire.

Steven: Throughout his Imperial Forum, Trajan had sculptures of captured Dacians, showing the Dacians as quite noble as formidable adversaries.

Beth: But it was easy to recognize the Dacians because they looked very different from the Romans. They wore fringed shawls, they have a beard and long hair. And so anyone looking at the sculptures could easily tell these were the defeated foes and there was a sense of the correctness of what the Romans had done. Everywhere one looked, you saw sculptures of the Romans conquering their enemies.

Steven: And his success over the Dacians funded this monumental building campaign.

Beth: So when you approach the forum, you would see the equestrian sculpture and then the Column of Trajan. And on top of the Column of Trajan, now, we see a sculpture of St. Peter, but originally, there was a sculpture of Trajan.

Steven: The pillar is 125 feet tall and it marks the height of the hill that was removed by Apollodorus of Damascus in order to build the forum here. So it speaks to the Roman's interest in making nature subservient to man's will.

Beth: So, we have the forum, beyond that, the Basilica Ulpia, beyond that, the libraries with the column in the center, and beyond that, Trajan had planned a temple. Temples were always part of forum complexes, but Trajan died before he could build it, but it was built by the succeeding Emperor Hadrian who built it in honor of the deified Trajan.



Apollodorus of Damascus, The Forum and Markets of Trajan, dedicated 112 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qeGYSo>

Steven: This Imperial Forum with its large open courtyard, with its basilica, with its libraries, with its column with its temple, would have been a civic space. It would have been a ceremonial space, but just adjacent to it, built into the hill, and in part, helping to hold the hill up, is the Markets of Trajan and most of this area survives intact.

Beth: And it's a museum today.

Steven: So often, when we think of ancient Rome and architecture, we think of forums, we think of temples, but in fact, the Romans were extremely adept at building dense, multi-storey buildings very much like our modern shopping malls or apartment buildings.

Beth: And this is because the Romans perfected the use of concrete. So let's go inside and look at some of the spaces in the Markets of Trajan.

Watch the video <https://youtu.be/y-IAOPxkNWo>.

45. b. Column of Trajan, Rome

A CONVERSATION

Dr. Beth Harris, Dr. Steven Zucker, and Dr. Valentina Follo



Column of Trajan (as seen through the ruins of the Basilica Ulpia in the Forum of Trajan), Carrara marble, completed 113 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qeGYSo>

This is the transcript from a conversation conducted at the Imperial Forum in Rome.

Valentina: We're looking out at part of the Forum of Trajan. And unfortunately, you cannot have an nice view of the entire square, because it's been cut by medieval walls. These walls have been kept here because the excavation in this area has been conducted in the 1990s with new modern archaeological techniques, meaning that you have to understand the development of a site. So even the medieval aspect of it is important to be preserved.

Steven: As I'm looking at this remaining piece of the Forum of Trajan,

I'm seeing some large marble fragments that are clearly the parts of a column.

Valentina: And if you walk a little further, we can see a little bit of the original flooring. These remains have been left here instead of being brought inside a museum to really show you a little bit of how lavishly decorated these places were. If you just look at the flooring, you had expensive slabs of marble—green and red, together with green columns, and red columns, and yellow columns. So even the columns were not all white. They were colorful. It was a way of displaying the wealth. Being able to bring marble from all over the empire into Rome meant being a Roman could permit you to bring the empire to you.

Steven: Let's go take a look at the Column of Trajan.



Column of Trajan (looking up), Carrara marble, completed 113 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pkesAe>

Valentina: So the column, there are 22 different layers. They are not panels, because they go around.

Beth: So it's a kind of spiral.

Valentina: And it narrates the two main wars—two main campaigns, I should say—that Trajan fought against the Dacians, chronologically. So it goes from the beginning of the war, up to the top part—you can barely see—but at the end, there's a scene of sacrifice. If you're looking at some of the scenes, you see that they are building camps, building bridges.



Column of Trajan (relief detail), Carrara marble, completed 113 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qgVUZ1>

Steven: Yes, building the fortifications. And as we were saying earlier, in a sense, when you're going to bring your army somewhere, you're going to build the infrastructure that's necessary to actually maintain that place.

Valentina: Yes. And we know that actually the army was the building force during these wars. Because they would build camps, and they would remain and would be transformed into cities and roads and things like that. The image of this guy with his back towards us—this bearded man—is actually a representation of the Danube River, where the campaign started. We know that–

Beth: In Germany?

Valentina: Yes.

Beth: In what is today…

Valentina: …more or less Austria, Germany—that is, central Europe.

Steven: So that's really a personification of the River Danube? Okay.

Valentina: All rivers are represented as bearded, half-naked men. Usually they have symbols to identify them. For example, an obelisk for the Nile, or the she-wolf and the twins for the Tiber River. In this case, you see that there are a series of boats and soldiers on top. This is the famous description. We know that Apollodorus of Damascus, to be able to cross the Danube, built an entire bridge of boats to do it. And this is a faithful narration of what happened.

Steven: Can I ask you a little bit about the base?



Column of Trajan (base), Carrara marble, completed 113 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/84dSJE>

Valentina: The base is a representation of typical Dacian weapons and cuirasses. So it's a representation—not of the defeated people, you don't see people there—but the defeated *weapons*, so to speak. The enemy here is treated as a valorous opponent, of course. Because if you have a weak opponent, your strength is not…

Beth: …that impressive.

Valentina: Exactly. The base of the column—

Beth: It's a laurel wreath.

Valentina: It's actually an oak. It's a victory crown.



Column of Trajan (lower shaft), Carrara marble, completed 113 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pk16zo>

Beth: Still struggling with how it's made.

Valentina: Those are blocks of marbles carved. Inside, it's empty. You can walk.

Steven: There's a staircase.

Valentina: Yeah, there's a staircase inside. You can see the small windows. You can go up to the top part.

Steven: Right at the neck of the personification of the Danube, you can see that that's where two blocks joined.

Beth: Just to get a sense of scale.

Valentina: There are 22 layers. And each layer is approximately 1 yard. And the base is also huge.

Beth: They carved pieces of the band and put them together?

Valentina: Exactly. They carved pieces.

Beth: Was this painted?

Valentina: It was painted over with colors. And the colors would have helped to read it. But still, there was a percentage that was lost.

Steven: But presumably, at least if you ascended the libraries on either side, you'd be able to gain some elevation.



Column of Trajan (looking up), Carrara marble, completed 113 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0)

Valentina: Absolutely, yes. Again, it's a celebration of the army. It's the greatness of the empire, of the Roman people to be able to bring civilization.

Steven: It's their ingenuity. It's their engineering prowess. It's their discipline.

Valentina: It's their ability to build.

Steven: And those are, of course, attributes that last beyond the victory. And it makes sense to celebrate them here, because those are attributes that really take into account the entire grandeur of the city and the culture.

Valentina: Exactly. And it's also a celebration, not just of victory, but of the entire reign of Trajan, so to speak. Because he was able to build something, something lasting. If you think about the Forum, it's still lasting today. The idea was celebrate the person in his entirety, not just one of the aspects of his life.

