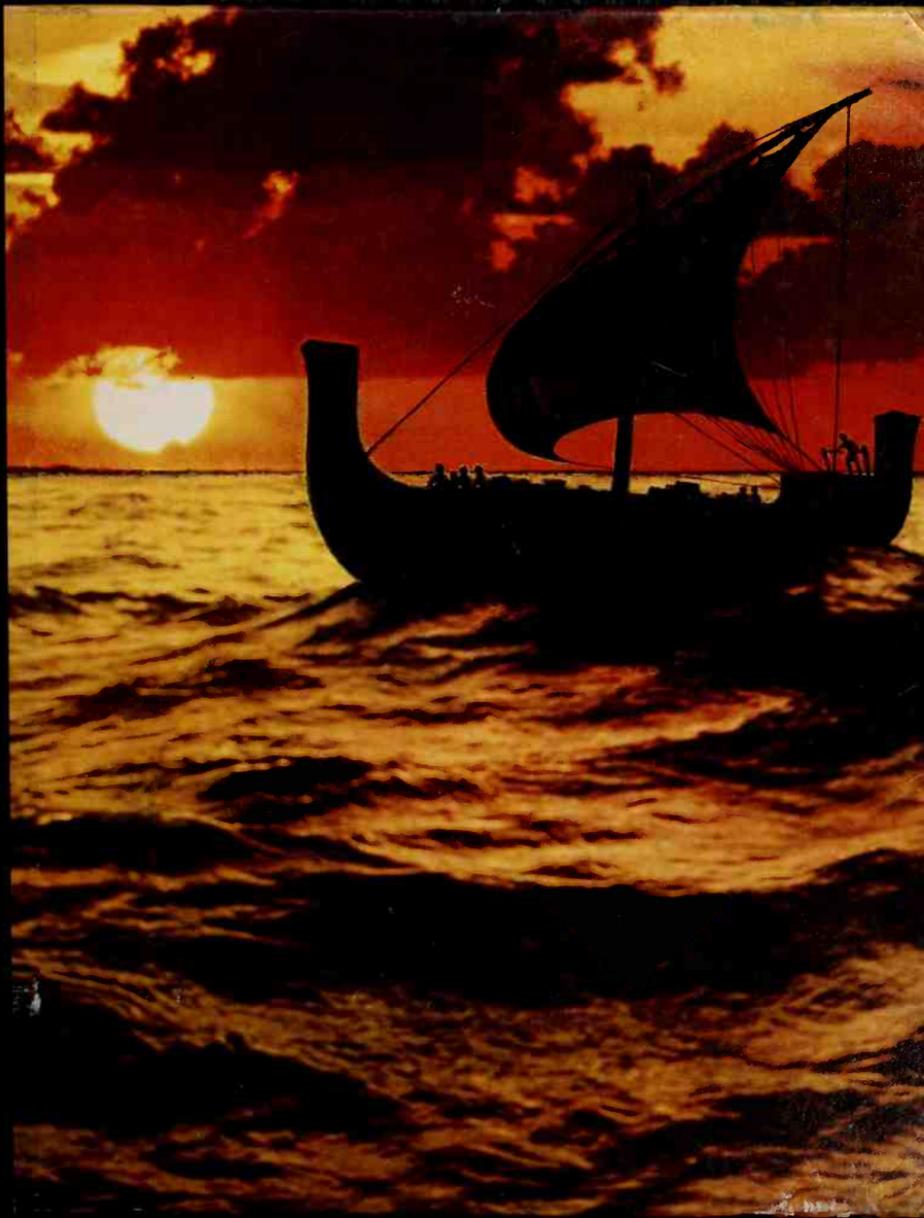


The Sea Traders



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The Emergence of Man

The Sea Traders

by Maitland A. Edey
and the Editors
of TIME-LIFE Books

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The Cover: A square-sailed Phoenician trading vessel prepares to head for the distant shore, where it will put in for the night. Such tubby boats—called “black ships” by the Greek poet Homer because of their protective coating of pitch—plied the Mediterranean on trading missions, ranging all the way from present-day Lebanon to Morocco.

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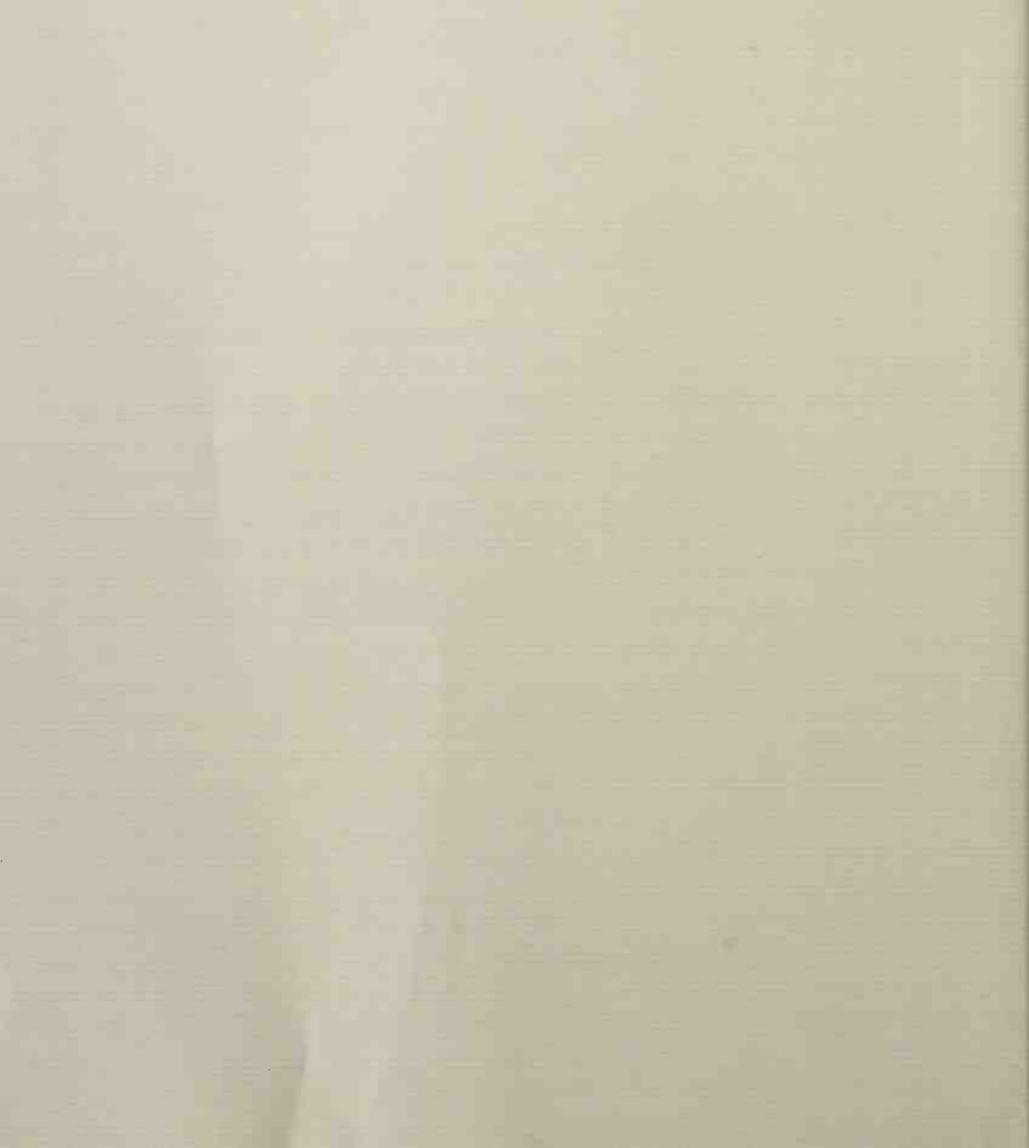
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Introduction

Of the three peoples—the Israelites, the Philistines and the Phoenicians—who played parts in the ascendant history that was being made about 1200 B.C. on the eastern coast of the Mediterranean, the Phoenicians are perhaps the least well known. The entry of the Israelites into Canaan is celebrated in the heroic sagas of the Bible. The Philistines, too, have been immortalized in the same source, although pictured in such an unfavourable light that their very name has come to signify uncouth barbarians—which they were far from being. But the Phoenicians escaped real attention. Except for the tradition that they invented the alphabet and a process for dyeing wool to a deep royal purple, their achievements as sea traders and colonizers have not been widely heralded.

The reasons for the oblivion into which the Phoenicians fell are many—and they are fascinatingly discussed in this book. Fortunately, their story can now be pieced together. Phoenician ships anchored at sheltered coves in Cyprus, Sicily, Sardinia, North Africa, Spain and on the western shores of Morocco. Recent evidence, uncovered not only at their home ports but at these ports of call around the rim of the Mediterranean and beyond, has provided many new insights into their pattern of behaviour and shed much new light on their accomplishments. As the sailors went ashore to trade, and later to establish trading posts and colonies, they left traces whose full meaning we have only lately been able to comprehend.

Now archaeologists, working at dozens of sites around the shore of what once was known as the Great Sea, are busy excavating the Phoenician past.

I, for one, have spent several years picking my way through the buried ruins of one of the Phoenician cities on the coast of Lebanon, trying to uncover its history and perchance to catch the spirit of the seafarers who set sail from its port. Even now it is clear that the city, then called Sarepta, was a centre for craftsmen: metalworkers, potters, dyers, weavers—all played their part in the lucrative trade for which the Phoenicians were famous.

Standing in Sarepta's ruins one can but wonder what induced men to set sail from Lebanon for unknown parts at the end of the Second Millennium B.C.; at the time their fathers had been content to live for centuries in a few city-states that were nurtured by a narrow strip of land between a massive range of mountains and the sea (*map, pages 12-13*). That they did set sail is a tribute to their courage and their skill as seafarers. But more important is the fact that in doing so they became the first to provide a link between the culture of the ancient Middle East and that of the uncharted world of the West. They brought with them skills from their homeland that were quickly mastered within the colonies. Further, their approach to these ventures represented something new. They went not for conquest, as the Babylonians and Assyrians did, but for trade. Profit rather than plunder was their policy. In their peaceful penetration of new markets the Phoenicians became the first Easterners to discover the Atlantic and to bear with them a useful invention, the alphabet. Had they not done so, the story of Western man might have taken quite another turn.

Professor James B. Pritchard
Associate Director
The University Museum
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Chapter One: Who Were the Phoenicians?



One day, about 3,200 years ago, a small trading vessel was poking its way along the southern coast of what is now Turkey. There is no way of telling whether it was headed east or west when it got into trouble, in what season of the year it was travelling or what port it hailed from. But trouble did strike. It sank just off Cape Gelidonya in about 100 feet of water.

In 1960 two young Americans who have since become experts in the study of ancient wrecks, George Bass and Peter Throckmorton, decided to investigate the Cape Gelidonya wreck, whose existence had been reported to them by local sponge fishermen. They found that it had landed on a hard, rocky bottom where there had been little or no deposition of sand or mud to cover and preserve it. Therefore nearly all of the hull of the little ship had long since been eaten away by marine worms. All that was left of it was its cargo and, underneath that, some bits of its bottom planking, along with a layer of coarse twigs and branches. This stuff is known as dunnage and has been widely used down through marine history as packing to prevent cargo from bumping and banging during rough passages at sea. By carbon dating, these remaining bits of dunnage helped confirm the age of the vessel—an age that had already been given it after the divers had a chance to study its cargo.

For marine archaeologists the Gelidonya wreck is a critically important one. With the possible exception of one other, located in shallow water near Marsala

off the coast of Sicily, the Gelidonya wreck is the only known fragment of a ship that is believed to have been built by the Phoenicians.

Common knowledge about the Phoenicians is as skimpy as the remains of their vessels. Most people, if they have heard of the Phoenicians at all, know only two things about them: they were great seafarers and traders, and they invented the alphabet. The first of these statements is true; the second is not (*Chapter 4*). What else is known about the Phoenicians is quickly told.

They were indeed the greatest sea traders of the ancient world. They had their start in the eastern Mediterranean in what is now part of Lebanon. They began to appear on the historical scene around 1200 B.C. and became an important influence in the commerce, the culture and the history of their world for nearly a thousand years. Over that long span they spread westwards throughout the Mediterranean, and so, for convenience's sake, it has been customary to speak of the cities that occupied the Lebanese coast as Phoenicia East, and the scattered settlements in the western Mediterranean as Phoenicia West. But, having so identified Phoenicia East and Phoenicia West, one must quickly say that there never was a country or an empire called "Phoenicia", only a collection of independent cities more interested in trade than in the development of an empire.

Furthermore, as traders they were their own worst competitors and were extremely jealous of one another, with the result that, though they spoke a common language and worshipped the same gods, they never did coalesce into a country. They spoke of themselves as Tyrians, Sidonians, Byblians, Carthaginians, Motyans and so on. The very word "Phoe-

Coasting along the rocky Mediterranean shore, a high-bowed Phoenician cargo vessel carries a load of fir and cedar logs, oxhide-shaped copper ingots, some covered bales of mixed cargo and two shipments of clay amphorae filled with olive oil and wine. On the starboard side a man—wearing a typically Phoenician cap—is taking a sounding with a lead line.

A Phoenician Chronology

1200-1100 B.C.

Coastal Canaanites become known as Phoenicians.

1000-700 B.C.

Phoenicia East establishes trading routes and settlements in Mediterranean.

c.880 B.C.

Assyrians embark on 250 years of harassing Phoenicians.

c.814 B.C.

Tyre founds Carthage.

735-728 B.C.

Greeks begin to settle Sicily.

c.700 B.C.

Carthage founds Motya, in western Sicily.

c.600 B.C.

Carthaginians begin alliance with Etruscans against Greeks.

585-572 B.C.

Nebuchadnezzar II of Babylon besieges and captures Tyre.

567-559 B.C.

Tyre under Babylonian control; judges rule city.

c.550 B.C.

Carthaginian general Mago campaigns successfully against Greeks in Sicily and establishes 150-year Magonid Dynasty.

494 B.C.

Phoenicia begins naval aid to Persia in 14-year campaign against the Greeks.

480 B.C.

Battle of Salamis. Greeks conquer Persians, who were fighting with Phoenician naval aid. Carthaginian army also routed by Greeks at Himera, Sicily.

397 B.C.

Motya falls to Greeks.

336 B.C.

Alexander the Great sets out to conquer the East.

333 B.C.

Byblos and Sidon surrender to Alexander the Great.

332 B.C.

Tyre besieged by Alexander. End of Phoenicia East.

264-241 B.C.

First Punic War between Rome and Carthage.

c.237 B.C.

Hamilcar Barca of Carthage develops power base in Spain; establishes Barcid Dynasty.

229 B.C.

Hamilcar Barca dies in battle; Hasdrubal, his son-in-law, succeeds him and founds New Carthage in Spain.

221 B.C.

Hasdrubal assassinated; succeeded by Hamilcar Barca's son Hannibal, known as Hannibal the Great.

218 B.C.

Second Punic War begins. Hannibal successfully crosses Alps to fight Romans.

202 B.C.

Hannibal recalled to Africa and defeated by Roman Scipio. Second Punic War ends.

146 B.C.

Third Punic War ends. Carthage falls. End of Phoenicia West.

nician" was unknown to them; the label probably was pasted on them by the Greeks and preserved by the accident that the Greek language and its literature, and not the Phoenician, have been passed down to us. The Phoenician scholar Donald Harden notes that the word "phoenix" first crops up in Homer, where it means a dark red or purplish-brown colour. Since the Phoenicians were dyers of great skill, renowned for their purple cloth, it is not hard to see how the name stuck. (Their name has nothing to do with the mythical bird phoenix, although both are derived from the same Greek root.)

The Phoenicians have occupied a curious place in history for a long time. Through many references to them by others—in the Bible, in ancient literature and in the works of classical historians—they earned their reputation as the outstanding seafarers, traders, travelling artisans, explorers and shipwrights of their day. They went everywhere. They swapped goods with Egyptians, Greeks, Assyrians, Babylonians, Africans and Spanish tribesmen. The entire Mediterranean world was their bazaar. They even went beyond it, out into the Atlantic, far down the African coast and possibly north to Brittany and the British Isles. And yet, until comparatively recently, almost nothing directly was known about them because they appeared to say so little about themselves.

In this respect they were quite different from their better-known neighbours, who have left behind myths, stories, detailed historical accounts and marvellously intimate glimpses into their daily lives. The Babylonians and Assyrians speak to us from literally hundreds of thousands of clay tablets and from inscriptions on monuments. The Egyptians speak from papyri, from a stunning collection of household ob-

jects and works of art, from long messages carved on temples and tombs. We know an enormous amount about the Hebrews from the Bible, about the ancient Greeks from Homer, Herodotus and Thucydides—from many other poets, dramatists and historians. The Phoenicians, by comparison, are strangely mute.

It is from others—from people who in talking about themselves talk about the Phoenicians—that much of our knowledge has come. Wall carvings from Egypt and Mesopotamia give us better pictures of Phoenician ships and cities than any Phoenician source does. Only two significant collections of clay tablets that scholars are willing to ascribe to Phoenicians or their immediate ancestors have ever been discovered. One devotes itself to politics, the other to religion. Neither says anything about Phoenician daily life. No Phoenician tale has ever been found, no song. The soul of a people is revealed by the songs they sing, the jokes they crack. On the record the Phoenicians never cracked a single joke. I cannot believe they didn't. But there is no Phoenician Aristophanes to memorialize their humour, just as there is no Aeschylus to preserve their sense of tragedy, no Homer to talk about good food, good ships, good fighting, fine weapons and beautiful women. The Phoenicians were familiar figures in the ports of the Mediterranean when Homer wrote the *Iliad*. Surely they were as passionate about ships, the sea, war and women as the Greeks. But what they thought about them and what they said we simply do not know.

No country, no civic records, no historians, no poets, no songs, no jokes. Who, then, were the Phoenicians? And if they were so well known to their contemporaries in the ancient world, how is it that they faded into such obscurity later on?

Fair questions. The Phoenicians faded because of the special circumstances they found themselves in, both geographical and historical—a particular climate, neighbours of a certain bent—and because of the particular kind of life they were able to work out for themselves in those circumstances. It is possible to write about them because, while their ships are still more or less a mystery, there has been recovered a growing collection of the trade objects that the Phoenicians carried about, assembled over the years by archaeologists working throughout the Mediterranean. Some of these were of Phoenician manufacture, some the goods of others for whom they were acting as middlemen—all of them widely scattered throughout the ancient world, thus proving the classical presumption that the Phoenicians were extremely busy traders and travellers.

Then there are the Phoenician sites, many of them the merest traces of abandoned trading posts stretching ever westwards like a string of beads along the African coast. An archaeologist, finding one and knowing how far a trading vessel could be expected to travel in a day (about 30 miles), can quite accurately forecast the next likely spot where the trader might have been tempted to put in for the night. A number of sites have been located in this way. Finally there were the settlements and trading posts that eventually became cities. The location of some of these places and their identity as Phoenician have been well known throughout history. Others were lost and had to be rediscovered. One, Sarepta, only eight miles from Sidon, was turned up as a rich archaeological site as recently as 1970. Today, though battered down by Greek and Roman, and by many an Arab and Crusader as well, the roots of those Phoenician towns

The Far-flung World Penetrated by the Sea Traders



The boldness of the Phoenicians as traders and explorers can be gleaned from this map. Before 1000 B.C. they were a huddle of small cities crowded along the very eastern edge of the Mediterranean. Anything lying west of Greece or Egypt was dangerously far from home; anything farther west—beyond Sicily—loomed as a fearsome waste of unknown geography, strange winds, currents, tides, whirlpools, ocean storms and savage people. The Phoenicians braved them all. Every town marked on the African coast—save Cyrene, a Greek colony—was settled by Phoenicians, with Carthage their western capital. So were towns in Malta, Sicily, Sardinia, the Balearic Islands and Spain.

The inset map shows why the eyes of the Canaanite coastal traders were turned seawards; they were hemmed in on land by the mountain ranges behind them. The key at left shows trade and exploration routes—though those shown running across the Sahara are largely conjectural. They touched at oases long since dried up and were used more by natives bringing things to the coast than by the Carthaginian traders themselves.

The period covered in the map extends from about 1300 B.C. to 140 B.C. in order to include and locate such peoples as the Hittites, whose empire collapsed soon after 1200 B.C., and the Etruscans, whose power began to wane after 500 B.C.



Lebanon's coast is rocky. Many of its reefs and ledges provide good harbours; others are lethal to ships blown ashore in storms.

still survive in the form of old walls, stairways, cisterns, temple foundations, tomb shafts and even paved dockyards for ships. The ghosts of the traders can still be heard whispering in those places, mingled with a hum of commerce and the creak of cordage, the clink of metals and the admiring sighs of people who came from far away to barter for rich purple cloth and shiny new toys.

How remote those old Phoenician cities are, their names disappearing into time like echoes struck from gongs: Oea, Utica, Hippo—all of them located in Mediterranean Africa. Motya, Lilybaeum (Marsala) and Panormus (Palermo) in Sicily. Sulcis in Sardinia. Alalia in Corsica. Abdera and Gades (Cadiz) in Spain. Finally, Mogador, vanishingly remote, a dream flickering far down the coast of Morocco, but no dream because recognizable Phoenician roots are still there. These are only a few of the scores of settlements, large and small, with which the Phoenicians dotted

their world and, in so doing, left us with the wherewithal to begin answering some of the questions about who the Phoenicians were and what they did.

