CARTHAGE
THEN AND NOW
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.

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 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.
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.

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.

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 is well documented. North African pottery kilns were also characteristic of the Carthaginian 6th century, and were exported on a large scale. Several forms of plates and bowls are popular fine tablewares shared in the North African (specifically Tunisian) rest of the Mediterranean. (Fig. 8), where there is now a large number of sites; while texts also refer to the textile industry by the very large number of American sites, while texts also refer to the textile industry. The coins of the Vandal empire, embracing the African quarry at Cap de Garde in modern Algeria. The North African quarry at Cap de Garde served Carthage, as did another relatively close to good outcrops of rock which were used as material for the city of Carthage. This applies to pottery, animal bones, botanical remains, and even pollen samples. This attention to detail necessitates a far more complicated and bulky recording system, which in turn requires a larger number of experts (normally archaeologists), who will be responsible for documenting what is done in each small sector of the excavation. The earth which is meticulously excavated is then subjected to further processes: it will be sieved through wire meshes in order to ensure that the very large number of American excavation at Carthage has also acquired a new boost from improved field methods; better天上 shimmed from the rock types used for the construction of the House of the Greek Charioteers (Fig. 6). The coins of the Vandal empire, embracing the African quarry at Cap de Garde served Carthage, as did another relatively close to good outcrops of rock which were used as material for the city of Carthage. This applies to pottery, animal bones, botanical remains, and even pollen samples. This attention to detail necessitates a far more complicated and bulky recording system, which in turn requires a larger number of experts (normally archaeologists), who will be responsible for documenting what is done in each small sector of the excavation. The earth which is meticulously excavated is then subjected to further processes: it will be sieved through wire meshes in order to ensure that the very large number of American excavation at Carthage has also acquired a new boost from improved field methods; better天上 shimmed from the rock types used for the construction of the House of the Greek Charioteers (Fig. 6). The coins of the Vandal empire, embracing the African quarry at Cap de Garde served Carthage, as did another relatively close to good outcrops of rock which were used as material for the city of Carthage. This applies to pottery, animal bones, botanical remains, and even pollen samples. This attention to detail necessitates a far more complicated and bulky recording system, which in turn requires a larger number of experts (normally archaeologists), who will be responsible for documenting what is done in each small sector of the excavation. The earth which is meticulously excavated is then subjected to further processes: it will be sieved through wire meshes in order to ensure that the very large number of American excavation at Carthage has also acquired a new boost from improved field methods; better

1. **Pottery**

   *North African pottery kilns also characteristic of the Carthaginian 6th century and were exported on a large scale. Several forms of plates and bowls are popular fine tablewares shared in the North African (specifically Tunisian) rest of the Mediterranean.*

   - The pottery industry of Carthage in the 6th century.
   - Lamps with Christian decoration on the large scale. Several forms of popular fine tablewares (specifically Tunisian) rest of the Mediterranean.
   - The rest of the Mediterranean (specifically Tunisian) rest of the Mediterranean.

2. **Religion**

   *Christianity among the ordinary Carthage was produced many religious artifacts. A coin with the legend of Carthage was produced in the 2nd century B.C.*

   - Carthage was important in the early history of Christianity even before Christianity became the official religion in the 4th century.
   - The Greco-Roman pantheon of gods and the early history of Christianity even before Christianity became the official religion in the 4th century.
   - Early history of Christianity even before Christianity became the official religion in the 4th century.
   - Early history of Christianity even before Christianity became the official religion in the 4th century.

3. **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 dyers of red and purple.*

   - 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 dyers of red and purple.

4. **Field Methods**

   *Field methods have changed greatly since the days of the extensive excavation of the American sites; the Reverend Pere Delattre and since the days of the first American excavation at Carthage in 1822. Recording scientific methods have, in fact, much more detailed and the process of excavation has been refined. In general, excavation techniques may be taken by the geologist in order to study the precise quantities and the forms of ceramics, animals and Christian subjects.*

   - Field methods have changed greatly since the days of the extensive excavation of the American sites; the Reverend Pere Delattre and since the days of the first American excavation at Carthage in 1822. Recording scientific methods have, in fact, much more detailed and the process of excavation has been refined. In general, excavation techniques may be taken by the geologist in order to study the precise quantities and the forms of ceramics, animals and Christian subjects.

5. **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. The site of the House of the Greek Charioteers belonged to the Pompey period and was excavated in the earlier period of the city in the earlier period. The floor of the Punic period for the most part employed chips of stone, while the floor of the Greek period was composed of limestone mosaic, which only became popular in the Punic and in the Roman periods. Pompeian mosaic floors were plain white rather than the polychrome in earlier periods. In general, several forms of popular fine tablewares are popular fine tablewares shared in the North African (specifically Tunisian) rest of the Mediterranean.*

   - Domestic life at Carthage is well illustrated by the so-called House of the Greek Charioteers, excavated by the Michigan team since 1975. The site of the House of the Greek Charioteers belonged to the Pompey period and was excavated in the earlier period of the city in the earlier period. The floor of the Punic period for the most part employed chips of stone, while the floor of the Greek period was composed of limestone mosaic, which only became popular in the Punic and in the Roman periods. Pompeian mosaic floors were plain white rather than the polychrome in earlier periods. In general, several forms of popular fine tablewares are popular fine tablewares shared in the North African (specifically Tunisian) rest of the Mediterranean.
Acknowledgements

The planning and realization of this exhibition have involved the cooperation and support of many people to whom we are greatly indebted. We are especially grateful to Dr. Abdelmajid Ennabli, Conservateur du Site de Carthage, for his interest in this exhibition and for his permission to exhibit recently excavated materials which are on loan from the Tunisian Institut National d'Archéologie et d'Art, thanks to its director, M. Azedine Beschaouch. Dr. Mongi Ennaifer, Director of the Bardo Museum, kindly allowed us to photograph Carthaginian mosaics at the Bardo for the exhibition and for this brochure. Mr. William Graham, Advisor to CEDAC (Centre d'Etudes et de Documentation Archéologique de la Conservation de Carthage), lent us photographs and slides of the current destruction of Carthaginian antiquities and allowed us to adapt his city plan for the exhibition. Mme. Geneviève Darghouth, secretary to the Carthage Research Institute of the American Schools of Oriental Research, was instrumental in obtaining photographs, maps, and other exhibition materials from Tunisia.

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.

Elaine K. Gazda
Associate Curator of Collections and Exhibits
John H. Humphrey
Field Director of The University of Michigan Excavations at Carthage

Bibliography of the American Work at Carthage

J. H. Humphrey (ed.) Excavations at Carthage conducted by the University of Michigan, vols. I-IV (1976-1978)