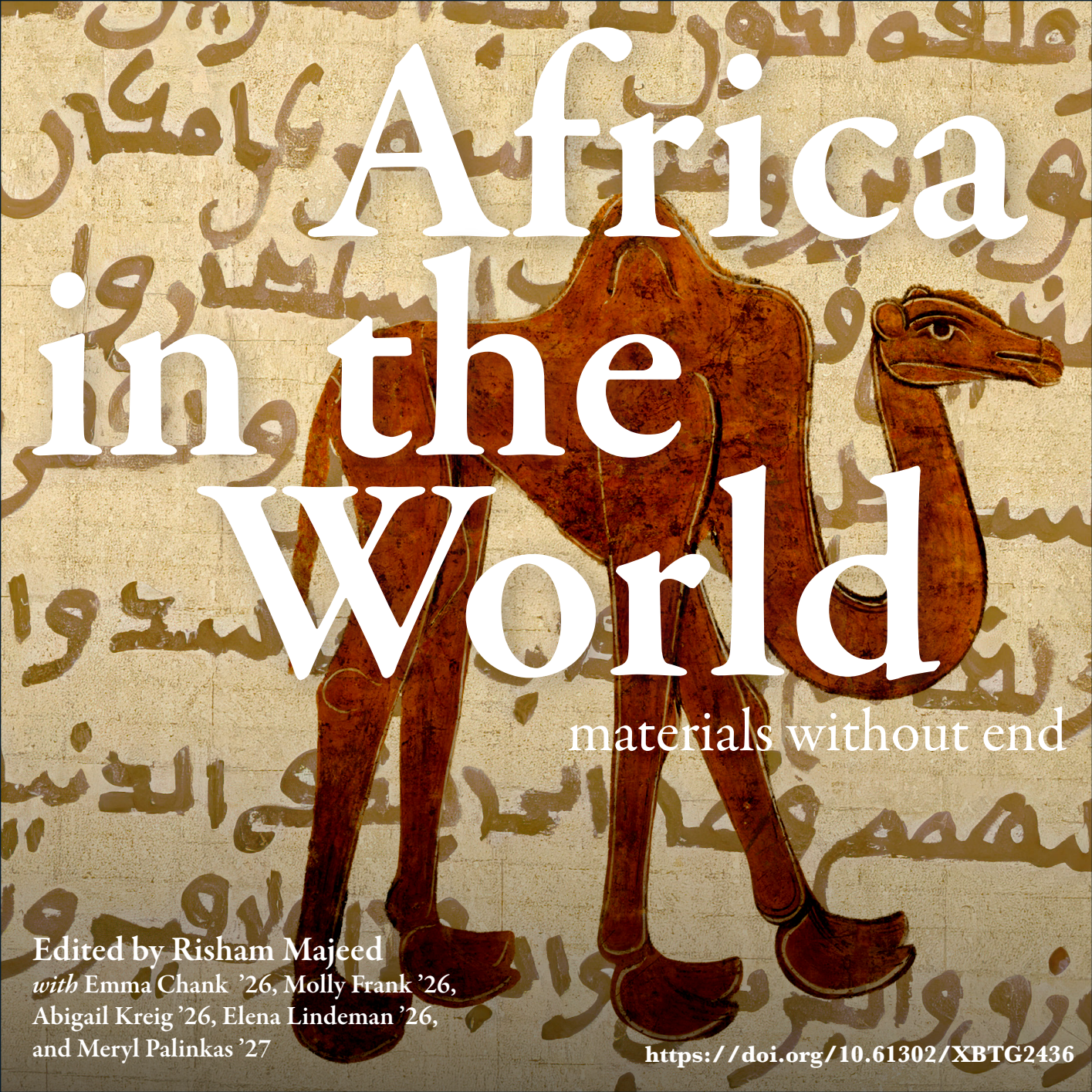




Africa in the World

materials without end

Edited by Risham Majeed
with Emma Chank '26, Molly Frank '26,
Abigail Kreig '26, Elena Lindeman '26,
and Meryl Palinkas '27

<https://doi.org/10.61302/XBTG2436>



Various West African Metal Currencies.
17th-20th centuries
Collection of Amyas Naegele.

Acknowledgements

The past decade has witnessed extraordinary exhibitions that have revealed how Africa has linked the world for centuries, through trade routes. The most innovative of these was also the first, *Caravans of Gold, Fragments in Time: Art, Culture, and Exchange across Medieval Saharan Africa*, which was curated by Kathleen Bickford Berzock, and held at the Block Museum of Art at Northwestern University (2019). This exhibition made plain what had been suppressed in art history: why have we never thought about where gold and ivory came from in the premodern world? Once that question is asked, it becomes obvious that we must foreground Africa as an interconnected place and an essential actor in the visuality of the premodern globe.

Exhibitions and research on this topic has intensified, and we now have a wealth of new knowledge about how Europe, Africa, and Asia have been in active exchange with one another for over two thousand years. I had written about these developments and wanted students to be able to work with these important ideas in the Exhibition Seminar (Fall 2025). There was a problem: there was no way to secure monumental loans at a small gallery so we decided to liberally use reproductions.

