The art of the mosaic was developed by the Greeks, notably within the royal court of Macedonia, and was initially unknown to the Egyptians. Macedonian mosaicists then established workshops in the capital, Alexandria, and in the new towns of Greek Egypt. Under the stimulus of commissions from the Ptolemaic court, these workshops soon showed that they were capable of innovation. Beginning with pebbles, they then used tesserae of different sizes, and adopted new materials (glass, faience, paint) in order to transpose onto the floor images from grand paintings, which was the major art form of the time and was characterized by the vivid use of color.

Alexandrian mosaicists were at the forefront of creativity during the Hellenistic period and their influence spread around the Mediterranean. After the Roman conquest of Egypt they adapted to the tastes of their new sponsors and to changes in architecture and were able to retain an important place within this art as it developed across the entire empire, in Rome and from east to west.

The Mosaics of Alexandria provides the first overview of the mosaics and pavements of Egypt that were created between the end of the fourth century BC and the sixth century AD. It presents a selection of some seventy mosaics and pavements from Alexandria and Greco-Roman Egypt. Generally little known and more often than not unpublished, these works are illustrated here in full color, some for the first time.

Anne-Marie Guimier-Sorbets is professor emerita of archaeology and Greek history of art at the University of Paris-Nanterre and a specialist in Greek architecture and architectural décor. In collaboration with the Centre d’Études Alexandrines over a period of some twenty-five years, she has authored numerous studies on Alexandria and has published articles on domestic and funerary contexts. Since 2015, she has served as president of the International Association for the Study of Ancient Mosaics.

After the foundation of Alexandria, Macedonian artists imported the techniques and the craftsmen of their homeland. These latter, responding to commissions from the Ptolemaic court, established workshops, which in turn became leaders in technical and stylistic innovation. Alexandrian mosaicists worked throughout northern Egypt as well as at its places where Greeks had settled in Upper Egypt. They created more or less elaborate pavements, the study of which has turned out to be particularly important for an understanding of architectural décor, which has very largely disappeared elsewhere.

—from the Introduction
Mosaics of Alexandria
Cover: Dog mosaic [10], detail of the head, see fig. 37
Back cover: Hunting Erotes mosaic [6], detail of the threshold, see fig. 156
Page 2: Medusa mosaic [18], shield with gorgoneion, see fig. 60
Page 7: Medusa mosaic [18], detail of the small central panel, see fig. 142
Page 8: Nilotic mosaic from Thmuis [44], exhibited in the Greco-Roman Museum in the 1930s. Glass plate negative,
© GRM archives
Page 11: Hunting Erotes mosaic [6], detail of the wild beasts band, see fig. 5.7

First published in 2021 by
The American University in Cairo Press
113 Sharia Kasr el Aini, Cairo, Egypt
One Rockefeller Plaza, 10th Floor, New York, NY 10020
www.aucpress.com

This English edition is co-published by Centre d’Études Alexandrines and the American University in Cairo Press

Copyright © 2019, 2021 Centre d’Études Alexandrines, CNRS/IFAO, Alexandrie
First published in French in 2019 as Mosaïques d’Alexandrie: Pavements d’Égypte grecque et romaine

English translation by Colin Clement
Copyright © Centre d’Études Alexandrines, CNRS/IFAO, Alexandrie, 2021

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

ISBN 978 1 649 03074 0

Library of Congress Cataloging-in-Publication Data
CIP data applied for

1 2 3 4 5 25 24 23 22 21

Designed by Fatiha Bouzidi
Printed in China
Contents

Preface 9

A Brief History of the Mosaic 13
What Is a Mosaic? 13
The First Greek Mosaics 13
Sources of Inspiration and Applied Techniques 13
The Development of the Mosaic in Ptolemaic Alexandria 14
  Spotlight 1. Mortar Floors 16
  Spotlight 2. Mortar Floors with Stone Chips and Plaques 18

Chapter 1: The First Mosaics of Alexandria 21
The Oldest Mosaic of Alexandria 21
  Spotlight 3. Floor Techniques: Mosaics of Pebbles and Tesserae, Lead Strips 22
The Little Hunters of Shatby 29
  Spotlight 5: The Animals of the Hunting Erotes Mosaic 39

Chapter 2: Imitating Painting, Color Conquers 43
The Royal Portraits of Thmuis 43
  Spotlight 6. The Use of Faience 46
Mosaics from the Palaces of Alexandria 51
  Spotlight 7. The Use of Large Regular Tesserae 60

Chapter 3: Techniques and Style 67
The Hellenistic Era: New Motifs, Added Color 67
  Polychrome swastika meander with squares in perspective 67
  Spotlight 8. Origins and Development of a Motif: The Palm Trunk (Stipe) Garland 68
  Fleurons made of bipartite leaves 70
  The gorgoneion 70
  Spotlight 9. Egyptian Blue, Revealed by VIL Photography 72
  The gorgoneion in the center of a fleuron 77

The Imperial Period 82
  Evolving techniques and materials 82
  The choice of motifs, their treatment, and the composition of the pavements 82
  The origins and evolution of a mosaic motif: The guilloche 84
  Continuity and innovation in the types of mosaic and flooring 88

Chapter 4: The Iconography of Mosaics 91
Mythological Scenes 91
  When a satyr meets a nymph 91
  Lycurgus and Ambrosia 93
  Alpheus and Arethusa 95
A Taste for Representations of Animals 97
  The birds 97
  The pavement of the birds at Kom al-Dikka 99
  A bird emblema 102
  Spotlight 10. The Birds of Rhodes 105
  Fish 107
  The popularity of polychrome animal panels 107
Nilotic Scenes and Other Aquatic Representations 108
  Nilotic scenes of the Ptolemaic period 108
  Nilotic scenes of the imperial period 108
  The marine mosaic with Erotes 118

Chapter 5: Mosaics in Their Architectural Context 123
Baths in the Fayoum and Upper Egypt in the Ptolemaic Period 123
  The Zenon archive and the baths of the House of Diotimos 123
  The Greek baths of Diospolis Parva and Karnak 123
Mosaic Decoration in Houses of the Imperial Period 127
  The Villa of the Birds in Kom al-Dikka 127
  The House of Medusa on the Diana Theater site 129
### Chapter 6: The Organization of Production

