

Claremont Colleges Scholarship @ Claremont

Scripps Senior Theses

Scripps Student Scholarship

2016

Out of Site, But Not Out of Mind: The Conservation and Display of Ancient Roman Floor Mosaics in Situ and in Museums

Erin M. Hoey
Scripps College

Recommended Citation

Hoey, Erin M., "Out of Site, But Not Out of Mind: The Conservation and Display of Ancient Roman Floor Mosaics in Situ and in Museums" (2016). *Scripps Senior Theses*. Paper 842.
http://scholarship.claremont.edu/scripps_theses/842

This Open Access Senior Thesis is brought to you for free and open access by the Scripps Student Scholarship at Scholarship @ Claremont. It has been accepted for inclusion in Scripps Senior Theses by an authorized administrator of Scholarship @ Claremont. For more information, please contact scholarship@cuc.claremont.edu.

OUT OF SITE, BUT NOT OUT OF MIND:
THE CONSERVATION AND DISPLAY OF ANCIENT ROMAN FLOOR MOSAICS IN SITU
AND IN MUSEUMS

by

ERIN HOEY

SUBMITTED TO SCRIPPS COLLEGE IN PARTIAL FULFILLMENT OF THE DEGREE OF
BACHELOR OF ARTS

FIRST READER: PROFESSOR MICHELLE BERENFELD

SECOND READER: PROFESSOR ERIC DOEHNE

APRIL 22, 2016

CONTENTS

Acknowledgements	3
Introduction	4
Chapter One: The Need for Mosaic Conservation	13
Chapter Two: The Importance of Context	19
Chapter Three: On Display in a Respected Establishment	28
Conclusion	35
Bibliography	38

Acknowledgements

I would like to thank my thesis readers, Professor Michelle Berenfeld and Professor Eric Doehne, whose guidance and suggestions helped me complete this project. Thank you also to Professor Frances Pohl for direction and instruction during the initial stages of the thesis.

Thanks also to my friends and family for their support through all the ups and downs this past year.

I couldn't have done it without all of you.

Introduction

Walking through the upstairs gallery at the Getty Villa in Santa Monica, California, visitors can view beautifully detailed and intricate floor mosaics from the ancient Roman Empire, some displayed in the middle of the room behind a barrier, but most hung up on walls. These mosaics are impressive—complex images and designs made up of tiny, colorful stones. When I visited the exhibit, I got lost in them as my eyes wandered over the millions tesserae that made up their various scenes. The images in the mosaics were of a variety of things, many different animals, local and exotic, hunters chasing after bears in one and deer in another, and complex geometric patterns in all. All the mosaics on display were originally parts of the floors of ancient Roman houses, and some churches, from all over the Empire—Italy, Gaul, Syria, Northern Africa—and spanned a time period of 400 years from the second to sixth centuries CE.¹ Being able to stand at eye level and study the mosaics hanging on the walls was a treat, but, as the wall text clearly stated, these mosaics were originally part of the ground of the buildings they came from.

While I was able to see what some of the mosaics would have looked like on the floors, as each room had one mosaic displayed on the ground, but I couldn't help but wonder what it would have been like to walk around and over them, to walk into a room where the whole floor was one giant mosaic. And the floors were entirely mosaic in elite houses—one set of mosaics that the Getty Villa had on display was 23 panels of a floor mosaic from around Naples, only part of a massive mosaic that adorned the floor of either a reception room in a house or a bath

¹ Getty Villa, *Roman Mosaics Across the Empire*, (Los Angeles, California: J. Paul Getty Trust, 2016), 1.

complex.² Called the Bear Hunt Mosaic, this piece had a figural scene in the middle, called an emblemata, and was surrounded by multiple borders that made up more than half of the mosaic. This mosaic was unceremoniously cut into pieces for its removal, often through figures. Most of it is displayed on the floor in one room of the exhibit, however some pieces—all border elements—are on the walls of this room, as shown in Figure 1. Next to these pieces is an image of all the



Figure 1. The Bear Hunt Mosaic on display at the Getty Villa. Two pieces of the mosaic are displayed on the wall, along with an image of all the sections pieced back together so one can see the mosaic in full. Photograph taken by the author.

sections of the mosaic put together so that viewers can get a better sense of what the mosaic looks like as a whole, as it was before it was cut and removed from the site. This was a common practice in the 19th and early 20th centuries, when the emblemata were often cut out of the mosaics to be displayed in museums and the rest of the floor was left behind.³ Even though the Getty Villa did its best to show the mosaic as one whole unified piece, some sections had to be displayed on the walls and other sections were simply not shown, due to space constraints. Displaying floor mosaics on walls has a long history that dates back to the 1800s when these mosaics were being collected by museums.

² *ibid*, 5.

³ Jerry Podany, “From Floor to Wall: Lifting and exhibition practices applied to ancient floor mosaics,” in *Stories in Stone: Conserving Mosaics of Roman Africa: Masterpieces from the National Museums of Tunisia*, ed. Ben Khader, et al. (Los Angeles, California: J. Paul Getty Museum, 2006), 115.

The presentation of the mosaics echoed the tradition of hanging many paintings on a single wall to save space and display as much work as possible.⁴

Thoughts about the display of mosaics have been changing, and museums now show them on the ground whenever possible, but since the mosaics can be very large in size, sometimes pieces end up getting hung on the walls, as with some of the mosaics shown in the Getty Villa's exhibit. As I looked at these mosaics, I felt a slight disconnect. I was trying to picture them as part of a house, part of the floor of the building, with myself walking over them. These mosaics were never meant to be seen as distinct and separate objects, they were meant to be part of a larger building and in a framework of other floor mosaics.

Viewing these mosaics in museums separates them from their architectural context, and in that process they lose some of their meaning. Mosaics in a building were designed specifically for the spaces they occupied, and in many cases relate to other mosaics in the same building to have even more meaning and significance. They could reference each other, and form much bigger narratives together than just separate images alone. To see an example of this, we can look at the mosaics in the House of Dionysos in Paphos, Cyprus, in particular mosaics 4, 5, and 11-13 on the floor plan shown in Figure 2.

When guests entered the peristyle of this house, they were greeted with images of men hunting wild animals—lions, bulls, even a leopard and a donkey.⁵ These scenes are very fitting for the peristyle of a home: they take place in the forest, and the guest viewing them would be surrounded by vegetation in the garden. The peristyle also displays meticulously cultivated

⁴ *ibid*, 116.

⁵ Christine Kondoleon, *Domestic and Divine: Roman mosaics in the House of Dionysos*. (Ithica and London: Cornell University Press, 1994), 295.