Museums around the world have made historical objects freely available to the public, through high-resolution scans. I am grateful especially to Kurt Heumiller and Justyna Badach at the National Gallery of Art, Washington D.C., for creating state of the art three dimensional scans (Gaussian splats) of the “Suger Chalice” especially for this exhibition. I am also indebted to Professor Steven Sidebotham, who generously gave us his time and shared his research at the important archaeological site of Berenike, Egypt. Finally, Amyas Naegele, has been a tireless champion of all African art, and flung open his collection for this show: many thanks to him for making this a smooth and rewarding exhibition.

This volume is dedicated to the memory of Josephine Masud.

Risham Majeed
March 31, 2026

<https://doi.org/10.61302/XBTG2436>



Introduction: Time Unbound

Time, that inscrutable force that passes through all things but that only appears to register in its reception by human beings, is multiple in its manifestations and belongs to no single moment. In other words, there is no single ‘now’

—Keith Moxey, “What time is it in the history of art?” (2018)

The premodern period is a long span of time that connects the ancient world to the end of the European Middle Ages (100 B.C.E. to 1500 C.E.). Long before the “voyages of discovery,” merchant sailors had mastered the seas and nomads had harnessed camels as “ships of the desert.” Through their specialized knowledge, these people enabled access to the desert and the sea connecting Asia, Africa, and Europe.

The constellation of objects in this exhibition reveals tenacious origin stories beginning with the procurement of raw and precious materials, their transport to important ports, such as Alexandria and Berenike, where they were fashioned into artefacts for élite individuals. As they moved in time and space, materials and artworks took on new meanings and at times were physically altered to align with new customs. What was pedestrian to one culture might be a powerful religious symbol to another, and what was sacred in the eyes of one group became a marvel to the next.

These objects demonstrate the power inherent in all works of art to exceed the parameters of their chronological circumstances; the ability to adapt to new locations, new cultures, and new centuries. They represent the past piercing through the present and persisting into the future.

Through a mixture of reproductions and original works of art, which have never been seen together, we invite you to think about where and when meaning is created, and how we can tell stories outside of the bounds of time.



Chapter 1. Connecting Cultures

Trade in the premodern world ensured the movement of ideas along with goods. New religions from Buddhism to Christianity and then Islam were carried far beyond their origins. The multi-cultural reality of this world is readily available to us through the objects that have survived to the present day. They become our primary sources.

The Roman Empire spanned from the Mediterranean basin south to Africa, east to India, and as far north as Britain. Conquest of these territories was accompanied by Romanization or *Romanitas* meaning that public monuments imprinted the physical presence of Rome in new locations. The fall of Rome (476 C.E.) did not extinguish its potency; architectural fragments, particularly the foliate Corinthian capital, were reused by cultures that followed.

After Rome, beginning in the late 7th century, Islam played a key role in connecting vast territories and kingdoms and cultures from North and sub-Saharan Africa up to the Iberian peninsula. The power of Islam to expand as swiftly as it did was indebted to the fact that the first Muslims were nomads in the Arabian desert where the religion originated. Movement west to Africa was relatively effortless as the terrain of the Sahara desert was already familiar to early Muslims.

As a nimble and highly mobile people, North African Muslims became essential to trade in the *Sahel* (Arabic for “shores of the Sahara”) fostering shared languages and belief systems. Rulers recognized that limited voluntary conversion would connect them to the larger world and enrich themselves and their subjects. The first high profile conversion was Koi Konboro of the Empire of Mali, who built the Great Mosque of Djenné in the 13th century. Later his successor, Mansa Musa, would make the journey across the continent to perform the *Hajj*, and legend has it that the vast quantities of gold he brought with him caused a financial collapse in Alexandria. He can be seen in the *Catalan Atlas*.



Unrecorded Artist
Buddha
Berenike or Alexandria, Egypt (excavated 2018-2022)
Marble (from Paros)
ca. 90-140 C.E.

The ancient port city of Berenike was founded in the 3rd century B.C.E and remained an active harbor connecting Asia to Egypt until the 5th century C.E. Archeologists report that this was a multi-ethnic and multi-religious society, with a considerable Indian population that settled there to make use of it as lucrative hub of trade.

This Buddha was discovered in the courtyard of the Temple of Isis in 2022. The head was found severed from the body, which had been found a few steps away in 2018. The archeologist who excavated this sculpture, Steven Sidebotham, remarks,

The find of the head, however, underlined the nearly pure white quality of the statuette and in combination with the remarkable glittering of the crystals in the breaks and the grain size suggests that the Indian customer chose for his votive statuette marble from the quarries of Paros. Parian Lychnite, completely white and translucent, was for centuries the finest white Greek marble used for sculpture in the Greek, and later, the Roman world.

Commissioned by an Indian, the sculpture was produced by an artist trained in Alexandria who traveled to Berenike for specialized work. The patron communicated the desired form of the Buddha to the sculptor verbally, or through a small wooden model or drawing. The style and sculpting technique are characteristic of Roman carving at the time: cascading drapery, enhanced by a shift in weight (contrapposto), and the use of the drill to indicate tight curls have their counterpart in Roman portraiture of the same period. The radiating nimbus behind the head, while signifying spiritual purity in Buddhist imagery, also recalls the iconography of Roman solar deities such as Mithras and Sol. Neither wholly Indian nor wholly Roman, the figure is a hybrid creation which has been shaped by artistic translation across vast distances.