**Where and How Did the Mosaicist Work?**

- **The Emblema Technique and Mixed Laying Technique**
  - Hellenistic *emblemata*
  - **Spotlight 11.** Ptolemais, Cyrenaica, Three Alexandrian *emblemata* from the Hellenistic Period
  - *Emblemata* of the imperial period
  - **Spotlight 12.** The Workshop of the Medusa *emblemata* from the Diana Theater Site
  - Mixed laying technique

- **Opus Sectile**
  - Did Alexandrians practice *opus sectile* in the Ptolemaic period?
  - *Sectilia pavimenta* of the imperial period
  - Mural panels in *opus sectile* of the Late Roman period

### Chapter 7: Late Antiquity: Pagan and Christian Contexts

- **In Alexandria:** The Mosaic of Sultan Hussein Street
- **In the Sinai Region:** The Mosaics of Shaykh Zuweid and of Pelusium
- **Middle Egypt:** The Mosaic of Antinoopolis
- **Mosaics in the Christian Context**
  - The monastery of Saint Catherine in Sinai
  - Alexandria and the Mareotid: An archaeological vacuum
  - Kellia: a conservation zone for the decor
  - Mosaics reproduced in paint in the world of the desert hermits, by Denis Weidmann
  - An *opus sectile* of glass plaques, by Denis Weidmann

### Chapter 8: The Role of Alexandria in the History of the Ancient Mosaic

**The Hellenistic Period: Alexandrian Workshops outside Egypt**

- The Nilotic mosaic of Palestrina
- The mosaics of the House of the Faun at Pompeii
- Alexander and Darius
- Nilotic panels
- Garland with masks
- *Symplegma*
- Dionysus on a tiger
- The lion
- Doves
- *Xenia*, cat, and bird
- A seascape with fauna
- Floors of plaques and *opera sectilia*
- Other Alexandrian elements in the House of the Faun

**Alexandria’s Role during the Imperial Period**

### Chapter 9: At the Dawn of the Third Millennium . . . the Mosaic Art Blooms Again in Alexandria

**Notes**

- Catalogue of the Mosaics
- Appendices
- Concordances
- Bibliographic References
- Image Credits
- Acknowledgments
Alexandria makes art historians dream and causes archaeologists to worry. Because of the leading role played by the Ptolemaic capital many inventions and remarkable advances have been attributed to Alexandrian art by the international academic community right up to the 1960s and 1970s. At that point, a certain doubt set in when faced with the dearth of discovered vestiges. Outside the hypogea, and despite the best efforts of successive directors of the Greco-Roman Museum of Alexandria, little was really known of the material living conditions of ancient Alexandrians and of the royal palaces that were so vaunted elsewhere. Moreover, few specialists of the classical world had actually visited the town and its hinterland, and the black and white reproductions of published objects were hardly sufficient, especially when the artefacts were characterized by their colors.

I was asked to undertake this work some years ago by Jean-Yves Empereur, who was then director of the Centre d’Études Alexandrines (CEAlex), with the aim of increasing our familiarity with the mosaics of Alexandria and its region, and Greco-Roman Egypt more widely. The research was ultimately a collaboration between the CEAlex and UMR Archéologies et Sciences de l’Antiquité (UMR 7041, ArScAn, team Archéologie du monde grec et systèmes d’information, University of Paris I Panthéon-Sorbonne, University of Paris Nanterre, CNRS, Ministry of Culture).

The writing of this book has benefited from certain favorable circumstances: a better scientific understanding of mosaic pavements and much greater attention now paid to this fragile evidence of architectural decoration. In fact, the mosaics of Alexandria and of the entirety of Egypt are better known thanks, on the one hand, to new studies of previously discovered examples held in the Greco-Roman Museum of Alexandria and, on the other, to new discoveries in excavations—both scheduled and salvage—that have been conducted within the city since the last quarter of the twentieth century. Furthermore, greater understanding of the Greco-Roman mosaic as a whole has led to a better evaluation of the place of the Alexandrian model. As a result, the archaeological authorities are now particularly concerned about the preservation of any pavements that are discovered, whether of figurative or simply geometric decoration. Where the archaeological site will allow, the mosaics are left in situ: if not, they are lifted by specialists when the site is due to be returned to the developers. In Alexandria this important conservation work is ensured by the relevant service of the Supreme Council of Antiquities (SCA) in collaboration with the Polish team on the Kom al-Dikka site and the CEAlex on its many salvage excavations. The CEAlex has a highly skilled conservation department and collaborates with specialized French centers, such as the Museum of Arles, when faced with specific problems. The SCA has also benefited from financing provided by the American Research Center in Egypt (ARCE), which allowed for the intervention of a conservation and restoration team from Madaba in Jordan under the leadership of the late lamented Father Michele Piccirillo, which worked on some pavements held in the Greco-Roman Museum of Alexandria. The techniques applied to mosaic preservation are constantly improving, and the training of restorers and those responsible for museums and archaeological sites is indispensable. In this, the MOSAIKON Initiative, funded by the Getty Conservation Institute, has been influential, and Egyptian conservation professionals have greatly benefited from it in recent years.