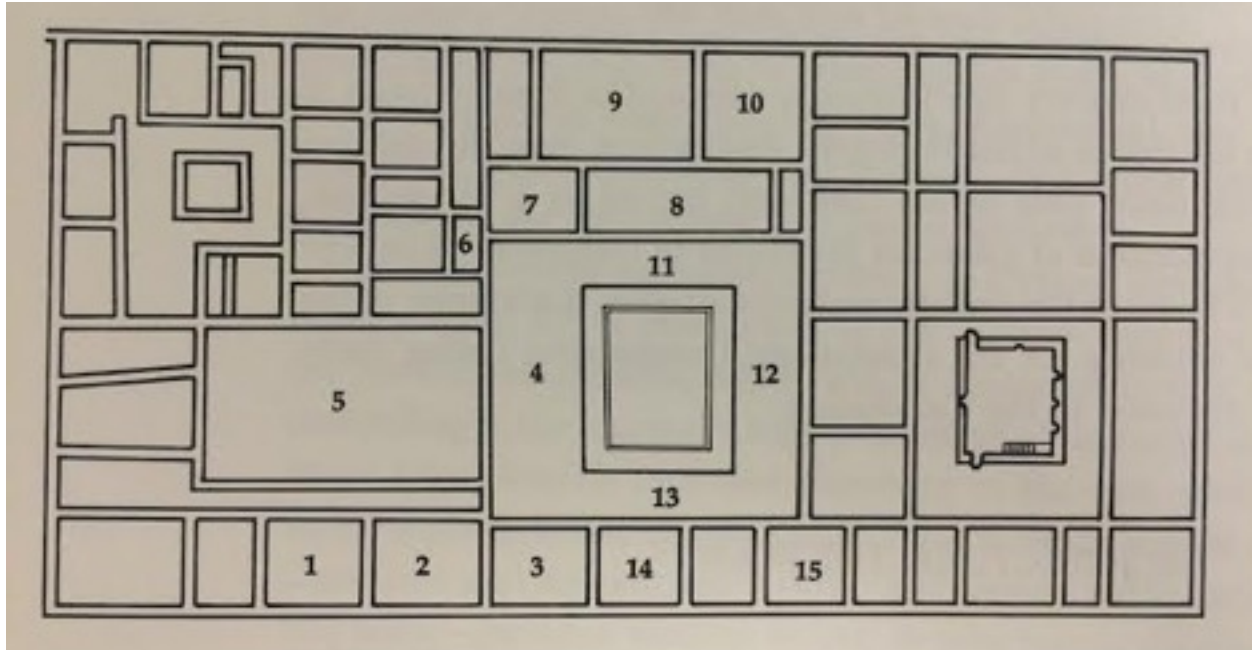


Figure 2. The floor plan of the mosaics in the House of Dionysos in Paphos, Cyprus. 11-13 are the hunting scenes in the peristyle. 4 are the Pyramos and Thisbe, Ikarios and Dionysos, Poseidon and Amymone and Apollo and Daphne mosaics at the entrance to the triclinium. 5 are the Triumph of Dionysos and the vine carpet mosaics in the triclinium. Image from *The Domestic and the Divine: Roman Mosaics in the House of Dionysos* by Christine Kondoleon.

vegetation, man refining nature, just as the hunters in the mosaics are hunting down and taming the wild animals. Walking through the peristyle, guests are faced with a few mosaics at the entrance of the triclinium. The first panel, still in the peristyle, is comprised of four different mythological scenes. Pyramos and Thisbe, Ikarios and Dionysos, Poseidon and Amymone, and Apollo and Daphne. Looked at in just the context of its location in the peristyle, these scenes could be unified and interpreted by looking at their connections to water.

Pyramos and Thisbe are two lovers attempting to rendezvous away from their disapproving families outside of town. Through a series of unfortunate events much like those of Romeo and Juliet, they both end up killing themselves in their belief that the other has already died. Pyramos in this mosaic is dressed in the guise of a river god: he wears a crown of reeds and

is holding a tall river reed, and is reclined against a hydra spilling out water around him. Because he is depicted this way, it is plausible to assume that he is a reference to the river of the same name, Pyramos in Cilicia.⁶

Ikarios and Dionysos are reenacting the scene of the “First Wine-Drinkers.” This scene, the biggest panel in the mosaic, shows Dionysos holding two clusters of grapes in his hands, and Ikarios coming towards him with two oxen pulling a cart filled with wineskins, among other people.⁷ In mythology, Dionysos taught Ikarios how to make wine from grapes. The first people who drank this new beverage, depicted lying on the ground in the mosaic, did so without mixing it with water, and so became too inebriated. The water referenced in this scene is the water that drinkers must mix with their wine.

In the next panel, Poseidon, complete with his trident, is walking towards the nymph Amymone, rescuing her from a satyr attack as she was collecting water. Her hydra sits in between them.⁸ Poseidon calls to mind the ocean as he is the god of the sea, and Amymone’s hydra reminds viewers once again of water.

The final scene in this mosaic is that of Apollo and Daphne. Here, Apollo is seen running towards Daphne, who stands behind a river god. Apollo is in chase of Daphne, who is turned into a tree in order to escape his advances. The river god is reclining in front of her, crowned with reeds and holding one in his hand, is laying on top of a spilled jug with water flowing out. He is most likely the river Peneios, Daphne’s father who turns her into a tree, the river that she is

⁶ *ibid*, 188.

⁷ *ibid*, 176.

⁸ *ibid*, 158.

running towards in her escape of Apollo.⁹ Viewers are again faced with a river god and the visual of Daphne escaping towards water.

These four panels in this mosaic all call to mind water— from rivers, from the sea, and for consumption—and behind them in the peristyle was an artificial pond in the garden. The mosaic and the pond would have played off of each other, perhaps making guests think that these scenes could have happened near them in that very peristyle. Its location in the home is important to its content.

Walking into the triclinium, visitors are greeted with another mosaic depicting the Triumph of Dionysos. Dionysos is riding a chariot that is being pulled by a panther, surrounded by satyrs and other Dionysian creatures, returning to Greece. This motif is very common for the threshold of a reception room such as that of a triclinium, as it is a display of a triumph and would remind visitors of the grand triumphs held in Rome that would commemorate victories in battle, great parades showing off the spoils of war, and it alludes to the abundance of wealth that the home owners might have, and the great feast that they are about to provide for the guests.¹⁰ This mosaic fits perfectly in the threshold of the dining room.

Once visitors entered the triclinium, they would be walking over a vine carpet mosaic. This was a very common scene to display in triclinia, referencing the food and drink they are about to consume. Grape vines wind around each other and around livestock and Dionysian creatures.¹¹ Visitors looking at these images would conjure up the feast they are about to partake

⁹ *ibid*, 169.

¹⁰ *ibid*, 220.

¹¹ *ibid*, 234.

in in their minds. While the meal is going on, they can gaze down at the grapes as they drink their wine, and look at the people hunting the animals they are eating.

Each of these mosaics is a great work of art on its own, and also references the places they occupy in the house. But more meaning can be drawn from them when viewers are able to interact with all of them in the same setting, particularly in the Triumph of Dionysos mosaic. The central panel of Dionysos and his accompanying satyrs and creatures is flanked by one panel on either side of two Dioscuri, dressed in armor and on horseback. The Dioscuri were two twins and protectors of guests. Their appearance here could be an apotropaic one, watching over the guests during their feasts. But their placement in the wider context of all the mosaics changes the others' meanings as well as its own.

