



**CARTHAGE
THEN AND NOW**

Carthage Then and Now

January 27 - April 15, 1979

Kelsey Museum of Archaeology • The University of Michigan • Ann Arbor

The International Campaign to Save Carthage

In 1972 the Tunisian Institute of Archaeology and Art launched, through the auspices of UNESCO, an unprecedented international rescue operation in order to try to save something of the ancient city of Carthage — a city which was consecutively the capital of the Punic empire (8th century-146 B.C.), the capital of the Roman province of Africa (1st century B.C.-A.D. 439), the capital of the Vandal kingdom of Africa (A.D. 439-533), and the chief city in Byzantine Africa (533-698). The history of this famous city spans almost fifteen hundred years, from its misty beginnings in the eighth century B.C. to the end of the seventh century A.D. when it finally succumbed to the Arab invaders.

The international rescue operation became necessary because of the dramatic transformation over the course of the twentieth century of the land which covers the ruins of the ancient city. As recently as 1925, most of the area which had formed the ancient city was open fields, cultivated by the inhabitants of two small villages which lay on the outskirts and by the French missionaries who had established a cathedral on the high point, the Byrsa. Starting just before the second world war and continuing at an ever-increasing pace since that war, the value of the land began to increase as the site became identified as one of the most desirable residential areas in the whole of modern Tunisia. This process has only been accelerated since the mid 1960s when the presidential palace was built on the northern edge of the ancient city. Thus, by 1972 most of the land which occupies the slopes of the hills facing towards the Gulf of Tunis (a gulf of the Mediterranean) had been bought up and built upon, mostly for wealthy villas. These villas have required massive foundations

and deep cellars which regularly cut through and often obliterate fifteen hundred years of history compressed into a depth of about fifteen feet of soil. Although some of the large monuments of the ancient city had been excavated and a few of them restored, (e.g. the Roman theater, the columned monument, and a Roman peristyle house which is now the Antiquarium), vast areas of the city were completely unknown.

Recognizing the magnitude of the problem, the Tunisian Institute moved to salvage as much as they could of the Tunisian heritage. Foreign archaeological schools and institutes were contacted and invited to send teams which would be assigned undeveloped lots within the area of the ancient city for excavation. The response was immediate, and within the next few years teams from Poland, Bulgaria, Britain, Italy, France (2), Germany, Denmark, the United States (2), and Canada (2) came to work in different parts of the city, joining the Tunisian archaeologists who were already working there. Most recently, specialists have been sent by the Netherlands and a Swedish team will begin in 1979. The Tunisian Institute made these excavations possible by blocking or temporarily forestalling the development of the few remaining vacant lots. Now, with the land facing the sea almost completely developed, the suburban growth is spreading to the back (or western) half of the ancient city, which will require more attention from archaeologists in the near future. The problem is not confined, however, to the area within the ancient city walls of Carthage since the extensive suburbs lying south and north of the walls have suffered even more dramatically from modern development, often of an industrial or commercial nature.



British Museum (Fig. 1). Kelsey's work concentrated on the area of the Sanctuary of Tanit (the Phoenician goddess, consort of Baal Hamon) and provided detailed information about the sanctuary and about child sacrifice in Punic Carthage. His photographer, George Swain, also of The University of Michigan, took many other photographs in and around Carthage which illustrate the appearance of the site in 1925.

The second aspect involves the advantages of the newer excavation techniques practiced by the current American teams at Carthage when compared with the old methods. By a peculiar coincidence, one of the two American teams now working at Carthage, the team from the Oriental Institute of Chicago and from the Semitic Museum of Harvard University directed by Professor Lawrence Stager, has resumed excavation in the same Sanctuary of Tanit where Kelsey worked (Figs. 2, 12). In 1975 The University of Michigan also sent a team to work at Carthage just 50 years after Kelsey worked there (Fig. 11). It is as a result of the information produced by the new excavation techniques that the contrast between "Carthage Then" and "Carthage Now" becomes all the more apparent. The work of these two teams is reflected in the present exhibit.