Watch the video. <https://www.youtube.com/watch?v=MFt3tHNevJg>



Column of Trajan (surmounted by St Peter), Carrara marble, completed 113 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pZqBBf>

45. b. Column of Trajan, Rome

Dr. Jeffrey Becker



Column of Trajan (as seen through the ruins of the Basilica Ulpia in the Forum of Trajan), Carrara marble, completed 113 C.E., Rome, dedicated to Emperor Trajan (Marcus Ulpius Nerva Traianus b. 53 , d. 117 C.E.) in honor of his victory over Dacia (now Romania) 101-02 and 105-06 C.E. (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qeGYSo>

The Triumph

The Triumph was a riotous military ritual celebrated by the Romans over the course of centuries—whenever their commander had won a spectacular victory. On the appointed day (or days) the city would be overflowing with crowds, pageantry, spoils, prisoners, depictions, and souvenirs of foreign lands—but then, just as quickly as it began, the glorious tumult was over. The spectacles and the echoes of glory entrusted to the memory of those who had witnessed the event. Was the parade and its giant city-wide party enough to commemorate the glorious deeds of Rome's armies? Or should a more permanent form of commemoration be adopted? Being pragmatists, the Romans enlisted both means of commemoration—the ephemeral and the permanent. The Column of Trajan (dedicated in May of 113 C.E.) might be the crowning example of the inborn need to commemorate—in more permanent form—historical deeds that dominate the psyche of Roman art and artists.

Returning from Dacia triumphant—100 days of celebrations

The emperor Trajan, who reigned from 98 – 117 C.E., fought a series of campaigns known as the Dacian Wars. Dacia (modern Romania), was seen as a troublesome neighbor by the Romans and the Dacians were seen to pose a threat to the province of Moesia, along the Danube frontier. In addition, Dacia was rich in natural resources (including gold), that were attractive to the Romans. The first campaign saw Trajan defeat the Dacian leader Decebalus in 101 C.E., after which the Dacians sought terms from the Romans. Renewed Dacian hostilities brought about the second Dacian War that concluded in 106 C.E. Trajan's victory was a substantial one—he declared over 100 days of official celebrations and the Romans exploited Dacia's natural wealth while incorporating Dacia as an imperial province.



Denarius (Roman coin), obverse: Trajan in profile; reverse: Dacian seated right on pile of arms, his hands bound behind him, silver, c. 103-11 (Fitzwilliam Museum, Cambridge, CM.BU.240-R) <http://webapps.fitzmuseum.cam.ac.uk/explorer/index.phpoid=103919>

After the first Dacian war Trajan earned the honorary epithet "Dacicus Maximus" (greatest Dacian) and a victory monument known as the *Tropaeum Traiani* (Trophy of Trajan) was built at *Civitas Tropaensium* (modern Adamclisi, Romania). Coins issued during Trajan's reign (as in the image above) depicted the defeated Dacia.

Iconography and themes

The iconographic scheme of the column illustrates Trajan's wars in Dacia. The lower half of the column corresponds to the first Dacian War (c. 101-102 C.E.), while the top half depicts the second Dacian War (c. 105-106 C.E.). The first narrative event shows Roman soldiers marching off to Dacia, while the final sequence of events portrays the suicide of the enemy leader, Decebalus, and the mopping up of Dacian prisoners by the Romans



The crossing of the Roman Army over the Danube River in the first Dacian War (the large figure is a personification of the Danube) (detail), Column of Trajan, dedicated 113 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/84aNS6>

The execution of the frieze is meticulous and the level of detail achieved is astonishing. While the column does not carry applied paint now, many scholars believe the frieze was initially painted. The sculptors took great care to provide settings for the scenes, including natural backgrounds, and mixed perspectival views to offer the maximum level of detail. Sometimes multiple perspectives are evident within a single scene. The overall, unifying theme is that of the Roman military campaigns in Dacia, but the details reveal additional, more subtle narrative threads.

One of the clear themes is the triumph of civilization (represented by the Romans) over its antithesis, the barbarian state (represented here by the Dacians). The Romans are orderly and uniform, the Dacians less so. The Romans are clean shaven, the Dacians are shaggy. The Romans avoid leggings, the Dacians wear leggings (like all good barbarians did—at least those depicted by the Romans).



"Scene from the second Dacian War, the Dacians plan a new offensive and attack a Roman Fort and engage with Roman troops. Many Dacians, however, fall in the wake of a strong Roman counteroffensive," (detail), Column of Trajan, dedicated 113 C.E., Rome (source for image and caption: Trajan's Column Website, Professor Roger B. Ulrich, Dartmouth College) <http://www.trajans-column.org/?page_id=578>

Combat scenes are frequent in the frieze. The detailed rendering provides a nearly unparalleled visual resource for studying the iconography of the Roman military, as well as for studying the actual equipment, weapons, and tactics. There is clear ethnic typing as well, as the Roman soldiers cannot be confused for Dacian soldiers, and vice versa.



The Emperor (fourth from the lower right) oversees construction (detail), Column of Trajan, dedicated 113 C.E., (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qgVUZ1>

The viewer also sees the Roman army doing other chores while not fighting. One notable activity is building. In numerous scenes the soldiers may be seen building and fortifying camps. All of the Roman edifices depicted are solid, regular, and well designed—in stark contrast to the humble buildings of the Dacian world. Roman propaganda at work.

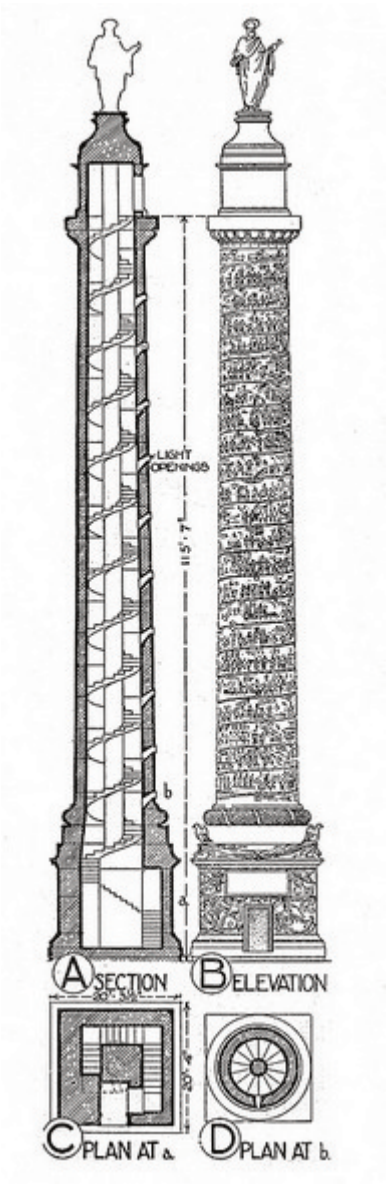


Trajan and his fleet depart for Second Dacian War—Trajan can be seen at the far left (detail), Column of Trajan, dedicated 113 C.E., detail, Column of Trajan, dedicated 113 C.E. (photo: Peter Reed, CC BY-NC-SA 2.0) <https://flic.kr/p/49ju57>

The emperor Trajan figures prominently in the frieze. Each time he appears, his position is commanding and the iconographic focus on his person is made clear. We see Trajan in various scenarios, including addressing his troops (*ad locutio*) and performing sacrifices. The fact that the figures in the scenes are focused on the figure of the emperor helps to draw the viewer's attention to him.

The base of the column eventually served as a tomb for Trajan's ashes. He died while returning from foreign campaigns in 117 C.E. and was granted this unusual honor, in keeping with the estimation of the Roman people who deemed him *optimus princeps* or "the best first citizen".