On a less positive note, the closure of the Greco-Roman Museum for far too long has meant no access to the numerous mosaics in its collections. Only a very small number of pavements are currently visible in Alexandria and throughout the rest of Egypt. This obstacle explains the rather uneven state of the photographic documentation gathered in this book. Let us hope that we will not have to wait too much longer for the reopening of the museum and that the mosaics will be well exhibited both there and in the proposed Mosaics Museum, the construction of which has been planned for more than twenty years on a site located in the center of Alexandria. Perhaps, following the model of the major exhibition entitled “La Gloire d’Alexandrie,” which was held in Paris and Agde in 1998, further exhibitions could introduce this rich heritage to countries beyond Egypt and, as a result, attract tourists to Alexandria for longer stays.
This book, which is designed as an overview, comes in the wake of several recent publications, from which it benefits. Other than occasional publications of mosaic pavements cited in the catalogue at the end of this work, the first general study was Brown’s 1957 book dedicated to the paintings and mosaics of Alexandria. Although pioneering for its time, this publication only concerned five pavements, the author merely restated previously published descriptions and dates without any critical challenge, and the comparisons of the mosaics with paintings scarcely provided any novel elements. The most important publication in this domain is the Corpus of Mosaics from Egypt, the first volume of which was published in 1985 by Wiktór Andrzej Daszewski after very detailed studies both in museums and in the field. His volume brings together all of the then known pavements dating up until the very beginning of the imperial period. The second volume has never materialized, even though this eminent scholar has subsequently published a series of articles on mosaics of the imperial era, which we have, of course, drawn upon. Since the appearance of this key text numerous pavements have been discovered in Alexandria, as well as in Upper Egypt (e.g., Karnak), which are important for our understanding of mosaics in Egypt. Our aim is to take advantage of new data and thus, among the seventy mosaics that we have chosen for our catalogue, we have featured fragments that might have passed unnoticed but which provide precious information about the technical evolution of the mosaic, this typically Greek art form that Alexandrian workshops developed in such a remarkable fashion. We have also thought it worthwhile to recall the international reach of Alexandrian mosaicists through reference to several pavements from outside Egypt.

Nevertheless, this book is not a corpus and makes no claim to being comprehensive. It is rather an assembly of a wide choice of previously unpublished or revisited mosaics set principally within the perspective of manufacture attested in Egypt and more generally in the Greco-Roman koine. Knowledge of the imperial-era mosaics of Alexandria would not be complete without a systematic study of the pavements and fragments found by the Polish Mission on the Kom al-Dikka site. In fact, these regular excavations allow for an understanding of the stratigraphic context, which is so often lacking for some of the pavements unearthed in earlier times. Other than the published and exhibited mosaics of the Villa of the Birds, we have included in our catalogue just a few examples from Kom al-Dikka which have been chosen for the variety of the techniques used and for which we have access to published data and photographs.

At the end of our book we cast a swift glance at the mosaics of the twenty-first century. This falls outside the catalogue and is at the initiative of Jean-Yves Empereur, who drew my attention to these modern examples, which demonstrate both the talent of young Alexandrians (sometimes students from the Fine Arts School under the guidance of their professors) and the persistence of the taste for this form of decoration. While adopting the graphics and iconography of their time (particularly from Walt Disney), these Alexandrian artists have not forgotten the different components of their own heritage and integrate them into original and appealing compositions. The place of these mosaics in modern urban decor gives us an idea of the role of mosaics within the lives of ancient Alexandrians.

The editorial choice of including this work in the collection entitled Antiquités alexandrines and not as part of the Études alexandrines series was made by the directors of the CEAlex, Jean-Yves Empereur and then Marie-Dominique Nenna. The intention is to set it within a framework designed for an informed general public, and with multiple color illustrations—an undeniable plus for a book about mosaics. The challenge was thus to limit the text somewhat and the notes more so (moved to the end of the publication), but also to develop “long” captions which would allow for an initial exploration through the images. As a balance, we have added a brief catalogue at the end for each chosen pavement, providing outline information, a limited bibliography, and thumbnail images to help navigation through a selection of sometimes quite similar objects (especially for the fleurons). Number references to text pages and figures mean that this catalogue can be used as an index of the Egyptian mosaics included in this book. Only a few previously unpublished pavements mentioned in this text do not feature in the catalogue. In the text, as in the captions, the numbers of the catalogued mosaics are noted between brackets in blue.

Our hope is that the reader will be able to flit between images, text, and catalogue according to personal needs and interests. Particular issues are expanded in highlighted sections called spotlights, creating “breathing spaces” in the reading of the book, and which, depending on the case, may be designed as information for the general public or detailed points for the specialist. As in our previous volume in the same collection, we have inserted a few passages translated from ancient authors. We sincerely hope that the reader will find his or her route with pleasure and interest: the mosaics of this region fully deserve to be better known both within Egypt and in the wider world.
1. Artist’s impression of a banquet in the *andron* of the House of Mosaics, Eretria (4th century BC)
A Brief History of the Mosaic

What Is a Mosaic?

The Greeks developed and refined the mosaic technique as an extension to floors made of mortar to create flooring that was both practical, because it was washable, and decorative. After settling and evening the ground with several layers of material of decreasing size, the mosaic craftsmen covered the surface with small pebbles or tesserae, placed one by one by hand, and fixed into a layer of mortar. Thereafter, to create as smooth a floor as possible, the craftsmen would run a roller over the surface and then give it a careful buffing. The resulting floor would be smooth and luxurious, bearing a durable decoration created through the juxtaposition of contrasting colored elements.

The First Greek Mosaics

Athens, Corinth, Olynthus, Sicyon, Eretria, and many other ancient cities of Greece have revealed floors that were decorated in this fashion during the fifth to fourth centuries BC. Most often these are pebble mosaics that decorated the floors of andrones, dining rooms of private residences where the master of the house received his friends and relations within a refined setting under the patronage of Dionysus, to whom a libation would be poured (figs. 1, 2). The figurative and vegetal decoration of the mosaics was part of the homage rendered to the god of wine, to the wild world he tamed, and to life, born and reborn, both on earth and on the sea. The composition of the pavements effectively organized the space within the room by marking the position of the beds along the walls, the threshold carpet to be crossed when entering, and the main mosaic, which the guests had before their eyes throughout the banquet, with the krater in the center. Geometric motifs served to enliven the pavement and organize the layout of the room. When not hosting banquets, these rooms provided a refined setting for other uses.