American Research at Carthage

The theme of the exhibit, "Carthage Then and Now," focuses upon two aspects of archaeological research at the city. The first is the radical transformation which has overtaken the site of the ancient city during recent years. We are able to illustrate this transformation the better because in 1925 Carthage was the scene of an earlier American excavation, by Francis W. Kelsey of The University of Michigan, founder of the Kelsey Museum. His excavations were conducted jointly with the Count de Prorok and with a number of French and British scholars, including Donald Harden, now of the

Trade

Trade between Carthage and the rest of the Mediterranean passed through the twin harbors (the rectangular commercial harbor and the circular military harbor), both now known to have been constructed in the late 4th or early 3rd century B.C. and then restored under Augustus (27 B.C.-A.D. 14) after the Roman sack of the city in 146 B.C. These two harbors have been the focus of attention for the British team and for the Chicago-Harvard team and they have shown that the harbors continued in use into the 7th century A.D. The site of the earlier Punic harbor (7th-4th century B.C.) has yet to be determined, but the quay walls of both of the late Punic harbors have been exposed. Imported pottery in that period includes black-glazed South Italian, Sicilian, and Greek wares, Italian perfume bottles, and amphoras from Marseilles.

In the Roman period, Carthage served as a major grain supplier for the city of Rome, and wheat from the hinterland passed through the Carthaginian harbors on the way to Italy. Warehouses around the rectangular harbor to house goods in transit have been identified by the Chicago-Harvard team. Other exports included fine tablewares, known as African Red Slip wares. Imports to Carthage are known chiefly through shipping containers (amphoras) which can be identified as made in other parts of the Mediterranean (Fig. 4). For the earlier Roman period, imports came from Italy and Spain, while for the later Vandal and Byzantine periods there were strong trading links with the eastern Mediterranean (Palestine and Egypt) and also with Constantinople. The movement of peoples and goods is also evidenced by coins which were in circulation at Carthage: in the later Hellenistic period coins minted in Cyrenaica and Sicily reached Carthage, while in the

4th century A.D., coins from almost every one of the imperial mints of Europe and Asia have been found. Until the current excavations, there was no information about the foreign coin types which were circulating in the city.



3

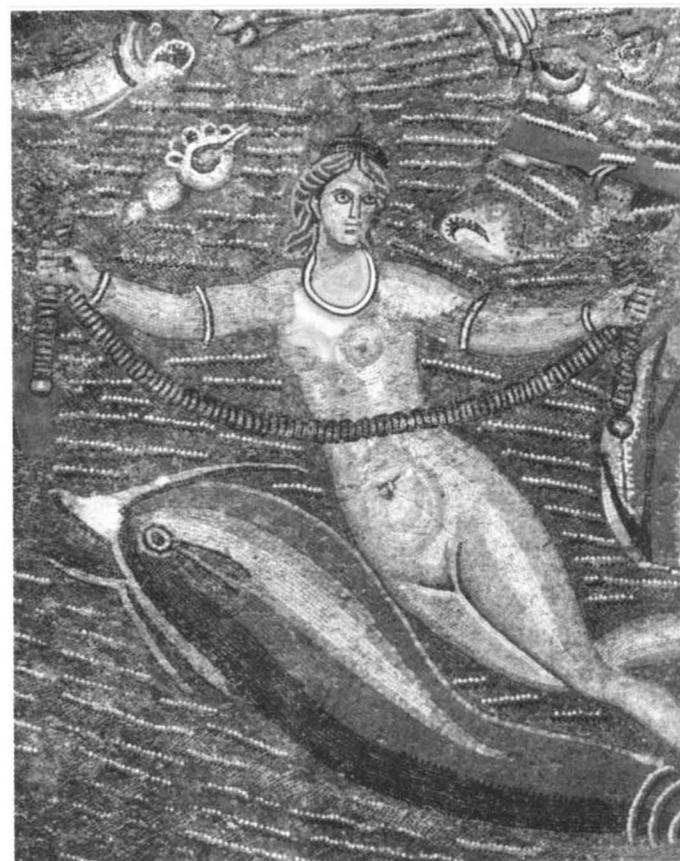


4

Industries

The Mint:

Current research has also provided much information about the history of the mint at Carthage. In the Punic period from the mid 4th century B.C. to about 200 B.C., the Carthaginian mint produced gold, silver, electrum, and bronze coins (Fig. 3), but after her defeat by Rome in the second Punic war only poor quality bronze seems to have been produced, reflecting her depressed economic condition. A mint was reestablished at Carthage as a Roman colony under Augustus and Tiberius, but from about A.D. 25 to the end of the 3rd century Carthage relied upon coins produced at other Roman mints. At the end of the 3rd century the mint was reopened because of the need to pay troops organized to fight a confederation of tribes of local Mauri. Gold, silver, and bronze were produced. After a number of other issues in the early 4th century the Carthage mint closed again in 311. Another irregular series of coins was struck in the late 4th and early 5th centuries at the time of usurpers who set themselves up as emperors (Gildo and Boniface). The Vandal kings established a major mint at Carthage which produced gold, silver, and bronze. Vandal coinage exhibits a number of Roman features, and some Vandal coins were struck in the name of Roman emperors. The Vandal moneyers also reintroduced on their coins the palm tree and the horse's head, both recalling earlier Punic issues. Carthage was also the chief mint city of Byzantine North Africa from 533 to 695. Gold and copper was struck in great quantities but silver was rare. During the middle of the 7th century, Carthage became the second most important mint in the empire.