The two brothers in the context of the rest of the mosaics could be Castor and Pollux. These twins were sometimes depicted attending the theoxenia, a banquet held for the gods.¹² Situated at the entrance of the triclinium, which is filled with images of vines and food and alludes to abundance, these brothers could be seen as Castor and Pollux. They also relate to the images in the peristyle, too. Castor and Pollux are very important to the hunting practices of the Romans. Some sources say that Castor invented hunting on horseback, and Pollux hunting with the use of hounds. Walking around scenes of men hunting animals in the peristyle only to come upon Castor and Pollux as they are about to enter the triclinium where visitors will feast on hunted animals among other things, they cannot help but thank the twins for the food they are about to consume. They are the physical and metaphorical bridge between the peristyle and the triclinium, between hunting wild animals and eating them.

¹² *ibid*, 227

And since these rooms and images are thematically linked thanks to Castor and Pollux, another parallel can be drawn between the four-paneled mosaic in the peristyle and the triclinium. All these scenes reference water and play off of the pond in the garden. However, they could also serve as a reminder to the guests as they are about to begin their meal—to add water to their wine. The main panel of Ikarios and Dionysos explicitly references watering down one's wine, however its placement in front of the triclinium, as well as Castor and Pollux's bridging of the two rooms, transforms it from just a reference to a specific warning to the visitors walking over it and into the triclinium about to take part in a feast where much wine will be consumed.

The mosaics in the House of Dionysos showcase an important aspect of Roman floor mosaics in a home. Separately, these mosaics each have their own iconography and significance. Where they are located in the house can give them even more meaning, playing off of the architectural features they are near. And when one looks at all the mosaics in a house in relation to each other, more discoveries can be made about their content, changing their understanding and giving them more significance.

Taking the mosaics out of their buildings and contexts destroys some of their meaning and lessens our understanding of them. However, in order to protect them, they must sometimes be removed from their site and taken inside. Ancient Roman floor mosaics were made to be indoors, under the cover of a roof and protected from the elements. But when they are excavated at an archaeological site, they are exposed and outside, vulnerable to the sun and rain. This can lead to their deterioration, so archaeologists and conservators must figure out how to preserve them. This can be done by erecting shelters over them or reburying them, as conservators did to various mosaics in Paphos, Cyprus, that will be discussed later on. But proper shelters that can

fully protect the mosaics are difficult to design and construct, and often the best way to preserve these mosaics is to take them inside.

Displaying the mosaics in museums not only better protects them, but it also elevates their status as works of art. Visitors to museums have an understanding that the objects on display are worthy of their veneration, because they are on display in the museum and museums signify respect. This is good for the mosaics, as they are both protected and viewed in a higher regard than they would be in situ in an archaeological site.

Visitors to the sites the mosaics left behind, however, would not get to see them and their context in the ruins of the buildings. So, in order to preserve that context and the look of the site, replicas of the mosaics should be put in their places, such as what was done with the Alexander Mosaic in Pompeii. This way, visitors can still see a mosaic's context and its relation to the room it occupies and the rest of the rooms and architecture of the house it is in.

The best way to preserve both a mosaic and its context is to lift and remove the original mosaic and display it in a museum, while replacing it with a replica in the archaeological site.

Chapter 1: The Need for Mosaic Conservation

Like all artifacts found in an archaeological dig, mosaic pavements need conservation treatment to prevent deterioration. While they are made of stone and constructed in antiquity to be durable as pieces of the floor, by the time they are excavated these mosaics have been weakened by time and several other factors that cause them to be fragile and in need of assistance if they are to survive.

Although much of the damage that occurs to the mosaics happens once they are uncovered and exposed, they can sometimes be damaged before their excavation. If the mosaic is buried in a shallow area where there is plant growth, then there is the possibility that the roots could come in contact with the mosaic, and tesserae could be broken by the roots growing through them. This occurred in the Orpheus Mosaic in Paphos, Cyprus, and was one of the reasons that a conservation team lifted and relaid the mosaic in a new foundation.¹³ A mosaic can suffer mechanical deterioration, from heavy objects falling on it, to the weight of the material that it is buried under slowly crushing it. Little pieces of the tesserae can break off, and over time significant loss can occur.¹⁴ Changes in humidity are also damaging to mosaics. When a mosaic is in a humid environment, water can seep into porous tesserae and mortar, and carry with it

¹³ Martha Demas, et al. "Learning from Past Interventions: Evaluation of the Project to Conserve the Orpheus Mosaic at Paphos, Cyprus," in *Lessons Learned: Reflecting on the Theory and Practice of the Mosaic Conservation: Proceedings of the 9th ICCM Conference, Hammamet, Tunisia, November 29-December 3, 2005*, ed Aïcha Ben Abed, et al. (Los Angeles, The Getty Conservation Institute, 2008), 16.

¹⁴ Anne E. Grimmer and Kimberly A. Konrad, "Preserving Historic Ceramic Tile Floors," in *Preservation Briefs*, ed. National Park Service, (U.S. Department of the Interior: Heritage Preservation Services, 2006).

dissolved salts.¹⁵ When the area dries out again and the moisture dissipates, the salts crystalize and break off pieces of stone. If this is happening for a long enough period of time, significant loss can occur. Because of the nature of these damaging factors, mosaics are best protected when they are in an environment that is dry and has a stable humidity. Archaeological sites are outdoors and exposed to the elements, so when a mosaic is excavated it is immediately susceptible to deterioration. If a mosaic is to be left in situ, it must be covered. The mosaics in the House of Orpheus were conserved in situ using different sheltering techniques.

The House of Orpheus in Paphos, Cyprus was excavated in 1984, and two floor mosaics were discovered in its rooms: the Orpheus Mosaic and the Amazon and Herakles Mosaic. The conservation team conserved the mosaics in situ from 1988 to 1989. Three preventive techniques were used here to ensure the continued survival of these mosaics: sheltering, reburying, and prohibiting public access. The Orpheus Mosaic was lifted from its original foundation using a rolling technique, treated, and relaid on a new support in situ. In order to protect it, the team installed a temporary shelter over the whole mosaic to keep rain and sunlight off it, as shown in Figure 3.¹⁶ The purpose of a shelter is to keep the mosaics at a relatively stable humidity, and to keep rain and sunlight off of them. The shelter over the Orpheus Mosaic does this, but the site is still experiencing some issues. The mosaic experienced some loss of tesserae along its edges, and detachment of some of the mortar in the infills that the conservation team had done.¹⁷ This was due to the fact that, while the shelter covered the mosaic and gave it some protection, it is still

¹⁵ *ibid.*

¹⁶ Martha Demas, et al. "Learning From Past Interventions: Evaluation of the Project to Conserve the Orpheus Mosaic at Paphos, Cyprus," 17.

¹⁷ *ibid.*, 21.



Figure 3. The shelter over the Orpheus Mosaic in Paphos, Cyprus, constructed in 1989. Image taken from “Learning From Past Interventions: Evaluation of the Project to Conserve the Orpheus Mosaic at Paphos, Cyprus” by Martha Demas.

outdoors and affected by environmental conditions. There was also an attempt at prohibiting public access to the mosaic, but a small barrier around the mosaic does not stop tourists from climbing over it to walk right up to the mosaic and disturb it. Due to the site’s isolation, it is not guarded well and visitors are able to cause damage to it. The Orpheus Mosaic has survived well given the amount of time it has been uncovered, but the irreversible damage of loss of material has still occurred. If the mosaic was on display in a museum or even in museum storage, visitor access would be more strictly prohibited and it would be indoors and more sheltered from the weather and changing humidity.