As to the question of “who”: the Phoenicians were Canaanites, one group of a large number of Semitic-speaking peoples who had been spreading through the Middle East for some thousands of years. Where they all came from is difficult to say, but many scholars believe that they represent successive waves of tribal expansion by semi-desert herders, who over the centuries moved out from the enormous semi-arid expanses of northern Arabia eastwards into the more fertile Tigris-Euphrates valley, and westwards towards the Mediterranean into an area that now comprises Syria, Lebanon, Jordan and Israel. Thus, most of the people who walked the pages of early Middle Eastern history were Semites: the Babylonians, the Assyrians, the Israelites, the Canaanites, the Moabites, the



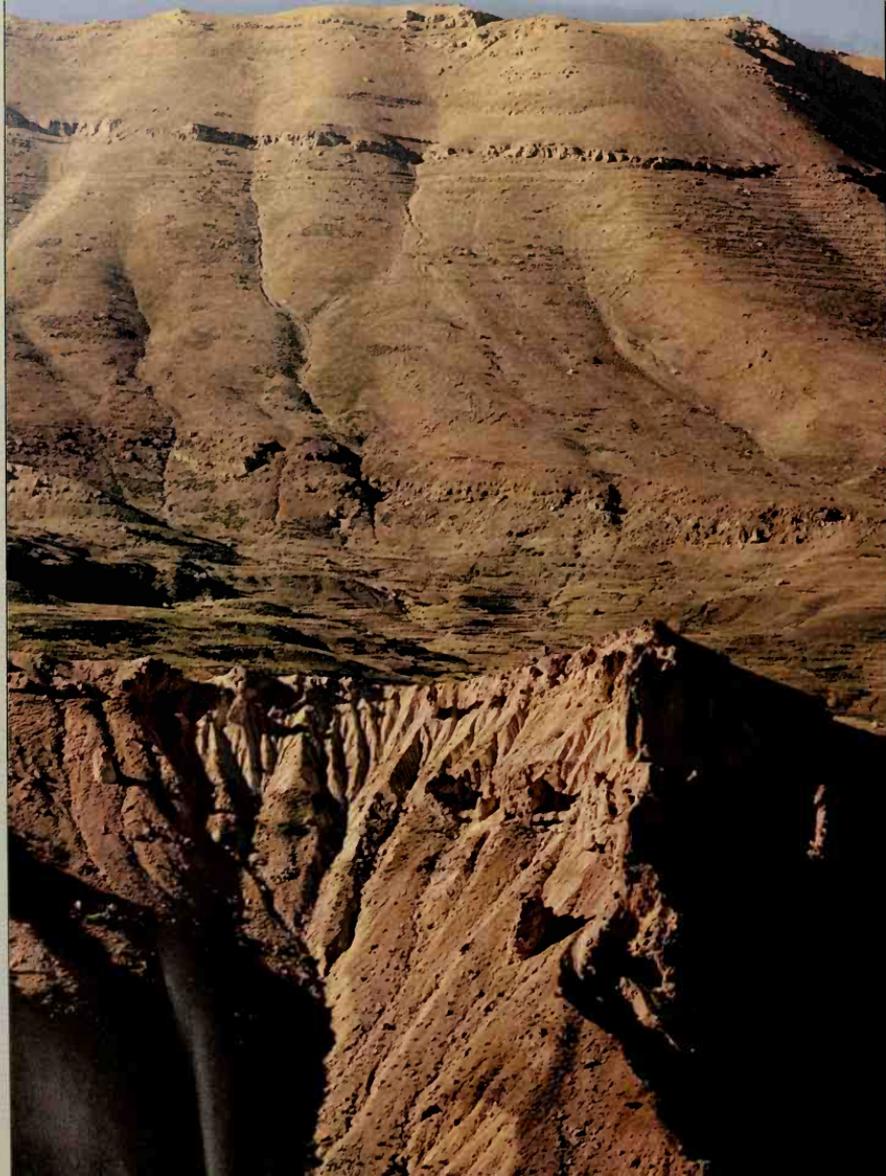
Cedars of Lebanon down the centuries supplied Byblos, Tyre and other Phoenician cities with an immensely valuable export.

Amorites, the Ammonites, the Amalekites and others whose identities are not even known today. They were the beneficiaries of two immensely important human “inventions”: agriculture (the domestication of wild plants) and husbandry (the domestication of wild animals); both are believed to have had their start in the Middle East some 10,000 years ago. These inventions helped change man from a hunter-gatherer—dependent wholly on the natural seasonal bounty of fruits, seeds and wild game—to one who could settle down as a farmer or one who wandered only to secure food and water for his animals. With the establishment of towns and cities, societies became more complex, and eventually powerful empires evolved. In the narrower, up-country valleys there was not that incentive to get together; the terrain tended to keep people apart. Thus small city-states, rather than empires, emerged, each with its own king.

As far as can be learned, it was in about 5000 or

4000 B.C. that one group of Semitic people began trickling into what is now Lebanon and Israel, nearly 300 miles of sea coast along the eastern edge of the Mediterranean, with mountains and upland valleys behind it. This area, particularly its inland sections, should be well known to readers of the Bible as the Land of Canaan. Along the shore are excellent harbours. There is also good coastal farmland, but not much of it because a range of mountains marches parallel to the sea only a few miles inland. The original Canaanite invaders who got as far as the sea coast settled down there, either displacing or mingling with some aboriginal inhabitants who lived by a combination of farming and fishing. The Canaanites established towns, learned to build boats and go to sea, began trading up and down the coast with their neighbours. It was these people who became known to others as the Phoenicians.

Having identified and located them, it is now ap-



From their earliest days the ancestors of the Phoenicians were forced by a range of mountains that ran down the Canaanite coast behind them to look towards the sea. Centuries of logging denuded the mountains of their dense stands of cedar and fir, and finally of their topsoil. Though little grows there now, the Lebanese government hopes to improve the slopes by reforestation.

appropriate to turn to the second question: Why for so long has so little been known about the Phoenicians? One reason is the climate. Coastal Lebanon is fairly damp. Anything written on papyrus quickly disappears; wood rots; clay tablets, unless safely buried in the ground, crumble. Even stone monuments or inscriptions, if exposed long enough to the weathering of wind, rain and frost, become blurred and eventually indecipherable. Therefore, while the Phoenicians over a period of about a thousand years undoubtedly were very busy making things, saving things and writing things down, the elements were equally busy destroying them.

A second reason has to do with the geographical position of the Canaanite coastal towns. They were not only strategically located with respect to trade, but also with respect to invasion. The most powerful forces of the day were the Assyrian and Babylonian empires to the east of Lebanon, the Egyptian empire to the south and the Hittite empire on the Turkish—or Anatolian—plateau to the north. All three were land powers with large armies but no fleets. They were separated from one another by rugged, dry terrain, much of it true desert. The only way they could get at one another was by established caravan routes through a few mountain passes—or by moving along the Canaanite coast. Thus, control of the Canaanite ports became of enormous strategic importance to the imperial dreams of Babylonian or Egyptian conquerors. As a result, those ports, each a separate little trading kingdom trying to get along on its own, were fought over constantly, sacked, knocked down, built up again—their contents trampled, crunched, burned, carted away—re-used over and over again.

And it did not stop with the Babylonians and the

Egyptians. The centre of the Levant became a cockpit for the Persians, the Greeks, the Romans, the Byzantine emperors, the Saracens, the Crusaders, the Turks, and in more recent times the British, the Germans and the French. It is scarcely surprising that by the beginning of the 19th Century, when archaeologists first began to concern themselves with those elusive people, the Phoenicians, there seemed to be almost nothing Phoenician lying about for anyone to study. But as scholars began poking into the ground they found that they had reason to do so.

The five principal eastern Phoenician cities were Aradus, Byblos, Berytus (Beirut), Tyre and Sidon. All are still inhabited today, and in the underground rubble around the edges of the modern towns archaeologists not much more than a hundred years ago began the slow rediscovery of the Phoenician past. And here is a dreadfully frustrating circumstance. Though the Phoenicians did their travelling and trading in ships, during more than a century of archaeological research not one ship was turned up in the mud of a Phoenician harbour or in the wreckage of a dockyard. No Phoenician carving or drawing of a ship was ever found. As far as the Phoenicians' own record was concerned, the extraordinary mercantile operation that these clever people conducted could well have been launched on tin trays. It was in that near vacuum of direct evidence of Phoenician ships that the two marine archaeologists Bass and Throckmorton swam down to a wreck at Cape Gelidonya in 1960 and began to examine it (*pages 27-31*).

They did not know, of course, when they first went down what they had found. Following a rule that is observed in all conscientious archaeological work to-

day—whether digging in prehistoric caves, ruined cities or deep in the sea—the first step Bass and Throckmorton took was to map the wreck site noting the exact position of every object in it. Scholars now recognize that the precise position of a find often is as important as the object itself. In this wreck the distribution of things on the bottom gave a clear clue to the size of the ship. Although the hull had almost completely vanished, its contents were still lying where they had originally settled, making it possible to estimate that the ship had been about 60 feet long. Their mapping done, Bass and Throckmorton, together with members of a 20-man underwater archaeological team they had assembled, then proceeded to remove the cargo and the remaining bits of hull piece by piece. Everything was almost totally encrusted with a thick, rock-hard layer that had slowly been deposited on it by marine organisms over the centuries, making it impossible for the divers to identify much of the material until it had been pried free in chunks and brought to the surface, where the encrustation could be chipped away.

In the course of their chipping and cleaning Bass and Throckmorton quickly realized that what they had found was the ship of a travelling smith or tinker and his crew. Most of the cargo consisted of ingots of copper and tin—the raw material for making bronze—plus some pieces of scrap bronze that the smith obviously had been saving for use in fashioning whatever metal objects might be in demand at the ports he put into.

Along with the raw materials of a smith were the tools of his trade: a large, flat stone anvil, two stone hammers, a whetstone, several polishing stones for buffing up a fine finish on metal articles and a special

block of bronze with holes used for making wire. These tools and the ingots were recognizable both by their shape and markings as having come from the near-by island of Cyprus. Bass's first thought was that this was a Cypriot ship, but it turned out not to be. When he and Throckmorton had brought more to the surface, they found that they were beginning to assemble a small, pathetic collection of personal belongings. They were clearly Phoenician: several carved scarabs, a cylinder seal (for signing clay tablets), some stone mortars and hammers, plus a number of graduated weights for a balance-pan scale—all of them of Canaanite origin.

From these homely bits and pieces a glimpse of the life of a Canaanite trader-craftsman is revealed. Since both raw materials and the wherewithal for making things were on board, it seems clear that this was a travelling workshop, either owned or leased by a seagoing artisan, and that perhaps his entire stock of worldly goods was carried with him. Whether he had partners or how big his crew was cannot be guessed. All we know is that he ate olives; deep in the wreckage was found a small heap of them, the meat gone but the hard little pits still there. When did he eat those olives? About 1200 B.C.; carbon dating and the style of the objects found aboard both point to that date.

In terms of Phoenician history this is an extremely awkward date. It is just about this time in history that scholars are willing to recognize the metamorphosis of coastal Canaanite into Phoenician. No race, no people, no culture, no way of life suddenly appears on the historical stage fully formed and neatly labelled. For example, the way of life practised by colonial settlers in the U.S.A. was not "American"



The earlier tradition of which Phoenician art and culture emerged can be traced in this bronze head of a man found in 1936 at Ugarit, a proto-Phoenician city. Once a prosperous trading centre with commercial ties to Greece and Crete, Ugarit was sacked in 1234 B.C. The owner of this head was probably a metalsmith or dealer who used it as a balance-pan weight.

the day after the Declaration of Independence was signed and "un-American" the day before.

Similarly with the cities of the Lebanese coast. That part of their history that was played out prior to about 1100 or 1200 B.C. scholars properly identify as Canaanite. After this time scholars are willing to identify the Canaanite coastal peoples as Phoenicians. The event that made the name change appropriate was actually a whole series of events that did not take place in Canaan at all but in Egypt, in the Aegean world of the Bronze Age Greeks and on the upland plateau of Anatolia. In all these places great political upheavals were taking place. Rulers rose and fell and empires were collapsing.

The Canaanites, heretofore confined more or less to their own doorsteps by more powerful neighbours, suddenly found this constraint removed. They began flowing outwards, cautiously at first, then with increasing boldness and rapidly into the vacuum left by their prostrate neighbours. Within a remarkably short period they had changed from local coastal traders to far-ranging seagoing merchant venturers with a network of trading posts throughout the Mediterranean. The existence of that trading network is the key to the identification of the Phoenicians as a recognizable people, though it should be emphasized again that they did not see themselves that way. That is why the Gelidonya wreck is so interesting. It is a small piece of positive evidence about the seagoing and mercantile habits of somebody from down the coast just at the moment when he was beginning to earn the label "Phoenician". By 1000 B.C. there would be no question whatsoever as to who a Phoenician was. The relatives and descendants of the Gelidonyan tinsmith had spread far. They had worked their

way south, leapfrogging across the Nile Delta past Egypt, and established settlements along the North African coast. Within a few hundred years they were all over the place. Carthage was founded, toeholds were secured in Malta, Sicily, Sardinia, Corsica, the Balearic Isles and Spain. Expeditions were even made into the Atlantic.

The point of changeover from coastal Canaanite to Phoenician is critically important to an understanding of Phoenician history. Unfortunately, there is no agreement among experts as to its exact timing. Some think the name “Phoenician” can be applied by 1200 B.C. or even earlier. Others would put the changeover as late as 1000 B.C. and will not concede that the Gelidonya wreck is Phoenician. I accept the older date—and thus that the wreck is indeed Phoenician—on the logic that the Canaanite merchant seamen had already begun a significant outreach in trading and that the Gelidonya wreck proves it. It is highly unlikely that the only or the farthest excursion of a Canaanite trader should have ended in disaster and that the results of that single disaster should have been preserved for discovery today. In other words, Gelidonya seems symptomatic of a considerably larger activity already underway and probably already going in a number of directions.

Be that as it may, there is absolutely no question that the opportunities open to a Canaanite trader after about 1100 B.C. were entirely different from those open to him prior to about 1200 B.C. An early merchant from Byblos, gazing out to sea and scratching his head over how to develop a profitable two-way line of trade, had rather limited options. He could look south towards Egypt and deal on Egyptian terms. Or he could look west to another rich market: the is-

land world of the Aegean, where superb trade goods—notably pottery and inlaid metalwork—were being manufactured and distributed by two peoples, the Minoans and the Mycenaean Greeks. What more could a little coastal trader hope for than to expand into that world of islands, with its multitude of fine harbours, local produce, fresh water—with scarcely more than a day’s good sailing needed to carry a ship from one sheltering shore to another?

Unfortunately for the dreams of the Canaanite trader, that world was rather effectively closed to him. Crete, an island nearly 200 miles long, lay like a bar across the foot of the Aegean. Crete was the central home base of the architects of the first true maritime power in history. The entire Aegean was their private lake. Its people, the Minoans, controlled commerce with the cities of the Ionian coast and with all the Aegean Islands. They dealt with the ancestors of Agamemnon and Nestor in Greece. They went to Troy and beyond. They probed the bottleneck of the Black Sea, which opened up eastwards like a cornucopia, for trade with horsemen from the Russian steppes, with Scythians, with Parthians and with unnumbered, unnamed people surging over a vast land that stretched to no one knew where.

Mighty people, the Minoans. If a Canaanite trader so much as put his nose into the Minoan lake, he did it on sufferance. More likely he had to accept Minoan trading concessions in his own home port. This could have discouraged him from anything more ambitious than local coastal trading, turning him into little better than a transfer agent of goods, which he sent on to Egypt or loaded for the long cross-country journey over the Lebanon Mountains and dusty plateaux to arrive eventually at Babylon or Nineveh.

That was the early pattern of trade for places like Byblos for a good many hundreds of years: south to Egypt, east to Mesopotamia. Then, beginning about 1400 B.C., there occurred a series of political upheavals that shook this relatively stable trading world to its roots. Somehow the Mycenaean Greeks got control of Crete and the Minoan sea empire vanished, leaving only scorched palaces and a glow of past glories behind. The Greek occupation lasted about 200 years and then in its turn collapsed. The Greek cities on the mainland were sacked one by one.

How this happened is not entirely clear. Some historians believe that the upheaval was internally generated and that Mycenaean civilization was self-destructive. Others believe that it became the victim of waves of invasion by a Greek-related people known as the Dorians, pouring in from the north. In either case the Bronze Age was ending, and it went out in a series of convulsions whose shock waves were felt throughout the entire Mediterranean world. "Sea Peoples" from the north, from Crete and from the other islands flooded ashore in Ionia and may even have overrun the Hittite Empire. They also appeared on the Lebanese and Syrian coasts—some in panicky flight, others as invaders looking for a new place to take over and settle.

In all the confusion during the years around 1200 B.C. piracy became a way of life for many peoples. Once the Minoan control was broken brigands multiplied like cockroaches in every coastal cranny. They took to looting coastal towns, and as their successes grew so did their ambitions. They joined forces. Their sinister fleets grew bigger and went after bigger game. Some authorities believe that the siege of Troy was nothing more than a giant piratical expedition of

Bronze Age Greeks reacting to increasingly chaotic conditions in the Aegean. In 1200 B.C. the palaces of Crete were ravaged for the second time and were never rebuilt. Shore people crept away to place their citadels inland on safer crags.

In this world of chaotic change the Canaanite traders began to emerge as Phoenician. Their ports quite suddenly showed a marked increase in vigour and enterprise, and two of them—Sidon and Tyre—would have long and bright histories. This coastal blooming came at a moment of power vacuum everywhere else. The pirate fleets shrank to local nuisances. Mycenaean and Minoan sea power was completely unravelled. The Hittite Empire lay smoking. Egypt slid into a long decline and lost its hegemony over the Canaanites for ever; instead of exacting large annual tribute in the form of timber from Byblos, as it had in the good old days, Egypt was reduced to buying timber at increasingly stiff prices.

The difference to Byblos—and, by extension, to all the other ports and their rulers—was remarkable.

There is hardly a better way of looking at this phenomenon than by making the acquaintance of two kings of Byblos: Rib-Addi (who ruled in about 1375 B.C.) and Zakar-Baal (who ruled in about 1075 B.C.)—the former unmistakably a coastal Canaanite king, the latter just as unmistakably a Phoenician.

Rib-Addi's world, like his own thinking, was dominated by Egypt and had been for a long time. Through various ups and downs extending back a thousand years or more, Egypt had been the mightiest power of the ancient world. Though it was never much of a naval power, it went through several periods of great military expansion on land, gaining



control of the whole Canaanite coast and exacting tribute from the Canaanite ports. For centuries Egypt used them as sources of supply and as bases for its campaigns eastwards against the Mesopotamian empires of Assyria and Babylon. In return it offered the Canaanite ports security against invasion by others.

In this long relationship the longest and closest ties were between Egypt and Byblos. Byblos was Egypt's principal supplier of prime timber—chiefly cedars of Lebanon—which grew in dense groves on the flanks of the mountains back of Byblos. They were consumed in such quantities by the Egyptians—for furniture, room panelling and especially river barges used for ceremonial purposes—that the ships sent up from the Nile to collect this wood were known as Byblos ships. The Egyptians paid well for Byblos' cedarwood, courted its kings with gifts of carved boxes and stone portrait busts inscribed with the personal seal of the pharaoh. In return, the Bybli-

an kings were outstandingly loyal to the Egyptians.

However, the Canaanite-Egypt axis suffered an inherent problem: when Egypt was strong, there could be little threat of invasion; when it was weak and the threats rose, it could not help its allies. The struggling little Canaanite seaports had to deal with local disturbances as best they could. They were constantly under the predatory eye of the Hittites, a powerful and warlike people glowering down at them from the heights of Anatolia to the north. Later they would be assaulted again and again by Assyrians and Babylonians from the east. It was Rib-Addi's bad luck to be seated on the throne of Byblos during a period of Egyptian weakness. The ruling pharaoh at the time was Amenhotep III, followed by his son, a religious zealot named Akhenaton. The latter resolved to impose the concept of one god, Aton, on an Egyptian society that had a long tradition of many gods. This caused a convulsion in Egypt and brought Akhena-

The lumber trade, on which so much of Phoenicia's wealth was floated, is illustrated in this Assyrian carving—on alabaster—of three high-ended Phoenician cargo vessels. Large logs are being wrestled aboard and towed.

ton into such conflict with a well-entrenched priestly class that for a number of years he had little or no time for foreign affairs. Egyptian control of the Canaanite coast loosened. Large bands of wandering roughnecks began hiring themselves out as soldiers in an eruption of simmering inter-city conflicts that had formerly been kept under fairly good control by the Egyptian presence. Worse, the Hittites were fomenting these quarrels with the long-term aim of taking over the entire Levant themselves.

It was in this disturbing climate that Rib-Addi sat down one day to dictate a letter that was duly inscribed on a clay tablet and sent off to Egypt. We know this because his letter has been miraculously preserved. It was found in Egypt in 1887 at a place called Amarna, along with 63 others from Rib-Addi and about 300 more by other writers. This cache of clay tablets turned out to be a portion of the royal files of Akhenaton and his father. An extraordinary collection, it contains correspondence from the kings of Assyria and Babylon on matters of state, as well as from the Hittites and the smaller vassal Canaanite kingdoms. But of all the letter writers, none was more impudent than Rib-Addi.

He had reason to be. A couple of neighbouring Amorite princes, Abdi-Ashirta and later his son Aziru, had taken up with the local mercenary gangs and were openly plotting with the Hittites while continuing to profess allegiance to Egypt. From the point of view of one like Rib-Addi, whose fortunes were closely tied to those of Egypt, this was treachery of the rankest sort. It was also a source of danger to him, for if it succeeded he would be out on the end of a limb of an essentially Egyptian tree, with nobody to catch him if he slipped. Accordingly, he fired

off a series of letters to Egypt, at first warning about the treacherous Amorites, later—when their treachery began to pay off in towns captured and local rulers deposed—pleading for help. He asked for soldiers, for horses and, when the perfidious Aziru was strong enough to besiege the city of Byblos itself, for food. Nothing came.

Next a faction of traitors sprouted within the city walls. "My gates have taken copper [bribes]," wrote Rib-Addi in a panicky letter, explaining that if he did not get help immediately, he might have to flee Byblos entirely. No word came back from Egypt, so he sent his sister and her children south to Tyre for safety. But eventually Tyre went over to the other side and they were all murdered.

By this time Rib-Addi's stubborn loyalty had placed him in extreme peril. Desperate, he dropped a shrewd hint to the pharaoh that he was about to throw in the sponge; his wife and all his courtiers were advising him to go over to Aziru. When even this elicited no helpful response, Rib-Addi as a last resort went to neighbouring Berytus to rally support. Returning to Byblos, he discovered that his own brother had defected and taken over the city; its gates were now barred to him.

Rib-Addi's final letter to Akhenaton informs him that now he has nowhere to turn, that his enemies are about to persuade the king of Berytus to hand him over to Aziru.