Specifications of the Column and construction



Column of Trajan, dedicated 113 C.E., plan, elevation, and section

The column itself is made from fine-grained Luna marble and stands to a height of 38.4 meters (c. 98 feet) atop a tall pedestal. The shaft of the column is composed of 19 drums of marble measuring c. 3.7 meters (11 feet) in diameter, weighing a total of c. 1,110 tons. The topmost drum weighs some 53 tons. A spiral staircase of 185 steps leads to the viewing platform atop the column. The helical sculptural frieze measures 190 meters in length (c. 625 feet) and wraps around the column 23 times. A total of 2,662 figures appear in the 155 scenes of the frieze, with Trajan himself featured in 58 scenes.

The construction of the Column of Trajan was a complex exercise of architectural design and engineering. As reconstructed by Lynne Lancaster, the execution of the column itself was an immense engineering challenge that required complex lifting devices and, no doubt, careful planning to execute successfully. Materials had to be acquired and transported to Rome, some across long distances. With the appropriate technology in place, the adept Roman architects could carry out the project. The successful completion of the column demonstrates the complex tasks that Roman architects could successfully complete.

Significance and influence

The Column of Trajan may be contextualized in a long line of Roman victory monuments, some of which honored specific military victories and thus may be termed "triumphal monuments" and others that generally honor a public career and are thus "honorific monuments". Among the earliest examples of such permanent monuments at Rome is the rostrate column (*column rostrata*) that was erected in honor of a naval victory celebrated by Caius Duilius after the battle of Mylae in 260 B.C.E. (this column does not survive). During the Republican period, a rich tradition of celebratory monuments developed, best known through the *fornices* (honorific arches) and triumphal arches. This tradition was continued in the imperial period, with both triumphal and honorific arches being erected at Rome and in the the provinces.



Gold aureus showing Trajan's Column, Roman, early 2nd century C.E. (The British Museum)

The idea of the honorific column was carried forward by other victorious leaders—both in the ancient and modern eras. In the Roman world immediate, derivative monuments that draw inspiration from the Column of Trajan include the Column of Marcus Aurelius (c. 193 C.E.) in Rome's Piazza Colonna, as well as monuments like the now-lost Column of Arcadius (c. 401 C.E.) and the Column of Justinian at Constantinople (c. 543 C.E.). The idea of the narrative frieze applied to the Column of Trajan proved influential in these other instances.



Aegidius Sadeler, view of the Column of Trajan, shown with its pedestal dug out from the earth, surrounded by buildings at the base of the Quirinal Hill, Rome, from the series "Ruins of the antiquity of Rome, Tivoli, Pozzuoli, and other places," 1606, etching and engraving, plate 31 (The Metropolitan Museum of Art)

Honorific or triumphal columns inspired by that of Trajan were also created in honor of more recent victories. The column honoring Admiral Horatio Nelson in London's Trafalgar Square (c. 1843) draws on the Roman tradition that included the Column of Trajan along with earlier, Republican monuments like the columna rostrata of Caius Duilius. The column dedicated to Napoleon I erected in the Place Vendôme in Paris (c. 1810) and the Washington Monument of Baltimore, Maryland (1829) both were directly inspired by the Column of Trajan.



Nelson's Column, c.1843, Trafalgar Square, London (photo: Saad Akhtar, CC BY-NC-ND 2.0) <https://flic.kr/p/ftiSZV>

45. c. Markets of Trajan, Rome

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted in Rome.



Apollodorus of Damascus, Markets of Trajan, c. 100-112 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/pZxPhM>

Steven: Perhaps the most powerful emperor in the history of Rome.

Beth: Well, certainly one of the most popular.

Steven: And one of the most successful in a military sense, was Emperor Trajan. He built, not only the largest Imperial Forum in Rome's history.

Beth: That is the biggest, most magnificent public space; in addition to temples and libraries, he also built a vast public bathhouse.

Steven: But he also built the markets. This was, what is in essence—or what we would recognize in the modern world as—a huge shopping complex, a kind of mall with more than 150 offices and storefronts.

Beth: As emperor, you could choose to build public buildings, you could build private dwellings, palaces for yourself. You can build a combination of both. Not long before Trajan, Emperor Nero had appropriated vast amounts of land that belonged to the Roman people, to build his palace, the Domus Aurea. So, the emperors that came immediately after him, for the most part, decided to build, instead, projects for the Roman public. The Flavians, for example, built the amphitheater, that we call the Colosseum. Trajan continues that tradition by building this massive public project, both the Forum and the adjacent market. The market is so interesting to me, because for so long when I thought of ancient Rome and architecture, I thought of temples, I thought of fora, I thought of these large civic spaces. What I didn't realize, was that the Romans were extremely adept at building dense, multi-story structures—basically apartment buildings, office blocks. And that's what we have here.

Steven: They had concrete, which allowed them to really shape space, in a way that you can't with spaces that are constructed with post and lintel architecture, which means essentially columns and roofs. For example, here in the markets of Trajan, when we enter the central hallway, we look up and we see this very high, wide space, constructed with the use of groin vault, made with brick-faced concrete.



Vaulting, interior of Markets of Trajan, c. 100-112 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qgVSGA>

Beth: So a groin vault is simply a barrel vault that has been intercepted by a second barrel vault that is perpendicular to it. So, in this case, we have the main barrel vault of the hallway, which is quite long,

intersected by addition barrel vaults at right angles. And, so, you get this kind of X-shaped archway.

Steven: This was done by Trajan's chief architect, Apollodorus of Damascus, an amazing engineer and architect, who also built bridges and other military structures for Trajan. Apollodorus of Damascus also built, on either side of this groin-vaulted hallway, offices that are supported by barrel vaults and linked to the main hallway by buttresses.



Vaulting, interior of Markets of Trajan, c. 100-112 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qgZgAZ>

Beth: What I find so phenomenal about this space, is the amount of light that is let in. And this is because the Romans had become so adept at using concrete. The ability to give up weight-bearing wall, for apertures, for windows, to let light in, both in the vaulting and in the walls, speaks to the extraordinary level of confidence of the ancient Romans under Trajan.



Gallery with sun, interior of Markets of Trajan, c. 100-112 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qeH6ES>

Steven: And soon after this, under Emperor Hadrian, the Romans will build one of the most beautiful, surviving monuments today, and that is the Pantheon. An enormous, uninterrupted domed space, created with the use of concrete.

Beth: So here, in the center of Rome we have—intact—one of the most complex urban spaces dating from ancient Rome. It is a spectacular display of Roman engineering and gives us a real window into what Roman life must have been like.

Steven: The Romans had a nickname for Trajan and that was Optimus Princeps. And that means "best leader." And standing here, overlooking Trajan's Forum, and standing in the market that he commissioned, we can understand why they would call him that.

Watch the video <https://youtu.be/z83guai4S68>.