5

Mosaics:

The two most famous home products of Roman Carthage were her mosaics and her pottery. Carthage became the center of the North African mosaic industry at about the turn of the 1st-2nd century and quickly developed into one of the leading Mediterranean centers, influencing not only the rest of North Africa but also cities as far away as Antioch in Syria. The most characteristic feature of her mosaic schools was the emphasis on figured polychrome "all-over" designs, often depicting scenes from daily life. Hunting and fish- or sea-related scenes (Fig. 5) were particularly popular North African themes. The mosaic industry at Carthage did not falter until the Vandal period, but even then mosaics continued to be made, and a revival of interest in decorated floors, sometimes in cut marble (*opus sectile*) occurred in the Byzantine period.

Pottery:

The pottery industry of Carthage shared in the North African (specifically Tunisian) development which introduced to the rest of the Mediterranean world the famous Red Slip Wares, which became the most popular fine tablewares throughout the period ca. 100 to 600 A.D. and were exported on a large scale. Several forms of plates and bowls are characteristic of the Carthaginian workshops. Other centers for the industry lay inland, including an important one at Oudna. The North African pottery kilns also developed the characteristic lamps with Christian decoration (Fig. 6), which began in the late 4th century and continued into the 6th century.



6

Punic Industries:

In Punic Carthage iron-smelting and processing are attested on the French, British, and American sites, while texts also refer to the textile industry (blankets and pillows) which would have been linked to the famous Phoenician dyes of red and purple.

Religion

Religious life in the Punic period is best exemplified by the excavations by both F. W. Kelsey and by the Chicago-Harvard team in the Sanctuary of Tanit (Figs. 1,2), where there is now firm evidence for human sacrifice of children in company with animals and other offerings. The children were burned on a funeral pyre and their ashes and calcined bones placed in the typical Punic urns, which were buried and then marked in the later Punic period by an upright slab or stela (Fig. 7) which often received elaborate incised decoration and an inscription in Punic.

In the Roman period, Carthage shared the same religious beliefs with the rest of the Roman empire, embracing the Greco-Roman pantheon of gods and the eastern cults which became so popular (e.g. the Egyptian cults, including that of Harpokrates), but still emphasizing some of the older African and Punic gods who had become assimilated with the new classical deities. Religious motifs which refer to the pagan gods are common, not least on the lamps produced in Carthage at this time.

Carthage was important in the early history of Christianity even before Christianity became the official state religion in the 4th century. The most famous Christian associated with Carthage was Saint Augustine. Carthage then produced many Christian motifs on her pottery, particularly on the large plates and dishes, and on her lamps (Fig. 6). The coins of the Vandal and Byzantine periods also commonly display Christian symbols, while the strength of Christianity among the ordinary people in the city is emphasized by the very large number of churches (e.g. St. Cyprian) which produce many Christian objects like carved bone plaques of saints.