Unrecorded Artists
Mummy Portraits
Fayum, Egypt
Middle of the 1st Century – 3rd Century C.E.
Encaustic on wood
The Metropolitan Museum of Art and Musée du Louvre

Ancient Africa was a multi-ethnic and multi-religious society on account of the many kinds of people who settled there

because of the riches of ports which connected them north to the Mediterranean and south to the Indian Ocean. The series of mummy portraits from the desert oasis of Fayum depict individuals with their own sense of style, adopting elaborate coiffures, wearing intricate jewelry, and refined textiles which shimmer like silk and flow like linen.

The critic John Berger asked:

Why do they strike us today as being so immediate? Why does their individuality feel like our own? . . . The short answer might be that they were a hybrid, totally bastard art-form, and that this heterogeneity corresponds with something in our present situation.

They are the most lively records of a bustling variegated society. The portraits from Fayum are further evidence of communities who spoke a range of languages, brought with them ritual practices from Hinduism to Buddhism which co-existed alongside indigenous religions, as we have seen at Berenike.

Unrecorded Artist
Statuette of a standing goddess
c. 1st century B.C.E.-1st century C.E.
Alabaster, gold, stucco, bitumen, rubies
Babylon
Musée du Louvre, Paris
Height: 10 ¼ x Diameter: 2 inches

This goddess's eyes are inlaid with rubies from Burma, and she wears a gold necklace and earrings. Such diminutive nude statuettes are a product of fertile in-between places, such as Syria, where indigenous cultures were also Romanized.



Unrecorded Artist
Yakshi figure (fertility spirit or perhaps a goddess)
c. 1st century C.E.
(before 79 C.E.)
Indian Elephant Ivory
National Archeological Museum of Naples
Original size: 9 3/16th inches

Carved from ivory, this sculpture depicts a nude, bejeweled central figure flanked by two smaller figures on a pedestal. The central figure's voluptuous physique— full rounded breasts, narrow waist, wide hips, and tightly crossed legs (with a prominently exposed vulva) are deliberately sensuous and titillating.

The precise iconography of the figure is not known, though she shares formal qualities with stone deities at the famous Buddhist stupa at Sanchi in central India. While some suggest she may have been a fertility figure, a more viable theory is that she is an amalgamation of Indian and Mesopotamian goddesses (like the one below). This is supported by the location of her 1938 place of discovery — a merchant's villa in Pompeii. The presence of an Indian ivory in Pompeii is striking evidence of cross-cultural pollination between Rome and India via Arabia and Africa. Indeed, more than a third of the Roman Empire's taxes went to goods imported from India and Roman bronzes have been found on its west coast.





Elisha Ben Abraham Cresques
The Catalan Atlas of Maritime Charts
 Ca. 1375
 Eight vellum panels with pigment affixed to wood
 Majorca, Spain
 Originally bound as a book for the Holy
 Roman Emperor Charles V
 Bibliothèque Nationale de France

Cresques was a Jewish cartographer and created this ‘atlas’ for the Holy Roman Emperor, Charles V. This technically advanced map represents all known regions of the world and is particularly indebted to the *Travels of Marco Polo*

(1245-1324). Marco Polo was a merchant, and following his observations, the map presents the world in terms of trade and indigenous natural resources, such as gold.

In Cresques’s map, an elegantly veiled nomad on a camel approaches a seated sovereign. This is Mansa Musa, the emperor of Mali (r. ca.1280-1337) who was thought to be the richest man in the world on account of the gold that he controlled. The light-skinned nomad on camelback is portrayed of equal size to the ruler, whereas the emperor is dark skinned, seated on a plush red cushion, and carrying the familiar insignia of *European* royalty: a fleur-de-lis scepter and a crown. It is not clear whether the golden



disk in his right hand is meant to signify the world, as it would in a European context, or if it is a reference to the immense amount of gold sourced from his kingdom.

Behind the nomad there is an encampment of black tents, which are modeled after European military tents—meant for temporary occupation during a campaign—rather than actual nomadic tents, which are intended for year-round habitation. The tents are of the same scale as the rider and ruler, and so it becomes clear that each aspect of the trio is conceived to be of commensurate importance. The accompanying inscription highlights this point: “The region is inhabited by

people who go heavily veiled, so that nothing can be seen of them but their eyes. They live in tents and ride on camels.”

The Tunisian globe-trotter, Ibn Battuta’s (1304-1369) account of his travels in this region similarly confirms the importance of nomads in the facilitation of the movement of goods and people that enabled the wealth of the empire. Referring to the famed Tuareg nomads, he wrote, “The caravan cannot travel except under their protection; and amongst them the protection of a woman is more important than that of a man. They are nomads, they do not stay in one place.” Indeed, women made and owned these tents, and their role in nomadic culture was essential to trade.

Reproduction

Reproduction

...that which withers in the age of mechanical reproduction is the aura of a work of art.

—Walter Benjamin (1935)

The majority of objects in this exhibition are reproductions of historical artworks. Housed in museums around the world, we have used all technologies available to us to bring these objects in conversation with one another for the first time. This exhibition makes the most of photographic reproductions, plaster casts, textile reproductions, ceramic reproductions, three dimensional prints, and animated Gaussian splats to make these incredible objects accessible to a wider audience. While a reproduction cannot compete with the ethos of an original, it can provide insight and point us to different narratives. Through the material recreations presented here, we offer a tactile experience that approximates the behavior of the originals in space.



Unrecorded Artists
“The Chalice of Abbot Suger”
Sardonyx, mined in India, carved in Alexandria (Egypt) (2nd-1st centuries B.C.E)
Gilt silver, pearls, gemstones, glass paste (12th century with later additions)
St. Denis, France
National Gallery of Art, Washington D.C.