Presumably this happened, for Rib-Addi vanished, never to be heard from again. We can deduce that Aziru caught him and killed him since another letter from the Amarna cache, written by a prominent citizen of Byblos, informs the pharaoh that Aziru is a horrible rascal who has the murder of several

kings on his hands, among them a king of Byblos.

The Amarna correspondence is one of the most interesting and revealing—and painful—in the whole legacy of material dealing with the Phoenicians and their forbears. It brings home, with a snarl that jumps from those innocent-looking clay tablets, how slippery the footing must have been for the insecure Canaanite king who wrote them. Grim, too, for unremembered others like him who were forced to make similar choices and who also may have guessed wrong as they were constantly faced with decisions about whether to dicker or fight. They had to trim sail frantically—not only to the large Egyptian wind that blew from the south and the Hittite wind from the north but to all the gritty little dust squalls that set neighbour against neighbour time and again.

But jump ahead some 300 years and a different Byblos is encountered. Once-potent Egypt has slid still further. Subservient Canaanite princes like Rib-Addi have been replaced by independent Phoenician kings, the change vividly revealed in another fascinating document. This is an Egyptian papyrus dating from about 1100 B.C. and describing the adventures of an envoy who was sent up from Thebes to dicker with King Zakar-Baal of Byblos for cedarwood the pharaoh needed in order to build a ceremonial barge for the god Amon. In former days, when the little Canaanite princes had to hustle to keep in the good graces of the Egyptians, we may be sure that the arrival of an Egyptian purchasing agent caused a great stir. How the local timber dealers, and perhaps the local king too, must have bowed and scraped to him.

How different now was the experience of the Egyptian agent whose name was Wen-Amon. The old

visits, full of pomp and fine compliments, had washed out with the tide. There was not even an Egyptian ship of state to bring Wen-Amon; he had to make his own passage in a Syrian vessel, and thieves stole most of his money during the voyage. When he stepped ashore at Byblos there was nobody at all to welcome him. On the contrary, not only did the king, Zakar-Baal, refuse to see him, he ordered Wen-Amon to leave. For 29 days in a row the king sent curt messages down to the harbour telling Wen-Amon to get out immediately. The only reason Wen-Amon did not go was that he could not find a ship to sail in.

Zakar-Baal may have been expressing a heady new sense of Phoenician independence or, on a more practical level, he may have heard that Wen-Amon had been robbed on his journey and had scarcely any money left with which to buy timber, let alone any kind of gift for the king.

Whatever the reason, Wen-Amon was still wringing his hands down at the harbour, wondering what to do next, when a young courtier of Zakar-Baal's conveniently fell down in some kind of religious fit, during which a voice spoke to him saying that the king should see the Egyptian purchasing agent. So Wen-Amon had his audience with Zakar-Baal, whom he found in an upstairs room in his palace "with his back turned to a window so that the waves of the great Syrian sea broke against the back of his head".

This revealing passage tells us that palaces in the early Phoenician towns were more than one storey, that they had windows and that they were built very close to the water. The ruins of ancient Byblos tend to confirm this. They lie in a jumble of old walls and foundations on a point of land jutting into the sea. The shoreline is abrupt and rocky, the old fortifica-



The adventures of Wen-Amon, a luckless agent sent up from Egypt to buy timber from King Zakar-Baal of Byblos, are described in this papyrus, which dates from the 11th Century B.C. Found in Egypt, it was bought and published by a Russian Egyptologist named Vladimir Golenitschiff in 1899—at a time when Egypt's archaeological treasures were being gobbled up by collectors. It is now in the Museum of Fine Arts in Moscow.

tions are right next to the water, and it is possible that the palace of a king interested in marine commerce could have been erected just within the walls, possibly overlooking a small snug harbour that still lies alongside. In bad weather a storm urged on by strong west winds would have sent the surf surging against those rocks. The spray could easily have flown a couple of storeys high, to glisten in the sun behind the head of a king seated with his back to the light—the more easily to stare down a petitioner.

The king's reception of Wen-Amon was chilly. It boiled down to: "I'll sell you wood if you want, but you had jolly well better pay for it, and it doesn't look to me as if you can." He then hauled out some scrolls that recorded previous timber transactions. This reference also is revealing: it indicates that Byblian records were being kept on papyrus and not on clay tablets. It also confirms that Egypt had already been buying timber (not taking it in tribute) for a number of years—and at prices that made poor Wen-Amon, his pocketbook thin to begin with and now almost flattened by theft, wince.

Wen-Amon tried to remind Zakar-Baal of the long and close relationship between the two countries and of the importance of the great god Amon. None of this impressed Zakar-Baal in the slightest. He finally agreed to load as much wood as Wen-Amon had money for, not one stick more, then fixed the Egyptian agent with a cold kingly eye and said: "See, the commissions [substantial timber deliveries] that my fathers carried out formerly, I have carried out, even though you have not done for me what your fathers would have done for me [in gifts and payments]. . . . I did not even do to you what was done to the messengers of Ka-em Waset when they spent seventeen

years in this land. They died [and were buried here].”

He offered to show Wen-Amon the tombs of the unfortunate messengers and began talking of other Egyptian agents whom he had detained until they too had died. Wen-Amon, thoroughly cowed, begged not to be shown the tombs and sent back a message to the pharaoh for more funds. In due course he got several jars of gold and silver, 10 bolts of Egyptian linen, 500 rolls of papyrus, 10 pieces of fine royal linen clothing, as well as 500 cowhides, 500 ropes, 20 sacks of lentils and five baskets of fish. He even got some lentils and fish for himself. With these he was able to complete his purchase of timber. His tale goes on to tell of the difficulties he had in getting away from Byblos—capture by pirates, shipwreck on Cyprus. Whatever became of the luckless Wen-Amon we do not know: the final parts of the papyrus that complete his story have never been found.

It is worth pausing a moment to compare Rib-Addi to Zakar-Baal. What a contrast there is between those two Byblian kings, separated by only 300 years in

time. But for the emerging Phoenicians those 300 years measured the difference between dependence and independence. Rib-Addi is a petitioner, a leaner. For all his enterprise and his scurrying about, he knows that the real power lies elsewhere and that unless he has support he will go under. His letters are sprinkled with “My Lord, this” and “My Lord, that”: “Let my Lord know that I would die for him. When I am in the city I will protect it for my Lord, and my heart is fixed on the King, my Lord.”

Zakar-Baal stands squarely on his own feet. He will deal with the Egyptians if it suits him; if it doesn't, he won't—and the Egyptian envoy can rot in a dungeon for ever, for all he cares. Zakar-Baal and the other Phoenician princes now emerging as heads of the various coastal cities are the survivors—the wildest, most long-headed, the most accommodating and the most overbearing people in their societies. These traits have brought them to the top. They have survived 10 generations of turmoil. Power radiates from them. They have earned it and they know how to use it. And they will use it for nearly a thousand years.

Recoveries from the Earliest Known Shipwreck

The 1960 expedition's main surface vessel was a Turkish sponge dragger. It had a powerful winch, shown here bringing up copper ingots cemented together by marine deposits from the 3,200-year-old ship lying below.

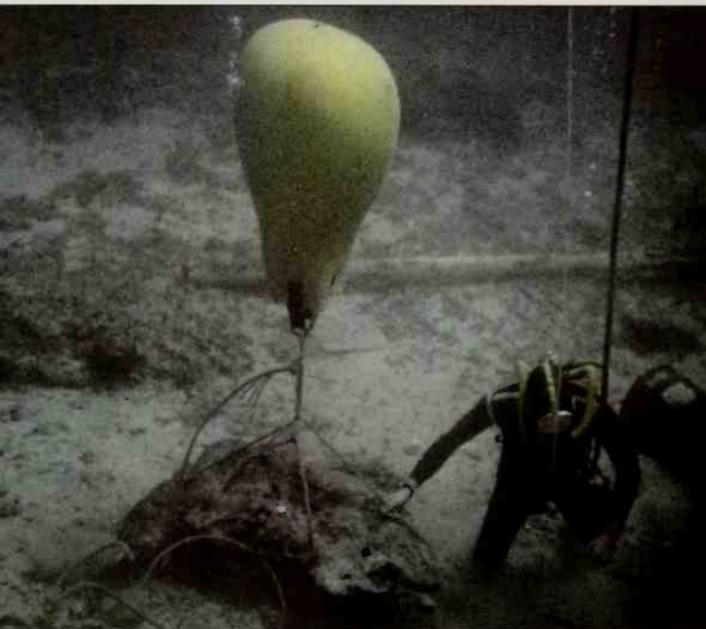
The only known Phoenician trading vessel—and the oldest wreck of any kind yet discovered in the Mediterranean—was found and explored in 1960 by two Americans, George Bass and Peter Throckmorton. Their studies of this wreck reveal clearly that it was the ship of a travelling metalworker who probably was headed west in about 1200 B.C. with a cargo of copper ingots and pieces of bronze and tin. His ship apparently hit some rocks in a storm just off the Turkish coast near Cape Gelidonya, then filled with water and sank. However, it did not turn over and spill out its cargo. Rather, it slid down a steep underwater slope with all its trade goods still inside and came to rest in about 90 feet of water. To retrieve the cargo, divers had to work in swift currents at a depth that limited their time underwater.



Problems in Recognition and Recovery

The Gelidonya wreck was deeply encrusted with a coating of marine deposits. At first only a few of the bonded lumps lying on the bottom were recognized as man-made. But as the divers became more familiar with their discovery, they realized that many of the "rocks" lying about in the bluish light were in fact artifacts.

The archaeologists had to devise new ways of mapping each piece of their find, then of getting the large, heavy chunks up to the surface. Once ashore, the finds were carefully broken into smaller pieces and the rocklike covering chipped away to expose what was inside. This painstaking process revealed such articles as ingots, a seal, a lamp, beads, weights and measures, anvils, metal tools, broken pottery—and pieces of the ship itself.



Raising heavy chunks of material from the sea bottom posed serious problems: first, coping with great weight under water, and then the hazard that a load might slip and fall, crushing other artifacts. One solution: a balloon that helped float loads to the surface.



A detailed drawing to mark the exact location of every object in the wreck was made before each find was brought to the surface. Here a draughtsman sketches the positions of sticks that had been packed between items of cargo in the ship's hold to ease chafing.

One of the expedition's divers sets down his hammer to collect small objects that had been hidden beneath a pile of ingots. The bicoloured ruled bar, at left under his flippers, was used to facilitate painstakingly accurate mapping of every single item found.

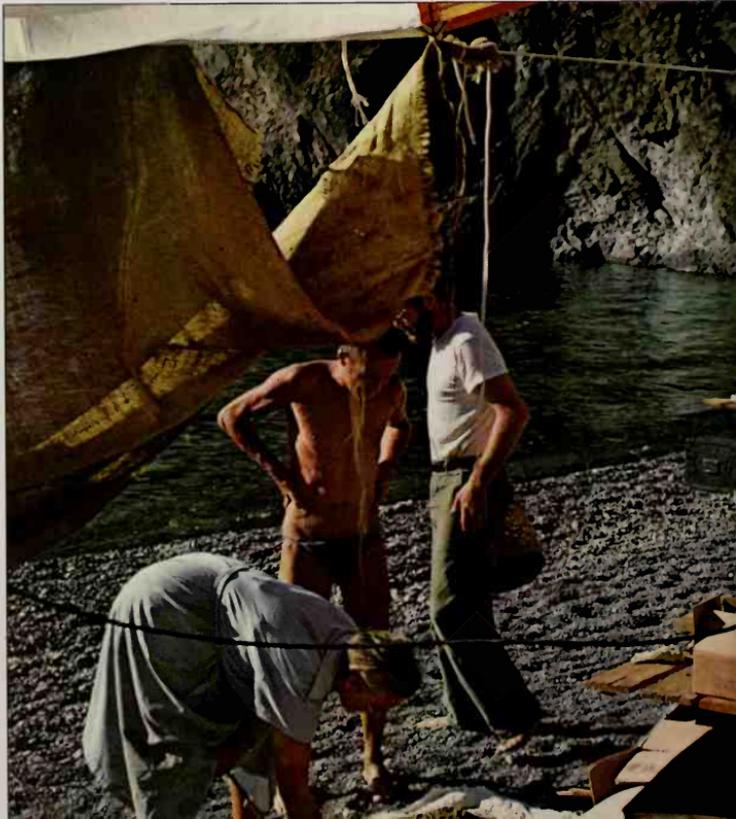


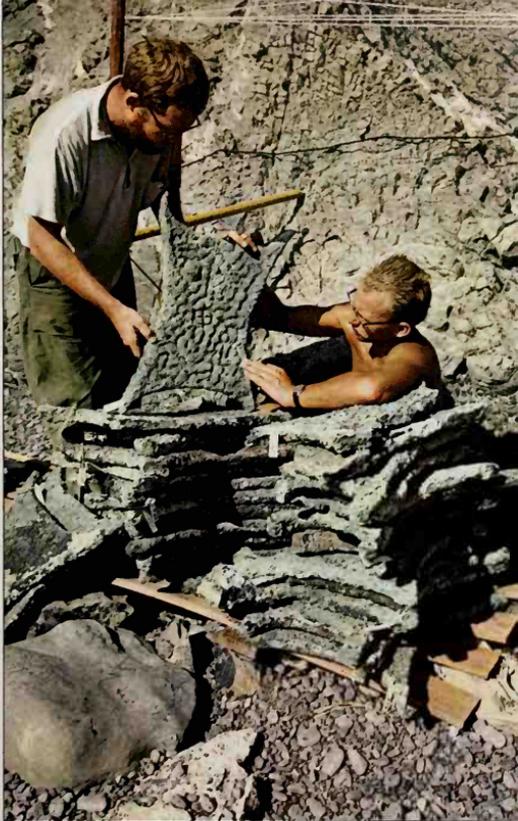
Putting the Pieces Together Again on a Rocky Shore

The difficulties encountered underwater at Cape Geli-donya were matched by those at the shore camp. Temperatures on the narrow beach soared into the 100s. Flies bit unmercifully, requiring the scientists to crouch under nettings while they worked. By the end of summer, storms rose, flooding the beach and leaving big drifts of sand. Rocks fell intermittently from the cliffs overhead, and there was a threat of rain-induced avalanches. For all this, the entire cargo was raised, cleaned and identified. The biggest single category was 34 copper "oxide" ingots, so called because of their shape. Some were intact. Others—because they were lying next to bars of tin—were partly eaten away by electrolysis: the result of salt-water action on the two metals.



Several ingots, welded by encrustation into a single chunk, lie on the deck of the surface vessel. A motor-car jack was used to pry pieces loose from the rocky bottom, with great care taken not to crack the ingots themselves.





George Bass (above left) and Peter Throckmorton examine some of the 34 copper ingots. Their oxhide shape was common in the Bronze Age for ease in handling, not—as some think—because each ingot was worth one ox.

Artifacts already chipped clean are laid out on the beach for study. The woman (foreground) is sifting through bottom debris in search of such small objects as carved scarabs. At rear: the expedition's mess table and kitchen.

Chapter Two: Ships in the Ancient Mediterranean



Fossil ships (to use the term very loosely), like fossil humans, are extremely rare. Wood disintegrates as readily as bone and, like bone, requires the protection of something to preserve it: the still water of a bog where plant growth can be deposited to form peat; the quieting arm of a harbour or bay, preferably one at the mouth of a river whose steady freight of silt will gradually cover the harbour bottom; a spot along the coast where a combination of ocean currents and storms can move large quantities of sand.

Amateur underwater prospecting has been going on in the Mediterranean for a long time. In recent years, with the development of scuba equipment, it has vastly accelerated. As a result, all the best-known and most accessible hulks from the classical world have been disturbed and looted so that they are virtually worthless for archaeological study. Understandably, there is no greater thrill for the amateur diver than to find a cluster of encrusted wine jars lying in a nest of half-buried timbers, and no greater temptation than to pry a couple of jars or beams loose to be carried off, perhaps to a different continent, for display on a mantelpiece.

Nonetheless, such pilfering destroys a much greater treasure. The wine jar, beautiful and interesting as it may be, or the worm-eaten timber—despite the fantasies it may conjure up—retains its true value only in the context of all the objects and ship parts surrounding it. By itself it is simply a curiosity.

Good pictures of Phoenician ships are very rare. This one of a warship is among the best. From an Assyrian wall relief carved about 700 B.C., it shows a bireme (i.e., a ship propelled by two banks of oars) with a shield-lined upper deck, or catwalk, on which archers and soldiers stood. Projecting from its bow is a long, pointed beak for ramming enemy vessels.

That is why the emergence of one end of a ship in 1971, as a result of sand-dredging in the shallow water near Marsala at the western tip of Sicily, has caused such a stir among marine archaeologists, particularly those interested in Phoenician naval history. For there is a strong possibility that this hulk may be Carthaginian. Furthermore, its study from the very start has been under the protection and direction of a team of professional underwater archaeologists headed by an Englishwoman, Honor Frost (*page 35*).

Frost is an experienced diver who has worked in the Mediterranean for a number of years. She has an exclusive contract with the Italian government to investigate the Isola Lunga wreck—so-called because of its proximity to an island of that name. And while it will take years before the Frost team can fully interpret its findings, the evidence so far holds out the promise of new insights into late Phoenician ship construction and use.

To begin with, there is the possibility that the Isola Lunga hulk, which dates from the Third Century B.C., may be a warship—nothing like the Gelidonya wreck described in Chapter 1, which is a cargo vessel. The latter comes from the east, from Byblos or Tyre perhaps; it is relatively small and dates from about 1200 B.C. The former comes from Phoenicia West, is perhaps three times as large and may be as much as a thousand years younger.

As the Isola Lunga wreck is cleared of its mantle of sand, one by one its parts are being meticulously plotted, numbered, raised and then put in freshwater tanks in the Palermo Museum. There they will be soaked for three years to remove all traces of salt before being impregnated with a chemical to preserve them. After that, an attempt will be made to reas-

semble the pieces of the wreck for museum display.

Accurate reconstruction of ancient hulks is next to impossible. When a wooden ship sinks it eventually spreads and comes apart as a result of gradual rotting, water movement and the weight of its own cargo or ballast. It ends up flattened out on the sea bottom, its original contours and dimensions hard to recapture. This problem has been made especially acute for classical wrecks by the total absence of ships' ends. Why bows and sterns are more prone to disintegration than amidships parts I do not know; it may only be because they stick up farther from the protective sand. But the fact remains that neither bow nor stern of a classical wreck, among the hundreds that dot the Mediterranean floor, had ever been recovered—until Isola Lunga.

Here is a well-preserved ship's end, with pieces of protective lead sheathing still attached to it, along with bits of the original cloth padding that was packed under the lead, the whole held in place by copper tacks still embedded in the wood. Frost believes it to be a stern, but she cannot be sure until she uncovers the rest of the vessel. Whichever it turns out to be, it is an invaluable find, for its shape should provide sufficient clues to show the rate at which the hull widens. Once this is known and related to the overall length of the hull (in this case probably 90 feet), some pretty shrewd estimates can be made of its beam and its cross-section curves. Therefore, when the true shape of the Isola Lunga wreck is worked out, Frost thinks it will be possible to establish with fair certainty that it was indeed a warship, assuming that its hull turns out to be long and slender. This would prove that the ship was designed for speed—by propulsion from many oars.

In addition to yielding up one of its ends, the Isola Lunga hulk has provided some bits of superstructure (another first for classical wrecks) and a large number of frames and planks, the latter with neat mortise-and-tenon joints that show how the planking was held together. Frost hopes that further recoveries will include some sections of decking, more planking and—given extraordinary fortune—a few of the rowers' benches. If this particular material can be found and coherently fitted together, Frost may succeed in solving a riddle that has plagued marine archaeologists ever since they started thinking about it: How were ancient warships with more than one bank of oars rowed? How were the oarsmen seated?

The standard warship of the Third Century B.C. was a trireme, a "three-banker". By that time every naval power had triremes in their fleets. Occasional pictures of them show up in wall paintings and in frescoes. They have even been found on pottery and in carved relief on temples.

But their details, particularly their inner workings, are nowhere clearly illustrated. Consequently nobody knows for certain how the rowers of those three banks of oars were fitted into the ship. If Frost's studies enable her to throw some light on the "trireme problem" it will be a great achievement.

She may also be able to establish beyond doubt that the ship is indeed Carthaginian and not Roman, as some scholars suspect. Her strongest case here would seem to lie in the discovery of a series of carpenters' marks, apparently based on the Phoenician alphabet, painted on some of the ship's timbers. The marks were easily seen by the divers, and although they have since faded they were copied while still fresh by an expert who is studying them. So far, more

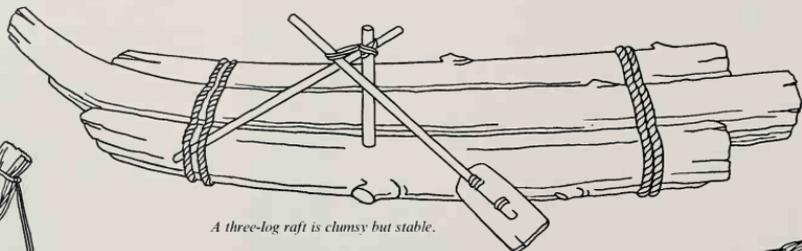


A Rare Find in Sicilian Waters

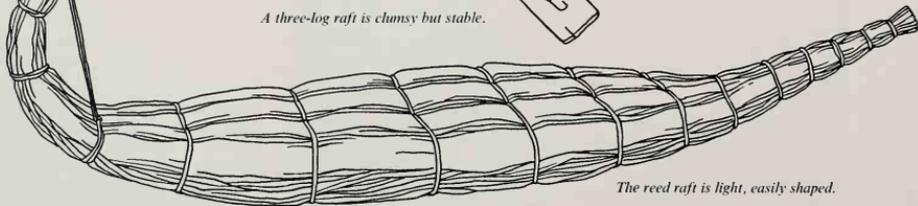
The only known relic of a ship suspected of being a Carthaginian war vessel is buried in sand beneath eight feet of water at Isola Lunga in western Sicily. A team of archaeologists headed by the English scuba diver Honor Frost has been working on the hulk since it was exposed by sand dredgers in 1971. Unlike other ancient hulks, it has not been vandalized; from it, in the years to come, the team hopes to learn much more than is presently known about ships with multiple banks of oars. They also may be able to figure out where this vessel was first launched by identifying the native rocks that served as its ballast and that still lie piled around it, and by identifying the dunnage—sticks, leaves and twigs of various kinds collected at the launch site and used to protect the hull from being chafed by the rock ballast. Although the wood of the ship itself has already been determined—oak, maple and pine—that knowledge does not help in establishing the launch site; the wood probably was imported in bulk by the shipwright from other places.