Apollodorus of Damascus, Markets of Trajan, c. 100-112 C.E., Rome (photo: Steven Zucker, CC BY-NC-SA 2.0)

<https://flic.kr/p/qgPeVa>



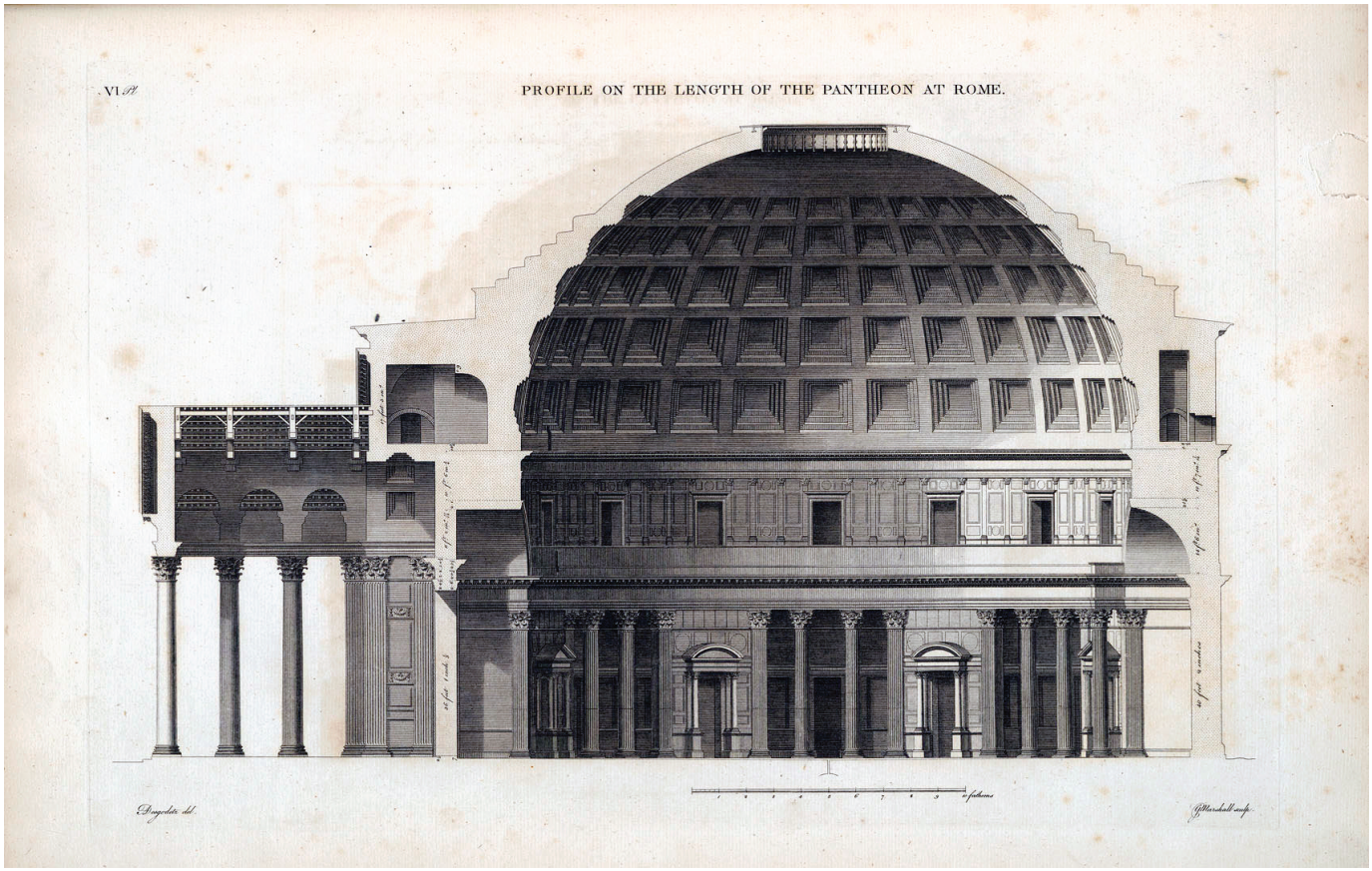
The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rwboB8>

46. The Pantheon, Rome

Dr. Paul Ranogajec

The Pantheon in Rome is a true architectural wonder. Described as the "sphinx of the Campus Martius"—referring to enigmas presented by its appearance and history, and to the location in Rome where it was built—to visit it today is to be almost transported back to the Roman Empire itself. The Roman Pantheon probably doesn't make popular shortlists of the world's architectural icons, but it should: it is one of the most imitated buildings in history. For a good example, look at the library Thomas Jefferson designed <http://smarthistory.org/jefferson-rotunda-uvirginia/> for the University of Virginia.

While the Pantheon's importance is undeniable, there is a lot that is unknown. With new evidence and fresh interpretations coming



Pantheon Elevation

to light in recent years, questions once thought settled have been reopened. Most textbooks and websites confidently date the building to the Emperor Hadrian's reign and describe its purpose as a temple to all the gods (from the Greek, pan = all, theos = gods), but some scholars now argue that these details are wrong and that our knowledge of other aspects of the building's origin, construction, and meaning is less certain than we had thought.

Whose Pantheon?—the problem of the inscription

Archaeologists and art historians value inscriptions on ancient monuments because these can provide information about patronage, dating, and purpose that is otherwise difficult to come by. In the case of the Pantheon, however, the inscription on the frieze—in raised bronze letters (modern replacements)—easily deceives, as it did for many centuries. It identifies, in abbreviated Latin, the Roman general and consul (the highest elected official of the Roman Republic) Marcus Agrippa (who lived in the first century B.C.E.) as the patron: "M[arcus] Agrippa L[ucii] F[ilius] Co[n]s[ul] Tertium Fecit" ("Marcus Agrippa, son of Lucius, thrice Consul, built this"). The inscription was taken at face value until 1892, when a well-documented interpretation of stamped bricks found in and around the building showed that the Pantheon standing today was a rebuilding of an earlier structure and that it was a product of Emperor Hadrian's (who ruled from 117-138 C.E.) patronage, built between about 118 and 128. Thus, Agrippa could not have been the patron of the present building. Why, then, is his name so prominent?

The conventional understanding of the Pantheon

A traditional rectangular temple, first built by Agrippa

The conventional understanding of the Pantheon's genesis, which held from 1892 until very recently, goes something like this. Agrippa built the original Pantheon in honor of his and Augustus' military victory at the Battle of Actium in 31 B.C.E.—one of the defining moments in the establishment of the Roman Empire (Augustus would go on to become the first Emperor of Rome). It was thought that Agrippa's Pantheon had been small and conventional: a Greek-style temple, rectangular in plan. Written sources suggest the building was damaged by fire around 80 C.E. and restored to some unknown extent under the orders of Emperor Domitian (who ruled 81-96 C.E.).

When the building was more substantially damaged by fire again in 110 C.E., Emperor Trajan decided to rebuild it, but only partial groundwork was carried out before his death. Trajan's successor, Hadrian—a great patron of architecture and revered as one of the most effective Roman emperors—conceived and possibly even designed the new building with the help of dedicated architects. It was to be a triumphant display of his will and beneficence. He was thought to have abandoned the idea of simply reconstructing Agrippa's temple,



Capitals, The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/reBZjm>

deciding instead to create a much larger and more impressive structure. And, in an act of pious humility meant to put him in the favor of the gods and to honor his illustrious predecessors, Hadrian installed the false inscription attributing the new building to the long-dead Agrippa.

New evidence—Agrippa's temple was not rectangular at all

Today, we know that many parts of this story are either unlikely or demonstrably false. It is now clear from archaeological studies that Agrippa's original building was not a small rectangular temple but contained the distinctive hallmarks of the current building: a portico with tall columns and pediment and a rotunda (circular hall) behind it, in similar dimensions to the current building.