The Chalice of Abbot Suger consists of a sardonyx bowl, heavily gilt silver mounts, and a variety of gems, pearls, and glass paste intended to imitate precious materials. This astonishing object is a testament to the trade routes that connected the premodern world as its current state is a result of over a thousand years of additions and subtractions as it passed through different hands and lands.

The Roman naval commander and author of the multi-volume encyclopedia, *The Natural History*, Pliny the Elder, tells us that sardonyx was imported from India, where it was so prevalent that he claimed, “There the common folk wear it pierced on a necklace.” Merchant-sailors brought the raw stone, which is a kind of banded agate, to a port in East Africa (perhaps Adulis, Ethiopia or Berenike, Egypt) where camel caravans transported their goods to Alexandria, the storied port city that opened up Africa to the Mediterranean. In Alexandria, the sardonyx was carved into the meticulously fluted bowl that now sits between two bejeweled gilt silver handles. It was likely used by a high ranking Roman.

A thousand years passed before the abbot of the royal burial church of St. Denis, Suger, acquired this cup in the 1130s. He had it fashioned into a resplendent Eucharistic chalice, with gold sourced from sub-Saharan Africa and pearls brought from the Indian Ocean. In this new time and place, the ancient bowl still held wine, but as a Eucharistic chalice, that libation was believed to turn into Christ’s blood, and consumed by the faithful to partake in his suffering and resurrection (transubstantiation). Of course, these beliefs did not yet exist, when the sardonyx was first brought to Alexandria.

Reproductions of the “Suger Chalice”

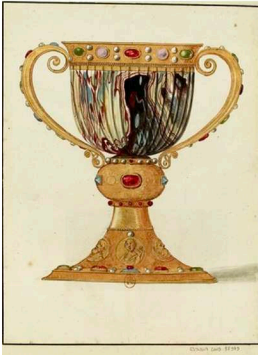
In the Indian stones we find that this layer has the color of azure or horn. Moreover, their white band can have a kind of iridescent shimmer, while the surface is red like the shell of a crawfish. ...if the white band is blurred instead of being defined, and similarly if it contains an intrusive patch of some other color. For no color must be broken by another in its own layer.

—Pliny the Elder, *The Natural History*, c. 77 C.E.

We also procured for the services at the aforesaid altar a precious chalice out of one solid sardonyx, which [word] derives from ‘sardius’ and ‘onyx’, in which one [stone] the sard’s red hue, by varying its property, so keenly vies with the blackness of the onyx that one property seems to be bent on trespassing upon the other.

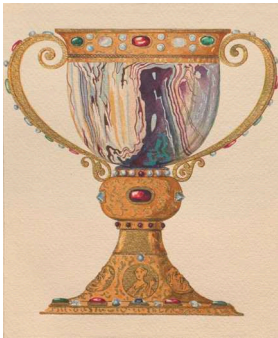
—Abbot Suger of St. Denis, De *administracione*, c. 1144-48 C.E.

The natural properties of sardonyx, drew lush descriptive language from Pliny and Abbot Suger, though they write a thousand years apart. The bowl of the chalice has been reproduced here in five different formats: engraving, watercolor, gelatin silver print, animation with 3-d scans (Gaussian splats), and a 3-d print that has been painted to evoke the watercolor. The original is in the National Gallery of Art, Washington D.C.



Daniel Rabel
Chalice of Abbot Suger
1633
Engraving
Cabinet des Estampes
Bibliothèque Nationale

Artist unknown
Chalice of the Abbot Suger
Watercolor
Reproduced in Rosenberg (1922)



IC Makerspace
Chalice of the Abbot Suger
3-d print
2026

IC Makerspace
Chalice of the Abbot Suger
3-d print
2026
Painted by Molly Frank



Photographer unknown
Chalice of the Abbot Suger
Gelatin silver print
Reproduced in Rosenberg (1922)

Gaussian splats by Kurt Heumiller
National Gallery of Art
Animation by James Botting
2022



Corinthian Capital and Column
Marble
Roman
ca. 117-138 C.E.
Metropolitan Museum of Art

The foliate style of Corinthian capitals originated in Greece around 400 B.C.E. and later became the preferred style of the Roman Empire. The capital’s vegetal ornamentation based in the natural world rhymed with the Roman idealization of the body. The carving abounds with acanthus leaves, a plant native to the Mediterranean region. Corinthian capitals can be found throughout the Roman Empire, which at its height extended across the Mediterranean Basin, including North Africa and Egypt, and into Britain. The practice of reusing Roman fragments, especially well-carved Corinthian capitals is visible throughout the regions of the empire, even after its collapse. This architecture became the shared heritage for Judaism, Christianity, and Islam. Some of the finest examples can be found in the Great Mosque of Córdoba in Spain and later medieval (Romanesque) architecture.



Great Mosque-Cathedral of Córdoba
Spain
8th-10th centuries C.E.
Marble



Double foliate capital (from the cloister)
St. Guilhem-le-Désert
France
Late 12th-early 13th century
Limestone
Met Cloisters, N.Y.