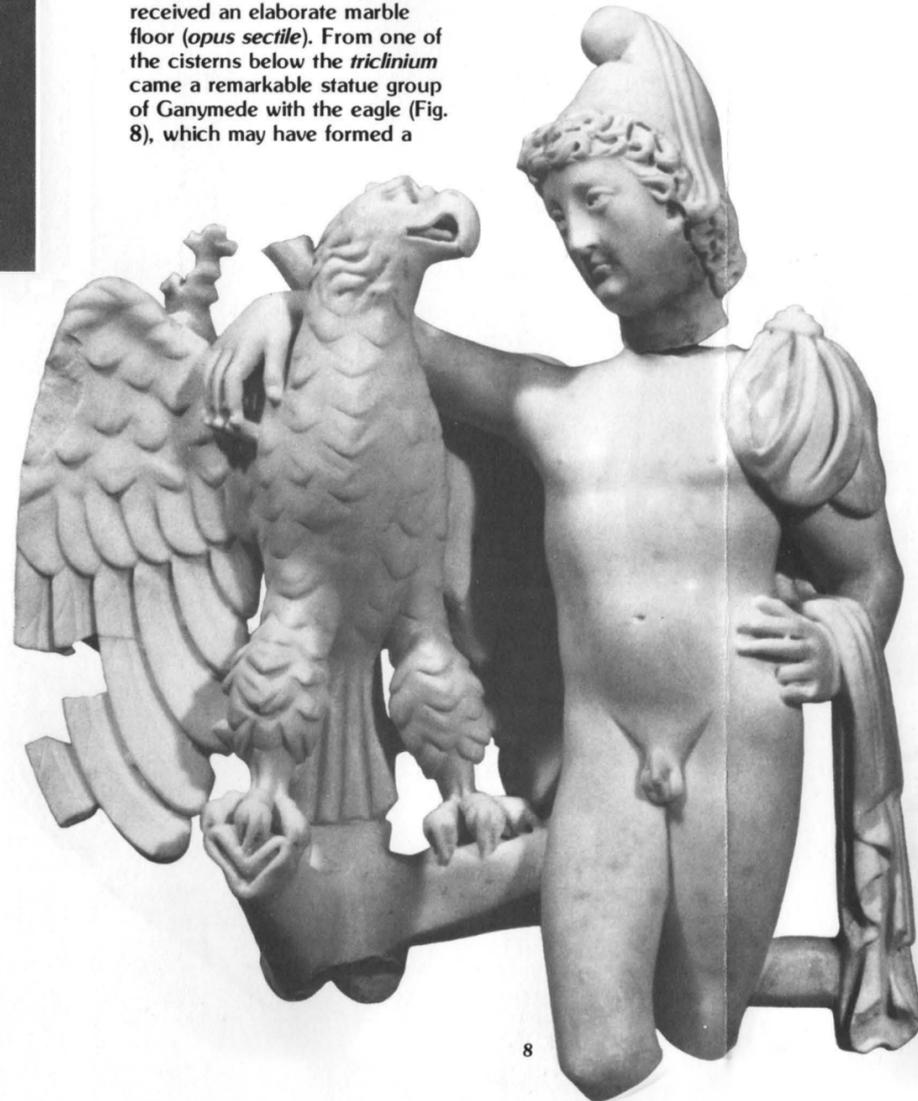


7

The House of the Greek Charioteers

Domestic life at Carthage is well illustrated by the so-called "House of the Greek Charioteers," excavated by the Michigan team since 1975. Constructed in the first quarter of the 5th century A.D., it contained elaborate mosaic pavements, including a panel at the entrance to the main dining room (*triclinium*) which depicted four charioteers in the starting gates of a circus (Fig. 10). In the Byzantine reconstruction of the house in the 6th century, it received an elaborate marble floor (*opus sectile*). From one of the cisterns below the *triclinium* came a remarkable statue group of Ganymede with the eagle (Fig. 8), which may have formed a

decoration for a fountain in the courtyard or for a niche in the *triclinium* itself and which seems to belong to the late Roman revival of paganism. The house has also yielded an assortment of cosmetic, personal, and utilitarian items of the kind which are often found at Roman sites; they include some gemstones and beads.



8

Building Materials and Techniques:

Many samples of Punic flooring have been recovered from the site of the House of the Greek Charioteers, floors which belonged to the Punic houses which occupied this part of the city in the earlier period. The floors of the Punic period for the most part employed chips of stone or terracotta rather than limestone mosaic cubes, which only became popular in the latest Punic and in the Roman periods. Punic mosaics tended to be plain white rather than the polychrome or decorative and figured designs which appear in the Roman period.

The Roman phase of the house made use of the characteristic North African vaulting tubes to roof the main rooms. These hollow tubes made of fired clay were lightweight and also provided insulation against excessive summer heat or against the cold in winter. The houses also contained many types of marble decoration, both for floors and for walls. The marbles found have been traced to quarries both in North Africa and in other parts of the Mediterranean. Carthage lay relatively close to good outcrops of rock which were used as quarries to serve the city and provide both the building stone and the more expensive decorative stones. Many of the quarries have been identified in the most recent research. More exotic stones were brought from around Thuburbo and Djebel Oust to the south (limestone). Marble quarries near Thuburbo and near the modern Algerian border at Chemtou (Fig. 9) also served Carthage, as did another North African quarry at Cap de Garde in modern Algeria. The Roman inhabitants also imported decorative marbles from overseas, particularly from the well-known quarries in Italy, Greece, and Egypt. Bricks were also used for other buildings in the Roman city, particularly for

bath buildings and for small arches or windows, while tiles were used in bath buildings and for roofing other structures. From the churches in the city come the molded tiles, probably used as wall decoration, which depict animals and Christian subjects.