And the temple may be Trajan's (not Hadrian's)

More startling, a reconsideration of the evidence of the bricks used in the building's construction—some of which were stamped with identifying marks that can be used to establish the date of manufacture—shows that almost all of them date from the 110s, during the time of Trajan. Instead of the great triumph of Hadrianic design, the Pantheon should more rightly be seen as the final architectural glory of the Emperor Trajan's reign: substantially designed and rebuilt beginning around 114, with some preparatory work on the building site perhaps starting right after the fire of 110, and finished under Hadrian sometime between 125 and 128.

Lise Hetland, the archaeologist who first made this argument in 2007 (building on an earlier attribution to Trajan by Wolf-Dieter Heilmeyer), writes that the long-standing effort to make the physical evidence fit a dating entirely within Hadrian's time shows "the illogicality of the sometimes almost surgically clear-cut presentation of Roman buildings according to the sequence of emperors." The case of the Pantheon confirms a general art-historical lesson: style categories and historical periodizations (in other words, our understanding of the style of architecture during a particular emperor's reign) should be seen as conveniences—subordinate to the priority of evidence.

What was it—a temple? A dynastic sanctuary?

It is now an open question whether the building was ever a temple to all the gods, as its traditional name has long suggested to interpreters. Pantheon, or *Pantheum* in Latin, was more of a nickname than a formal title. One of the major written sources about the building's origin is the *Roman History by* Cassius Dio, a late second- to an early third-century historian who was twice Roman consul. His account, written a century after the Pantheon was completed, must be taken skeptically. However, he provides important evidence about the building's purpose. He wrote,

> He [Agrippa] completed the building called the Pantheon. It has this name, perhaps because it received among the images which decorated it the statues of many



Giovanni Paolo Panini, Interior of the Pantheon, Rome. c. 1734, oil on canvas, 128 x 99 cm (National Gallery of Art)

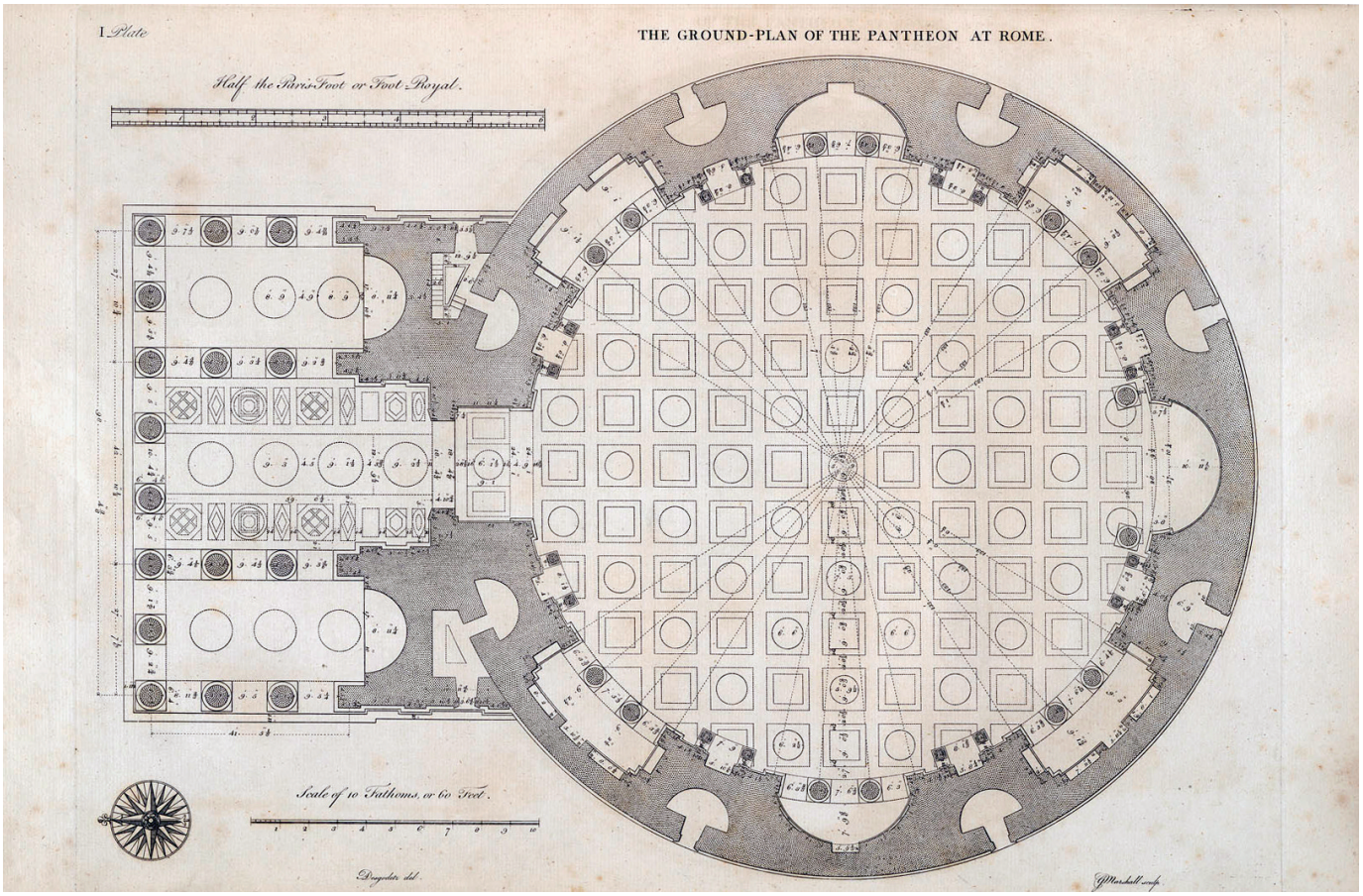
> gods, including Mars and Venus; but my own opinion of the name is that, because of its vaulted roof, it resembles the heavens. Agrippa, for his part, wished to place a statue of Augustus there also and to bestow upon him the honor of having the structure named after him; but when Augustus wouldn't accept either honor, he [Agrippa] placed in the temple itself a statue of the former [Julius] Caesar and in the ante-room statues of Augustus and himself. This was done not out of any rivalry or ambition on Agrippa's part to make himself equal to Augustus, but from his hearty loyalty to him and his constant zeal for the public good.

A number of scholars have now suggested that the original Pantheon was not a temple in the usual sense of a god's dwelling place. Instead, it may have been intended as a dynastic sanctuary, part of a ruler cult emerging around Augustus, with the original dedication being to Julius Caesar, the progenitor of the family line of Augustus and Agrippa and a revered ancestor who had been the first Roman deified by the Senate. Adding to the plausibility of this view is the fact that the site had sacred associations—tradition stating that it was the location of the apotheosis, or raising up to the heavens, of Romulus, Rome's mythic founder. Even more, the Pantheon was also aligned on axis, across a long stretch of open fields called the Campus Martius, with Augustus' mausoleum, completed just a few years before the Pantheon. Agrippa's building, then, was redolent with suggestions of the alliance of the gods and the rulers of Rome during a time when new religious ideas about ruler cults were taking shape.