Chapter 2. Technologies of Transport

In the premodern world, movement was a form of technology. Native to Central Asia and Northeast Africa respectively, Bactrian and Dromedary camels were the ideal – and only – reliable method of transportation across desert-based trade routes. The camels' physical resilience, load-bearing strength, and ability to travel without frequently stopping for sustenance made them incredibly efficient. While the desert was considered untraversable by many, nomads like the Tuareg, had extensive, generational knowledge of terrain and weather conditions, using the camel to move goods and their homes. Tensile, lightweight architecture - constructed by women in this society - made movement possible.

When represented in art like the fresco fragment from San Baudelio, Spain, or the Tang dynasty (China) terracotta, the camel is not merely decorative but an embodiment of the shared labor of humans and animals who sustained an expansive world bonded through trade. Similar to ships at sea, camels functioned as living vessels; monumental agents of connection that allowed goods, ideas, and artistic forms to travel.

Maritime trade required equally sophisticated knowledge. Though impermanent and liminal by nature, the Mediterranean Sea's placement at the epicenter of cultural interest proved to be advantageous. By mastering seasonal monsoon wind patterns to propel their ships, Indian sailors linked the Mediterranean to South Asia. The marble Berenike Buddha reflects this movement of materials, beliefs, and aesthetics through sustained contact rather than conquest.

Unrecorded Artist

Camel

728 C.E.

Glazed earthenware

Luoyang, China

British Museum, London

Cream colored with brown and green accents, this camel classifies as “sancai” (three-color) glazed. It is based on direct observation; one can almost hear the cry being emitted from its gaping mouth and outstretched neck. Biological details unique to the Asian double-humped camel, such as bushier neck fur braided geometrically, are highlighted through changes in the color of the glaze and varying levels of relief. Its limbs, neck, and head are splayed outwards, producing a sense of frenetic energy. The camel is outfitted with a saddle and a bag filled with provisions, like a hunk of meat, for the sustenance of its rider and perhaps rare goods for sale upon arrival at their destination.

This is a type of funereal object known as *mingqi* (“spirit good”) tomb figurine, found in general Liu Tingxun’s tomb. Mingqis helped the deceased through the afterlife, offering protection, entertainment, and reminding them of their mortal lives. Human souls were believed to have two halves: *hun* (which ascended), and *po* (which remained on earth). Tang funerary rituals such as this were thought to reunite these halves, laying them to rest together within the tomb. The inclusion of a camel in Tingxun’s *mingqis* signifies both the general’s participation in the development of trade networks and communicates his status through his proximity to these precious creatures.





Elena Lindeman
Copy of the Tang Camel (1/4 scale)
 Terracotta
 2026
 Ithaca, N.Y.

I sculpted the camel from terracotta clay, which is probably the most similar to

the ‘earthenware’ the original statuette was made from. I began with the body. Scaled down to a quarter of its size, it sat comfortably in the palm of my hand. As I sculpted, I thought about the original artist, and how they approached the work. When I began the legs, I remembered from my research that it’s likely that the original camel was made from a mold — mass produced and in high demand. I grew almost jealous of that and wished I too could use a mold to quicken my process and make it more precise. But I grew grateful for the longevity of the process; the almost meditative state of translating what my eyes saw on my computer screen to my hands re-creating it in three dimensions. When I began the eyes and fur, I wondered about the tools the artist had used for the high relief. I wondered if they too worried about their camel surviving the kiln. I thought of the innate, time-altered differences in approach — my computer screen, plastic bags, factory-cut sponge, and old yogurt container as futuristic tools aiding my imperfect reincarnation of this bygone creature. It was impossible to create an exact replica, which felt like both a constant disservice to the perfection of the original, and an act of intense focus and attention that I could only describe as utmost care.

Unrecorded Artist
Pyxis of Ziyad ibn Aflah
 African Elephant Ivory and metal fasteners
 Córdoba, Spain
 969-70 C.E.
 Victoria and Albert Museum, London
 Measurement of original object:
 height 7.6 x diameter 4.8 inches

Spain was ruled by the Umayyads (756-1061 C.E.), a dynasty with close ties with their North African counterparts through the strait of Gibraltar. This cylindrical container is carved from African elephant ivory. The inscription that runs around the perimeter of the vessel reads, “The blessing of God and prosperity and good fortune to Ziyadh ibn Aflah, Prefect of Police. Made in the year 359,” and functions almost like an honorific tiraz. It is the only such extant pyxis to be made for a person who was not a member of the ruling dynasty. The imagery shows activities of courtly, aristocratic men, including falconry and hunting, perhaps as aspirations for its owner.

Another face of the pyxis shows a man sitting cross-legged in an elaborate palanquin atop a naturalistically modeled elephant. Nobility in this period harnessed the power of elephants for travel, and its presence here is also a visual gesture toward the lands south of the Sahara where tusks of this magnitude (4-5” wide) could exclusively be procured. Since it was designed to be held, opened, and transported, the pyxis’ intimacy further highlights how its portability enhanced its political and cultural significance to aid the political ambitions of an important functionary in Córdoba.