Sand removal around the Isola Lunga hulk has already revealed part of its keel, a couple of dozen ribs and sections of its planking (top picture). The black-and-white metal pipes have been put down on the sea bottom to form a grid for precise location of the ship's parts before they are brought ashore. The vessel's apparent sternpost (bottom picture), projecting from the sand, led to the hulk's discovery. It is the only ancient ship's end ever found. Lead sheathing and the copper nails that held it are still in place.

From Log Raft to True Boat



A three-log raft is clumsy but stable.



The reed raft is light, easily shaped.

than 100 of these carpenters' marks have been discovered, covering 10 of the 22 letters of the Phoenician alphabet. For Frost, this makes the Carthaginian origin of the ship unmistakable. Others are not so sure, nor are they sure she has found a warship. The naval historian Lionel Casson points out that ballast was seldom carried in naval vessels; it would have made the warships unnecessarily heavy and would not have been needed for stability in craft designed with a low centre of gravity. He also points out that lead sheathing is characteristic of cargo vessels. But Frost is sticking to her guns. She believes that the shape of the ship will bear her out. If she is right, it will.

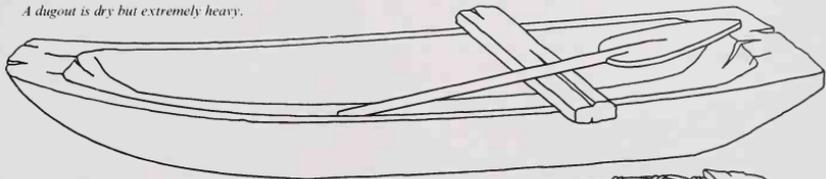
Meanwhile Frost reasons that the markings indicate some kind of mass-production activity. It is known that the Carthaginians often built large fleets in a very short time to meet political emergencies. The quickest and most sensible way to do this, of course, would have been to build ships of a standard size and to keep a large prefabricated warehouse

stock of plank "A", plank "B", frame "C" and so on.

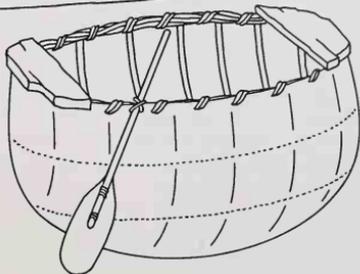
Speculation about where the Isola Lunga ship was built is also possible. The clues here are the stones used for ballast and the dunnage placed under those stones to keep them from gouging the wood in the hull bottom. The ballast, which is being studied by a geologist, seems to consist of volcanic rock from Pantelleria, a Carthaginian-held island near Sicily. The dunnage turns out to be a highly interesting mixture of wood chips, the shells of nuts and a quantity of twigs and leaves from such diverse trees as oak, maple, pistachio and olive—10 or more varieties in all. If a place can be found where all these grew in abundance and where there also is a good supply of the right kind of stone, it logically could be assumed that the Isola Lunga ship was built and launched there.

The reason is that this ship seems to have been a brand-new one whose caulking was still not entirely dry when it was launched, and whose dunnage was also fresh—green stuff that had just been gathered. If the vessel had been old, the possibility of pinpoint-

A dugout is dry but extremely heavy.



Best: The coracle, a frame boat with a "skin".



The earliest form of watercraft undoubtedly was the log: seen floating on rivers, its buoyancy was quickly recognized. Lashing several logs together to carry a load was a natural development. In the Nile, bundles of papyrus were shaped for the same purpose. The hollowed log, which offered protection and extra buoyancy, came later. But digging out a log was a backbreaking job and, of course, was not possible where logs themselves were absent. At some point skins or small planks were attached to a wood frame, and the boat was born.

ing its origin would not be nearly as good, because dunnage is replaced from time to time and there would be no telling where it came from.

How did ships themselves come into being? Man is not a seagoing creature. Unlike almost all other mammals, he does not swim naturally. A man who has not learned how and who falls into the water will probably drown. And yet in all societies that have developed near water man has learned to venture out on it in boats of every conceivable type.

The oldest boat so far discovered dates from about 6000 B.C.: the remains of a wooden dugout exhumed from a bog in Holland. The oldest-known picture of a boat is much younger. It dates from about 3400 B.C. and is a drawing of a fairly sophisticated Egyptian river craft with several oars or paddles on each side. By 3000 B.C. bits of pottery from the Aegean Islands begin to show up; on them are scratched drawings of a long, low boat with many oars. Quite an ambitious craft, it was surely able to go from island to island.

Both the Holland dugout and the Mediterranean picture are obviously products of a long evolution from more primitive forms. Here is one of the tantalizing problems that arise when one tries to unravel the misty origins of one of man's inventions. The first evidence of it—hard evidence that a fact-respecting scientist can put his thumb on—is usually that of a rather sophisticated device. What took place before that is pure guesswork. Nevertheless, a considerable prior history must be assumed.

The simplest water vehicle of all is the log. And the raft is a fairly simple extension of that idea. Several logs lashed together will provide a more stable, drier platform than a single log can—something a man can sit on instead of merely clinging to.

A hollowed log, or dugout, is a far more sophisticated device than a raft. Whereas the latter relies on its own instantly apparent buoyancy (It floats! It will support me!), the dugout must be crafted into a dish that displaces water and relies on that displacement for its ability to float and carry things. It can be

either a log hollowed out as thin and light as crude technology permits, or it can be a watertight skin stretched over a framework of bent branches; the principle is the same. But it is a far more advanced notion than that of a raft. Nevertheless, both dug-out and raft are capable of considerable development. Both forms evolved in the Mediterranean, and threads of that evolution can be traced.

The story is clearest in Egypt where, thanks to the extreme dryness of the climate, a great number of tomb paintings, papyri, wall sculptures and actual models of a wide variety of boats have been preserved. The Nile was Egypt's source of life as well as her thoroughfare, and her boats took an evolutionary course most suitable to river conditions. The earliest river craft of the Egyptians were rafts. They came in all sizes and were made of bundles of papyrus reed, since good wood was in short supply. Later, when a demand for larger and more durable craft developed—particularly for the movement up and down river of heavy loads of building stone—the Egyptians did develop true boats, some of considerable size, almost all of them made of local acacia wood.

Acacia wood is poor stuff. It is hard enough, but the trees tend to be small and crooked and can yield only short, narrow boards. Consequently, a typical Egyptian river boat of any size must have looked something like a floating jigsaw puzzle, with its quantity of small planks all neatly fastened together—the butts joined by wooden dowels and the sides held together by hourglass-shaped pegs, somewhat like the dovetail construction of a bureau drawer.

This method of building, while ingenious, is extremely fussy and inherently weak—suitable for protected river waters but not for putting out to sea.

It is interesting to note that when the Egyptians got around to exploring rougher waters they had to strengthen their boats.

One problem they had to contend with was “hogging”, the tendency of a long overhanging bow or stern to droop down. The surge of ocean waves will exploit this weakness, even to the point of breaking the back of the vessel and sending it to the bottom. Since Egyptian river craft did have long raised bows to facilitate running up on river banks, this problem was serious. It was dealt with in an extremely clever way that is clearly pictured in numerous Egyptian wall carvings. A heavy, multi-stranded rope was fastened to the bow and stern; in between, it passed over a couple of crutchlike posts that stuck up six or eight feet from the deck. By inserting a bar through the rope's strands and twisting it, a ship's captain could tighten the rope like a tourniquet and hold up the bow and stern to whatever extent was needed. This tourniquet, known as a truss, also increased the overall rigidity of the hull.

It is certain that the coastal Canaanites, whom the Egyptians had begun visiting as early as 3000 B.C. to get timber, had numerous opportunities to examine at their leisure Egyptian trussed ships and to note whatever useful refinements in hull construction or rig the visitors had devised. We have no evidence at all that the Canaanites had developed a maritime capability of their own at this early date. But their proximity to the sea makes it probable that they had. If so, it is most likely that they did not copy Egyptian models, for they were also being exposed to a different, and better, method of ship construction.

By the time the Egyptians were going up to Byblos in their patchwork trussed ships, other peoples—Mi-

noans and Mycenaean Greeks—were coming down to Byblos from the northwest in long, narrow, better-made vessels that were essentially large dugout canoes whose sides were built up to increase capacity. As this type of vessel evolved, the dugout log—which originally had been the basic boat—was reduced in size and function to a long rigid keel to which built-up sides of the vessel were attached.

Thus the citizens of a place like Byblos were confronted very early with two basically different concepts of ship construction. The Egyptians first built a shell of many small pieces and later added ribs and thwarts—and possibly a strengthening member along the bottom. Northerners laid down that strengthening member—the keel—first and anchored the planking to that. This latter method of ship construction is far superior to the Egyptian method and has been followed right up to modern times. What made it possible, of course, was the availability of large trees, which were lacking in Egypt. Since the coastal Canaanites had an abundance of excellent timber for the strong keels that seagoing ships need, it is overwhelmingly logical that they followed the Aegean rather than the Egyptian tradition.

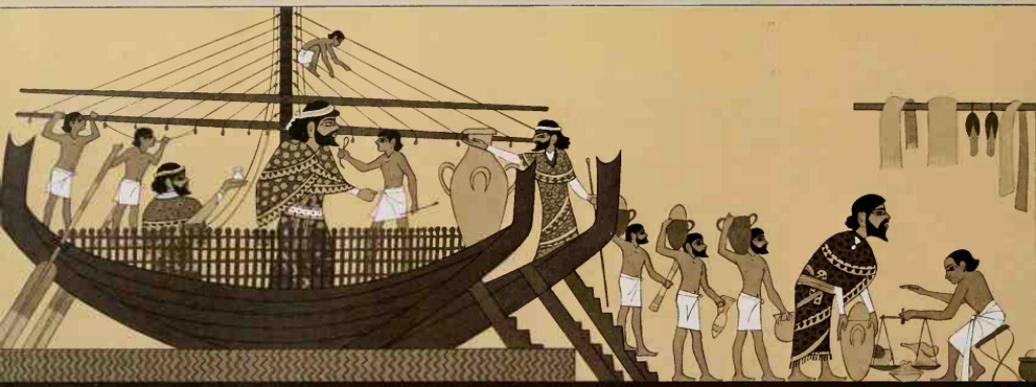
Logical it may be, but in the present state of knowledge it cannot be certain. The early Aegean legacy is far skimpier than the Egyptian. Nothing survives from around 3000 B.C. beyond those cryptic little scratched drawings on broken bits of pottery, and they are so crudely done that it is impossible to tell anything about the ships they represent except that they had oars and extremely high stemposts as their bows. Or is it sterns? Experts are not entirely sure, although they suspect they are bows because some have figureheads in the form of fish pointing in a for-

ward direction. Better documented vessels of later periods commonly had carved objects of one sort or another in their bows: birds, fish, the heads of animals. Many had large eyes painted on each side of the bow. The purpose of all such ornaments was to help the vessel see its course or speed it on its way.

Not until about 2000 B.C. did pictures of vessels definitely known as Minoan begin to appear. Then, rather suddenly, there were a good many of them. The Minoans were superb potters, and many of their jars and vases are decorated with paintings of ships. They also carved enormous numbers of small personal seals. These were the “signatures”, or identifying emblems, of individual men and were widely used for the signing of clay tablets.

Seldom more than an inch or two long, Minoan seals were exquisitely carved on very hard stone. It is possible to make sharp impressions from many of them even today. Those that depict ships show a vessel of a characteristic type. It had a sensible rounded hull, turned up at either end for seaworthiness. It had a mast amidships and ropes of some material for raising and trimming a sail. Vessels of this general type would, in the following centuries, make their way throughout the Mediterranean. They are the most logical model for the proto-Phoenician seagoing trader to have copied. In fact, the first-known picture of a Phoenician ship (*page 32*), carved on the wall of an Assyrian palace in about 700 B.C., bears a close resemblance to the Minoan designs that were approximately a thousand years older.

Summarizing this admittedly sketchy skein of evidence: the most likely prototype for the Phoenician ship was a vessel with a rounded hull and a strong keel derived from Aegean models. By 2000 B.C., per-



haps even earlier, the ancestors of the Phoenicians in Lebanon were putting it to local coastal use. Certainly it was in wide use by 1500 B.C. It was driven by sails or by oars, or by both—the former being the principal propulsive agent for cargo vessels, the latter for warships.

Where did oars and sails come from? This is another very elusive and tantalizing question. The oar was surely preceded by the paddle, and paddling is probably about as old as boats themselves. The first men to use log rafts to cross lakes or rivers undoubtedly learned rather quickly that they could propel them better with broad, flattened sticks than they could with their hands. Very early—on the evidence of wall art and actual models—the Egyptians were using well-shaped paddles with broad blades.

In due course, some genius invented the oar. This does not seem like a very momentous discovery, but it was. The oar is far superior to the paddle in power because the rower is using a fulcrum—an oarlock, a loop of rope, a thole pin or simply a hole in the side of the boat—as a brace against which he exerts his strength efficiently by pulling on one end of the oar as the other bites the water. A rower does not have to lift the weight of his oar for every stroke as a paddler does: the oar is supported by the side of the

boat. Therefore, an oar can be much longer and heavier than a paddle—with multiple advantages. The most obvious is that an oar can be used in a larger boat from a higher position above the water. A paddler sitting in such a position would have to have such a long, heavy paddle simply to reach the water that he would quickly become exhausted by the mere effort of lifting it for successive strokes. Paddles are useful only in long narrow craft where the user can sit close to the water and close to the edge of the boat, as he does in a canoe. For anything significantly higher or wider, oars are superior.

Furthermore, two men cannot operate one paddle, but they can sit side by side on a seat to pull on one oar from positions quite far inboard from the side of the boat. This has important implications for the multiple use of oars in warships.

The Egyptians were using paddles from time immemorial for their reed rafts and small river boats. By 3000 B.C. they had shifted to oars for their larger craft. But by that time Aegean ships were oar-driven too. One may have learned from the other, or the improvement may have come about independently in both places. Whichever the case, the oar as a familiar and superior device for seagoing vessels was widely known by the time the ancestors of the Phoenicians began going to sea.

Trade between Egypt and Canaan was being conducted as early as 1400 B.C., when the original of this copy of an Egyptian painting was done. The artist made the long-robed traders bigger than the other figures. One directs unloading; the other bargains with an agent. Crew members unload wine or oil, and pottery. On sale above the second agent: sandals and cloth.

The invention of the sail, like that of the oar, was momentous. It provided man with a power supply far stronger and more enduring than his own muscles and transformed the waterways of the world from barriers into highways. Like boats themselves, sails probably were first developed in the relatively safe confines of lakes and rivers: the Nile, the Tigris and Euphrates, the great rivers of India and China. Sailing craft emerged in all those places, each with individual styles that would persist down through the centuries. But in all places the primitive sail was essentially the same.

It was the simplest kind of device imaginable and reflected man's dawning realization that if he hung up a piece of cloth or a mat where the wind could catch it he would be blown along. For this he needed a pole (a mast) to hold up the sail and a cross-piece (a boom or yard) to spread it out so that it could fill with wind. These needs produced a single square sail almost identical with the kind that boys still put on toy boats whittled from shingles. Shingle boats have their masts up near the bow, since they are designed to be blown before the wind and go straightest with their masts so situated. The earliest river boats probably did the same. The oldest-known picture of a sailboat—once again Egyptian and dating from about 2900 B.C.—shows the mast and sail up near the bow.

The Egyptians conceivably could have been the first people anywhere to use sails. They were extremely inventive, and the peculiar conditions of the Nile could have beckoned them in that direction with an almost overwhelming persuasiveness. The Nile lies in a north-south direction. The current flows steadily north and the wind blows just as steadily south. This meant that a boat with a sail could be

wafted upstream against the current without any effort beyond that of steering. Coming back downstream, the boatman could lower his sail and drift with the current. Oars could have been used either way to increase speed or improve steerage.

Early Egyptian masts were tall and often were "bipods"—i.e., double masts running up from the sides of the boat and coming together at the top. The reason for this design seems to have been that reed rafts were too flimsy to support the entire weight of a single mast at one spot in the centre of a boat; a bipod distributed the weight better.

Conditions on the open sea are quite different from the predictable, protected ones on the Nile. It is often extremely rough at sea. Currents are variable, often depending on the direction of the wind. The winds themselves vary with the seasons, even with the days or hours. Sometimes they do not blow at all. It is those conditions that produced the useful little vessels shown on Minoan seals, vessels which—in the opinion of many experts, an opinion I share—were ancestral to the trading vessels of the Phoenicians. The differences in design between them and Egyptian ships clearly reflect the differences in the conditions under which they operated.

The Phoenician cargo vessel probably ranged between 30 and 80 feet in length. Although it may have had oars for getting in and out of crowded anchorages and for progress in calms and against headwinds, its principal propulsive agent was its sail, whose design represented a considerable improvement over the tall early Egyptian version. The Phoenician mast was short, probably set in a mast step or slot in the bottom of the ship. Since the Phoenician hull had a very strong backbone in the heavy

wooden beam that served as its keel, the butt of the mast could rest in its step with little danger of being driven through the bottom of the hull. A short mast promised good hull stability during squalls and gales, and reduced strains aloft.

Even a short mast will give trouble if it is not set tight in its step and held firm aloft by stays. This makes lowering the mast a nuisance. While it could be done in ancient vessels, particularly warships, it probably was seldom resorted to in cargo vessels—which presented the Phoenicians with the problem of how to shorten sail. They could not simply lower it. The wooden boom, or yard, from which it hung was heavy; it had taken a great deal of sweating to haul it up the mast in the first place. Once up, no sensible ship's master would have lowered the yard unless he had to, particularly since pulleys with revolving sheaves were unknown in ancient times, and ropes were thick, unevenly made and unreliable. Without proper pulleys, even a modern rope will chafe through quite quickly. Frequent raising and lowering of a heavy yard would have worn out in no time the inferior hoisting halyards of the past. So, once up, a yard stayed up, and the problem remained: How did one furl a square sail without lowering it?

The Phoenicians, or some Greek or Minoan predecessor, solved the problem very neatly. They attached ropes, called brails, to the bottom edge of the sail, half a dozen or more of them, and ran them vertically up the sail's front side, fastening them at intervals to the sailcloth. The brails were then laid over the top of the sail and down to the deck. Crew members standing on the deck and hauling on the brails could draw up the sail like a Venetian blind, bunching it in loose folds against the bottom of the yard.

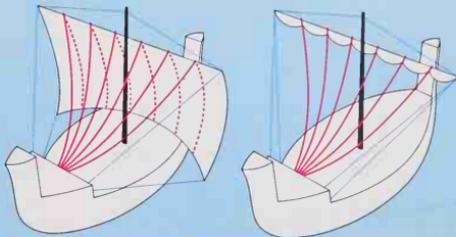
Another basic improvement incorporated into the Phoenician trading ship was a better positioning of the mast. A simple river craft going before the wind up the Nile could sail straight upstream with its mast forward. But for a seagoing vessel expected to move in a number of directions under a variety of wind conditions, the Phoenicians needed something more versatile. With the mast amidships, and with ropes called braces leading from the outermost tips of the yard all the way down to the deck, it was possible to swing the yard so that the sail—instead of lying at right angles to the direction of the ship—could be set almost parallel to it. This innovation allowed the vessel to take advantage of winds coming from the side and still roll speedily along in the direction the captain wished, instead of being able to utilize only those winds that came from directly astern.

Since much of the voyaging the Phoenicians engaged in on the Mediterranean was in a general east-west direction, that meant that the winds that often blow from north and south there—and heretofore useless a good deal of the time—could now be used for travel in either direction virtually all of the time. As the traders became more and more familiar with wind patterns in their great inland sea, they surely exploited them seasonally, hugging one coast on the way west to take advantage of the breezes that blow favourably there in spring, but following a different course and different breezes in summer and autumn. Along the African coast, for example, the prevailing winds are easterly from May to October, and westerly from October to May.

But no Phoenician ship could “go to windward”—that is, sail at better than a right angle to the breeze, zigzagging back and forth, gaining a little each time

How early mariners furl their sails

The single square sail of an early merchantman was simply lashed to a horizontal pole, or yard. Since the yard was heavy and could not be lowered easily, a method was devised for pulling the sail up to the yard. Ropes, known as brails (dotted red lines in drawing at right), were fastened to the sail's bottom, run up and over the front and then down to the deck (solid lines). Men would pull on the brails to bunch the sail against the yard (far right).



and gradually working its way upwind. If a trader's course lay directly into the eye of the wind, there was nothing to do but furl sail, grit teeth and start rowing—or wait for the wind to shift.

Steering the Phoenician coastal trader was no great problem, although the true rudder—one that hangs amidships from the stern—would not be invented for another couple of thousand years. All ancient sailing ships were controlled by steering oars, hanging down from each side of the ship near the stern.

What living conditions were like aboard Phoenician traders is a mystery. No drawings, models or carvings exist to show the interiors of any ancient vessels, except for some of the specialized Egyptian river craft. Since we also do not know how large a ship's crew was—whether its members doubled as sail handlers, boatswains, riggers, loaders and unloaders when the ship was beached for trading—life aboard can only be surmised.

Somewhere on the vessel there may have been a platform with a sand base in which a fire could be lit for cooking. Otherwise there probably were no amenities whatsoever, for traders of that time preferred to travel only during the day. At night they beached their boats and went ashore.

If it rained they probably went back aboard and sprawled on the rowers' benches below decks or tried to find comfortable places in the cargo. Decking, with hatches to give access below, can be assumed. It has multiple advantages: it is a hull strengthener and a protector of cargo that might be spoiled by rain or salt spray; it guards against instant swamping if a huge sea should come aboard; and it provides a platform for cargo, whether livestock or lumber, that does not suffer from a wetting.