The Amazon and Herakles Mosaic was reburied shortly after the Orpheus Mosaic was conserved, in 1990. This involved placing a netting over the mosaic, and then placing a shallow layer of sand on top, followed by clay pellets. Reburying a mosaic protects the mosaic by returning it to the state it was in before it was excavated: protected by layers of earth.

Management can still allow people to view the mosaic occasionally, however, by alternating periods of uncover and burial, so that the mosaic is protected part of the time. However in the case of this mosaic, it was later found that the covering was too shallow, and plant growth had penetrated it, growing into the mosaic and causing breakage and flaking.¹⁸ Leaving it in situ allows for visitors to see it in the context of the rest of its house and site, however even reburial leaves it susceptible to further damage. If the Orpheus Mosaic and the Amazon and Herakles Mosaic were removed and taken to a museum, they would be separated from their context, but they would be better protected and loss of original material could have been avoided.

The practice of lifting mosaics and taking them to museums has been around since floor mosaics were first excavated in the 1800s, where they could be seen by the most people. Most of the time, mosaics were cut into smaller pieces to be transported to museums. Francesco Belloni, founder of the Royal Mosaics Factory in France, used this method to remove mosaics from their foundation. Cutting the mosaics into pieces made transporting them to museums easier and safer, and also allowed parts of a large mosaic to be displayed in smaller rooms.¹⁹ Ideally cuts were made so that they would be as least noticeable as possible, however hasty or careless jobs caused large and obtrusive cuts to criss-cross mosaics, such as with the Bear Hunt Mosaic on display in the Getty Villa. But many times in the early days of mosaic excavation, only the mosaics that were most valued were brought to museums. At the time this meant just the emblemata featuring human or animal figures were cut out of the rest of the floor, and the geometric patterns were left

¹⁸ *ibid*, 21.

¹⁹ Jerry Podany, "From Floor to Wall: Lifting and Exhibition Practices Applied to Ancient Floor Mosaics," 120.

behind.²⁰ Removing the “important” mosaics and placing them in museums was the main practice of conserving mosaics in the 1800s. The figurative emblemata were valued for their aesthetic value rather than their cultural context as an architectural feature, so they were taken from their site and hung on walls in museums.²¹ Since the Renaissance, mosaics were artistically connected with paintings,²² and were fervently removed from site to be framed and collected like so many of the great paintings during that time. And since so many mosaics were being dug up and sent to museums, limited amount of space forced them from the floor to the wall. The British Museum in London displays floor mosaics this way, as shown in Figure 4. The mosaics are crowded



Figure 4. Floor mosaics on display in a stairway in the British Museum in London. The way they are hung on the wall crowded together in this manner is reminiscent of the presentation of paintings in museums in order to conserve display space. Image from “From Floor to Wall: Lifting and Exhibition Practices Applied to Ancient Floor Mosaics” by Jerry Podany.

together, and viewing them in this way is extremely different than ancient Romans would view them in antiquity on the floors of their homes and other buildings. Unfortunately the lack of documentation that these mosaics have means that their original architectural context is lost, however they survived to this day, whereas the rest of the floors they were removed from have

²⁰ Thomas Roby, “The Conservation of Mosaics in Situ: Preserving context and integrity,” in *Stories in Stone*, ed. Ben Khader et al. (Los Angeles J. Paul Getty Museum, 2006), 101.

²¹ Jerry Podany, “From Floor to Wall: Lifting and Exhibition Practices Applied to Ancient Floor Mosaics,” 115.

²² *ibid.* While mosaics were revered for their “sheer technical wonder” of the complex and detailed use of tiny colored stone to create narratives, they were visually connected with paintings at the time, and so treated as such.

deteriorated and are lost. Loss of context for a mosaic means that we have lost valuable information. What if the mosaics in the House of Dionysos had been removed and it was not known where the different pieces were in relation to each other in the house? What if the mosaics had been separated and it was not known that they even came from the same building? The extra layer of significance that we get from their connection—the fact that the Dioscuri twins could be Castor and Pollux, and the warning to dinner guests about to begin their meal to water down their wine—would not be known.

In the next chapter, the importance of context will be looked into further, and the case will be made for replacing original mosaics from archaeological sites with replicas.

Chapter 2: The Importance of Context

Preserving the context is essential for our understanding of the mosaics. Floor mosaics in the ancient Roman world were meant to be walked over and through and around. The viewer was supposed to be able to travel over these images on the ground. The mosaics were meant to “interact with moving, standing, or seated viewers, who would be (literally) figures on this ground.”²³ These mosaics were designed specifically for people to walk on them and participate in their stories and to be part of the image. Often floor mosaics in a house also interacted with each other and the spaces they occupied. They could beautify and enhance, or even define a space.²⁴ The mosaics in the House of Dionysos are a perfect example of this. The mosaics related to the rooms’ functions, and the types of rooms that they adorned gave more meaning behind the stories and characters of the mosaics. Floor mosaics can also give insight on the private and public interactions of the ancient Roman people. The ancient Roman house was not a private space in the sense that modern houses are private. Parts of these houses were open to the public. Guests would come in and out every morning, meeting with the owner and discussing business. The way the ancient Roman house was designed and decorated reflected different power dynamics between owner and guest, in part to “promote [the owner’s] own ruling culture.”²⁵ The vine carpet mosaic in the triclinium of the House of Dionysos would have

²³ Rebecca Molholt, “On Stepping Stones: The historical experience of Roman mosaics.” (New York: Columbia University, 2008).

²⁴ *ibid*, 200.

²⁵ Christine Kondoleon, *Domestic and Divine: Roman Mosaics in the House of Dionysos*, 2.

immediately reminded people that they were guests of an abundant and wealthy host family, as they entered the room to sit down for dinner.

Floor mosaics were not individual pieces of art, they were part of a much larger whole: architecture of the house they were in. They were just as much a part of the architecture of the house as walls or rooms were. The people viewing these mosaics would be able to understand the whole narrative only by walking around and interacting with the mosaics and the rest of the house. As visitors to the House of Dionysos wandered further into the house, their understanding of the mosaics they walked over would change as they interacted with more of them. By the time they made it to the Triumph of Dionysos mosaic, they would be able to look at Castor and Pollux and think back to the hunting scenes in the peristyle and imagine the brothers teaching the rest of the world how to hunt on horseback or with dogs. The viewers would become a part of this visual material and narrative and, as they move through the house, cannot help but participate and become part of the story they are walking over.²⁶ While entering the triclinium, guests might look down at Castor and Pollux, in the guise of the Dioscuri, and thank them for protecting them during their meal. Many of these mosaics' stories and context, however, were destroyed when early archaeologists removed certain pieces of them and placed them in museums. Most of the time in these cases, just the emblemata of the mosaic were cut out from the rest of the floor and taken to museums. These mosaics being displayed in these museums only show a "small and select part" of the rest of the image and floor.²⁷ As previously discussed in Chapter 1, the archaeologists excavating these mosaics in the 1800s only took the emblemata out of the floors

²⁶ *ibid*, 13.