Emma Chank
Elephant roundel copy
 Palmer clay
 Ithaca, N.Y.
 2026



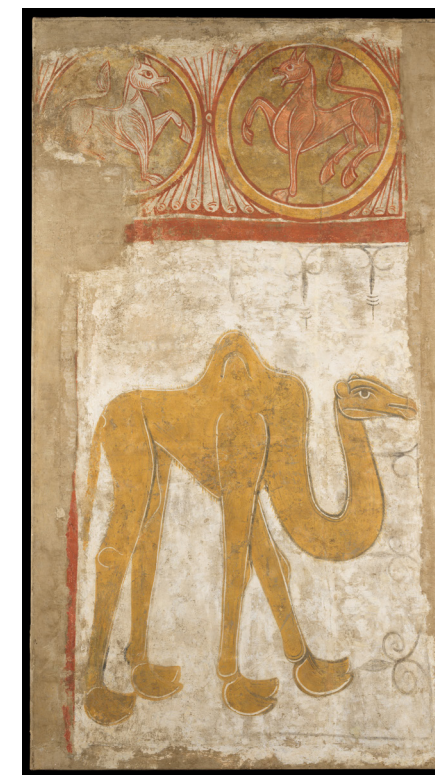
To replicate this roundel of the Pyxis of Ziyad ibn Aflah, it was crucial to carefully study the intricacies of the original. The craftsmanship of the container is truly remarkable and suited for the luxury object that it is. Due to the nature of ivory, darker coloration and natural impurities along its surface hide some of the components. Upon closer inspection, the decorative features become clear. The carefully removed layers of ivory push and pull the figures and plants into the final composition. Deep incised cavities outline figures and plants, while shallow markings become the rest of the visual information. The process for this recreation was similar. The medium was removed to reveal the image, with the figures brought furthest forward. It was difficult to articulate subtle features with a malleable material, like clay, that shifts at the slightest touch. The recreation process revealed the time and energy that was required and the mastery of the medium in the original.

Unrecorded Artists
Camel
 San Baudelio de Berlanga (Castile-Léon, Spain)
 Fresco transferred to canvas
 c. 1140s
 The Met Cloisters, N.Y.

Once painted on the walls of a small Christian hermitage (or monastery) in medieval Spain, this image of a North African/Arabian camel (dromedary) formed part of a larger narrative cycle positioned beneath scenes from the life of Christ. The fresco transmits the complex cultural landscape of twelfth century

Iberia, a region shaped by centuries of contact, exchange, and coexistence between Christian, Jewish, and Islamic cultures. The monastery’s location at the frontier of lands controlled by Christians to the north and Muslims to the south (Al-Andalus) means that it had access to both cultures.

Rendered with bold contour lines and a flattened, stylized form, the camel recalls animal motifs common in Islamic textiles, carved ivories, and other luxury objects circulating in the twelfth century. Its simplified yet immediately recognizable anatomy such as the rigid legs, elongated neck, and the staccato repetition of individual stands of hair, suggests both artistic convention and close observation. Indeed, dromedaries were introduced to Iberia in the early eleventh century and continued to be imported, alongside mules and other pack animals.



By placing a camel, an animal closely associated with trade, travel, and Islamic lands, within a Christian sacred space, the fresco becomes a visual marker of cultural entanglement and hybridity. It embodies a world structured by movement: of goods, artistic forms, and lived experience. As both subject and symbol, the camel stands as a testament to the networks of exchange that reshaped Iberian visual culture in the medieval period.



Chapter 3. Materials and Movement

Through their physical composition, several objects become witnesses to the interchange that fueled the premodern period. For objects made from raw materials sourced in one place and fashioned into an artefact elsewhere, intercultural highways became essential.

Regions across Asia, Africa, and Europe had varied access to materials. India was home to fresh water pearls, gemstones, and ivory while China manufactured silk and porcelain, and Africa was renowned for gold, ivory, rock crystal and salt. Each region had their own method of transport for these resources. Indian sailors harnessed the power of the seasonal monsoon winds across the Indian Ocean, Asian merchants made use of the Silk Roads, and African nomads handled trade throughout the Sahara and Sahel.

Unrecorded Artists
“Lewis” Chess Pieces
Walrus ivory
Norway
c. 1150-70
British Museum, London

Carved in Norway (Trondheim) and discovered on the Isle of Lewis in 1831, it is believed that over seventy-eight chess pieces were brought to Scotland and either lost or buried there by a medieval merchant in the twelfth century. The ‘Lewis’ chess pieces are an amalgamation of distant ideas adapted to local culture. Their existence would not have been possible without the origination of the *Chaturanga*, or chess as we now know it, in India.

The game was introduced to northern Europe by Vikings who had contact with Asia from at least the 6th century C.E. A cache of objects, including a tiny bronze Buddha cast in what is today modern-day Pakistan, was found in Helgö, Sweden and dates to the 6th century. A carnelian ring, a stone also imported from the same region, was discovered in a Viking cemetery in Repton, England, and dated to the 9th century C.E. by the archeologist Cat Jarman.

The forms of the pieces themselves depict knights, queens, and kings in the visual language of Norse culture. Most unique are the rook pieces which represent the mythological Norse “berserkers” who aggressively bare teeth and bite their swords and shields. The backs of the royal thrones are carved with a mixture of abstract and geometric forms, hybrid beasts, meandering vines, also found in monumental sculpture in Scandinavia.



Unrecorded
(female) Artist
Reclining figure
Terracotta
Djenné-Jeno (Mali)
12th-14th centuries C.E.
National Museum of Mali, Bamako

In West Africa, for thousands of years clay has been handled by women so it can be deduced that this sculpture was made by a female artist. This terracotta belongs to a group of sculptures that were created between the 10th-14th centuries and discovered under the foundations of homes. The reddish-brown hue of the material is characteristic of the alluvial, iron-rich clay in the Middle Niger region, which is also home to the largest mud building in the world, the Great Mosque of Djenne. Slip and burnishing techniques were implemented to create soft highlights in the body which gives it a life-like warmth. This sculpture was excavated in-tact and it has been proposed that the head was deliberately removed as an act of desacralization. The function of these figures remains a mystery. Some scholars believe they may have been apotropaic or fashioned as votives; material prayers for success and/or deliverance.