The dome and the divine authority of the emperors

By the fourth century C.E., when the historian Ammianus Marcellinus mentioned the Pantheon in his history of imperial Rome, statues of the Roman emperors occupied the rotunda's niches. In Agrippa's Pantheon these spaces had been filled by statues of the gods. We also know that Hadrian held court in the Pantheon. Whatever its original purposes, the Pantheon by the time of Trajan and Hadrian was primarily associated with the power of the emperors and their divine authority.

The symbolism of the great dome adds weight to this interpretation. The dome's coffers (inset panels) are divided into 28 sections, equaling



Pantheon Plan



Reconstruction by the Institute for Digital Media Arts Lab at Ball State University, <http://institute%20for%20digital%20media%20arts%20lab%20at%20ball%20state%20university/> interior of the Pantheon, Rome, c. 125 C.E. (Project Director: John Filwalk, Project Advisors: Dr. Robert Hannah and Dr. Bernard Frischer)



Dome, The Pantheon (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/DXhoZR>

the number of large columns below. 28 is a "perfect number," a whole number whose summed factors equal it (thus, 1 + 2 + 4 + 7 + 14 = 28). Only four perfect numbers were known in antiquity (6, 28, 496, and 8128) and they were sometimes held—for instance, by Pythagoras and his followers—to have mystical, religious meaning in connection with the cosmos. Additionally, the oculus (open window) at the top of the dome was the interior's only source of direct light. The sunbeam streaming through the oculus traced an ever-changing daily path across the wall and floor of the rotunda. Perhaps, then, the sunbeam marked solar and lunar events, or simply time. The idea fits nicely with Dio's understanding of the dome as the canopy of the heavens and, by extension, of the rotunda itself as a microcosm of the Roman world beneath the starry heavens, with the emperor presiding over it all, ensuring the right order of the world.

How was it designed and built?

The Pantheon's basic design is simple and powerful. A portico with free-standing columns is attached to a domed rotunda. In between, to help transition between the rectilinear portico and the round rotunda is an element generally described in English as the intermediate block. This piece is itself interesting for the fact that visible on its face above the portico's pediment is another shallow pediment. This may be evidence that the portico was intended to be taller than it is (50 Roman feet instead of the actual 40 feet). Perhaps the taller columns, presumably ordered from a quarry in Egypt, never made it to the building site (for reasons unknown), necessitating the substitution of smaller columns, thus reducing the height of the portico.



Pantheon, Rome, c. 125 C.E. (photo: Darren Puttock, CC BY-NC-ND 2.0) <https://flic.kr/p/mwTdUP>



The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/5BWRhe>

The Pantheon's great interior spectacle—its enormous scale, the geometric clarity of the circle-in-square pavement pattern and the dome's half-sphere, and the moving disc of light—is all the more breathtaking for the way one moves from the bustling square (piazza, in Italian) outside into the grandeur inside.

One approaches the Pantheon through the portico with its tall, monolithic Corinthian columns of Egyptian granite. Originally, the approach would have been framed and directed by the long walls of a courtyard or forecourt in front of the building, and a set of stairs, now submerged under the piazza, leading up to the portico. Walking beneath the giant columns, the outside light starts to dim. As you pass through the enormous portal with its bronze doors, you enter the rotunda, where your eyes are swept up toward the oculus.



Reconstruction by the Institute for Digital Media Arts Lab at Ball State University, <http://idialab.org/virtual-roman-pantheon-in-blue-mars-cryengine/> exterior of the Pantheon, Rome, c. 125 C.E. (Project Director: John Filwalk, Project Advisors: Dr. Robert Hannah and Dr. Bernard Frischer)

The structure itself is an important example of advanced Roman engineering. Its walls are made from brick-faced concrete—an innovation widely used in Rome's major buildings and infrastructure, such as aqueducts—and are lightened with relieving arches and vaults built into the wall mass. The concrete easily allowed for spaces to be carved out of the wall's thickness—for instance, the alcoves around the rotunda's perimeter and the large apse directly across from the entrance (where Hadrian would have sat to hold court). Further, the concrete of the dome is graded into six layers with a mixture of scoria, a low-density, lightweight volcanic rock, at the top. From top to bottom, the structure of the Pantheon was fine-tuned to be structurally efficient and to allow flexibility of design.

Who designed the Pantheon?

We do not know who designed the Pantheon, but Apollodorus of Damascus, Trajan's favorite builder, is a likely candidate—or, perhaps, someone closely associated with Apollodorus. He had designed Trajan's Forum and at least two other major projects in Rome, probably making him the person in the capital city with the deepest knowledge about complex architecture and engineering in the 110s. On that basis, and with some stylistic and design similarities between the Pantheon and his known projects, Apollodorus' authorship of the building is a significant possibility.

When it was believed that Hadrian had fully overseen the Pantheon's design, doubt was cast on the possibility of Apollodorus' role because, according to Dio, Hadrian had banished and then executed the architect for having spoken ill of the emperor's talents. Many historians now doubt Dio's account. Although the evidence is circumstantial, a number of obstacles to Apollodorus' authorship have been removed by the recent developments in our understanding of

the Pantheon's genesis. In the end, however, we cannot say for certain who designed the Pantheon.

Why Has It Survived?

We know very little about what happened to the Pantheon between the time of Emperor Constantine in the early fourth century and the early seventh century—a period when the city of Rome's importance faded and the Roman Empire disintegrated. This was presumably the time when much of the Pantheon's surroundings—the forecourt and all adjacent buildings—fell into serious disrepair and were demolished and replaced. How and why the Pantheon emerged from those difficult centuries is hard to say. The *Liber Pontificalis*—a medieval manuscript containing not-always-reliable biographies of the popes—tells us that in the seventh century Pope Boniface IV "asked the [Byzantine] emperor Phocas for the temple called the Pantheon, and in it he made the church of the ever-virgin Holy Mary and all the martyrs." There is continuing debate about when the Christian consecration of the Pantheon happened; today, the balance of evidence points to May 13, 613. In later centuries, the building was known as Sanctae Mariae Rotundae (Saint Mary of the Rotunda). Whatever the precise date of its consecration, the fact that the Pantheon became a church—specifically, a station church, where the pope would hold special masses during Lent, the period leading up to Easter—meant that it was in continuous use, ensuring its survival.

Additional Resources:

Mary T. Boatwright, "Hadrian and the Agrippa Inscription of the Pantheon," in *Hadrian: Art, Politics and Economy*, edited by Thorsten Opper (London: British Museum, 2013), pp. 19-30.

Paul Godfrey and David Hemsoll. "The Pantheon: Temple or Rotunda?" in *Pagan Gods and Shrines of the Roman Empire*, edited by Martin Henig and Anthony King (Oxford: Oxford University Committee for Archaeology, 1986), pp. 195-209.

Gerd Graßhoff, Michael Heinzelmann, and Markus Wäfler, editors, T*he Pantheon in Rome: Contributions* (Bern: Bern Studies in the History and Philosophy of Science, 2009)

Robert Hannah and Giulio Magli. "The Role of the Sun in the Pantheon's Design and Meaning," *Numen* 58 (2011), pp. 486-513.

Lise M. Hetland, "Dating the Pantheon," *Journal of Roman Archaeology* 20 (2007), pp. 95-112.

Mark Wilson Jones, *Principles of Roman Architecture* (New Haven, CT: Yale University Press, 2000)

Tod A Marder and Mark Wilson Jones, editors, *The Pantheon from Antiquity to the Present* (Cambridge: Cambridge University Press, 2015).