²⁷ *ibid*, 4.

to be displayed in museums because they placed higher value on them than the rest of the mosaic. This is because the emblemata had life-like figures of people, animals and objects, and the rest of the mosaics were patterns, shapes and lines.²⁸ Because the emblemata have been safely indoors since they were uncovered, they remain in good condition. However, for many of them, information about which houses they came from and where in the houses they were is lost, so their context is gone. And the many borders that were left in situ have been neglected and eventually deteriorated and fallen into disrepair. The mosaics indoors survive more easily than the ones left in situ because they are protected from the elements and generally have better security guarding them.

While mosaics held in museums are much safer and better preserved, they are often not treated or displayed as floor mosaics, but hung up on walls so that they visually resembled paintings. This hinders the way modern viewers see the mosaics, since they are looking up at them rather than walking over them as the ancient viewers did. The modern viewer's whole experience of the mosaic changes, since the "spatial relationships within the image place" change as the horizontal mosaic become vertical, and therefore the impact of the whole mosaic changes.²⁹ Remember, these images were meant to be looked down upon and walked over, and the viewer was supposed to be a part of the narrative. This drastically changes when the viewer is physically separated from the mosaic and looking up at it on a wall.

The Alexander Mosaic in the Naples Archaeological Museum, for example, is a massive floor mosaic was discovered in archaeologists 1831 in the House of the Faun in Pompeii. It is

²⁸ Thomas Roby, "The Conservation of Mosaics in Situ: Preserving context and integrity," 101.

²⁹ Jerry Podany, "From Floor to Wall: Lifting and Exhibition Practices Applied to Ancient Floor Mosaics," 116.

5.82 x 3.13 m including its border, and is dated to the second half of the second century BCE.³⁰ It was located in an exedra that opened into the first, smaller peristyle of the house. This is most likely one of the rooms where the owner of the house received his guests each day, so it was an important room. The guests coming into the room might have been nervous about interacting with the owner, and seeing such a magnificent scene, with the spears all pointing upward and forward, a major battle about to take place. The mosaic took up the whole room, so it was a major part of the room. However in 1843, the mosaic was lifted and taken to the museum in Naples some 15 miles away, where instead of being displayed on the floor as it was in antiquity, it is hung up on a wall like a painting (Figure 5). This echoes the way mosaics have been



Figure 5. The Alexander Mosaic, removed from the floor of the House of the Faun in Pompeii and on display on a wall in the Naples Archaeological Museum. Image from “A Survey and History of the Conservation of the Opus Vermiculatum Mosaics of Pompeii” by Kevin A. Wohlgemuth.

³⁰ Ada Cohen, *The Alexander Mosaic: Stories of History and Defeat*, (Cambridge: Cambridge University Press, 1997), 1.

displayed on walls since the 1800s, like the crowded wall of emblemata on display at the British Museum. Tourists visiting the museum cannot walk around and peer down at the scene as ancient Romans would have done. Instead, they view it from a couple feet away behind a rope, raising their necks and looking up at the mosaic mounted several feet up on a wall.

The context of this mosaic is now drastically changed. It is no longer part of the architecture of a house as it was in antiquity. It is an independent work of art displayed in a museum. The average viewer might not take the time to read any information about the mosaic and assume that it was originally a wall mosaic or a separate piece of art, not tied together in a larger context of other floor mosaics, wall paintings, and a whole house. Looking up at the mosaic on the wall and walking around and through it on the ground elicit very different feelings and responses from viewers.

While the Alexander Mosaic's context and positioning in the world have changed, it is at least in the same condition of preservation as it was when it was first excavated. This is because it was safely inside the Naples Archaeological Museum, and not outside in the elements. While leaving a mosaic in situ would allow viewers to see it in its context and relation to the rest of the house it is in, this leaves the mosaic exposed and in danger. While these mosaics were originally made to be tread upon, they are now weakened by being buried for hundreds of years and are more susceptible to deterioration when they are excavated. They were also indoors inside houses, so were never really exposed to wind or rain, so after excavation, being bare and outside can cause even more damage. Preserving mosaics in situ can then become a difficult task, as the conservation team working in the House of Orpheus in Paphos, Cyprus discovered. They decided to leave the Orpheus Mosaic and the Amazon and Herakles Mosaic in situ because they decided

that the mosaics “do indeed make a site” and are part of the architectural context of the house that they are in.³¹ The team understood that the mosaics were a part of the site, not just objects found there. Much like the remains of the house were linked to the site, so were the floor mosaics. As discussed earlier, the conservation team worked on the mosaics from 1988 to 1989. They constructed a shelter over the Orpheus Mosaic, and reburied the Amazon and Herakles Mosaic. Visitors to the site can see the mosaics in their context, however they are still being damaged by exposure to the environment—changes in humidity and plant growth. The context is protected, however the mosaic is not.

So, in order to maintain a site’s “look”—floor mosaic, building foundations and all—without further damage to the original mosaic, the original could be placed safely inside a museum while a replica could be put on site in its place. This is what one team from the International Center for the Study and Teaching of Mosaic (CISIM) did in 2003.³² As mentioned before, the Alexander Mosaic from Pompeii was removed from its site in the House of the Faun and placed in the National Archaeological Museum in Naples in 1843. The room it occupied in the house had been empty ever since; just a dirt floor where the beautiful mosaic had once been. The Superintendent of the project, Pietro Giovanni Guzzo, wanted to show visitors to the site just how “luxurious” the house had been before it became an archaeological ruin.³³ However, replicating the mosaic was no small feat.

³¹ Martha Demas, et al. “Learning From Past Interventions: Evaluation of the Project to Conserve the Orpheus Mosaic at Paphos, Cyprus,” 21.

³² Marco Merola, “Alexander, Piece by Piece.” *Archaeology* 59(2006), 36.

³³ *ibid*, 38.

A team of 8 mosaicists from CISEM spent almost 2 years and a total of 16,000 hours carefully recreating the mosaic.³⁴ This is due to both the precision of the copying that the team had, but also the sheer size of the mosaic—9 feet high and 18 feet long consisting of two million tesserae.³⁵ They first outlined each individual tessera from the mosaic using a photograph onto tracing paper to capture each specific location of the tesserae. They then created 44 clay frames to lay the tesserae out on, instead of one large individual frame as the ancient Romans would have done, as the team was not big enough to work on the whole scene at once. The tracing paper was then pressed into the class to transfer the outline from the paper to the clay so that the mosaicists could place each tessera in exactly the right position. The team even made their own



Figure 6. The replica of the Alexander Mosaic, in the original's location in the House of the Faun in Pompeii. Image from "A Survey and History of the Conservation of the Opus Vermiculatum Mosaics of Pompeii" by Kevin A. Wohlgemuth.

tesserae for the project, carefully picking out each block of marble used, taking into consideration not only color, but where the original blocks of marble came from in antiquity.³⁶ Finally, 21 months later, the team was able to put all 44 pieces of the copied mosaic into the original's location in the House of the Faun in 2005, where it resides today (Figure 6).³⁷

³⁴ *ibid*, 36.