So much for the Phoenician merchant vessels, the unobtrusive but persistent work horses of the Mediterranean, showing up wherever there was business to be done—beamy, rounded, durable, efficient and known in the waterfront slang of whatever port they put into as “tubs”.

How different was the warship. Originally, all sea-going ships of the Greek and Minoan strain probably were pretty much alike. Naval warfare had not yet evolved as a special way of fighting and therefore commanders did not need specially designed fighting craft. They used ships primarily as troop transports and supply carriers. But inevitably there were shrewd tacticians who began to realize that it was easier to destroy enemy troops at sea by drowning than it was to kill them in hand-to-hand combat on the beach. Somewhere along the line vessels designed to fight other vessels began to evolve.

The fighting ship had to be fast and manoeuvrable, able to carry a large number of fighting men. It had to provide places for these men to stand and from which they could shoot arrows, wield pikes or—at an instant's notice—jump over the side and wade directly into battle if the action was on the beach or, if at sea, force their way aboard an enemy vessel and engage that enemy on his own deck.

The vessel that these needs produced was long and low and narrow, and propelled by oars. It had a sail used only to get from place to place, never in combat. Winds were too fickle and in summer sometimes entirely absent. Smart commanders therefore left their masts and sails ashore before big sea battles so as not to clutter up their decks during the fighting. In consequence, most of the great naval engagements of classical times were fought very close to shore, some-

times in narrow bays or harbours, sometimes only a mile or so off the coast.

They often took place under the gaze of people whose lives were riding on the outcome. Crowds of Greeks and Persians stood on different bluffs and headlands surrounding the Strait of Salamis to watch a Greek fleet meet and destroy a larger Persian one (pages 49-55). Among the Persians was their monarch, Xerxes, who sat on a throne that had been carried a thousand miles from Persepolis for just this purpose. Doing by far the best fighting for his side was a squadron of Phoenician mercenary ships. When they were finally beaten along with the others and Persian hopes for conquering Greece sunk with the wreckage of Xerxes' fleet, Xerxes summoned the Phoenician captains and according to legend had them all murdered.

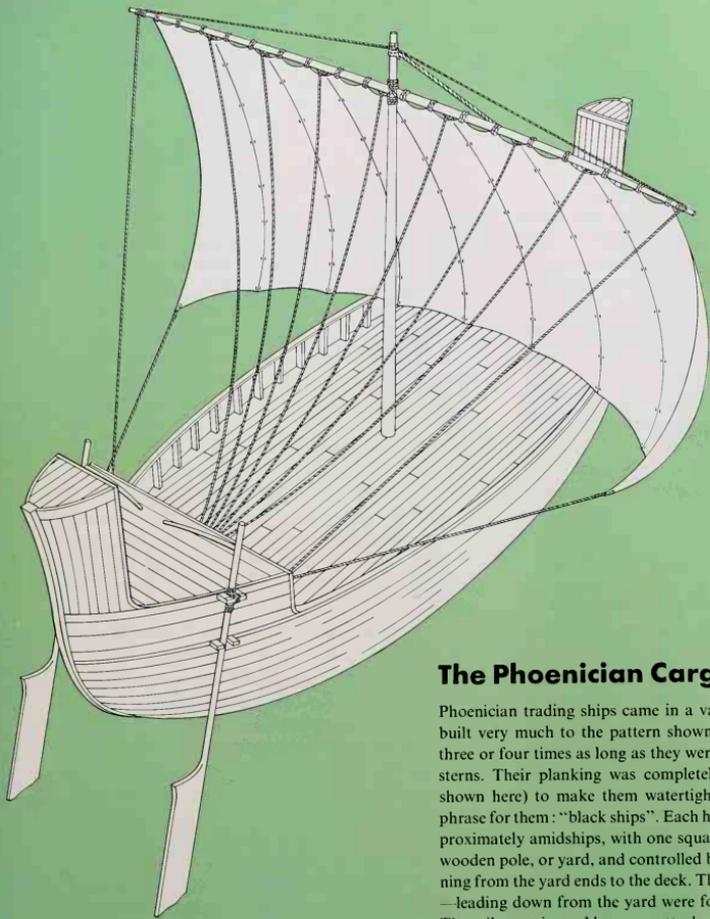
Salamis was fought in 480 B.C. By that time both the Greek and the Phoenician war galleys had evolved into highly specialized and remarkably similar war machines, culminating almost two thousand years of development. A war galley is essentially a long rowboat: long so there will be room for a large crew of oarsmen to move it fast; narrow to make it as light as possible and also so that it will slip smoothly and easily through the water. But narrowness produces a serious problem that is best illustrated by a quick look at a modern eight-oared racing shell.

The racing shell is needle narrow, barely wide enough to accommodate the hips of the oarsmen, who sit one behind another. If a racing shell's oarlock (the fulcrum against which the oar is pulled) is placed on the gunwale, or edge, of the boat, the rower will have to use either a ridiculously short and inefficient oar or one of sensible length but with a handle so

close to the fulcrum that he cannot exert enough leverage to pull it. The solution, of course, is not to pivot the oar on the gunwale but on an outrigger that projects about three feet from the side of the boat. This way the oarsman gets all the leverage he needs to pull an oar that may be twice as long as he is.

According to a tentative reconstruction offered by the naval archaeologist Björn Landström, the early galleys used in the Aegean, dating back to about 3000 B.C., were large dugouts made of tree trunks, with outriggers slanting out from each gunwale and running the length of the boat. The oars, maybe a dozen to a side, rested on the outriggers, giving the rowers plenty of pulling leverage. With the addition of small platforms or decks in the bow and stern to hold fighting men and helmsmen, this interpretation produces a hull that must have been about 65 feet long and four feet wide, not counting the outriggers—light enough and slender enough to be driven fairly fast by its two dozen oarsmen.

A larger, more powerful dugout with, say, 50 rowers could have overtaken and destroyed a 24-oared ship if it could have caught it offshore. The hitch was in the catching. A 50-oared ship would necessarily have been nearly twice as long and therefore handicapped by a much larger turning radius. Its more nimble adversary, always able to make tighter turns, probably could have kept away from a large ship almost indefinitely and in the process totally exhausted the oarsmen of the heavier pursuing vessel. In actual combat, of course, such simple matchups seldom occurred. As noted before, naval battles often took place where manoeuvrability was limited, and engagements almost always involved fleets of considerable size: dozens, sometimes scores, even hundreds



The Phoenician Cargo Vessel

Phoenician trading ships came in a variety of sizes, but all were built very much to the pattern shown here: tubby vessels about three or four times as long as they were wide, with high bows and sterns. Their planking was completely covered with pitch (not shown here) to make them watertight, which explains Homer's phrase for them: "black ships". Each had a single mast stepped approximately amidships, with one square sail hanging from a long wooden pole, or yard, and controlled by two ropes—braces—running from the yard ends to the deck. The other seven ropes—brails—leading down from the yard were for furling the sail (*page 43*). The sail was trimmed by ropes attached to its lower corners. Steering was managed by means of two oars controlled by a single helmsman. He stood between them and turned the oar blades in the water by pushing or pulling the two short, horizontal tillers.

of ships on a side. A fleet of big galleys moving up abreast could surround little ones, unless the little ones had big ones of their own for protection.

Naval warfare, despite the relative simplicity of ancient ships, has itself never been simple. A fleet had to have vessels of various types if it expected to succeed in battle. Manoeuvres and strategy were as intricate as they are today.

The better fleet was, almost by definition, the one with the better rowers. It was as simple as that, which is why slaves were not used in fighting ships; their reliability was too uncertain. A war galley had to have highly trained, patriotic citizens willing to pull their hearts out. If the ability of the rowers made a ship faster and more manoeuvrable than an enemy ship, the enemy was doomed. Sooner or later the faster vessel would get the other into a position where it could not avoid being rammed broadside or in its unprotected stern by a sharp beak that stuck out from every warship's prow just below the water line.

Some authorities give credit to the Phoenicians for developing the ram, which apparently was invented around 1000 B.C., just about the time the eastern ports were emerging as trading powers in their own right and building up their war fleets. If the Phoenicians did not invent the ram, they were quick to adopt it; for it was a revolutionary development that would affect naval strategy for centuries. A good smash from a ram and a skilful backing away by the rammer's oarsmen would leave the other vessel in a helpless condition with a huge hole stove in her side. The rammer could then depart to seek out another enemy vessel or lie fairly close by while her archers methodically picked off the enemy soldiers and oarsmen struggling in the water.

Since speed was so decisive, and since the only way to achieve speed in galleys was with human muscles, ancient warships began to grow in size in order to accommodate more power. But growth carries a penalty. Long thin ships are slow turners and, if made too long and thin, fatally fragile amidships; they cannot withstand the shocks of bumping or ramming. What then does one do to accommodate more rowers and still keep one's ship fairly short? One solution is to put several men on the same oar and give them a bigger oar to tug on. But to do that the ship must be made wider so that there is room on each bench for four or five men sitting abreast. This is not a very good solution. For one thing, a wide ship tends to be heavy and sluggish. For another, since an oar enters the boat at an angle, the longer the oar is, the higher above the rowers' bench it will be at its inboard end—too high perhaps for the inmost rower to pull on it unless he stands up at the beginning of each stroke and sits down again at the end of it. Because rowing, particularly combat rowing, is exhausting work to begin with, all that extra sitting and standing will wear out a crew just that much faster. A better solution is to have two banks of oars, one above the other.

Again, the Phoenicians may have had a hand in developing the two-banked ship, or bireme. The vessels shown on the Assyrian relief carving at Nineveh are two-bankers. However, paintings of biresmes also begin to show up on Greek vases of about the same date. Naval historian Lionel Casson says that with the present evidence it is impossible to decide which of the two was the inventor. "Whichever it was," Casson goes on, "the other quickly followed suit." Like the ram, it was a stunning invention and, like all truly original ideas, very simple.

It would be nice to imagine some now-forgotten genius sitting down at his drawing board and saying:

“Let me see; we have ships of 12 oars to a side.



“I’ve been ordered to design a ship with 24 oars to a side. If I design it the old way, the ship will come out looking like this:



“That is much too long and unwieldy. But suppose I make my ship higher and build another row of benches over the first one. Then I can stagger the oars like this:



“That does it. I’ve doubled the rowing power, with a ship that is very little longer than the original.”

Unfortunately, it probably did not happen that way. Just how and when that upper row of oarsmen became a permanent feature of the fighting galley and turned it into a bireme is not known. Some Greek vase paintings of this period show two banks of rowers at work, some show only one. But in those that show only one, it is often the upper bank that is doing the rowing. Empty slots for the lower oars and tholepins for fastening them are carefully drawn. Experts conclude that while cruising the lower position was not to be used.

This makes sense. From the rower’s point of view, the lower banks of those old galleys were uncomfortably close to the water. Clearing an oar after a

stroke must have been a hard job in rough seas, particularly in a narrow hull that was rolling badly and dipping alternate sides. Catching crabs (being unable to get one’s oar out of the water in time to keep up with the other rowers) would have been commonplace—with all the bruising of ribs and smashing of knuckles that resulted, not to mention the broken rhythm of the stroke. In bad weather, therefore, and when not absolutely necessary because of fighting, the lowest bank in a multi-banked vessel probably was not used. In combat, however, the lower position probably was preferred during close-in fighting: it protected the rowers and left the upper deck clear for the soldiers. It was only a step from there to the use of both banks and to the design of ships that made that practical.

In calm water and during battle, what a tremendous improvement the bireme was. Scarcely longer than a one-banked vessel, it packed nearly double the muscle. In time, the Phoenicians and the Greeks would develop three-bankers—called triremes—and these would become the standard big warships of their respective fleets. By 500 B.C. they were common in the Mediterranean.

With the trireme perfected, an ancient war fleet was a formidable weapon. The Carthaginians became superb naval fighters. They were masters at the manoeuvre of attack at full speed, in line, abreast. They would row right through the enemy ships, whirl quickly around and attack them from the rear. If the enemy bunched tight to prevent this, the Carthaginians would execute end runs and again attack from behind against ships that were so tightly packed they were getting in one another’s way. They also perfected a technique of near-head-on collisions, sliding

by an enemy so close that the oncoming hull of the Carthaginian vessel would shear off the oars on one side of the opposing ship and leave it helpless.

The confusion of a major naval engagement waged between two large, evenly matched fleets must have been overwhelming: such a gasping of straining men and a thrashing of oars, ships moving in slow-motion patterns, the crunching and splintering of wood, yells and curses, boardings, poking with pikes, flights of arrows, capsizings, swampings, drownings and half-drownings, men clinging to floating wreckage, some hiding in it and pretending to be dead, others swimming for a shore which, if it belonged to an enemy, could only offer slavery.

The Phoenicians knew this world well and lived in it for hundreds of years. They undoubtedly engaged their coastal neighbours, fought it out with sea raiders from the Aegean, with endless generations of pirates, and after about 700 B.C. more and more with the Greeks. The latter were as much at home in the wa-

ter as the Phoenicians—as hardy, as venturesome, as determined, as good shipbuilders and sailors as they. Their aims, however, were somewhat different. The Greeks wished to establish colonies to relieve land shortages and overflowing populations at home; the Phoenicians wanted trading strongholds and markets. The objectives, though different, took both peoples to the same places, and inevitably to hundreds of years of seesaw conflict.

They were fatally well matched, particularly in the technology of their ships. A Phoenician would have been instantly at home in a Greek vessel and vice versa. In fact, one of the dividends of a naval victory was the ships captured from the enemy. They were towed home or sailed home with prize crews, refitted and added to the fleets of the victors. Thus, it was almost impossible for one side to get any significant technological jump on the other. If Greek or Phoenician had been able to gain such an advantage, the conflict would not have gone on for so long.

The Great War against the Greeks

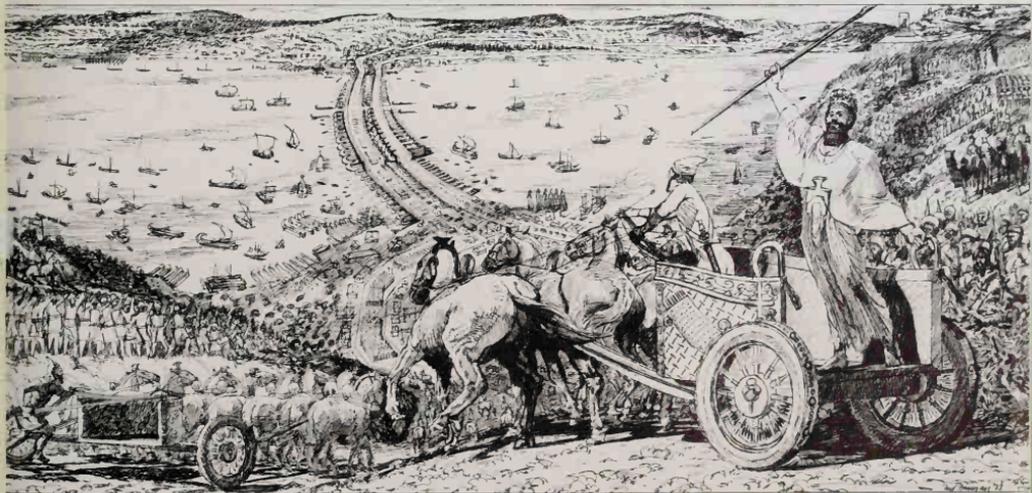
By 500 B.C. the Phoenicians found themselves under the relatively benign umbrella of Persia, which had replaced those old Phoenician enemies, Assyria and Babylon. The only cloud on the horizon was the increasing aggressiveness of the Greeks, who were establishing colonies throughout the Mediterranean, interfering with Phoenician trade and becoming increasingly annoying to the Persians.

In 484 B.C. the Persian king Xerxes decided to crush the Greeks. He recruited a huge army of nearly 200,000 men and in 480 B.C. aimed them north around the top of the Aegean, planning to fall on the Greek cities one by one. But to do this he had not only to supply his army but also to protect it from Greek naval activity and—eventually—to engage and destroy the Greek fleet. Most important, the Persian king had to get across the Hellespont, the narrow strait that separates

the continent of Europe from Asia.

These needs were met in large measure by the Phoenicians, who supplied Xerxes with 300 warships, plus fleet-support vessels and invaluable know-how. The latter was put to use in building a double bridge of ships strung across the Hellespont. When sections of this bridge, secured by cables woven of flax and papyrus, blew away in a storm, their architects were beheaded. Phoenician workmen helped repair the bridge and strengthened it by using extra-heavy anchors and beefing up the cables, which, according to Herodotus, weighed 50 pounds a foot. The bridge of ships, thus solidly fixed in position, was then floored with planks, which were covered with earth to calm skittish cavalry. And then Xerxes' mighty army rumbled over it. Herodotus says that their number was so great that the crossing took seven days.

The bridge of ships ordered by Xerxes was built at Abydos, where the Hellespont is a mile wide. The vessels were lashed side to side, their bows pointed upstream so that they would be exposed to a minimum of strain from the currents flowing out of the Black Sea and from winds blowing in from the Aegean. A total of 674 ships was used. When the bridge was done, Xerxes crossed it in a chariot drawn by matched Nisaeen horses.



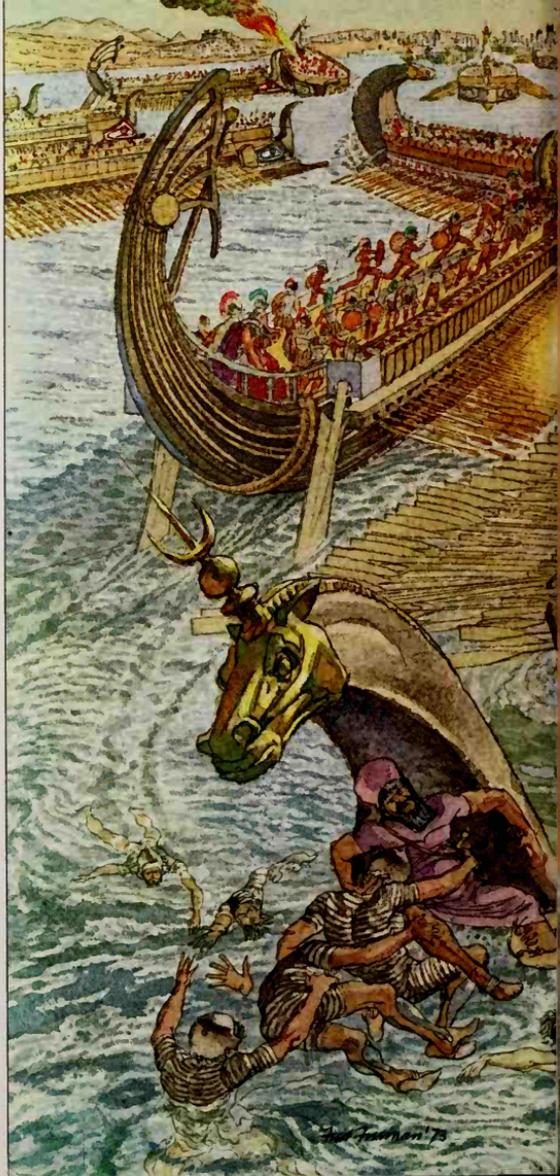
The Battle of Salamis: A Debacle for Xerxes

Xerxes' army pushed south, crushing Greek resistance as it went. It finally captured Athens, whose government fled to a near-by island, Salamis, there to be protected by a combined Greek fleet. The Greek cities, hopelessly at odds with one another, agreed to stand at Salamis largely because of the persuasiveness of the Athenian admiral Themistocles, who managed to convince most of them that their only chance of turning back Persia was by beating the enemy fleet in the Strait of Salamis. There, the narrowness of the sea would enable the Greeks to engage only a few of the Persian ships at a time, thus neutralizing the Persian numerical superiority. The location would also prevent a battle involving open-sea manoeuvres, at which the Phoenicians—the elite of the Persian fleet—were so adept.

Pretending indecision, the Greeks lured the Persians into the strait. The scene that unfolds on these pages shows the Phoenician spearhead, with gilded sterns and guardian statues of gods on board, bearing down on the Greek line, which is waiting at right and across the bottom of the picture. The bulk of the Persian fleet is still trying to crowd through the narrow strait at top left. When enough ships have squeezed in, the Greeks will surround them from the right and crush them.

A number of vessels from independent Greek cities had joined the Persian fleet. One was commanded by a woman, the imperious Queen Artemisia of Halicarnassos. Shrewd enough to realize that the Persians were falling into a trap, she quickly rammed a Persian vessel (top centre) in the hope of deluding the Greeks. She did—and escaped. In the end, the Phoenician contingent was chewed to bits and the Persians fled, losing 200 ships to the Greeks' 40. Repulsed, Xerxes returned to Persia.

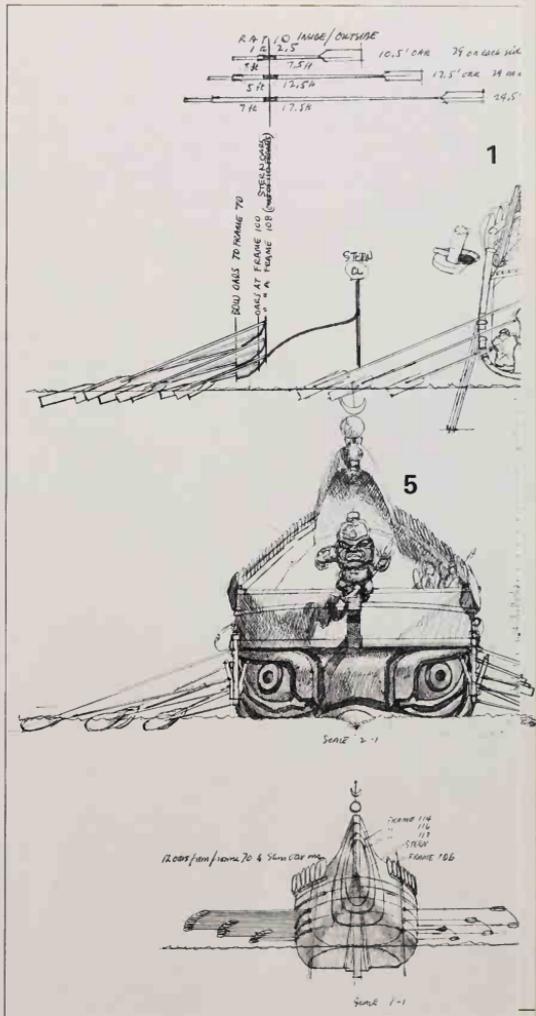
Pressed from behind by friendly ships crowding to get into action, the Phoenicians attack the Greek line and immediately get into trouble. One ship (lower left) has been rammed and is sinking. Another (centre) is being hit by a Greek ship that has swung out of line. The Phoenician ships behind them are having trouble keeping position because a wind has risen.



ist's Attempt Tirreme that Works

ing of the Battle of Salamis on the preceding
made by Fred Freeman, who did a prodigious
research to prepare himself for it. Presented
two pages from his sketchbook, the near one
to reconstruct how a Phoenician trireme may
owed, the far one devoted to a Greek trireme.
first did some studies of oars and their prop
left), then attempted to fit three banks into a
t outriggers (1, 2, 3, 4), remembering that he
with a time period between 500 and 300 B.C.,
authorities think Phoenician triremes were
decked over. He found a possible solution by
rs of different lengths, but this raised another
ort-oar men can row a much faster stroke than
en. Figure 5 is a bow view of a Phoenician
elow it a stern view. Figure 6 shows a side
essel; below it (7) is a top view. A close
side view will reveal that the uprights next to
in the top bank are placed in such a way that
annot complete his stroke. In later sketches
d to change that.