Sources of Inspiration and Applied Techniques

Textile carpets were the first source of inspiration for mosaic pavements, along with the scenes and images that decorated the drinking vessels used in the andron; this explains the fact that the decoration, whatever it may be, was composed of light figures on a dark background and was rendered in an essentially graphic style. The ruins of Olynthus, an Athenian colony founded in 432 BC in Halkidiki, northern Greece, and destroyed by Philip II in 348 BC, features a large ensemble of houses with some twenty pebble mosaics of white decoration on a dark background. The majority of them decorated banqueting halls. Then, gradually, mosaicists found inspiration in painting, which was a major art form of that period. In order to reproduce large figurative compositions, render the third dimension, increase their color palette, and create gradations of color, all in imitation of painters, they had to solve a number of difficulties, find new materials, adapt their techniques, and erase the discontinuity between the elements used, even if this was a basic feature of mosaics. They stopped using pebbles and turned to small cubes of cut stone: tesserae. The straight edges of these cubes allowed for more precise lines than the rounded pebbles and the interstitial gap was less visible. Thus the technique known as opus tessellatum appeared in the workshops of Alexandria, as it probably did in other places in the Greek world. This technique was further refined for the most heavily decorated parts of the pavements. In opus vermiculatum miniscule fragments of stone in a variety of shapes would take the place of cubic tesserae, and the mortar joints, themselves tiny, were colored to blend in with their surrounds. This evolution, both technical and stylistic, continued throughout the entirety of the Hellenistic era.
The Development of the Mosaic in Ptolemaic Alexandria

Beginning in the fourth century BC, the artists called to the court of the kings of Macedonia played a particular role in this creative process. In the two capitals of the Macedonian kingdom, Pella and Vergina, pavements in the houses of the king’s companions and in the royal palaces display some striking examples. After the foundation of Alexandria, Macedonian elites imported the techniques and the craftsmen of their homeland. These latter, responding to commissions from the Ptolemaic court, established workshops, which in turn became leaders in technical and stylistic innovation. Alexandria mosaicists worked throughout northern Egypt as well as in places where Greeks had settled in Upper Egypt. They created more or less elaborate pavements, the study of which has turned out to be particularly important for an understanding of architectural decor, which has very largely disappeared elsewhere. These Alexandrian workshops were also engaged by other Hellenistic monarchies and cities, where the wealthy owners of villas or palaces called upon them to decorate their homes according to the fashion that was current throughout the Mediterranean basin. Alexandria mosaicists set up workshops in these places, which would thereafter continue independently in the development and innovation of this increasingly prized form of decoration. They would also export their emblemata, small panels of detailed mosaic that were manufactured within a workshop to be slotted into a pavement.

In the imperial period, mosaics covered many rooms in both public and private buildings, and they were not limited to floors but appeared also on walls, especially in large luxury structures such as public baths. Roman mosaicists adapted their materials, techniques, and styles within a different political and economic context. This context was obviously less favorable to Alexandrian mosaicists; however, their city still played an economic and artistic role in the Mediterranean basin and so they continued their craft and the export of their teams and their products toward other major creative centers.

The mosaics of Egypt are relatively little known. Only a small number of them have survived, often the result of chance discoveries in the past now held in museums, thanks to the diligence of directors of the period or donations from collectors. Most often, the precise discovery context for these mosaics is unknown, which is particularly regrettable when the decor is architectural. Nonetheless, the mosaics represent rare surviving features of once prestigious buildings. These fragile objects, often held in unsuitable conditions when they have not deteriorated completely since discovery, deserve our close attention and the careful intervention of professional restorers, who are indispensable for their preservation.

Since the 1980s excavations have led to the discovery of new pavements and fragments of mosaic. The variety of techniques used to create flooring is one of the characteristics of ancient Alexandria, and during excavations this is demonstrated just as much by the floors still in place as by the always numerous fragments that are found in backfill. Along with pavements held in museums, especially the Greco-Roman Museum of Alexandria, we shall also present fragments from the CEAlex excavations. These fragments, whether belonging to the ground floor of buildings demolished in antiquity or to collapsed upper stories, provide precious information about the techniques applied from the very first centuries of the city. They are mostly from the former British Consulate site, excavated between 1994 and 1997, which was part of the ancient Brucheion district adjacent to the palace quarter. The excavations revealed houses dating from the end of the fourth to the second century BC. The neighboring Cricket Ground site was excavated during the same period and the structures there were dated to the third–second centuries BC, with a redevelopment in the imperial era. All the same, all the examples of floors mentioned in the first chapters are of the Hellenistic period. These two sites had been seriously disturbed before excavation by the work of bulldozers and the sinking of many concrete piles that cut through the archaeological layers.

Based upon a wide choice of pavements, essentially from Alexandria and the Nile Delta, but also from recent excavations at Karnak, this book hopes to improve our knowledge of Egypt’s mosaics and to introduce these sometimes simple, sometimes luxury witnesses to a craftsmanship that was capable of producing masterpieces and which played an important role in the life of the ancient upper classes.
The banqueting hall played an important role in the social life of the homeowner. The beds and their blankets and cushions, along with the mosaics and tableware, all added to the luxurious effect of the reception. The guests, who faced the center of the room, reclined on cushions, their weight on their left elbow to free the right arm. The red-figure Dionysiac scene on this krater from Apulia in Italy shows a representation of a Greek banquet. The crowned god lounges on a bed covered by a panther skin with a thyrsus in his left hand. The index finger of his right hand is inserted through the handle of a cup as if in preparation to play the game *kottabos*: he must skillfully throw wine from his cup into the vessel perched on the stand in front of him, which is being held in this instance by a maenad. To the left-hand side, a crowned satyr empties a wineskin into a krater: a ribbon attached to its handles shows the sacred nature of the contents. A small table placed in front of the divinity bears a *situra* and two fruits. To the right-hand side, another maenad holds a *tympanon* and provides musical accompaniment. On the floor in the foreground, a basket of fruit and a flowering plant, symbols of the eternal vitality of the god, remind us of the habit of scattering vegetation on the floor of the *andron* or of representing it on mosaics.
SPOTLIGHT 1. MORTAR FLOORS

Other than beaten earth and wooden boards, which were used primarily on upper stories, mortar floors represent in Alexandria from its foundation, as in Greece, the most commonly used type of flooring, both in houses and in public buildings like bathhouses. The mortar kept the floor waterproof and the room clean, in that it could be easily swept with a broom or even washed.