³⁵ Ada Cohen, *The Alexander Mosaic: Stories of Victory and Defeat*, 1.

³⁶ Marco Merola, "Alexander, Piece by Piece," 38.

³⁷ *ibid*, 40.

Replicating this mosaic was obviously very labor intensive and required a lot of time and money. In fact, the Archaeological Superintendency of Pompeii paid \$216,000 for the funding of the creation of the replica. This is a very high cost, especially coming from a site where funding for conservation has been an issue already. However, Superintendent Guzzo believes that it is worth it. Not only does he want to help return the site and its houses to their ancient glory for visitors to see, but he also wants to attract more visitors to the site in general. He believes that having this replica in the House of the Faun will “significantly increase the number of visitors in the near future.”³⁸ Superintendent Guzzo believes that adding more artwork to the site than just foundations and walls could attract more visitors. And since most of Pompeii’s funding to conserve and maintain the site comes from the tickets from visitors, paying for the replica of the Alexander Mosaic was a sacrifice he was willing to make. Having this replica in the room in the House of the Faun instead of just a dirt floor can help tourists better envision what the ancient city looked like, which is a major reason why tourists visit archaeological sites like Pompeii in the first place.³⁹ Adding more of these replicas of artworks to the site (while the originals stay safe inside museums) could help sites gain more recognition, attract more visitors, and make more money to help maintain and conserve the site.

Most archaeological sites cannot afford to make such an expensive replica. But there is a reason why the Alexander Mosaic was so costly—the mosaic team producing it took many measures to make sure that the replica was as accurate as possible to the original, that each one of the two million tesserae were in the exact same location in the replica as they were on the

³⁸ *ibid*, 38.

³⁹ Alia Wallace, “Presenting Pompeii: Steps Towards Reconciling Conservation and Tourism at an Ancient Site,” *Papers from the Institute of Archaeology* 22(2013).

original. Other sites could achieve the same goal of showing how the mosaic functioned with the rest of the house through other means. Cheaper ways of producing replicas could be used, or digital reproductions could be displayed on site.

Having this replica on site also allows tourists to see the mosaic as it originally functioned in antiquity—not hung up on a wall to be gazed at at a distance, but laid out over the entire floor of a room to be walked around and interacted with. And although tourists cannot actually walk upon the replica due to the sheer number of visitors coming through the site and the House of the Faun each day, they can see how the mosaic was originally *meant* to be viewed—on the floor, horizontally, rather than vertically. Putting replicas on site preserves the context of the mosaics, while keeping the original pieces safe indoors.

Chapter 3: On Display in a Respected Establishment

With a replica of the Alexander Mosaic on site maintaining the context of the site, the original mosaic has remained safely indoors and has not experienced any damage. Displaying mosaics in museums not only protects them, but also raises their statuses as art objects in the eyes of many people.

Taking floor mosaics out of the archaeological site and placing them in museums, as what happened with the Alexander Mosaic and the many emblemata in museums such as the British Museum, can actually elevate how the average museum visitor views these mosaics as art objects. What exactly is the average museum visitor, though? Just like people other than scholars visit archaeological sites today, many people uneducated in the art world visit art museums. A study done by museum education specialist Dr. Abigail Housen revealed that 31% of visitors to the Institute of Contemporary Art in Boston interviewed about their experience had no connection to the art world—they were neither artists nor art students—and 43% did not have a college degree in art or art history.⁴⁰ Many people come to art museums with little knowledge of the art world. Free-choice learning expert Dr. John H. Falk even coined a category of museum visitors who go to museums for the sake of going to a museum: experience-seekers.⁴¹ These are people who visit museums because they identify the museum as an important place to go. Just as the objects inside are seen as important because they are on display in a museum, the museum is seen as important because it is distinguished and labelled as a museum. And, these experience-

⁴⁰ Abigail Housen, “Three Methods for Understanding Museum Audiences,” *Museum Studies* 2, no. 4 (1987) : 45.

⁴¹ John H. Falk, *Identity and the Museum Visitor Experience*, (Walnut Creek, California: Left Coast Press, 2009), 83.

seekers visit museums for that reason: they see them as valuable and meaningful institutions. And while these visitors feel the drive to go inside the museums, they still may not know much about what they are looking at. They may recognize that what they are looking at is a work of art and assume that it is important because it is displayed on a museum wall, but they may be uneducated in the field.⁴² However, they still associate these works as having meaning and deserving of respect because they are shown in a museum. The average art museum visitor is someone who is motivated to attend a museum and believes that the objects inside have importance and meaning, even while having little to no education on the material inside.

If the average visitor viewed these mosaics in situ, could they truly appreciate them amongst mostly dilapidated archaeological ruins? Or, does simply being in museum setting help raise the status of these mosaics as works of art if they are displayed among other objects that are deemed precious enough to be housed in a museum? Museums automatically signify to visitors that these objects on display are deserving of their respect. One visitor to the Natural History Museum in London remarked that the “building *itself* is a work of *art*... There’s this feeling of *awe* when you go there... You’ve already got that feeling there, ‘Okay, now, let’s see what’s inside.’”⁴³ Visitors entering museums experience wonder and awe, and are excited to see what is displayed inside because of this. Things being displayed in museums are worthy of one’s time. Museums let the public know that what is on display inside warrants “veneration” simply for

⁴² Jen Oleniczak, “Museum Experience is no One-Size-Fits-All,” Art Museum Teaching: a forum for reflecting on practice, September 25, 2013.

⁴³ Tiina Roppola, *Designing for the Museum Visitor Experience*, (New York, New York: Routledge, 2012), 94.

being on display inside.⁴⁴ Even someone with no training or knowledge of art or history—an average visitor—once inside an art or history museum, understands that these objects are important and are meant to be respected. Educated and uneducated visitors alike can appreciate them.

Archaeological sites are slightly different, however. In the 1800s, when archaeology was a past time of the elite and gaining momentum, the people who frequently visited these sites were professionals, historians or classicists who knew about the culture the archaeologists were uncovering. They came to the site knowing what to expect—that it would be a field of ruins—and came to explore and learn. They were happy just being at the sites, they didn't need visitor centers, gift shops, or really any guides or information about the site.⁴⁵ Now, however, more and more tourists are visiting archaeological sites, whether or not they are educated in archaeology or the history of the site they are visiting. Tourism as a business has grown exponentially in the last few decades, and with it archaeological sites as tourist destinations. Visitors to sites now do expect to be entertained while there. They value the archaeological site and any artifacts there just as much as they value the gift shops and cafes and visitor centers.⁴⁶

For some sites, visitors also come because they want to immerse themselves in the site's history. This is especially the case at Pompeii, where the volcanic eruption that destroyed and buried the city in 79 CE also helped preserve its buildings much more so than in another, more

⁴⁴ E. Margaret Evans, et al. "The Authentic Object? A Child's-Eye View," in *Perspectives on Object-Centered Learning in Museums*, ed Scott G. Paris, (Mahwah, NJ: Lawrence Erlbaum Associates, Inc., 2002), 63.