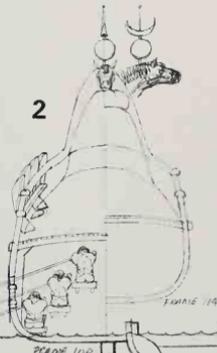
k trireme is conceived of as a ship with out-
d oars that are all the same length. The
n makes for easier stockpiling of oars, as well
wing. The Phoenician system may have been
he Greek than the one Freeman originally
got a clue to the Greek arrangement from a
ek sculpture (9) and used it to satisfy himself
and horizontal studies (10, 11) that his place-
ment would work through a full stroke, using oars
about 14 feet long (8). Figure 12 is a side view of a Greek
trireme and shows the triple beak that those vessels are
known to have had. Why such a prow was preferred is
not known; later the Greeks went back to the single spike
used by the Phoenicians (6). Figure 13 is a top view that
experiments—again unsuccessfully—with oars of differ-
ent lengths. The unnumbered sketches are bow and stern
views of the Greek trireme—the former showing the *oculi*,
or eyes, that were commonly painted on the bows of an-
cient vessels, presumably to help them find their way.



Keel (Thalwale)
 all side timbers (Frigel)
 two 3d on each side (Thalwale) Top



2

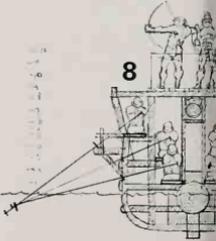


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3



FRAMES 30 & FRAME 70



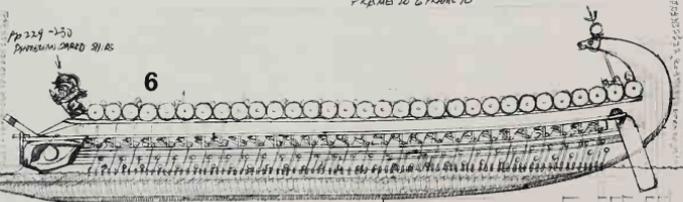
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SCALE 2-1

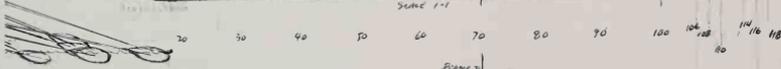
FRAME 108

pp 229-230
 PROVISIONS ON DECK

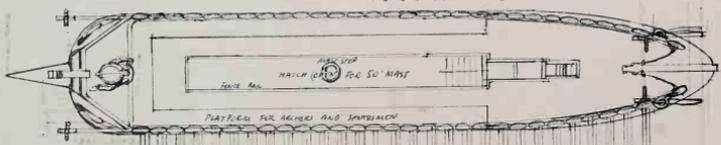
6



SCALE 1-1



FRAME 20
 170 CARS FROM THE BOW CASE



7

PLATEAU FOR REIGNS AND SADDLINGS

SCALE 1-1

© 1971 J. J. FRAHM, JR.



see page 80



FRAMES 108
 15
 + 9/16
 17

fastening lines
 like a
 like & handles
 like a

Rowler

see page 38

Chapter Three: Carving out a Trading Network



For many living in a backwater of the then-civilized world, the Phoenician trader who came ashore might be the only stranger encountered in their entire lives. In more cosmopolitan spots where strangers were common there was still something special that set the Phoenician apart. He had been to places other men had only heard about.

This reputation grew quickly after 1000 B.C. reflecting the speed and energy with which the coastal traders began flowing outwards at about that time and, in so doing, metamorphosed themselves from Canaanites into Phoenicians. That energy cannot be accounted for simply by calling the Phoenicians super-energetic. Energetic they were, but there were other ingredients in their situation that might almost have foretold their important rôle as an exploring and sea-trading people.

First and foremost was their location. They stood literally at the centre of the ancient world. Much of that world's trade wound up travelling in Phoenician bottoms or was stored in Phoenician warehouses. If the Tigris-Euphrates people wished to communicate with the west, they did so by overland caravan routes that came out on the Lebanese coast.

Halfway between Byblos and Beirut is a river gorge that winds down out of the mountains to the sea. Known as the river Dog, it has been both a trade route and an invasion corridor for several thousand years. During that time many invaders have passed

that way and left memorial plaques carved in the rock to record their passage.

The oldest of these monuments are so weathered now as to be indecipherable. But they are still there (*page 59*), staring impassively at a sea that winks as blue as it did when poor Rib-Addi was scurrying up and down the coast, past this very spot, scheming how to keep Byblos—and himself—intact.

More than three thousand years of plaques marking invasion and military conquest make clear the unique strategic importance of Lebanon. When an Egyptian pharaoh aimed his eye and his regiments eastwards towards Assyria or Babylon, he first had to take a hard squint at the Lebanese ports to make sure they were secure to him. Similarly, when Assyrian or Babylonian armies pressed westwards, there could be no descent on Egypt without some kind of accommodation—agreed or forced—between the invader and the kings of Tyre and Sidon.

No less important than its strategic value was the actual value of the region itself. The Phoenician ports grew enormously wealthy, and they attracted Assyrian invaders as a honey pot attracts wasps. As a result, even though the Assyrians often had no real geopolitical excuse for coming, they came anyway. During their predatory prowls they sometimes intimidated the Phoenicians into giving them tribute, sometimes they extracted it by force. Sometimes they simply marched back home afterwards, sometimes they left garrisons or imperial agents behind to ensure that the tribute kept coming.

For the most part, the Phoenician merchant princes apparently found it prudent to pay; their long trading experience told them that if they were patient a good deal of the wealth being taken from them by

Cyprus was a major source of copper for Phoenician traders, and the decorative element of this Cypriot stand for an incense burner tells that story clearly. The man, wearing one of the long robes favoured by Phoenicians, is carrying off a copper ingot in the shape of an oxhide. Such odd-shaped ingots were common in the Mediterranean world at that time.

Cut into the rock of the river Dog gorge in Lebanon is the plaque believed to commemorate an invasion by the Assyrian king Shalmaneser III in 858 B.C. It is one of 19 plaques that were scattered along the gorge in eight different languages. The oldest one is Egyptian, going back to 1297 B.C. The most recent is Lebanese, celebrating the expulsion of the French in 1946.

force would return in more peaceful ways later. The recuperative powers of the Phoenician cities were remarkable, and it is not wholly unfair to speculate that they regarded intermittent invasion as a sort of disagreeable excess-profits tax that they had to pay from time to time in order to stay in business.

One reason the Phoenician cities recuperated so fast was their great political flexibility. Each city was a separate entity, free to act in its own best interest, to bargain independently, alert to any business advantage that might arise, ready to join a neighbour in a commercial or political enterprise one year if it seemed attractive, just as ready to stab him in the back the next year.

Just how much stabbing went on is hard to judge, although the scant records that do survive tend to show that the coastal towns were unreliable allies, made more so by Assyrian pressures. Balancing off that tendency towards mutual squabbling was the larger and more important reason for rapid recuperation: tremendous commercial opportunity. The Mesopotamian world of the rivers Tigris and Euphrates was only one of three important markets that were joined at the Phoenicians' doorstep. A second was Egypt to the south. A third was Cyprus, Crete and the whole Mediterranean world to the west. If the Babylonian king Nebuchadnezzar wanted some fine Greek pottery, he could get it most easily from the Phoenicians. If some northern or western Mediterranean people wanted Egyptian papyrus—they, too, found it most convenient to get it from the Phoenicians. And so on.

Thus, though the Phoenicians were by no means the only traders in the Mediterranean world, they were the most centrally situated. And, thanks to their

enterprise in establishing their unique network of trading posts, they could offer the greatest variety in merchandise. Finally, being mariners, they could penetrate markets inaccessible to non-maritime peoples. In sum, they were the hub around which a great deal of the early Mediterranean and Middle Eastern trade revolved. But they were not content to be merely a hub, clipping commissions from whatever passed through their hands. They had other assets also: two natural ones and a third that they had to work up themselves over the centuries.

The natural assets were timber and purple dye. Byblos was long a lumber centre, well known for its cedar and fir. Tyre and Sidon were dyeing centres, famous for their purple cloth, which depended on Phoenicia's second natural asset, the murex, a kind of snail that was abundant in the coastal waters. Someone—perhaps a fisherman—discovered that if the soft body of a murex was removed from its shell and exposed to the sun in a shallow pan of salt water, it would start to rot and liquid from a gland in the snail's body would separate out. This liquid was used to dye cloth. Depending on how long the rotting process was allowed to go on and how concentrated the extract was, the colour that resulted could vary anywhere from a pale pink through various shades of red to a deep violet. This latter hue was the royal Tyrian purple (*pages 60-61*), known and admired throughout the ancient world and in some countries worn only by kings.

The third asset the Phoenicians used to propel themselves into commercial pre-eminence was know-how. Placed as they were at the trading hub of the world, they had a chance to familiarize themselves with a wide variety of materials, as well as manu-



facturing techniques and artistic styles. They sucked up all this information like sponges and put it to their own use. From being traders in ivory, they became expert workers of ivory. They got the secret of glass-making from Egypt and exploited it. They became great fabricators of jewellery. They learned *repoussé* and enamel work, and applied both those techniques to the decoration of ornaments and jewellery made of fine gold and silver. Although a few scholars detect elements of a “Phoenician” style in this work, the artists leaned primarily on the designs of others for their inspiration. Similarly with metal containers, silver basins and copper and bronze bowls. Some of these utensils are beautifully made, but with designs that clearly derive from Mesopotamia, from Egypt or from the Aegean world.

This is not to say that the Phoenicians lacked originality. More probably they permitted themselves to

be influenced by market conditions. “If Egyptian necklaces with scarab designs are good sellers,” one can almost hear a Phoenician craftsman saying to himself, “I’ll copy them. No need to buy from Egypt; I’ll save by making them myself.” Furthermore, as items for export tended more and more to be produced in larger volume, the skills and the originality of the artist-artisan tended to be suppressed in the demand for objects that could be turned out as rapidly and as cheaply as possible.

Having a fine source of wood close at hand, the Phoenicians were known from the outset as excellent carpenters and cabinetmakers. Apparently they did not use much wood in actual house building—they used stone or brick for that—but they did use it extensively in decoration and in furniture. In all, their familiarity with metal, wood and stone put them much in demand as travelling craftsmen. One who

sought the advantage of these skills was the Israelite king David. Having consolidated the kingdom of Israel in about 1000 B.C., David wanted an outlet to the sea and timber for "an house" for himself. He called on his neighbour Hiram, who was then king of Tyre, for craftsmen, and a mutually profitable trading alliance resulted.

From the Old Testament we know that Hiram was a great man—probably the most powerful on the entire coast. A strong ruler with a trader's instinct for expansion wherever profit lay, he recognized the value of the Israelite connection. Having done well with one Israelite king, Hiram was delighted to continue with another, David's son Solomon.

Solomon's needs were more ambitious than David's. First, he wanted to erect a temple more splendid than any the Hebrews had ever known. So Hiram sent an entire work force over the mountains to Israel to design and build from scratch a temple. In return, Hiram got a yearly supply of oil and wheat. The latter, we can imagine, was much needed by the burgeoning population of Tyre, whose own farmlands were narrow as a result of the nearness of the mountains to the sea. The second of Solomon's aims was to expand his trade south and east via the Red Sea and the Indian Ocean—specifically to Ophir, where gold was produced. Down the course of history the exact location of Ophir has been lost, but many experts think it was probably somewhere in southern Arabia. Wherever it was, Solomon saw a chance to get to it by using an outlet he had in the Gulf of Aqaba at the head of the Red Sea—if only he had ships. But he was a landsman, as were all his people, sons of nomadic herders.

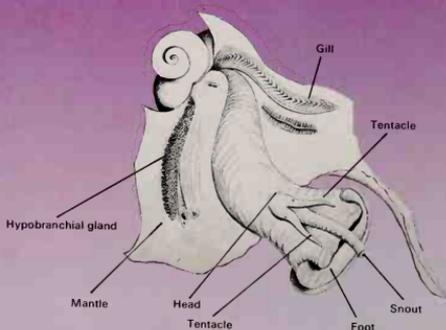
Again Hiram alertly stepped forward. According



Murex trunculus



Murex brandaris



The Royal Purple—and How It Was Manufactured

According to legend, the Tyrian god Melqart was strolling by the seashore one day with his beloved, a nymph named Tyrus, when a dog that was accompanying them picked up a murex snail and bit it in two. Immediately the dog's mouth became deeply crimsoned, and Tyrus, admiring the beautiful colour, announced to Melqart that she would not accept him as her lover until he had provided her with a gown of the same hue. Whereupon Melqart gathered up a large quantity of shells—and the Tyrian dyeing industry was born.

A delightful legend, and based perhaps on the fact that early dyers learned where to obtain their colours by noticing the tinted mouths of people who ate murexes. At any rate, by 1000 B.C. Tyre and Sidon had become the centres for dyed wool and silk of a quality unsurpassed throughout the ancient world.

The dye came from a small gland in the body of the murex, which had to be removed from a living snail if the

brightest hues were to develop properly. Each gland yielded only a drop or two of a yellowish liquid that darkened when it was exposed to sun and air. Processing required constant slow simmering in an outdoor pan for almost two weeks, during which time the precious liquid boiled down to about one-sixteenth of its original volume. At this rate, it took the glands of some 60,000 snails to produce only one pound of dye, which explains why the essence was so fantastically expensive. One expert has calculated that a single pound of fine quality silk dyed according to the highest Tyrian standards could have fetched as much as £12,000 in modern currency.

The best dyers did all their processing in lead or tin pans, knowing that brass or iron would discolour the essence. Mainly they used two species of murex (*left*). Brandaris alone produced a heavy dark tint in cloth, and needed just the right admixture of *trunculus* plus a carefully controlled double-soaking with added dye from a third snail—not a murex at all—to achieve the lustrous royal purple that was so avidly sought. Other tints—shading down to a pale pink, shown in the graduated background opposite—were achieved by varying the mixture and the amount of exposure to light. All Tyrian purple dyes were colourfast—that is, they did not fade,

which contributed as much to their value as their beauty did.

There was a time, as Rome's power and prestige began to grow, when any rich citizen could "wear the purple", a narrow band on his toga. Later this privilege was reserved for senators and, finally, for the emperor alone. Antony and Cleopatra are reputed to have had a warship notorious for its ostentation; its mainsail was coloured with Tyrian purple dye.

Murex dyeing was practised in several places in the Mediterranean area, including the islands of Malta and Motya, but nowhere was it done with a skill that matched that of Tyrian and Sidonian dyers. Their immense productivity is attested to by the mounds of shells—literally millions of them—that still lie piled around the ruins of the old dye works. In both Tyre and Sidon the works were located to the south, just out of town and downwind, because of the dreadful stench that emanated from the rotting bodies of the molluscs.

Throughout many ups and downs the dyeing industry continued, surviving even the fall of Tyre and struggling on to A.D. 800, when Charlemagne was importing Tyrian-dyed cloth. It languished thereafter because of its prohibitive cost. Cheap, colourfast aniline dyes ensure that it will never again be revived.

Both murex trunculus and murex brandaris (left, above) were abundant in the eastern Mediterranean. A diagram of the latter (left, below) indicates its parts. The hypobranchial gland produced the essence sought by dyers.

to reports, he sent a team of shipwrights, sailmakers and riggers to construct a fleet of merchantmen for Solomon at Ezion-geber, near the modern Israeli port of Elath. After the fleet was built it was manned by Phoenician sailors, and Hiram apparently got his cut of the gold and precious stones that were brought back from the mysterious Ophir. Of gold alone which was brought from Ophir, the Bible gives a figure of 420 talents. As a talent weighed slightly more than 75 pounds, the gold—if the Biblical figure can be believed—amounted to a king's ransom.

Gold from Ophir. Copper from Cyprus. Silver from Ethiopia. Tin from Spain. More and more the trade of the Mediterranean world was coming to be governed by the demand for metals. The Phoenicians were in the thick of it all. Tin was sought because it could be mixed with copper to make bronze, a far harder metal than copper. Many scholars believe that it was the lure of rich tin deposits in Spain that first drew the Phoenicians westwards, and from there northwards perhaps to Brittany and the British Isles, where tin was also produced. Meanwhile, the secret of smelting iron had been worked out in Asia Minor, and the Phoenicians quickly added that skill to their repertoire of talents.

By about 1000 B.C. they were uniquely equipped for the rôle that would establish them as the mariner-traders par excellence of their day. And with a thorough knowledge of metals, with trade goods of all kinds, with a whole arsenal of industrial techniques, with a fine knowledge of ships and the sea, the Phoenicians were ready to go almost anywhere. And they did. They flowed westwards, establishing small trading posts at strategic points as they

went. Eventually they reached the western limits of the Mediterranean itself: the Pillars of Heracles (known as Hercules to the Romans, and as the Strait of Gibraltar in modern times), the gateway to the Atlantic. Still they did not stop.

Some of the trips they took are literally astounding. In about 600 B.C. their reputation as dependable voyagers to far places was so great that they were asked by the Egyptian pharaoh Necho to undertake a voyage of exploration. In those days all of Africa was known as Libya—a vague term for all the unexplored sandy wastes that made up the Sahara and lay to the south of a much better-known strip of fertile coastline along the Mediterranean. How big ancient Libya was nobody knew. Faint caravan tracks linked by oases wandered off into the desert. Strange black people lived somewhere at the far ends of those trails. That was known because trade goods—gold, ivory and black slaves—came back via those trade routes. But how far Libya extended or what shape it was remained utterly unknown. Necho must have believed it was an island because his instruction to the Phoenician venturers was to sail south out of the Red Sea and return from the west via the Pillars of Heracles—in short, to sail around Africa. Astonishingly enough, that is what the Phoenicians appear to have done. No one would sail around Africa again for another 2,000 years.

It took the Phoenician sailors three years. The Greek historian Herodotus describes how they did it. When autumn came wherever they happened to be, they went ashore, cleared some land, planted it with corn and waited for it to ripen. When it did, they harvested it and continued on their way. No other word survives of what else they did, whom they met or

An ivory panel dating from 1200 B.C. shows a Canaanite king sitting on a throne decorated by winged sphinxes. Similar sphinxes were later used in King Solomon's temple (pages 123-127) and are referred to in the Bible as cherubim. The panel was fastened to a piece of furniture through the three holes (black circular areas).



what they saw—save one interesting fact. Reporting to Necho, the sailors insisted that as they rounded the southern end of Libya and headed west the sun had been on their right hand. Herodotus, one of the most charming tale-tellers who ever lived—but also one of the most sceptical—conscientiously reported this odd bit of news, but declared that he did not believe it. Of course, it is just that observation that gives weight to the claim that the Phoenicians had indeed got down into the southern hemisphere and for a while had the sun on their right hand—i.e., rising and setting slightly to the north of them.

Another, more reliably documented African trip was taken by the Carthaginian admiral Hanno in about 425 B.C. Hanno was not trying to sail around Africa. Rather, he was interested in solidifying African trade. He kept a log, a Greek translation of

which still survives. By following it, one can recognize some of the landmarks he saw and locate the places at which he stopped to found cities or trading posts. Virtually all experts agree that one large river he crossed was the Senegal. But south of that his account becomes increasingly fuzzy. It is hard to say whether it was Sierra Leone he reached before turning back because of a shortage of supplies or, as some think, the Cameroons, nearly 1,500 miles farther down. In either case he had some strange adventures. He saw great herds of elephants in riverine reed beds, also enormous numbers of crocodiles and hippos in what seems to have been an arm of the Senegal. At one place, trying to land, he was attacked by a swarm of skin-clad savages, standing on cliffs overhead, who threw so many rocks down on his party that it was forced to sail on. At another place he encountered

some hairy-bodied inhabitants whom an African interpreter accompanying him identified as a people named gorillas. The “men” got away by climbing straight up a cliff, but Hanno’s party did manage to catch a few of the “women”, who bit and mangled their captors so fiercely that it was necessary to kill them. Hanno brought the skins of three of them back to be displayed in Carthage.