The covering was most often composed of a lime mortar, or more rarely of pulverized terra cotta, strengthened by an added aggregate of small pebbles or stone chips (fig. 1.1). These small elements coated in mortar might appear on the surface or be completely concealed. The surface was finely smoothed and buffed (fig. 1.4). It was sometimes surfaced with a colored mortar (“painted” mortar) in a thin, evenly spread coat (figs. 1.2, 1.3) or in a decorative pattern (fig. 1.6). Occasionally pebbles were added on top of the fine colored coat (fig. 1.5).

Boraik and Guimier-Sorbets 2013; Fournet and Redon 2017, 432–33, no. 33; Guimier-Sorbets 2001; 2009a; 2017c; Guimier-Sorbets and Redon 2017; Silhouette 2011; 2016; Vassal 2006; 2016.

1.1. Alexandria, excavations of the former British Consulate garden, mortar floor with pebbles and small stone chips.

1.3. Alexandria, Cricket Ground site, detail of the mortar floor. The colored layer is less worn along the walls, and it is also apparent that the color was applied before the two layers of mortar on the walls.

1.4. Karnak, Greek baths, fragment of lime mortar colored red in which the aggregate of pebbles is partly visible.

1.6. Karnak, Greek baths, western entrance to the north tholos, lime mortar with pebbles, colored more or less intensely in red to create a design [52].
1.2. Alexandria, Cricket Ground site, mortar flooring with limestone chips: the surface has been colored red. At least one phase of renovation can be seen. The flooring covered a reception room in a house dated to the third century BC.

1.5. Alexandria, Cricket Ground site, fragments of lime mortar covered with a red and yellow colored layer to which white pebbles were added.
SPOTLIGHT 2. MORTAR FLOORS WITH STONE CHIPS AND PLAQUES

The addition of stone chips into the flooring can simply be intended as reinforcement. In this case, the chips are covered by the mortar and are not visible. If they do show on the surface they are carefully buffed (fig. 2.1). The floor might also include larger elements, flattish plaques of stone of a greater size than the chips. The plaques and the chips are sometimes both the same color and contrast with the mortar, which might itself be colored, or they may be of different colors (figs. 2.2, 2.3). Another alternative is seen in the mottled shades of onyx, which give the floor a discreetly colored and luxurious character (see fig. 83). These elements, scrap from stone cutting or recycled material, add to the richness of the flooring through the variety of stones used in the midst of other smaller, less colorful chips.

This type of floor is attested in Alexandria in a building located above the great tomb of Wardian [63], built in the second half of the first century BC. Colored plaques stand out against a black background of stone chips (fig. 2.5). Similar examples have also been found in the districts of Kom al-Dikka and Muharram Bey. In all these cases, whether the plaques are tightly packed or more loosely scattered across the mortar, they do not create any distinct pattern. In other instances, the plaques and chips are laid out to form geometric shapes (squares, lozenges, etc.); this technique, attested in Houses FA and MA [64] at Kom al-Dikka, evokes the more costly technique of *opus sectile*. The mortar can also be selectively colored to design motifs and patterns (fig. 2.4).

Buffing and polishing, which was more or less difficult depending on the hardness of the stone chips, was accomplished using a hard stone like the one discovered in a channel in the Greek baths at Karnak (fig. 2.6). This type of polishing tool could also be used to sand down walls, as was suggested for a very similar tool found in a Macedonian tomb at Lefkadia, Greece.

Daszewski 1985, no. 21; Guimier-Sorbets 2017c; Guimier-Sorbets and Redon 2017; Majcherek 2007b, 204, 207–208; Rhomiopoulou and Schmidt-Dounas 2010, 89, pl. 9.2–3.

2.1. Alexandria, Cricket Ground site, fragment of a floor with black stone chips in a white mortar.

2.2. Alexandria, British Consulate site, mortar fragment with chips of different colored stone.

2.3. Alexandria, Terra Santa site, mortar fragment with chips of different colored stone.
2.4. Karnak, Greek baths, north *tholos*, a tilapia [52].

2.5. Wardian necropolis, ground-story floor [63].

2.6. Karnak, Greek baths, diorite polishing tool.
3. Pavement of the *andron* of the House of the Rosette [1]: general view after excavation
Chapter 1

The First Mosaics of Alexandria

As in their native land, the mosaicists began by using pebbles to create what was usually a black and white decoration, and, as at Pella, they inserted thin lead strips to add precision to lines, whether straight or curved depending on the pattern. Very soon, however, they began to cut stones to create the shapes that they wished to represent, such as the eyes of persons or for elements of geometric or floral decoration. They also cut “standard” pieces—of terra cotta and stone—to produce tesserae, rough cubes with straight lines that fit more snugly than pebbles and reduced the areas of interstitial mortar or grout.

The Oldest Mosaic of Alexandria

The oldest Alexandrian mosaic [1], dated according to archaeological criteria to 315–300 BC, was discovered in 1996 by the CEAlex team of Jean-Yves Empereur during salvage excavations in the garden of the former British Consulate (fig. 3). It covered the floor of an andron, as was revealed by its dimensions and especially the composition, which corresponds to that of a seven-bed banqueting chamber, a common type at Olynthus and many other sites in Greece, including Eretria. Most of the andron floor in this so-called House of the Rosette was of mortar reinforced with small pebbles: the area for the beds was outlined by a red band of carefully placed terra cotta tesserae (fig. 3.3). The main areas of the pavement—the center and the threshold—featured mosaic panels of black and white pebbles. A checkerboard pattern marked the threshold following a well-attested custom in Greece among the oldest pavements (fig. 5). In the center, where the krater would be placed, was a circular panel featuring a six-lobed white rosette set against a black background (fig. 6). This simple and easily drawn motif is a geometric rendering of the vegetal fleuron from which the krater of Dionysus seemed to rise. In contrast to the pavements of Olynthus, the area reserved for the beds is not raised and thus the chamber could be used for activities other than banquets. Whatever the use, in one corner of the room, at the lowest point of the gradually sloping floor, a duct provided an exit for cleaning water into the street.