The subject appears to be a pregnant woman with full breasts and a rounded stomach with distended navel. She rests comfortably but assuredly, with elongated limbs providing a sense of protection. An arm dagger, perhaps a reference to Tuareg daggers, connects the figure to the nomadic presence in this region close to the Sahel, an Arabic word which means “shore.” The figure is adorned with beaded necklaces made from glass and gemstones, and imported from as far away as Venice.



Unrecorded Artist
Buddha
Bronze
Swat Valley, Pakistan (found in Helgö, Sweden)
c. 6th century
National Museum, Stockholm

Andrea Mantegna
Adoration of the Magi
Distemper on linen
1495-1505
Italy
Getty Museum, Los Angeles



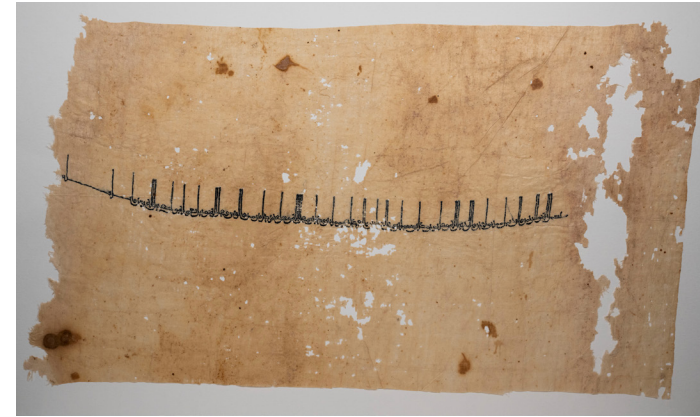
Here we see three kings recognizing the newborn Christ as savior by presenting him with luxurious gifts. The appearance of a Black king, who was named Balthazar, is a result of European trade with West Africa. Portuguese sailors had made contact with the Kingdom of Benin around 1472 and the Kingdom of Kongo a decade later. When Mantegna was painting this scene, even though there would have been an African presence in Italy by the 15th century, the Black figure on the far right is not based on direct observation.

Balthazar carries a lidded vessel made of sardonyx that had become associated with remote lands (India by way of Africa), and wears pearls sourced from the Indian Ocean. The other kings also carry rare goods, including a porcelain cup from China filled with gold, and another vessel made from an iridescent gemstone. Several different kinds of textiles and furs appear here from leopard skin to velvet, to fine linen and muslin. Christ's mother, the Virgin Mary, wears a deep blue

mantle which is further embellished with a pseudo-Kufic (Arabic) script along the hem of the sleeve and the collar, a reference to the prestigious *tiraz* on view nearby.

As the pathbreaking art historian, Michael Baxandall has shown, “money was very important in the history of art,” a truism that we seem to minimize as we admire these works. During Mantegna's time, exact contractual specifications would have been dictated with regard to how much blue the patron desired. Ultramarine, used in the Virgin's outermost garment, was very expensive as it was made from *lapis lazuli*, a stone imported from what is today Afghanistan and ground into pigment.

As much as this painting represents the beginning of Christianity, it is a dramatic distillation of the known world through the materials it depicts, along with the pigments used to depict them.



Unrecorded Artist
Tiraz
Plain weave linen with silk embroidery
10th Century C.E.
Egypt
Metropolitan Museum of Art, New York

By the tenth century, Islam was the dominant force in North Africa and Spain. At this time Fatimids controlled Egypt and moved the capital from Alexandria to Fustat, the city of tents, which is now Cairo. A *tiraz* is a piece of fabric embroidered with Arabic calligraphy that would be gifted to socialites and high-ranking individuals during a *Khil-a* ceremony. The inscriptions referenced one's allegiance to the ruling Caliph and/or blessings taken from the Quran to be bestowed on the recipient. *Tiraz* were ordinarily attached to the hemline of robes to be conspicuously shown by the wearer.

Tiraz were most commonly embroidered onto linen, wool, cotton, or a fabric called *mullham* that used silk for the warp and cotton as the weft. Though flax, sheep, and the cotton plant were native to North Africa, silk came from China. This shows that trade between North Africa and China is embedded in the DNA of *tiraz*. The fabric was lightweight and durable, which made it easy to wear and move.

The portability of *tiraz* ties into the bigger picture of the routes that unified the Sahara Desert. With trade, the influence of

Islam trickled into Europe and surrounding areas, especially the Iberian peninsula. *Tiraz* can be seen on the garments of the Virgin Mary from the twelfth century onwards, and in Mantegna's *Adoration of the Magi*.

In European contexts, *tiraz* did not honor Islam as a religion, rather they invoked the power and importance associated with *tiraz*. These textiles demonstrate how Arabic was more than a language: in a European context it functioned as an image rather than a text, signifying luxury, authority, and cosmopolitanism.