Prior to Hanno’s relatively well-documented voyage, another trip may have been made by Himilco, also a Carthaginian admiral and possibly Hanno’s brother. Records of Himilco’s trip, as well as the relationship of the two men, are practically nonexistent. However, most historians report that Himilco’s expedition went north out of the Pillars of Heracles instead of south. This voyage tends to confirm that the Phoenicians were involved with the metal trade in Britain. Accounts unfortunately are vague, written long after the fact, and may mix more than one voyage. But they do supposedly describe how Himilco sailed up the coast, around the peninsula of Brittany and on to the British Isles. There is no direct Phoenician archaeological evidence to prove the story, but it is certain that somebody was going there from Spain during the Iron Age; traces of such visitations have turned up in Cornwall. Whether the visitors were Himilco and his party, other Phoenicians or Celts trading up and down the coast on their own is impossible to determine. These three Phoenician voyages, two in Africa and one to Britain, took place over a period of about 200 years. During that time there were surely many others of which no written record or archaeological trace survives. Tradition has it that the Phoenicians reached the Canary Islands, Madeira and the Azores. Accidental discovery



The Nora stone, from Nora, Sardinia, has an inscription written in Phoenician characters. It is the oldest evidence yet known of Phoenician penetration of the western Mediterranean. Dating from the Ninth Century B.C., it may well pre-date the founding of Carthage. The message, though fragmentary, appears to spell out the crimes for which a man could be banished from Sardinia for a year.

of all these islands by vessels blown to sea by storms is a distinct possibility. A prudent captain, caught in a real howler, would have battened down his ship and ridden out the gale, hoping to be able to sail or row back to land again once the storm subsided. The nearest of the Canary Islands is only 65 miles from the coast of southern Morocco. Since traders were going up and down that coast continually, it is hard to imagine that during several centuries of coastal traffic somebody was not blown to the Canaries. Madeira is farther out to sea, the Azores farther yet—at least a thousand miles to the west of Gades (Cadiz). But it is in the Azores, of all places, that eight Carthaginian coins have been found. It cannot be proved that Carthaginians brought them there, but the likelihood that somebody else did is remote.

Great seamen the Phoenicians. What is most impressive about their recorded voyages is that nothing like them was attempted by any of their contemporaries. No one else, it seems, had the energy, the daring and the skills to pull them off. The Phoenicians combined these qualities, and on top of that they certainly must have been tough—hard, pragmatic men who vanished over the horizon not for romance but because there was gold or ivory there, or because the elements took them. Others, writing about them, emphasize their daring. But they also emphasize their hardness as traders, their trickiness. They are described as dishonest when they could get away with it, and not above murder and enslavement.

In fact, they had a bad reputation as slavers. A stock character in Greek and Roman comedies is somebody who has been carried off by Phoenicians as a child and sold into slavery. Homer's *Odyssey* tells how the infant Eumaeus of Syria was kidnapped

by the Phoenicians—"famed for their ships, greedy knaves bringing countless trinkets in their black ship"—who connived with Eumaeus' Phoenician nurse to seize them both. What Homer failed to mention was that the nurse may well have been a slave herself, victim of a Greek kidnapping or sacked city years before—and only too glad to find an opportunity to get a little of her own back while making her way home to Phoenicia.

In defence of the Phoenicians, it must be remembered that it is their enemies who are doing the talking, and also that they were living in a rough world where everybody grabbed his when others were not looking.

Finally, we can turn to Herodotus again for some evidence that the Phoenicians were more honourable as traders than they were painted. Since they travelled as far as they did, they were constantly in contact with less civilized peoples whose languages they could not speak and of whose customs they were largely ignorant. This was particularly true of the African coast beyond the Pillars of Heracles. There, trade—if it was to be conducted at all and if the traders had any expectation of coming back—had to be built on some sort of mutual trust. According to the account of Herodotus:

"They [the traders] no sooner arrive—they unload their wares. Having arranged them in an orderly fashion along the beach, leave them and returning aboard their ships, raise a great smoke. The natives, when they see the smoke, come down to the shore—lay out as much gold as they think the goods are worth, then withdraw to a distance. The Carthaginians then come ashore and look. If they think the gold enough, they take it and go their way. If it does not seem suf-

ficient, they go aboard ship once more and wait patiently. Then the natives approach and add to their gold until the Carthaginians are content. Neither party deals unfairly by the other: For the Carthaginians never touch the gold until it comes up to the worth of their goods, nor do the natives ever carry off the goods until the gold is taken away."

A nice story and—measuring the Phoenicians as practical, long-headed traders—probably a true one.

Dramatic as the great voyages of discovery may have been, it was the slow day-to-day poking about the Mediterranean that kept the Phoenician mercantile enterprise ticking, its "tubs" a common sight in almost every civilized port—and some not so civilized. An exception was the Aegean. The Phoenicians had an early try at penetrating that sea. They were already well established at several places in Cyprus, and they went on from there to set up trading stations in Rhodes and even in Crete. But their toeholds were quickly trampled on by the Greeks, and any hope of a real presence in the Aegean had to be abandoned for the time being.

The Mediterranean, by contrast, was wide open to them, with its pot of Spanish metallic treasure beckoning at the end of a 2,300-mile watery trail to the west. It is quite possible to follow the westward movements of the Phoenicians by keeping an alert eye for the kinds of places along the coast that their captains might have chosen as good overnight anchorages, each one just about 30 miles beyond the last. The French archaeologist Pierre Cintas has refined this research tool by urging that the exploratory eye concentrate on finding "a 'landscape', a certain kind of landscape—a 'Punic landscape'".

What does Cintas mean? "Punic" is the Latin word for western Phoenician, and Cintas means simply that the Phoenicians had well-known preferences in their choice of where to set up trading posts that might eventually grow to cities; and if an archaeologist keeps those preferences in mind while prospecting, the chances of locating additional Phoenician sites are greatly enhanced.

The "Punic landscape" involved either an easily defended promontory sticking out into the sea or a small island close to the shore. A good source of fresh water was important, as was a good stone quarry to be drawn upon for fortifications and buildings. Another requirement: a good anchorage, preferably two—one for summer weather and one on the opposite side of the island or promontory for the different winds that blew in winter. A final and very important need was land for agriculture available near by. The Phoenicians have been so fixed in the minds of everybody as mariners supreme that one tends to forget they also were extremely good farmers. Living in cities—and in what for the time were densely concentrated and rather large populations—they needed dependable sources of food. They ensured these by annexing farmland around their cities and cultivating it intensively.

The result of this practice was a pattern of little spots of "Phoenicia" sprinkled widely over the Mediterranean, each surrounded by a much larger population of local people who were less advanced culturally and commercially. Much of the Phoenicians' success as traders grew from that cultural difference. Their neighbours were either unable or unwilling to make many of the trinkets and ornaments that the Phoenicians dealt in, and they innocently

traded off spices, ivory, gold or other metals for much less than those raw materials would bring elsewhere. That was the Phoenician trading margin, and it was a big one. It enabled flourishing cities to spring up wherever there were good hinterland markets to support them, or wherever strategic necessity dictated the planting of an outpost.

One strategic spot was the bottleneck between Sicily and North Africa, a narrowing of the Mediterranean that served to separate the western half of that great inland sea from its eastern half.

The Phoenicians took every precaution to ensure control of the bottleneck by establishing strong settlements in three places: on the island of Malta, which commanded the eastern approaches to the bottleneck; at Carthage, where the African coastline juts out close to Sicily; and at the nearest Sicilian point opposite, specifically at a small fortified island named Motya at Sicily's western tip. So entrenched, the Phoenicians could keep the Greeks, their chief competitors, out of the western Mediterranean and reserve the Spanish metal trade for themselves.

We now come to a most perplexing and difficult matter: Exactly when did all this happen?

There can be no "exactly", but there is beginning to be a "probably", and it raises the second of the two major problems that plague Phoenician study. The first is the already much-mentioned matter of when Phoenicia East can properly be given the name Phoenicia. The second has to do with the timing and the dynamics of the development of Phoenicia West—particularly in Sicily, where a long struggle with the Greeks was to take place. What has been said here so far about the second matter has followed tra-

ditional historical thought, much of it based on the writings of dozens of classical historians, poets, chroniclers, travellers and occasional myth-sayers. All this material has been sifted by later scholars and, taken with the necessary grains of salt, fitted together into a chain of events whose links—through time—hold together remarkably well.

It is this traditional historical view that suggests a Phoenician settlement of Spain as early as 1100 B.C., of Utica on the North African coast at about the same time, of Carthage prior to 800 B.C. and the establishment of outposts throughout much of Sicily shortly thereafter. The picture that this develops is one of established Phoenician presence in Sicily well before the Greeks came to contest it. Awkwardly, the most recent archaeological evidence, backed up by new methods of interpretation, suggests that the tradition may be wrong.

What is wrong is that nobody has been able to find in any western Phoenician site—Carthage, Sicily or elsewhere—any object that can be reliably dated earlier than about 735 B.C. Since it is almost literally impossible for permanent settlements of any size to conceal their age from the most sophisticated modern analysis, this means that the ideas that scholars, both ancient and modern, had about the rôle of Greeks and Phoenicians in the west may have to be seriously revised.

The trouble, oddly enough, seems to go back to one of the most scrupulous and reliable historians who ever lived, the Greek writer Thucydides. In describing the rapid colonial expansion of many Greek cities in response to land shortages and social turbulence at home, Thucydides duly records the settlement of southern Italy and then of Sicily by

these early Greek colonists, who began arriving in numbers in the west after about 735 B.C. He goes on to say that the Phoenicians who had been living in Sicily slowly retreated once this Greek invasion began until they were confined to three cities at the far western end of the island.

This statement has had the weight of gospel ever since it was written, but it is suspect. Colonization is difficult under the best of circumstances. The arriving Greeks carried fierce mutual jealousies with them and did considerable fighting among themselves. To assume that they could have settled their internal squabbles and at the same time find the energy to dislodge a network of well-entrenched Phoenician settlements strains credulity.

Why, then, did Thucydides make this claim? According to Rhys Carpenter, a specialist in classical archaeology and Greek history who has written an absorbing study of this entire matter, Thucydides was probably led astray by the poet Homer. For a sober historian to be deluded by a poet requires explaining. To begin with, something must be understood of the exceptional position Homer occupied in the minds of the Greeks: he was believed to be the fountainhead of practically all the knowledge they had of a big slice of their own past and even their origins. His right to the respect that Greeks and later Romans accorded him has also been acknowledged in modern times—albeit in a less literal, more interpretive manner.

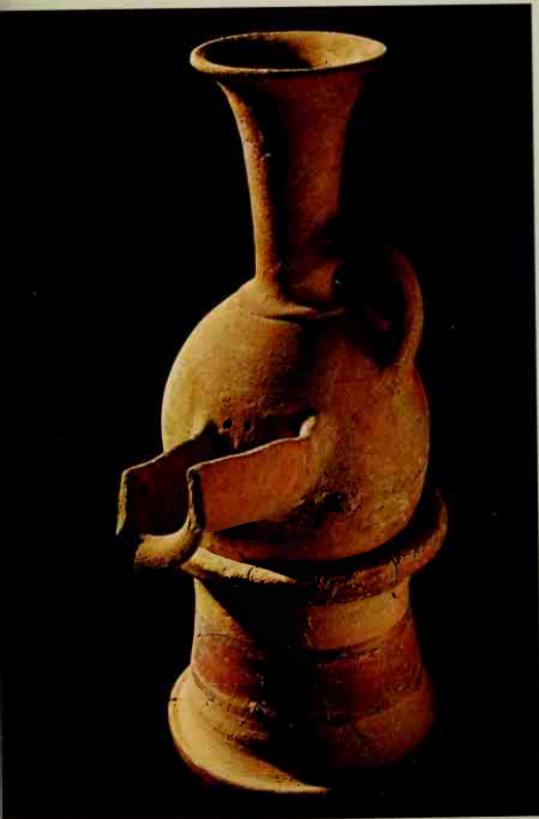
Excluding the myths and miraculous events that interlard his epics, he turns out to be—the deeper one delves into his work—a wonderfully accurate portrayer of the Greek Bronze Age. The *Iliad*, which deals with events that took place in about 1200 B.C.

—some 400 years before Homer himself supposedly lived—re-creates that time and that world in such detail as to make the jaw drop at the accuracy and perception of it all. The more sophisticated one's knowledge of Homer is, the more respect one has for him as a chronicler of life in Mycenaean Greece.

No wonder Thucydides leaned heavily on him. Unfortunately, in doing so he made one simple but bad mistake. He assumed that both the *Iliad* and the *Odyssey* were written at about the same time by the same man and that they both dealt with events of 1200 B.C. That, according to the best modern scholarship, is not so and brings us to the prickly question of the identity of Homer.

The Greeks themselves did not know exactly who Homer was, where he lived or when. We do not know today. We cannot even be sure that such a man existed at all. We do know that at the time he is supposed to have lived there were professional bards who often sang at the courts of princes. If Homer did indeed exist, he was one of those, drawing for his inspiration on a long background of spoken legend woven into song by a succession of unknown men and passed down by word of mouth from generation to generation. Exhaustive study of Homer's two great epics, the *Iliad* and the *Odyssey*, suggests that he was an Ionian who lived on the island of Chios in about 800 B.C. How much of the *Iliad* or the *Odyssey* he composed himself, how it was passed down—verbally or in written form—is also unknown. But analysis of both epics makes it increasingly clear that parts of the *Odyssey* are very probably not by Homer but were interpolated later by one or more other poets whose identities are now lost. What is important to the matter at hand is that the entire *Odyssey* seems

An Eighth Century B.C. Sidonian pitcher, with a set of sievelike holes at the base of its spout, suggests that the Phoenicians may have been tea drinkers—not of true Oriental tea but some local infusion like camomile.



to have been composed a good many years after the *Iliad*, perhaps half a century or a century later. References to the Phoenicians in both works reinforce this view, since they inadvertently reveal how the Greek attitude towards the Phoenicians had changed in the one hundred years between 800 and 700 B.C.

When the *Iliad* was written, the Aegean dark age had ended and the Greeks were just beginning to fan out again as traders and colonists. Their arts were not yet as highly developed as they later would be, and as they moved through the Aegean eastwards to mercantile contacts with Phoenicia East, they were unfailingly impressed by the sophistication of the products they found there. As a result, the Phoenicians appear in the *Iliad* as master craftsmen and nothing more. That was the Eighth Century Greek view of them; and that is the view reflected in the *Iliad*, even though it professes to talk of events that took place 400 years earlier.

The view in the *Odyssey* is quite different. By this time Greek art had developed greatly, as had Greece's outward colonial thrust, Greek was bumping into Phoenician everywhere, no longer as friendly trader but as bitter rival. The former now looked on the latter as a nasty, crafty, thieving, child-snatching, woman-seducing, ocean-roving pest who was more a purveyor of trumpery wares than a master craftsman. That is the Phoenician of the *Odyssey*—the actual Seventh Century Greek view.

Thucydides, who did not understand these nuances, particularly the time-gap between the creation of the *Iliad* and the *Odyssey*, spliced the two epics together in the belief that they depicted real events that took place within a decade or two of each other. This left him with an awkward problem. Somehow or

other he had to fit the time of the Trojan War as described in the *Iliad* (and which he correctly estimated to have taken place shortly before 1200 B.C.) with the movements and behaviour of the Phoenicians as described in the *Odyssey*. The best assumption he could make was that the Phoenicians had been at their nasty, crafty, far-ranging business for a long time. As a result, when he came to writing an account of the colonization of Sicily by the Greeks in 700 B.C., Thucydides had to explain the failure of those aggressive Phoenicians to prevent it. He did so by merely stating that they withdrew westwards. Delelud by the *Odyssey*, it never occurred to him that they might not have been there at all.

Why has Thucydides' statement gone unchallenged for more than 2,000 years? The reasons are many. For one, his own care and accuracy and scepticism gave whatever he said enormous weight. For another, the fact that Phoenician records about their own activities have never been found makes it necessary to rely on the records of others. For a third, and deriving from the second, the Phoenicians had always been a mysterious, elusive people. For a long time almost nothing was known about them except for their reputation as supreme seamen and long-distance travellers. When archaeological evidence about them finally did begin to turn up, it tended to confirm this view since their settlements were widely scattered throughout the west. Finally, and perhaps most important, the archaeological finds made at those places were not always systematically analysed.

This brings us to the specialized subjects of pots. The clay pot was the container of the ancient world; almost everybody made pots. Those who couldn't traded for them. They were in daily use as pitchers,

drinking vessels and tableware. They were used to hold and store wine, water, oil—all liquids. They also held grain and such valuables as gold dust, not to mention the cremated ashes of the dead. Since pots were such universally employed objects, they also provided a good outlet for the artistic impulses among peoples, who made them in every conceivable shape and decorated them with all kinds of patterns. Later, after glazes became common, pottery-making became an art of great beauty and subtlety.

Pots break fairly easily. When broken they are thrown away. Their pieces, however, are very durable. As a result, the most common bits of human detritus found in every archaeological site through the Mediterranean and Middle Eastern world are bits of pottery. Since certain styles are easily attributable to certain peoples, and since the evolution of a single style over a period of years can be worked out, experts realized very early in the archaeological game that pottery was the best way to analyse the different levels in the sites they were investigating—not only to determine the age of the pots but also to determine just who had lived there at a given time and with whom they had been trading.

The trouble with the pottery of the Phoenicians, particularly that found in Carthage and other western Mediterranean sites, was that it did not at first seem to show all that much variety. Their major output was a so-called red-slip burnished pot—an object of a brick-red hue, sometimes veering towards pale orange, and with a shiny interior surface. Designs were conservative. Decoration was minimal or entirely absent. Apparently the practical Phoenicians regarded their own pottery as utilitarian stuff.

Accustomed to trafficking in more exotic and valu-

able items like jewellery, scarabs and ornaments, and accustomed to dealing with the wares of others if they could find a market for them, they did not develop their own pottery designs much, but depended rather on trading in Greek and other wares. Nevertheless, all types of Phoenician pots inevitably travelled throughout the Mediterranean and, of course, exist in fragments, sometimes in great numbers, in all major sites that were occupied by Phoenicians for any length of time.

Despite their ubiquity, Punic pots were, in Rhys Carpenter's words, "long dismissed as a dreary sequence of undistinguishable uniformity", and hence not worth the archaeologist's time to sort—"so devoid of character that they cannot be interpolated into any chronological system and hence are archaeologically worthless for historical inferences".

Not so, says Carpenter; and he goes on to cite the work of Cintas, who after many painstaking years has given the pottery of Carthage and other western Phoenician sites a vitally needed and dependable sequence. Now for the first time it is possible to evaluate some of the material from sites in southern Italy, Sicily, Sardinia, North Africa, even Spain, to learn who was actually first in the west, the Phoenicians or the Greeks.

Answer: the Greeks.

An astonishing conclusion. Carpenter comes to it only after an exhaustive review of many Punic sites and an analysis that goes beyond pots to works of art, inscriptions and even includes a new way of dating pots themselves by laboratory analysis of the magnetic particles in the clay. All this analysis is beyond the scope of this book, but its cumulative weight is formidably impressive. Furthermore, it tends to un-

derscore doubts that other Phoenician experts have expressed about the accuracy of those very old traditional dates. Particularly it validates an argument advanced 80 years ago by J. Beloch, the German classical scholar. Beloch had the same ideas Carpenter advances now, but he was ahead of his time. He did not have the pottery analysis of Cintas to back him up; historical tradition was too strong, and he was laughed out of court.

So, how are tradition and the new archaeological ideas to be reconciled? I would like to suggest something like this:

In the power vacuum that followed the collapse of Mycenaean Greece, the Phoenicians in the east did begin to reach out. They touched Cyprus, Rhodes, Crete, other Aegean Islands, even Greece itself. They also went south to Egypt and west from there. But they went as traders, not as settlers, and as a result left behind in the towns they visited little record of their early presence other than the goods in which they traded. As for the uninhabited harbours or beach fronts where they may have dropped anchor and gone ashore for only a night or so on their travels, they left little trace at all.

This pattern of activity began to develop around 1100 or 1000 B.C. It steadily expanded and, by the Ninth Century, had established the Phoenician ports as centres of great maritime and trading capability. Beginning then and continuing for the next 150 years were series of invasions by Assyrians from the east. At some point during this period these assaults had become so burdensome as to suggest to the Phoenicians—particularly the Tyrians, who were the only ones to stand up consistently against the Assyrians—that it might be prudent to establish a colony in

the west, out of the reach of those avaricious invaders. Not only would this be good for the long-term outlook of Tyre, it would help with the exploitation of metals in Spain, a business opportunity that was by this time known to the Phoenicians. Ironically, even in Spain they may not have been first. Though they are generally credited with having been the first through the Pillars of Heracles, the Greeks appear to have beaten them there too. Phoenician pottery and other archaeological material in Spain follow the dating pattern just described, whereas two Greek war helmets of an earlier period have been recovered from the bottom of a river that runs down to the Atlantic Ocean at Gades.

The Greeks, for reasons we do not know, did not follow up this early penetration and did not manage to develop any kind of regular trade with the far west. The Phoenicians did. By 750 B.C., perhaps earlier, they were going there regularly. It was only when increasing numbers of Greek colonists began popping up in southern Italy and Sicily that the Phoenician trade route to the west became threatened. Only then did the traders from Phoenicia occupy Sicily, and by that time the only part they could occupy was the western end, which the Greeks had not yet taken themselves. The first Phoenician toehold in Sicily seems to have been located on the island of Motya, which probably was first settled and fortified in about 700 B.C. The establishers of Motya were most likely the Carthaginians.

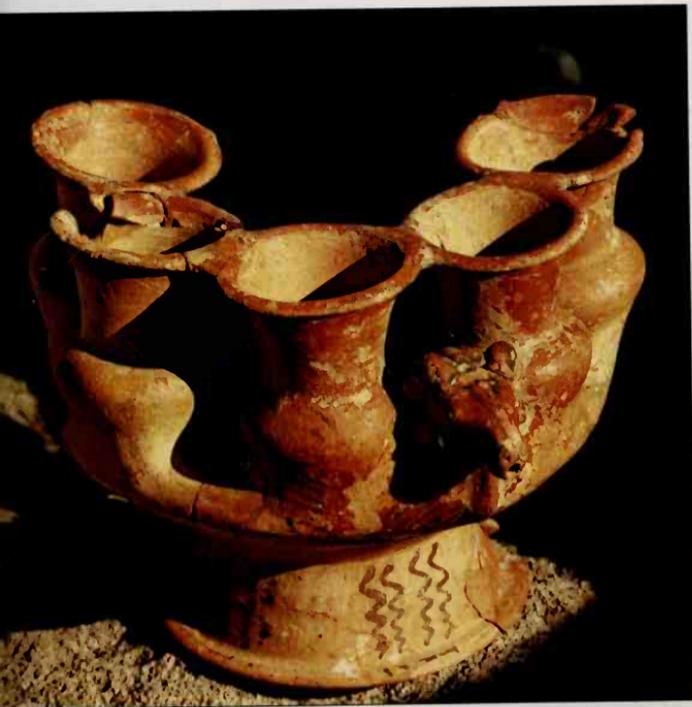
Exactly how Carthage itself fits into this picture is far from clear. The accepted date for the founding of Carthage is 814 B.C., when a group of dissident aristocrats went there from Tyre. The problem this date poses is that nothing quite that old has ever been

found at Carthage. The earliest objects so far recovered date from a good 75 years later. The oldest parts of the original settlement have now been identified to the satisfaction of experts most familiar with the place. Nothing older, they say, will ever be found; only bedrock lies beneath. What the Carthaginians did during those first 75 years—if indeed they actually were there—remains a mystery.