This pavement consisted of elements already attested in Greece, and while somewhat plain in composition and decoration, it nevertheless contained a certain novelty, in that at the end of the fourth century BC it involved several techniques: the mortar floor, the pebble mosaic, and the band of terra cotta tesserae. Moreover, the room, and therefore its pavement, were in use for a sufficiently long time that the wall plaster required replacement: traces of earlier layers were found on the lower sections of the walls. The oldest plaster displayed an illusionist decor of molded stone blocks in a well-known “architectural” style, which gives us an idea of the elegant setting of the reception area in a house built by the first generation of Alexandrians[8] (fig. 7).

The Hunter Surrounded by Wild Animals

Not far from here, in what was once the Basileia or palace quarter, Evaristo Breccia discovered a pavement that was also created using a mixed technique of pebbles and tesserae, as well as lead strips [2]. It is only partially preserved and presents the peculiarity of having been restored in antiquity: the right-hand side was replaced by two bands of tesserae (fig. 8). It is unclear whether the damage was accidental, or perhaps deliberate in order to retain the pavement in a smaller space than the initial room, but we can see the ancient reuse of a figurative decoration rendered in weak colors (white, yellow, and red) against a dark background. The wide band around the central panel is filled with three pairs of real and mythical animals—lions, lion-griffins, and eagle-griffins—facing off against each other. In the center stands a man, naked but for boots on his feet and a kausia (a kind of Macedonian beret) on his head. His weight is on his right leg and he brandishes a short hunting spear and holds a round shield. The state of preservation of the mosaic does not allow us to fully grasp the entirety of the scene: he may be a warrior as suggested by the shield, or more probably a hunter. The natural background to the scene is rendered by a dead tree and the uneven terrain. The position of the man recalls the lion hunt mosaic of Pella, while the border recalls pavements of Olynthus and that of Pella in which Achilles confronts...
SPOTLIGHT 3. FLOOR TECHNIQUES:
MOSAICS OF PEBBLES AND TESSERAE, LEAD STRIPS

The difference between a mosaic and a decorated mortar floor is that the elements of the mosaic are set into the fresh mortar one by one to create a decoration, or at least the surface is covered with elements as close to each other as possible. In contrast, the elements added to mortar floors are effectively poured with the mortar, which coats them, or they are spread across the surface in a random manner.

The first mosaics were made from pebbles that had been left in their natural shape. This method is well attested in Greece from the second half of the fifth century BC and was used in the earliest Alexandrian pavements (figs 3.1, 3.2). Thereafter, tesserae, more or less regular cubes of stone or terra cotta, replace the pebbles: a series of pavements from the end of the fourth and the third centuries BC were made of both pebbles and tesserae (figs. 3.3, 3.4).

In order to trace precise lines in the pebble designs, mosaicists began to place lead strips, of varying thickness but easily malleable according to the requirements of the design, into the fresh mortar. The strips helped guide the positioning of the pebbles or tesserae (figs. 3.5, 3.6, 3.7), and they themselves were placed along preparatory lines incised into the fresh mortar.

3.1. Alexandria, British Consulate site, fragment of a pebble mosaic: swastika meander with squares, created from dark elements on a light bedding.

3.2. Alexandria, British Consulate site, fragment of a pebble mosaic: wave motif.

3.3. Alexandria, British Consulate site, mosaic in the andron of the House with Rosette dated by stratigraphy to 315–300 BC [1]. Mortar floor filled with pebbles, with a red band of terra cotta tesserae.

3.4. Alexandria, British Consulate site, fragment of mosaic with figurative decoration in mixed technique: pebbles and tessellatum, separated by a lead strip.
Opus tessellatum, opus vermiculatum

According to the size and shape of the elements cut to create the mosaic, the techniques are known as opus tessellatum (elements of more than 0.4 cm cubed, with roughly square surfaces) or opus vermiculatum (elements of less that 0.4 cm cubed, sometimes 0.1 cm, often specifically shaped for the design).

Lead strips, which are no longer strictly necessary to set continuous lines in the mosaics, are, however, still used in opus tessellatum until the end of the Hellenistic period in order to delineate the major compositions of the pavement before the tesserae are placed. In complex motifs, such as meanders in perspective, waves, and guilloches, the strips are used to mark the main lines of the preparatory design, which has been incised in the mortar and which gradually disappears as the mosaicist pours in the bedding mixture necessary to fix the tesserae in place.


3.5. Alexandria, mosaic of the hunting Erotes from Shatby [6]. Lead strips were used to mark out the lines of the ivy stalks and leaves; they also constitute the ivy shoots and surround each of the berries, which are made of a small round element. Strips also trace the lines of the leaves of the acanthus calyx and the interior details.

3.6. Alexandria, mosaic of the hunting Erotes from Shatby [6]. Lead strips outline the red terra cotta band as well as the outer and inner lines of the guilloche. Each eyelet, outlined by a lead strip, is made of a single circular terra cotta element that has two intersecting lines incised into it in order to give the impression of four tiny triangular tesserae.

3.7. Alexandria, British Consulate site: fragment of opus tessellatum. The size of the tesserae chosen by the mosaicist depends on the width of the space to cover. The edges of the bands are lined by lead strips.
4. Pavement of the andron of the House of the Rosette [1]: positions of the beds
This drawing of the pavement shows the positions of the beds along the walls and the threshold carpet at the entrance. In banqueting halls of almost standardized dimensions, the threshold carpet was shifted to the left to allow for a seventh bed to be placed to the right of the door. Thus all the guests are equal, with the same orientation and traditional positioning.

5. Pavement of the andron of the House of the Rosette [1]: threshold carpet
The threshold carpet that one crosses when entering the banquet chamber is decorated with a checkerboard pattern of lozenges inspired as much by textiles as by decorated paving. The pattern is made of black and white pebbles, which effectively reinforce a surface that would be eroded with repeated use if only made of mortar. The red rectangular surrounds are of cut terra cotta tesserae. The care taken in the laying of the different elements enhances the quality of the decor.