⁴⁵ Walker Cameron and Neil Carr, *Tourism and Archaeology: Sustainable Meeting Grounds*, (Walnut Creek, California: Left Coast Press, 2013), 23.

⁴⁶ *ibid.*

“typical,” archaeological site. One visitor told anthropologist Alia Wallace that she visited Pompeii out of “curiosity to know what it is to visualize an ancient village.”⁴⁷ While many visitors like this one interviewed by Wallace do come to learn, many visitors simply don’t give archaeological sites the same respect as they give museums. Visitors unfamiliar with archaeological sites might come anticipating a romanticized version of the site, such as a “city frozen in time” as Pompeii is often thought of as. And when the site does not meet their expectations, they can feel underwhelmed. One slightly disappointed visitor told Wallace that he was “expecting to be in awe more than [he] was.”⁴⁸ If visitors exploring Pompeii feel as though their expectations have not been met, when looking at the Alexander Mosaic in the House of the Faun, would they see it as a beautifully constructed mosaic and spend time looking at it, or would they still feel let down?

A lot of the time, visitors spend most of their time at the gift shops and cafes that they expect to be there, rather than in the actual site itself. For example, Professor of Anthropology Cameron Walker and Professor of Tourism Neil Carr found that visitors to Stonehenge on average spent more time in the visitor center than they did “actively studying and learning about the monument.”⁴⁹ Compared to the first visitors to archaeological sites in the 1800s who were content to wander the site sans guide or accommodations, modern tourists expect there to be much more to a site than just the ruins themselves. One Pompeii visitor told Wallace that he

⁴⁷ Alia Wallace, “Presenting Pompeii: Steps Towards Reconciling Conservation and Tourism at an Ancient Site.”

⁴⁸ *ibid.*

⁴⁹ Walker Cameron and Neil Carr, *Tourism and Archaeology: Sustainable Meeting Grounds*, 26.

wasn't as "blown away" as he was expecting to be.⁵⁰ With tourism being such a big industry, tourists have come to expect a lot from the places they visit, and when they are not "blown away" as the case many times is at archaeological sites, they feel upset and disappointed.

If the average visitor cannot fully appreciate the archaeological sites he or she is visiting, then it is most likely that he or she would not be able to view these floor mosaics in high regards either. However, if they were in museums, they would be seen as higher art objects. The museum building is an automatic signifier to people that the objects inside should be "venerated" and shown respect, simply for the fact that they are being shown in a museum.⁵¹ Visitors come to museums fully ready to use guides and read wall text in order to learn more about the displayed objects. Unlike visitors to archaeological sites, who are there to explore the ruins and immerse themselves in an ancient city, visitors to museums come to observe and learn about the art or information being displayed inside. They do expect there to be wall text, audio guides, and informative videos that will help their experience.⁵² Visitors to archaeological sites expect different types of accommodations—visitor centers, gift shops, and cafes—where as visitors to museums expect informative guides and labels. So, someone viewing a floor mosaic in a museum might have a totally different understanding of the mosaic than someone seeing it in an archaeological site.

Looking at the Alexander Mosaic from Pompeii can shed some light on how people view mosaics in museums. The original floor mosaic was taken to the Naples Archaeological Museum

⁵⁰ Alia Wallace, "Presenting Pompeii: Steps Towards Reconciling Conservation and Tourism at an Ancient Site.

⁵¹ E. Margaret Evans, "The Authentic Object? A Child's-Eye View," 73.

⁵² John H. Falk and Lynn D. Dierking, *The Museum Experience Revisited*, (Left Coast Press, 2013), 104.

in 1843, where it was hung on a wall rather than laid out on the floor as it was on site and in antiquity. One reason that the mosaic was displayed on a wall and has remained there ever since is due to space as was the case with the emblemata on display in the British Museum (Figure 4), but another probable reason is that it has always been assumed that the mosaic is a Roman copy of an original Greek painting dating from the 4th century BCE. The belief that the Alexander Mosaic was a copy of a Greek painting is a very old one, and is “usually taken for granted rather than argued.”⁵³ People have accepted that it is a copy of a painting almost since its discovery, and this helped contribute to the mosaic’s prestige. The belief that the mosaic is a copy of a Greek original painting was not an isolated incident—many of the wall paintings and floor mosaics found in Pompeii are believed to be Roman copies of Greek originals, and many are. But the belief that the Alexander Mosaic is a copy has largely gone uncontested, and as such many scholars have been studying the mosaic as if it were a fourth century BCE Greek painting, rather than a second century BCE Roman mosaic.⁵⁴ And while viewing it as a copy rather than an original work of art sometimes dismisses the excellent and highly technical way the mosaic was constructed, viewing the mosaic up on a wall like a painting rather than in situ in the midst of the ruins allows people to appreciate its beauty even more. Paintings have always been viewed as high quality art in Western society. 20th century American artist Adolph Reinhardt even once said, “Sculpture is something you bump into when you back up to look at a painting.”⁵⁵ In

⁵³ Ada Cohen, *The Alexander Mosaic: Stories of Victory and Defeat*, 51.

⁵⁴ *ibid.*

⁵⁵ Jack Flam, “The Road to Minimalism.” Review of *The Sculptural Imagination: Figurative, Modernist, Minimalist*, Alex Potts. *The New York Review of Books*, March 28, 2002.

studying it as a fourth century BCE Greek painting, the Alexander Mosaic was treated as a high art object.

In a museum, visitors give the mosaic the same respect they give other pieces on display, because that is what the museums signifies: that objects on display are worthy of their veneration. On site, however, the mosaic could have fallen in danger of being seen as just another part of the ruins. It is common that visitors to archaeological sites leave slightly disappointed, and that they “expect more” from the sites they are visiting, especially Pompeii.⁵⁶ And rather than being another ruin on site, in the Naples Archaeological Museum, the Alexander Mosaic looks like and is viewed as another work of art. If visitors want to see the mosaic as it would have existed in its ancient house, they still can if they go to the site in Pompeii, since there is a replica there. Because the original Alexander Mosaic is safe indoors in the Naples Archaeological Museum, and there is a replica in its place onsite, both the original material and the mosaic’s context and protected and saved.

⁵⁶ Alia Wallace, “Presenting Pompeii: Steps Towards Reconciling Conservation and Tourism at an Ancient Site.”

Conclusion

The contexts of ancient Roman floor mosaics is as important as the mosaics themselves. They are as much a part of the architecture of the buildings they adorn as the walls are. The rooms they are located in and their relation to other mosaics in the house deepen our understanding of them and the spaces they define. The mosaics in the House of Dionysos play off of one another to give more significance to their scenes and the figures in them. The Dioscuri in the Triumph of Dionysos Mosaic become Castor and Pollux based off of the other mosaics around it, and Dionysos showing Ikarios how to make wine becomes a warning to the entering dinner guests. The mosaics also play off of other architectural elements around them. The Vine Carpet mosaic in the triclinium depicts the food and drink that the guests are about to consume. If these mosaics were to be taken away from the House of Dionysos, then some of their meaning would be lost.