Gene Waddell, Creating the Pantheon: Design, Materials, and Construction (Rome: L'Erma di Bretschneider, 2008)

Yet, like other ancient remains in Rome, the Pantheon was for centuries a source of materials for new buildings and other purposes—including the making of cannons and weapons. In addition to the loss of original finishings, sculpture, and all of its bronze elements, many other changes were made to the building from the fourth century to today. Among the most important: the three easternmost columns of the portico were replaced in the seventeenth century after having been damaged and braced by a brick wall centuries earlier; doors and steps leading down into the portico were erected after the grade of the surrounding piazza had risen over time; inside the rotunda, columns made from imperial red porphyry—a rare, expensive stone from Egypt—were replaced with granite versions; and roof tiles and other elements were periodically removed or replaced. Despite all the losses and alterations, and all the unanswered and difficult questions, the Pantheon is an unrivaled artifact of Roman antiquity.



Sanctae Mariae Rotundae, The Pantheon (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/DDpXL5>

46. The Pantheon, Rome

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted in Rome.



The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/Dx3m38>

Beth: We're standing in the piazza, the square in front of the Pantheon.

Steven: This is the best preserved ancient Roman monument. And yet, look at the sense of age. Look at the weathering. Look at the way in which its history is revealed through its surface. It's been attacked. Its original bronze fittings have been ripped off. Look at the numerous holes, for instance, in the pediment, that tell of all the different purposes that this building has been put to. Originally a temple to the gods, then sanctified and made into a church. Now it's also a major tourist attraction. This is a building that has had just a tremendously complex history. And you can see it all over its surface.

Beth: We're seeing it very differently than anyone in antiquity would have seen it.

Steven: In fact, we're standing many feet higher than we would have been in the ancient world. Rome accumulated elevation from the debris of history. Once, you would have stepped up to the porch of the Pantheon. Now, we actually lie downhill.

Beth: And the space in front of the Pantheon was framed by a colonnade.

Steven: The colonnade and the other buildings that would have originally surrounded this building would have obscured the barrel on the side, and so that we would have only seen this very traditional temple front.

Beth: Exactly. It would have been something very familiar. And the surprise was what happened as you approached the threshold.



Pediment and frieze, The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/DXhjHV>



Porch truss with capitals, The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/D8NutC>

Steven: I have to tell you that I'm absolutely in love with those massive columns. They are supported by these enormous marble bases. They rise up unarticulated, without any fluting, and in these massive fragments of what were originally marble Corinthian capitals. These are monoliths. They're single pieces of stone. Unlike Greek columns, they were not segmented. They were not cut. And they were imported from Egypt, which was symbolic of Rome's power over most of the Mediterranean under the emperor Hadrian, who was responsible for the construction of this building. So let's go in. Let's go under the porch. Let's go through those massive bronze doors.



Entry arch, The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/Dx3mw4>

Beth: We just walked in under the strictly rectilinear porch and then the space opens up into this vast circular space.



Interior, The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/reB75L>

Steven: The width of the building and the height of the building completely fills my field of vision. And it is, in a sense, an expression of the limits of my sight. Unlike a basilica, this is a radial building. That is to say that it has a central point and radiates outward from that central point. But what's fascinating about this building is that it's not a traditional radial structure, in that the point would be on the floor. The central point—its focus—is midway between the floor and the ceiling, and midway between its walls. It is large enough, and geometrically perfect enough, to accommodate a perfect sphere.

Beth: And, as soon as you walk in, you notice that there's a kind of obsession with circles, with rectangles, with squares, with those kinds of perfect geometrical shapes.

Steven: This is a structure that is concerned with the ideal geometries. But it also locates our place within those geometries.

Beth: But the experience of being in this space is anything but static.

Steven: No, it's really dynamic, in fact. One of the causes of that is if we move our eye up the columns, you can see that they're beautifully aligned with the frieze of false windows that are just above them. But then all of that does not align with the dome.



Dome, The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/rwboCF>

Beth: That's right. They don't align with the coffers that we see in the dome. What that does is creates this feeling that the barrel that the dome rests on is independent from the dome, and almost makes it feel as if the dome could rotate.

Steven: That complex visual relationship between the dome and the decorative structures in the barrel remind us that the actual structural system here is dependent on concrete, and not these decorative columns that we see on the interior.

Beth: Exactly. There's a thick, thick barrel of concrete that supports the dome. Because a dome pushes down and out, Roman architects had to think about how to support the weight and pressure of the dome. And one of the things that are doing that is the thick concrete walls of the barrel.

Steven: You know, the Romans had really perfected concrete. And this is one of the buildings that shows what was possible. This is shaping space because concrete could be continuous. It could be built upward continuously with wooden forms, which would then be removed and then could open the space up in a way that post and lintel architecture never could.

Beth: So concrete could be laid onto wooden support or mold and could be shaped in a way that you can't do with post and lintel architecture.



Coffer, The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/AThmGS>

Steven: Well, what it does is it allows for this vast, open, uninterrupted space. We walk into the space and we feel freed. We are given a tremendous amount of freedom in terms of how we move and how we see through this space.

Beth: Because of the Roman use of concrete, the idea that architecture could be something that shaped space and that could have a different kind of relationship to the viewer.

Steven: It is even now, in the twenty-first century, awesome. Emperor Hadrian, under whose direction this building was constructed, apparently loved the building and loved to actually have visitors come to him here. One could imagine him even in the back apse opposite the entrance.

Beth: The Pantheon originally contained sculptures of the gods, of the deified emperors, we think. It really was about the divine. It was about the earthly sphere meeting the heavenly sphere.

Steven: And also in some way about human perception. Look how rich the surface is.

Beth: And there would've been much more in antiquity when the coffers probably had gilded rosettes. As we look at the drum, we see colored marble. We see purples, and oranges, and blues.



Stonework, The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/Bi7FvL>

Steven: Remember, these marbles are taken from around the Roman Empire. So this is really an expression of Hadrian's wealth and Hadrian's power. This is the empire being able to reach across the globe to draw in these precious materials.

Beth: Perhaps the most exciting part of this space is the oculus. Because it almost seems to defy reason. How could there be a hole in the center of that dome? It doesn't make sense.



Oculus, The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/qzbVDN>

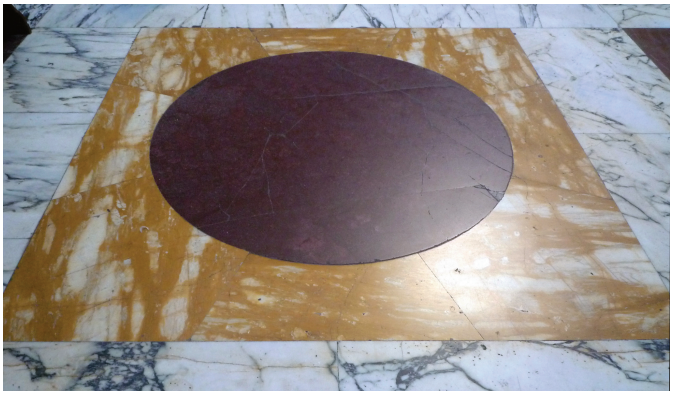
Steven: Well, it's the only light that comes into this space, with the exception of some light wells in some of the recessed areas, and of course, the grill just above the door, and the door itself. There is one

great window. And my students for years have asked, is there glass? And of course, the answer is no. When it rains, the floor gets wet.