6. Pavement of the andron of the House of the Rosette [1]: the central carpet
The center of the room is decorated with a fleuron upon which the krater would be placed, thus seeming to sprout from the plant, a metaphorical figure of Dionysus, the god who ensures the growth and regeneration of nature.
7. Pavement of the andron of the House of the Rosette [1]: the wall paintings
The first phase of painting in the room was found on a section of the lower part of the walls. One can make out an illusionistic pattern representing molded orthostates in an “architectural” style that is well known for this period. The harmony of the floor and wall decoration added to the refinement of the banqueting chamber.
8. Mosaic of the hunter [2]
The hunt takes place in the midst of real and mythical beasts, an expression of the wild nature over which Dionysus reigns. The decoration of the outer band is oriented toward the guests. This pebble mosaic was probably badly damaged in antiquity and then restored in order to preserve the intact section, thus demonstrating the interest that people of ancient times had in placing such ancient works of art of modest polychromy in their houses.

9. Mosaic of the hunter [2]: detail of a beast’s wing
The details of the wing are outlined by lead strips, introducing graphic elements between the rounded pebbles.
Penthesilea. The polychromy is similarly reduced to the four traditional colors (or tetrachromy) of painting, and the surrounding band holds the same real and mythical animals set in pairs. The pavements of Pella do not feature tesserae but are composed solely of pebbles, placed very carefully to make them fit as close as possible. The mosaicist of the Alexandrian pavement, perhaps less sure of his technique, has chosen material according to its use in the image: pebbles of various colors are the most numerous but they are replaced by tesserae of terra cotta or yellow stone for the areas designed with greater precision (e.g., the spear shaft and shield rim). Lead strips are used to graphically delineate the outlines of figurative elements filled in with pebbles, and to mark internal details, such as the face and the fair hair of the man, and in the animals’ wings (fig. 9). The uneven ground is created with pebbles of various colors, while the eyes of the hunter are made of cut pieces. Iconographic and technical comparisons have suggested an early date for the first stage of this mosaic, toward the end of the fourth century BC, similar to the mosaics of Pella, or the beginning of the third century BC. The presence of griffins and wild beasts effectively sets this hunting scene within the untamed world of Dionysus, as is the case for numerous pebble pavements in Greece.

On ancient mosaics, the eagle-griffin is represented twice as often as the lion-griffin, and in the two forms griffins appear more often in pebble mosaics than in opus tessellatum. Therefore it is not surprising to encounter these monstrous hybrids in the parade of wild animals that frames mosaics featuring hunting scenes, these being among the most ancient of Alexandria, dating from the end of the fourth to the beginning of the third century BC. On the preserved half of the hunter mosaic, they confront lions, and an eagle-griffin and two lion-griffins can be distinguished. The representation of the two types on the same pavement is exceptional (figs. 10–12), but the situation of the lion-griffin below the hunter is even more surprising. The lion in front of it is winged, but is not a lion-griffin since its wing does not curl toward the front and it does not have small horns on its head. In addition, griffins are not presented attacking each other. Where do the wings on this lion come from? Is this a mistake by the mosaicist, who has, it should be noted, tried to render them precisely using lead strips (see fig. 9), or is it just an attempt to emphasize the power of the lion-griffin who is facing down such an adversary?

The excavations of the former British Consulate site unearthed fragments of mosaics [3] combining different materials and techniques: two adjacent fragments displayed two zones of black pebbles and one of faded gray tessellatum separated by a lead strip, all of which most probably belonged to a figurative decoration (fig. 13). Part of a curved wing visible on another polychrome fragment [4] involves different types of tesserae separated by lead strips (fig. 14).
**SPOTLIGHT 4. A MYTHICAL ANIMAL: THE GRIFFIN**

The griffin is a hybrid animal that appears in Greek art as well as that of other civilizations. It has the body of a large winged feline and generally the head of an eagle, but sometimes the head of a lion. These two forms are distinguished by naming one a griffin-lion and the other a griffin-eagle: both forms are common in mosaics from the fourth to the third centuries BC.

In Greek mythology the griffin represents the savagery and violence of the world. Tales were told of the lands of the north where griffins defeated the Arimaspi when they tried to steal gold from the Hyperboreans. While they were sometimes connected with Apollo, griffins in mosaics are mostly associated with Dionysus, whose divine character they recognized and honored. As part of the Dionysiac world they are presented either in a position of attack, expressing the wildness of nature, or in a more heraldic pose, head lowered and one paw raised, paying homage to the god whose supremacy they recognize, however the god may be represented (a vase full of wine, or a sprouting plant). In this form, the griffin can also play the role of guardian of whomever Dionysus protects: in the domestic context it stands at the door to the andron, whereas in a funerary setting it guards the entrance to the tomb or is featured on cinerary urns.

The eagle-griffin with the body of a wild beast has long wings with flight feathers tapering to the rear; its beak is powerful and it has small pointed ears on the top of the head and a short crest running along its backbone (fig. 4.1). The lion-griffin possesses a lion's head and body, and has short horns on its head and wings curling toward the front: it is linked to Eastern iconography, particularly Achaemenid (fig. 4.2). From Ptolemaic Alexandria, an eagle-griffin can be seen protecting someone's mortal remains contained in a *hydria* of Hadra, while lion-griffins decorate the metopes of a faience vase. These two vases date to the third century BC. In the lunette of the Mafrousa-Wardian tomb (third–second century BC), a pair of painted griffins in heraldic pose stands on either side of a vegetal decoration, paying homage to the god and protecting the deceased who lies within the funerary bed below. These mythical animals were familiar to the Greeks who settled in the city, within both domestic and funerary contexts.

Adriani 1966, no. 93; Guimier-Sorbets 2004a; Nenna and Seif el-Din 2000, no. 280.