However, as soon as mosaics are excavated, they are in danger of deterioration. Their durability as objects made of stone has diminished in their time buried below ground. Plant growth can break apart tesserae and separate them from the mortar, as what happened to the Orpheus Mosaic in Paphos, Cyprus. Exposition to sunlight and rain is also damaging, as salts can enter the stone to crystalize and cause flaking and more damage. These floor mosaics were not constructed to be outdoors, so something must be done to protect them if they are to remain in situ with their context. Ways of doing this include constructing a shelter over the mosaic or reburying the mosaic. Both of these methods were used to protect the mosaics in the House of Orpheus, however they still sustained damage by remaining outside.

So in order to make sure that these mosaics do not deteriorate further, they should be removed from their sites and taken to museums. In a museum, a mosaic would be safely indoors and in a more relatively stable humidity, and it would also be better guarded than in a remote archaeological site. Archaeologists have been taking floor mosaics to museums since the 1800s, and they have fared better than the mosaics that were left behind in situ. There are issues with the way they are being displayed—hung up on walls, and in some cases crowded together like in the British Museum—but they are protected, and many people can still see and appreciate them.

People viewing the mosaics in museums also will value the mosaics more highly than if they viewed them on site. Tourists uneducated in the art or archaeological world visiting archaeological sites are often underwhelmed with their experience there. Many times they visit the sites expecting more, and leave slightly disappointed. If they saw a mosaic in its original location amongst the ruins, they might not appreciate it as much. However visitors to museums treat the objects on display with respect, because they understand museums to be institutions of significance and importance. Being displayed in a museum signifies to visitors that the mosaic is something to be appreciated simply by being on display in the building.

If the original is safely on display in a museum, however, then left behind in its place is an empty dirt floor. The Alexander Mosaic was removed from the House of the Faun in 1843, and until 2005, visitors to the house did not see that the exedra it was in was filled with a massive mosaic battle scene. They would not have understood that ancient guests to the house would have met the homeowner in this room and be greeted with countless soldiers pointing their spears to the sky. Luckily, a team from the International Center for the Study and Teaching of Mosaic spent 2 years meticulously producing a replica of the mosaic to be placed on site. Now

that it is there, visitors can still see the mosaic in its context and where it is in relation to the rest of the house, but the original mosaic is still safely indoors.

Ideally, original mosaics excavated in archaeological sites could be conserved in situ, but even with some of the best measures taken, mosaics remaining on site are in danger of deteriorating and will be damaged. Being taken to museums and displayed indoors is a much safer option for mosaics. However this separates them from their context, which is an important part of their meaning as they are architectural features as the floors of buildings. To save this context, replicas could be displayed in the original's location. The Alexander Mosaic replica is an extremely detailed copy, however replicas of this caliber need not be made at all sites, especially when cost and time are taken into consideration. Images of the mosaics could be used instead, or other low-cost reproductions. Showing what the mosaic looked like in relation to the rest of the room and building is what is important, and that can be done without taking 2 years to make a piece-by-piece replica.

The context of ancient Roman floor mosaics is important if we want to fully understand the meaning behind the mosaics and their significance to the rest of the building they occupy, but protecting the original material is just as important, too. Protecting both the context and the mosaic itself can be done with the help of museums and replicas.

Bibliography

- Cameron, Walker, and Neil Carr. *Tourism and Archaeology: Sustainable Meeting Grounds*. Walnut Creek, California: Left Coast Press, 2013.
- Cohen, Ada. *The Alexander Mosaic: Stories of Victory and Defeat*. Cambridge: Cambridge University Press, 1997.
- Demas, Martha, Thomas Roby, Neville Agnew, Giorgio Capriotti, Niki Savvides, and Demetrios Michaelides. "Learning from Past Interventions: Evaluation of the Project to Conserve the Orpheus Mosaic at Paphos, Cyprus." In *Lessons Learned: Reflecting on the Theory and Practice of Mosaic Conservation: Proceedings of the 9th ICCM Conference, Hammamet, Tunisia, November 29-December 3, 2005*, ed. Aïcha Ben Abed, et al. Getty Conservation Institute, 2008.
- Evans, Margaret E., Melinda S. Mull and Devereaux A. Poling. "The Authentic Object? A Child's-Eye View," in *Perspectives on Object-Centered Learning in Museums*, ed Scott G. Paris, (Mahwah, NJ: Lawrence Erlbaum Associates, Inc., 2002).
- Falk, John H. *Identity and the Museum Visitor Experience*. Walnut Creek, California: Left Coast Press, 2009.
- Falk, John H., and Lynn D. Dierking. *The Museum Experience Revisited*. Left Coast Press, 2013.
- Flam, Jack. "The Road to Minimalism." *The New York Review of Books*, March 28, 2002.

- Getty Villa. *Roman Mosaics Across the Empire*. Los Angeles, California: J. Paul Getty Trust, 2016.
- Grimmer, Anne E., and Kimberly A. Konrad. "Preserving Historic Ceramic Tile Floors." In *Preservation Briefs*. U.S. Department of the Interior: National Park Service: Heritage Preservation Services, 1996.
- Housen, Abigail. "Three Methods for Understanding Museum Audiences." *Museum Studies* 2, no. 4 (1987): 41–49.
- Kondoleon, Christine. *Domestic and Divine: Roman Mosaics in the House of Dionysos*. Ithaca: Cornell University Press, 1994.
- Merola, Marco. "Alexander, Piece by Piece." *Archaeology* 59 (January 2006): 36–40.
- Molholt, Rebecca. "On Stepping Stones: The Historical Experience of Roman Mosaics." New York: Columbia University, 2008.
- Oleniczak, Jen. "A Museum Experience Is Not One-Size-Fits-All." *Art Museum Teaching: A Forum for Reflecting on Practice*, September 25, 2013.
- Roppola, Tiina. *Designing for the Museum Visitor Experience*. New York, New York: Routledge, 2012.
- Roby, Thomas. "The Conservation of Mosaics in Situ: Preserving Context and Integrity." In *Stories in Stone: Conserving Mosaics of Roman Africa: Masterpieces from the National Museums of Tunisia*, ed. Ben Khader, et al. Los Angeles, California: J. Paul Getty Museum, 2006.
- Podany, Jerry. "From Floor to Wall: Lifting and Exhibition Practices Applied to Ancient Floor Mosaics." In *Stories in Stone: Conserving Mosaics of Roman Africa: Masterpieces from*

the National Museums of Tunisia, ed. Ben Khader, et al. Los Angeles, California: J. Paul Getty Museum, 2006.

Wallace, Alia. "Presenting Pompeii: Steps Towards Reconciling Conservation and Tourism at an Ancient Site," *Papers from the Institute of Archaeology* 22(2013).

Wohlgemuth, Kevin A. "A Survey and History of the Conservation of the Opus Vermiculatum Mosaics of Pompeii." *Electronic Theses, Treatises and Dissertations*. Paper 882 (2008).