Beth: The perfect circle of that oculus. The perfect circle of the dome.

Steven: The oculus is critical in the issues that you had raised before. This is a building that in some way is a reflection of the movement of the heavens. And what happens is light moves into this space from the sun. It projects often a very sharp circle on the dome and moves across the floor of the building as the sun moves across the sky, and then eventually creeps up the other side of the dome. And so this entire building functions in some ways almost like a sundial. It makes visible the movements of the heavens and makes them manifest here on Earth. We've been talking about this building as a great monument of the ancient world. But it was admired and copied in the Renaissance, and in fact, it is perhaps the most influential building in architecture in the Renaissance and in the modern era. I mean, think about all of the different architects that have referenced this building. I'm looking down at the floors and the geometry that you spoke of, the circles and squares. And I'm thinking about the pavement in front of the Guggenheim Museum on Fifth Avenue in New York.

Beth: Actually, once you know the Pantheon, you begin to see copies of it and pieces of it everywhere.



Paving, The Pantheon, Rome, c. 125 (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/D98RR8>

Steven: It's true. The dome especially is perhaps the most copied element, especially with the oculus. You can see that, for instance, in the National Gallery in Washington. You can see it in almost every Neoclassical building in Europe and North America. But before we leave, I'd love to go and pay homage to Raphael, who's buried just over there.

Watch the video <https://youtu.be/KaY8zqYfQI0>

47. Ludovisi Battle Sarcophagus

A CONVERSATION

Dr. Beth Harris and Dr. Steven Zucker

This is the transcript of a conversation conducted at the Palazzo Altemps, Rome.



Battle of the Romans and Barbarians (Ludovisi Battle Sarcophagus), c. 250-260 C.E., preconneus marble, 150 cm high (Museo Nazionale Romano-Palazzo Altemps, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dDbJvx>

Steven: It's clear looking at this who the Romans are. The good guys, and who their enemies are, likely the Goths.

Beth: And the Romans portraying themselves as the good guys here, and they look more noble, more heroic. Their features are more ideal. The Goths, their enemy, look almost caricatured with puffy noses, and cheeks, and wild expressions on their faces.

Steven: They're the barbarians, and it's interesting because that's something that the ancient Romans are borrowing directly from the ancient Greeks. Yet, this is the style that is pulling away from the traditions of classical antiquity.

Beth: In that, we have none of that clear sense of space around them. Instead, their piled one on top of another.

Steven: That's right. They've lost their autonomy in the world. They don't have room to move. Instead, we have this dense carpet of figures. We're looking at the *Ludovisi Battle Sarcophagus*. It's this large tomb. A huge piece of marble, that has been carved in this incredibly deep relief.

Beth: And the skill of the carving, I think, is one of the most remarkable things here. Not only is every area of this sarcophagus covered with figures, and horses, and shields, but there are some places where the carving is so deep that the forms, the limbs, the heads of horses are almost completely offset from the background. There are two to three or four layers of figures and forms.

Steven: Well, it's such a dense tangle, that it actually takes us a moment to be able to follow each body and understand where each person's body begins and ends.

Beth: And when we look closely, what we see in the center at the top is obviously the hero. He is coming in on his horse. He's twisting around opening his right arm bringing his horse along with him. Look how he is off-set against his horse. He looks almost wild and passionate, but he looks calm.



Ludovisi Battle Sarcophagus (detail) (Palazzo Altemps, Museo Nazionale Romano, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dDh7Ns>

Steven: His body is splayed out. The drape of his armor creates this radiating sense. He's almost like a sunburst in the center of this composition.

Beth: Yeah and moving at the same time. In fact, everything here is moving.

Steven: It's almost impossible to remember that this is just static rock because the surface is so activated.

Beth: When we look closely, we see that the Romans look stern and serious. For example, the figure at the far left. He's charging into battle. So there's a sense of the seriousness of battle.

Steven: There are these moments of moral decision making. Look at the Roman soldier who has a captured Goth bound at the wrist. He's holding his chin, he's holding the back of his head, and you have the sense that he's making a decision as to whether to be merciful or to slay this prisoner.



Ludovisi Battle Sarcophagus, detail with captor (Palazzo Altemps, Museo Nazionale Romano, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dDh841>

Beth: And strangely if we look toward the bottom of the sarcophagus the figures get smaller instead of larger. Which we might expect for the horses along the bottom are smaller. The figures who are slaying or wounded on the bottom are also slightly smaller.

Steven: It's as if we are looking down from above some hell. We have a kind of interesting perspective that's constructed in here, certainly not linear perspective, but kind of an organizing perspective that makes sense of this complex surface. One of the issues that I find most interesting is the way in which the shields and other elements create canopies that frame individual figures, and bring our eye deeply into this composition.

Beth: Look at the figure who we see in profile, whose head is framed by two shields.



Ludovisi Battle Sarcophagus, oblique view from right (detail) (Palazzo Altemps, Museo Nazionale Romano, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dDbMoH>

Steven: That's right. Peeking through at this wonderful moment.

Beth: That dark shadow behind him, it's really wonderful about this sarcophagus is the alternation of light and dark that animates the surface. Where we see the most shadow and the deepest carving is in the hair of the Goths, in their faces, and the smooth surface of the marble is reserved for the Romans, who are left deeply carved.



Ludovisi Battle Sarcophagus, detail with Roman framed by shields (Palazzo Altemps, Museo Nazionale Romano, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dDh9F9>

Steven: That texture is associated with the enemy and a kind of roughness.

Beth: We see more and more sarcophagi, or the plural of sarcophagus, beginning in the second century in Rome, and continuing through the third century.

Steven: Right. Previously the Romans had cremated their dead, but we know that by the second century it became fashionable to bury the dead in the sarcophagus. After all, it does give one the opportunity to create these monumental sculptural forms.

Beth: Art historians have been trying to identify the figure whose sarcophagus this is, and they have one or two ideas, but we're not really sure. It must have been someone wealthy and powerful because this is an enormous piece of marble. That would have taken a very long time to carve.

Steven: So what we can see here is a choice to move away from the high classical Greek carving that we associate with the great sculptures of the Parthenon that we know the Romans also loved. Instead, we see the intention been put on the interaction between these figures.

Beth: It's important to remember that in the second and third centuries the empire was not as stable as it was in 100 or 200 years after Augustus. There's a civil war, there's instability in the empire generally, and it's possible to associate this style with these political and historical changes.

Steven: It might be too much to say in the chaotic qualities of this surfacing to mirror the chaos of the empire. I think it is appropriate to say that we see a turning away from the high classical tradition, and the adventure of a more complex style that is less concerned with the elegance of the individual human body.

Watch the video<https://youtu.be/m4raOIxsbaU>



Ludovisi Battle Sarcophagus, with Beth (Palazzo Altemps, Museo Nazionale Romano, Rome) (photo: Steven Zucker, CC BY-NC-SA 2.0) <https://flic.kr/p/dDbMy4>

Acknowledgements

Book cover design by Susan Zucker.

Special thanks Dr. Joseph Ugoretz for continuing to be our guide in academic technology and strategy, to Susan Zucker for shaping Smarthistory's design, and to the Samuel H. Kress Foundation.

AP® Art History is a trademark registered by the College Board, which is not affiliated with, and does not endorse, this publication.