---


**4.2.** Lion-griffin: trumpet-necked vase, third century BC, Greco-Roman Museum of Alexandria.
The Little Hunters of Shatby

The large pavement of hunting Erotes [6] (5.25 m x 3.95 m, current state of preservation) was discovered by Breccia in the modern Alexandrian district of Shatby, which lies in what was once the royal palace quarter (fig. 15). It is comparable, in its iconography and overall composition, to the previously described hunter mosaic but it is the work of a more experienced workshop or craftsman. The central panel shows three winged children preparing to beat a fallen stag. The ensemble of the scene, in both action and composition, recalls the deer hunt mosaic at Pella signed by Gnosis except that the two strapping Macedonian hunters are replaced here by three Erotes (figs. 16, 17). Such young winged children appear very frequently in Alexandrian art and are linked to the world of Dionysus as members of his ecstatic retinue, or thiasos. While these characters look like Erotes, they are in fact Bacchoi, the little companions of Dionysus as a child, with whom the young god learned how to tame wild animals when he was in the East. Far from being a “rococo pastiche,” as it was described in the past, it is rather a mythological transposition of the scene from Macedonia. Dionysus, master and civilizer of nature, gives his young companions, as he does the maenads, the power to go one step beyond and to overcome wild animals. The contrast between these chubby little children and the violence of the hunt and the surrounding nature is reinforced by the presence of wild beasts and griffins in the band that frames the scene, as in the preceding pavement. Various wild animals (fig. 18) face each other in pairs or are set to attack deer or a bull. While we can recognize the real wild animals (lion, leopard, bull, boar, and deer) and mythical beasts (two eagle-griffins) (figs. 19, 20), which might appear in mosaics in Greece, there are also Egyptian animals rendered in a realist style (gazelle and hyena). The natural setting of the two scenes is represented by the uneven ground and the trunks of trees. Tendrils of ivy with corymbs sprouting from acanthus buds in the corners (see fig. 3.5) run between the central scene and the surrounding bestiary. This motif, composed of one of the god’s favorite plants, joins the two parts of the same scene more than it separates them since it is not bordered, and it underlines the Dionysiac character. In contrast, the guilloche that forms the frame of the ensemble belongs to the decorative repertoire of luxury arts (see fig. 74).

As at Pella, this pavement features the traditional reduced polychromy and uses shading to render the volume of bodies. The technique is remarkable: the mosaicists have mostly used tesserae, more or less regularly cut and carefully chosen, particularly for the animals’ fur and to create the eyes of the Erotes (figs. 16, 17) and of the animals. A similar treatment of eyes is visible on the hunter mosaic from Alexandria (fig. 8). However, as at Pella (lion hunt mosaic) and in the Alexandrian hunter mosaic, the craftsmen turned to pebbles to make the children’s hair and the lion’s mane, outlining the
strands with lead strips (fig. 18). These strips are also used to mark the lines of decorative elements, notably in the children’s wings, even when the use of tesserae with straight edges makes the strips less useful. Tesserae are laid in oblique lines to create the volume of the torus. The shape of the tesserae is adapted to their use: at the threshold they are elongated for the thin red (terra cotta) strip and those that are placed along this strip are triangular. They are also cut more or less regularly as a function of use: very carefully cut in the torus to allow for tight alignment, but more irregular in the white background. This pavement belongs to the phase of technical transition and development of opus tessellatum.

Only a small part of the threshold is preserved (fig. 21). It features the use of different colored stone cut according to function (fleurons, bead and reel, segments of meander) (fig. 22) and reflects an inlay technique, which is a well-known craft in Egypt and the East from the second millennium. On a larger scale, this use of cut stone elements is to be found in opus sectile, a luxury craft that developed during the Hellenistic period for the decoration of floors and walls (see fig. 95).

Without any solid archaeological context, the date of this pavement has been much discussed. Breccia placed it between 50 BC and AD 50, and this date was accepted by both Adriani and Brown. Robertson preferred to attribute it to an “ancient period.” After examination and detailed study, Daszewski settled on a date between 290 and 260 BC. His arguments have not convinced all the specialists because of the ongoing debate as to whether opus tessellatum was “invented” in the West (Carthage or Sicily) or the East (Alexandria).

Two fragments of a panel or a band featuring a centaur pursuing a deer made of tesserae on a black background with the same wide use of lead strips have been found quite close to the hunter mosaic and the one from the British Consulate site (figs. 23–24). The shapes of the two figures are outlined by lead strips and certain internal features are also marked by lead strips. The centaur is seen side on, at full gallop, with his back turned to three-quarters profile. His right arm held a hunting staff to strike his prey but it is not preserved. His left arm is stretched forward to maintain his balance and is covered with an animal skin, the outer surface of which we can see as reddish-yellow with black spots, similar to the hide of the deer he is chasing, and the inner surface is still blood-red. The legs of the skin hang down below the legs of the centaur and its tail flies behind his torso. This action pose expresses the speed of the hunt. The centaur’s face is seen in profile and is made of small white and yellow tesserae with lead strips marking certain features (fig. 25). The deer is rendered in a similar way as on the Shatby pavement, with a ginger hide dotted with small squares made by the tessellatum. As with the centaur, the tesserae are larger on the body than on the head, and lead strips mark out the internal lines of the animal. These two fragments belong to the same evolutionary phase of Alexandrian mosaics as the hunting Erotes of Shatby.

The mortar floor with fleuron, the pebble pavement of the hunter, and the tessellatum mosaic of hunting Erotes are all three of mixed technique and were most certainly made within a reasonably short lapse of time for a domestic or palace context. The early date, to the end of the fourth and beginning of the third centuries BC proposed by Daszewski in 1978, has been confirmed by pavements and fragments that have been discovered more recently in stratified contexts. This is not the place to enter into the debate around the invention of opus tessellatum, which, in any case, seems to be somewhat pointless in that this new technique could have been “invented” in several centers from which it then spread. Nonetheless, it is noteworthy that these first Alexandrian pavements retain the composition, iconography, and limited polychromy of mosaics of Greece, and that they are evidence of technical innovations by mosaicists settled in the young capital and called from Macedonia by the new masters of Egypt.
This banqueting hall, discovered in the royal palaces zone, featured scenes from the savage world of the hunt. The central hunting scene is surrounded by wild animals oriented toward the guests. The animals are represented realistically. Erotes—young, chubby children with wings—are about to slay a deer that they have brought to ground. The mosaicist plays with the contrast between the graceful children and the wild beasts they are confronting, an expression of Dionysus’ power.