9



10

Field Methods:

Field methods have changed a great deal since the days of the extensive French excavations of the Révérend Père Delattre and since the days of the first American excavation at Carthage in 1925. Recording systems are much more detailed and the process of excavation itself has been refined. In general, excavations today move much more slowly than their predecessors; much less earth is dug and much more evidence is extracted from that which is dug. Smaller numbers of laborers are employed, and emphasis is placed less on the pick and shovel than on the trowel and brush. An effort is made to distinguish every archaeological layer, no matter how small, to excavate it separately, and to keep the finds and material culture from it separate (like pottery, animal bones, botanical remains, coins, and geological samples). This attention to detail necessitates a far more complicated and bulky recording system, which in turn requires a larger number of supervisors (normally archaeology students) who will be responsible for controlling what is done in each small sector of the excavation. The earth that has been meticulously excavated is then subjected to further processes: it will be sieved through wire meshes in order to ensure that

all the important remains of material culture (including the animal bones and shells) are recovered, and then every fifth bucket of earth may also be subjected to water flotation, which causes the carbonized materials (wood and seeds) to float to the top where they can be scooped off. Samples for sedimentary analysis may be taken by the geologist in order to study the processes which resulted in the formation of each archaeological deposit, while pollen samples taken particularly from the water-laid sediments produce profiles of the natural environment (especially tree and plant cover).

By treating each archaeological deposit separately, it is possible to refine the dating of the material culture. This applies particularly to pottery vessels, which can be dated more closely from their association with coins in the same deposit. A detailed sequence of the various categories of material which derive from different phases in the history of the city can be worked out so that we can talk with more precision about standards of living and the economy from one period to another. Environmental research has also acquired a new boost from improved field methods; animal bones and other faunal remains, including shells, provide evidence for the kinds of animals being raised, the pattern and methods by which they were raised, and butchery practices; carbonized seeds give us information about the crops which were grown and the impact of crops on the diet of the citizens; carbonized wood gives us data about the fuel and the sources from which it was gathered, an economic indicator which can be coupled with the study of the rock types used for construction materials. Improved methods, then, have resulted in increased knowledge about numerous aspects of life in the city of Carthage.



11

Acknowledgements

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John Griffiths Pedley, director of the Kelsey Museum and Project Director of the Michigan

excavations at Carthage, actively assisted us in many ways both at Carthage and at the Museum. We are most grateful for his enthusiastic support of this project. Lawrence Stager, Director of the Chicago-Harvard team at Carthage and professor of archaeology at the University of Chicago, was an indispensable help in sharing his knowledge of the Punic sanctuary of Tanit and of the commercial harbor and in providing us with numerous artefacts as well as photographs, slides, and drawings from his excavations.

At Carthage, many individuals on the 1978 Michigan team gave their time in helping us to assemble exhibition materials: Steven E. Ostrow, Robert L. Vann, Amy Rosenberg, and Patrice Panella. Special thanks are due Betty Naggar, expedition photographer, who spent many hours retracing the steps of George Swain at Carthage to capture modern views of the monuments and sites he photographed in 1925.

John W. Hayes advised us on the pottery and lamps. Bruce Hitchner selected the coins and prepared information on the mint at Carthage for this exhibition. T.V. Buttrey gave us additional advice on the coins and obtained photographic materials. Katherine Dunbabin provided

information about the mosaics. David Reese, Jeffrey Schwartz, and Willem van Zeist helped us to assemble analyzed organic materials. Carl Kruschen provided us with a section drawing of the commercial harbor. Robert L. Johnston, Margaret Alexander, and Anna Marguerite McCann permitted us to reproduce their slides of Tunisian potters and mosaicists at work and of the Chemtou quarry, respectively. Rebecca Miller lent us slides for the section on field methods.

At the Kelsey we have relied heavily upon the skills and talents of David Slee for the installation of the exhibition, of Jill Bace for loans, of Fred Anderegg for numerous photographs, and of Pamela Reister for the typing of labels. Secretary Kathleen Font was an invaluable help in all of the administrative details.

The installation at the Kelsey Museum was designed by Vincent Ciulla of New York. The brochure was edited by Carol Hellman and designed by Carol Taylor, both of University Publications. The idea for the exhibition, which was first suggested to us by Professor Sharon Herbert of The University of Michigan, could not have been realized without the generous support of the National Endowment for the Humanities, Division of Public Programs, Museums and Historical Organizations Program.

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Carthage



12

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