Meryl Palinkas
Copy of the Met's Tiraz
Black embroidery on muslin
Ithaca, N.Y.
2026

To replicate the *tiraz*, I first printed out an (almost) to-scale image of the original *tiraz*, held it up to a light source, secured my fabric on top of the image, and traced the *tiraz* with a pencil onto the fabric. I then embroidered the design I had traced using black embroidery floss. The process was slow and meditative. To get clarity and rounded forms on such a small scale, I had to use impossibly tiny stitches. However, I appreciated that there was a path to follow and I could always see what was ahead of me. My only interruptions were to stop and start the threads. Though I have no idea what the *tiraz* says, it did feel like I was creating something significant and powerful as I stitched each letter.

Select Bibliography

Achi, Andrea, *Africa and Byzantium* (New York: Metropolitan Museum of Art, 2023).

Albers, Anni, “The Pliable Plane: Textiles in Architecture,” *Perspecta* 4 (1957), p. 36-41.

Austen, Ralph A., “Introduction to the Sahara: From Desert Barrier to Global Highway,” in *Trans-Saharan Africa in World History* (Oxford, 2010), p. 1-22.

Barry, Fabio, “ “Painting in Stone”: Early Modern Experiments in a Metamedium,” *The Art Bulletin* vol. 99, no. 3 (2017), p. 30-61.

Baxandall, Michael, *Painting and Experience in Fifteenth-Century Italy* (Oxford: Oxford University Press, 1972).

Benjamin, Walter, “The Work of Art in the Age of Mechanical Reproduction (1935),” in *Illuminations* (New York: Harcourt Brace, 1968), p. 217-264.

Berger, John, “Fayum” in *Portraits: John Berger on Artists* (London: Verso, 2015), p. 7-11.

Berns, Marla, “Art, History, and Gender: Women and Clay in West Africa,” *The African Archeological Review*, vol. 11 (1993), p. 129-148.

Brunning, Sue, ed., *Silk Roads* (Seattle: University of Washington Press, 2024).

Berzock, Kathleen Bickford, *Caravans of Gold, fragments in time: art, culture, and exchange across medieval Saharan Africa* (Princeton University Press, 2019).

Collins, Kristin, and Bryan Keene, eds., *Balthazar: A Black African King in Medieval and Renaissance Art* (Los Angeles: John Paul Getty Museum, 2023).

Fauvelle-Aymar, François-Xavier,, *The Golden Rhinoceros: histories of the Africa Middle Ages* (Princeton: Princeton University Press, 2018).

Dalrymple, William, *The Golden Road: How Ancient India Transformed the World* (London: Bloomsbury, 2024).

D’Avignon, Robyn, *A Ritual Geology: Gold and Subterranean Knowledge in Savanna West Africa* (Durham: Duke University Press, 2022).

Eicholz, D.E., trans., *Pliny, The Natural History, Books 36-7* (Cambridge: Harvard University Press, 1962).

Grabar, Oleg, *The Formation of Islamic Art* (New Haven: Yale University Press, 1987).

Guérin, Sarah, “Exchange of Sacrifices: West Africa in the Medieval World of Goods,” *The Medieval Globe* (2017), p. 97-124.

Guy, John, *Tree and Serpent: Early Buddhist Art in India* (New York: Metropolitan Museum of Art, 2023).

Jarman, Cat, *River Kings: A New History of the Vikings from Scandinavia to the Silk Roads* (London: Pegasus Books, 2021).

Jones, Roger, “Mantegna and Materials,” *I Tatti Studies in the Italian Renaissance*, vol. 2 (1987), p. 71-90.

Lagamma, Alisa, *Sahel: Art and Empires on the Shores of the Sahara* (New York: Metropolitan Museum of Art, 2020).

Latham, Roger, trans., *The Travels of Marco Polo* (London: Penguin Books, 1958).

Moxey, Keith, “What Time is it in the History of Art,” in Moxey and Karlhom eds., *Time in the History of Art: Temporality, Chronology and Anachrony* (London: Routledge, 2018).

Mukherji, Chandra, “Women Engineers and the Culture of the Pyrenees: Indigenous Knowledge and Engineering in Seventeenth-Century France,” in *Making Knowledge in Early Modern Europe*, Pamela H. Smith and Benjamin Schmidt, eds. (Chicago: University of Chicago Press, 2007).

Moon, Iris, *Monstrous Beauty: A Feminist Revision of Chinoiserie* (New York: Metropolitan Museum of Art, 2025).

Panofsky, Erwin, *Abbot Suger on the Abbey Church of St. Denis and its art treasures* (Princeton: Princeton University Press, 1979).

Prussin, Labelle, *African Nomadic Architecture: space, place, gender* (Washington D.C.: Smithsonian University Press, 1995).

Rosenberg, Marc, *The Chalice of the Bishop Sugerius from St. Denis* (London: 1926).

Sciacca, Christine, *Ethiopia at the Crossroads* (Baltimore: Walters Art Museum, 2023).

Seidel, Linda, *Songs of Glory: the Romanesque façades of Aquitaine* (Chicago: University of Chicago Press, 1981).

Sidebotham, Steven, et al., “Indians in Roman Berenike,” *Jahrbuch des Deutschen Archäologischen Instituts*, 140 (2025), p. 1-126.

Shalem, Avinoam and Cynthia Hahn, *Seeking Transparency: Rock crystals across the medieval Mediterranean* (Berlin: Verlag, 2020).

Smith, Dylan and Therese Martin, “Reflections on the Suger Chalice: new observations and technical analysis” *Facture*, Volume 7 (2025).

[illegible]