Nevertheless, Carthage was founded and it grew rapidly. Although it initially kept ties with Tyre and sent representatives there for religious observances, it was far enough away to be completely independent and to develop a style and thrust all its own. To counter the rising Greek presence, Carthage abandoned the traditional Phoenician policy of sticking strictly to trade and to the management of its own city. It expanded its own hinterland, subdued the local tribes, developed a mercenary army and a large war fleet and began to speak for all the western Phoenician towns. It turned itself into a power with control over the western Mediterranean and developed an aggressive foreign policy. It began wars and defended itself vigorously in wars that were forced on it. Carthage grew into something quite unlike its mother city, Tyre.

In weighing all these matters it may not be too much to say that the Greeks made Carthage by giving it the incentive to become what it did. It is surely wrong to say that Carthage—or Phoenicia—was already settled throughout the west, or an important power, when the Greeks arrived. It is the persistence of that second and essentially romantic idea of a history extending mistily back for hundreds of years that continues to confuse the overall picture of the actual Phoenician enterprise.

What the Pedlars Peddled



Made of terra cotta, this bowl was found in a grave at Motya. Originally it had an unbroken ring of seven cups, each for a different liquid and all connecting to a ram's head from which the resulting blend was drunk.

For a thousand years it was impossible to move through the Mediterranean world without encountering Phoenician goods. Much of what was sold there—the jewellery, the glass, the carved ivory, the decorated metal bowls—was Phoenician. These came in a bewildering variety of designs, which resourceful artisans borrowed from other cultures to satisfy their customers' varied tastes.

In the beginning, the Phoenicians probably acted more as dealers, as middlemen, only too glad to handle Minoan pottery or Egyptian scarabs superior to any they could make. But their skills grew rapidly; in time they made most of the decorative objects in which they dealt.

One curious aspect of all this peddling is that most of what survives comes from other countries, which reflects the way Phoenician merchants flooded their markets. But it does make difficult the unravelling of what in fact was "Phoenician" in style and what was something else.

Generally speaking, the Phoenicians drew on two major style sources: Egyptian and Mesopotamian—the latter predictably, since Canaanites and Mesopotamians had a common cultural heritage.

Exquisitely Carved Ivory Miniatures

Although they made figurines, ornamental plaques and such useful objects as combs and hairpins from ivory, the Phoenicians' most notable ivory output was decorative panels for furniture. The Assyrians were great connoisseurs of Phoenician furniture and amassed tons of it in tribute and booty. The furniture itself has long since disappeared, but occasionally a piece of ivory inlay shows up — like the panel below, thrown into a well during the sack of the Assyrian city of Nimrud in about 700 B.C. and not recovered until 1951. Phoenician ivory came from the tusks of both Indian and African elephants. The Carthaginians, in fact, raised elephants on farms.



An ivory furniture panel shows a jewelled lion seizing a gilded slave's throat. The floral background: carnations and blue enamel.

From Megiddo comes this crowned female nude, her hair elaborately braided. The figure's front is missing.



An ivory spool for spinning or weaving was found in the Carthaginian town of Lilybaeum in Sicily, near Motya.



The "Mona Lisa of Nimrud", about six inches high, was found in the same Assyrian well as the panel opposite.

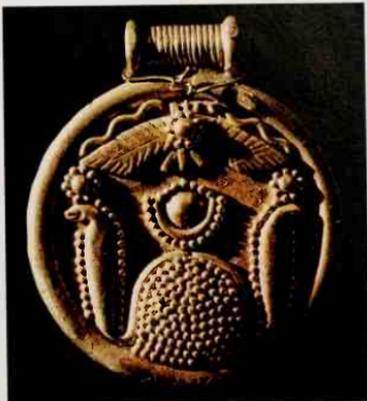
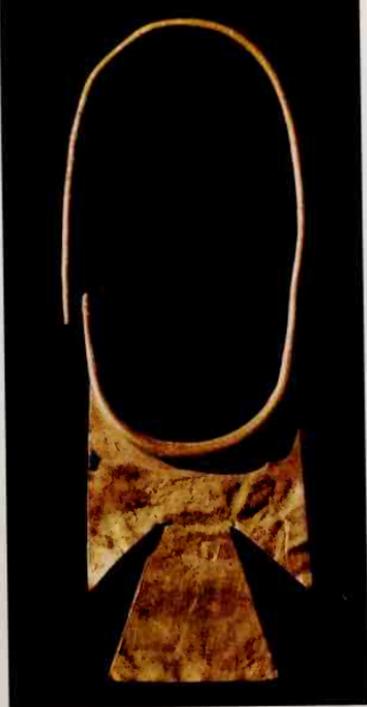
Highly Wrought Gold Trinkets

However enormous their output of what today would be called “junk” or costume jewellery—assembly-line items of copper and bronze—the Phoenicians were also the quality jewellers of their world. They got their designs from Egypt and from the Aegean, and turned out exquisite ornaments of gold and silver. Most of the latter have oxidized and disappeared, but Phoenician gold endures. Much of it is “granulated”—its surface covered by minute beads of gold that were created by snipping small slivers from a thin gold wire. Heated, the slivers turned into globules. The process was lost for many centuries and baffled jewellers until its rediscovery in the 1920s.



One end of the hoop on this Minoan-style, whorled earring can be loosened, placed in a pierced ear and fastened.

A pendant earring of granulated gold links a crescent, a hawk and an acorn, all derived from Egyptian models.



Snakes and a sun god adorn a pendant whose small size underscores the delicacy of Phoenician craftsmanship.

This crude earring has a beaten gold ornament that resembles an ankh, a good-luck symbol common in Egypt.



A superb hinged bracelet has its Egyptian motifs of lotus buds and a winged sun god picked out in tiny granules.

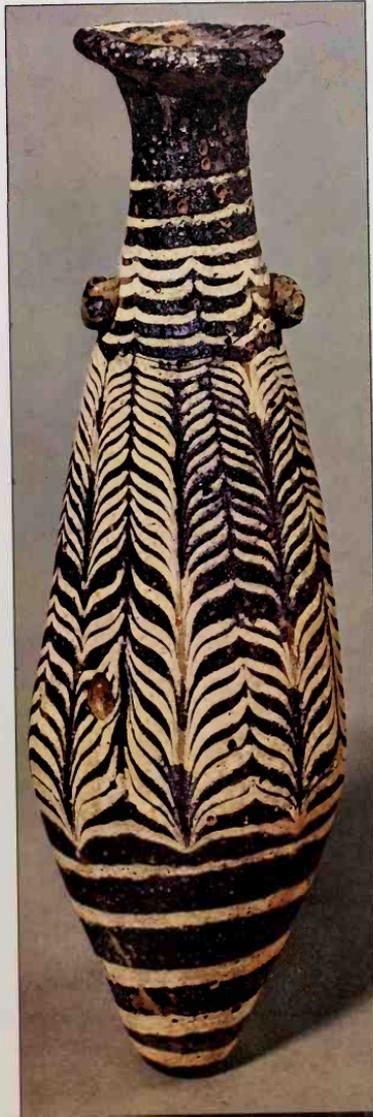
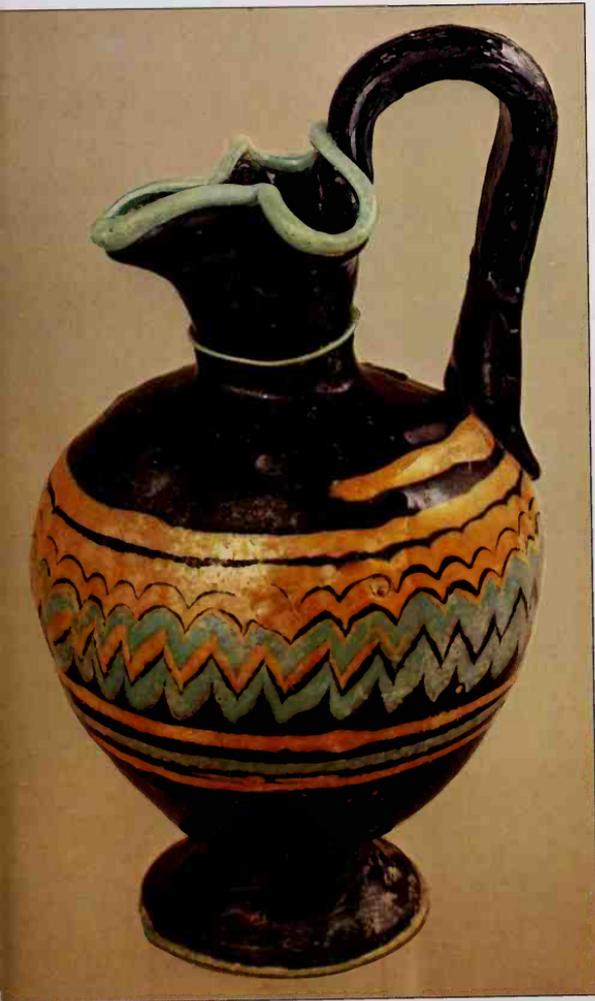
Beads and Bottles of Coloured Glass

Inheriting a tradition of glassmaking from Egypt and Mesopotamia, the Phoenicians rapidly developed great skill in the manufacture of beads and ornamental objects. They also made small incense bottles and other containers, relying—according to tradition—on high-quality sand from a beach near Tyre. The Phoenicians used a paste of fine-ground sand combined with soda. Under high temperatures, and with pigments added, the mixture became coloured glass. Since glass blowing was not yet known, containers either had to be hollowed out of solid glass blocks or moulded around clay cores, which could be removed after the paste outside had been fused into glass by great heat.



Five necklace beads from a tomb in Sardinia typify the huge Phoenician traffic in small, moulded-glass objects.

This jug was moulded from blue paste. The coloured decorations were added directly to the surface.



The vial at right and jug above are under five inches tall; the clay-core method yielded only small objects.

A Blend of Styles in Fine Metals

As silversmiths and as workers in figurative bronze, the Phoenicians achieved skills that made them almost without peer. Even the Greeks recognized the fact. Both the *Iliad* and the *Odyssey* admirably describe Sidonian silver bowls, whose fame undoubtedly derived from specimens like the two shown here. But, once again, the best examples were not found in Phoenicia. The one opposite comes from a tomb near Rome. The one below, at left, is from Assyria. While both are unquestionably Phoenician, they represent a melange of Egyptian and Mesopotamian motifs that only those masters of stylistic cannibalizing—the Phoenicians—could possibly have dreamed up.



A lion hunt is the motif on this bronze bowl, one of a hoard amassed by Assyria's King of Ashurnasirpal.

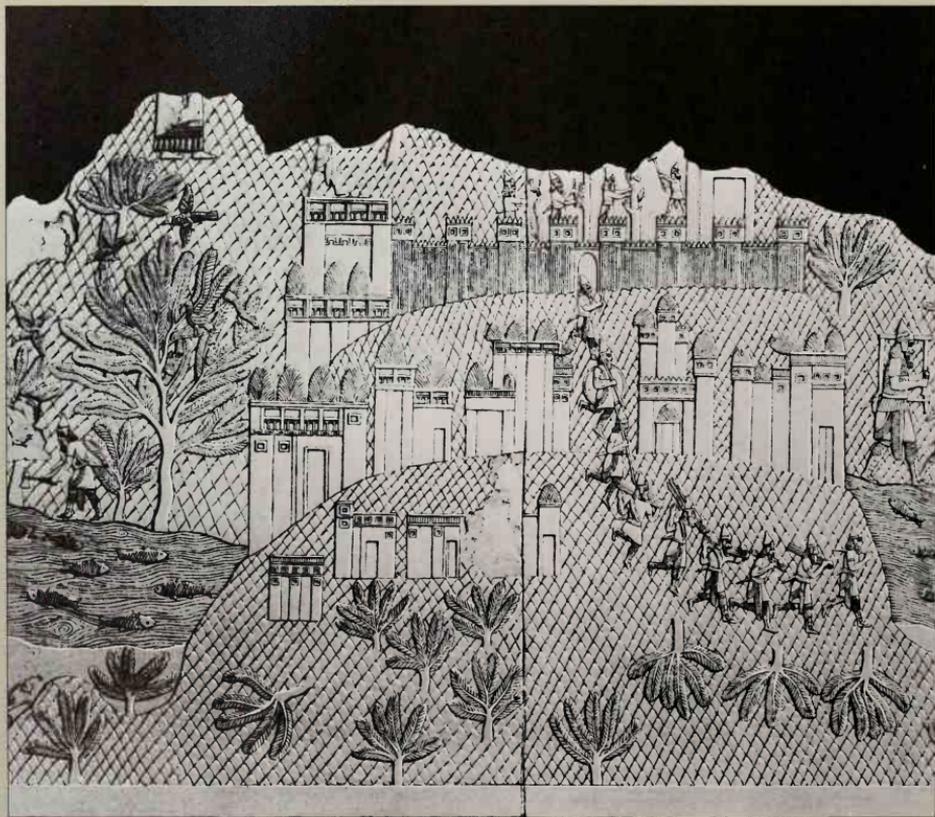
Far cruder than the bowls is this cast-bronze figurine, mass-produced by the shipload for dedication to a god.





A superb gilt silver cup combines an Assyrian castle and chariots (top) with unmistakably Egyptian figures (centre).

Chapter Four: Life and Death in the Port Cities



What was it like to be a Phoenician living in one of the major ports? What did people wear? What kinds of houses did they have? How did they run their businesses, keep their records? What kind of a writing system did they use? How did they govern themselves? What kinds of taxes did they pay? How did they deal with their ferocious neighbours, the Assyrians? Above all, what did a Phoenician town *look* like? Answers to any of these questions are not exactly easy to come by.

As far as appearance goes, the best single bit of evidence is a handsome carved wall relief (page 82) from the royal palace of Sennacherib at Nineveh. It shows in detail the looting of a Phoenician city by Assyrian soldiers. Whoever the artist was, he certainly had a vivid idea of his subject. The principal impression it seems to have left on him was one of lushness and opulence. For an invader who has trudged across hundreds of miles of dusty plains and scaled iron-hard mountains, this is not surprising. A Phoenician port must have seemed green and rich beyond imagining. Water flows through the centre of this relief—either the edge of the sea or a river. It teems with fish. There are fruit-bearing trees and grapevines. Palm trees sprout everywhere, some with plump pigeons flying through them and even a nest full of fledglings on one branch.

The city itself is a splendid one, ringed with turreted walls. Its houses are tall, with high narrow

doors, colonnaded windows on the second storeys and peculiar roofs that appear to reflect the artist's attempt to depict tiled domes, or else high bushes growing on roof gardens. Out of the city march the looters, loaded down with bundles of captured weapons and unidentifiable rods of some sort. Others are carrying furniture, handsome chairs or tables of Egyptian pattern with carved animal heads. In the background other soldiers are measuring trees and cutting them down; for the timber-hungry Assyrians, even the wood in a Phoenician city apparently was worth taking back home with them.

What city is this, so lovingly preserved in Sennacherib's palace? No one knows. But it could be Tyre, which is known to have been the target of Sennacherib's wrath in about 700 B.C. Whatever place it describes, this relief gives a unique picture of the external appearance of a Phoenician city. Only one other such representation is known, a much cruder relief scratched on a tomb at Cape Bon, in Africa—so crude as to nearly disqualify itself as a useful bit of evidence about what Phoenician towns really looked like. All it has in common with the stunning relief from Nineveh is the suggestion that its houses, too, had strange rounded shapes—domes or bushes—projecting from the tops of their roofs.

Of the interior of a Phoenician town, or what life was like therein, no reliefs or pictures survive at all, no written description of any sort. For that one must rely on inference drawn from contemporary cultures and religions, from the hints that those cultures drop in their own literature, from a few Phoenician inscriptions. Finally, and most important, one must rely on archaeology—on what is turned up by the spade as it digs through layer after layer of cultural debris hid-

Assyrian soldiers carry loot from a Phoenician city in this drawing of a relief found at Nineveh. The town—possibly Tyre—is strongly defended. It has high walls with towers. The houses rise two or three storeys. Their upper windows have small rows of columns almost identical with those in the ivory on page 98—clearly a popular Phoenician architectural motif.

den in the earth. Unfortunately for the archaeologist, all the major Eastern Phoenician port cities—Byblos, Berytus, Tyre and Sidon—are still occupied, their ancient quarters now buried beneath larger modern towns. It is impossible to get at the old Phoenician dwellings and temples except by the occasional accident of an excavation being made for a new hotel or business building.

The visitor to this area of the world does not at first realize what the true situation is. There are ruins all about him at the major sites, most of them Greek or Roman: single temple columns standing here and there, open-air theatres, paved avenues, baths, storage vaults, tiled drains and the foundations of numberless small buildings—none of them Phoenician. Where archaeologists have been able to excavate at Byblos they have turned up a part of the city that dates from the pre-Phoenician Bronze Age, from Rib-Addi's time or earlier. The Phoenicia with which this book deals, the coastal ports of 1200 B.C. or later, has nowhere yet been properly revealed.

This extraordinary situation may be on the verge of a dramatic change, thanks to work now being done by James B. Pritchard of the University of Pennsylvania. In 1970 Pritchard and a team of co-workers started excavating a site eight miles south of Sidon that he had identified as the old Phoenician town of Sarepta. Never in quite the same class of importance as Sidon, perhaps because its harbour was smaller and poorer, Sarepta was nevertheless a thriving place as early as 1600 B.C. It ultimately covered several hundred acres and contained a good many thousand people. Now it is a wheat field, its surface uninhabited, and thus a prize that has heretofore not been available to archaeologists: a Phoenician port site

with no people presently living on top of it to bar proper scientific study of its ruins.

Where to start work on a large site is always something of a problem. Pritchard began with a straight narrow test trench that, with luck, led right into the old pottery-making quarter of Sarepta. His team has found 19 kilns and masses of broken and blistered pots that were ruined in firing and thrown away by their makers. Already half a million bits of pottery have been laboriously catalogued and cross-indexed as to their shape and their position at the site. All together, the gradually changing styles of these shards cover about 1,000 years of continuous production. Their absolute age has not yet been fixed, but Pritchard hopes to be able to do that when he has had a chance to broaden the excavating. If and when hard dates are found for this sequence of pottery, it should solve many riddles about Phoenician life and history, one of the most vexing of which is the already-mentioned problem of dating the founding of the Carthaginian colony.

Pritchard's first probe has already revealed that this one Phoenician town—and presumably others—had its various trades and industries concentrated in separate quarters. The pattern still prevails in many Middle Eastern cities, but heretofore proof that it was followed in any Phoenician town has been lacking. A second Sarepta probe by Pritchard's team, so far very limited, promises to be as interesting as the first. Work there already has uncovered the location of a shrine (*Chapter 5*).

Also unknown as yet is the nature of Sarepta's defences. All major Phoenician cities were walled towns located with a wary eye against assault, but Sarepta seems to violate this rule. It is not on an island,

not on a hilly promontory, which raises the question of whether it was able to resist attacks on its own or whether it had to depend on neighbouring Sidon for help in emergencies. There is some evidence that Sarepta was under the political domination of Sidon during much of its history. It may conceivably have been a sort of Sidonian suburb, a bit of ancient industrial urban sprawl without any of its own defences. Further digging may answer that question.

Something similar did exist 15 miles farther down the coast at Tyre. Tyre, built on an island, is a perfect example of the kind of site the Phoenicians picked over and over again during their history. The island lay less than half a mile offshore. It was surrounded by low reefs and ledges that could be extended to form breakwaters for "summer" and "winter" harbours on the north and south sides of the island. Close at hand, along the coast, lay a flat expanse of extremely fertile land. This became the shoreside extension of Tyre, was intensively farmed and bore the name of Uzu. Since it was difficult to fortify, Uzu was overrun time and again when invaders appeared. The island citadel of Tyre itself, however, was a tougher nut to crack. From about 1000 B.C., and for some 700 years thereafter, Tyre would be a city famous for its defences, immune to land assault because of its island situation, safe from invading fleets because of the strength of its own navy. It withstood many sieges and really succumbed only three times during its long history as a Phoenician city.

One probable reason for this long success is that for several hundred years fortified towns had been developing an increasing ability to resist sieges through the use of slaked lime as a waterproof plaster. This material was introduced in about 1400 B.C.,

and by the time Tyre had become a prominent city slaked lime was widely used for the construction of underground cisterns—applied either to rock or brick. Before the introduction of slaked lime the only possible large underground water container that a town could hope to have was one hewn out of solid rock. Cutting a reservoir big enough to supply the water needs of an entire town for months, or even years, was a huge task, and there was never any guarantee that it would not have cracks in it. Now, with slaked lime as a sealer, reliable cisterns could be made, and in places where solid rock did not exist. Since thirst had always been a problem in besieged towns without springs within their walls, the development of the cisterns was a great boon to island fortresses like Tyre.

The matter of defence was a perennial preoccupation of the Phoenician towns. Not only were they constantly squabbling with each other, they were prey to a far greater menace: periodic assaults by Assyrian armies from Mesopotamia. Assyria was only one of three ponderous invaders—the other two being Babylonia and Persia—that came trundling out of the east to harry the coastal cities. Of the three, the Assyrians were by far the worst. They hung like a black cloud over the area and for hundreds of years affected the politics of the coast and the fate of its cities and its kings. For a while, Tyre, Sidon, Byblos and other smaller towns were shielded by geography, by buffer states like Syria and Israel, which had to be subdued first before the Assyrians could reach the coast. The Bible is full of the agony and convulsions of those years. The prophet Isaiah wrote vividly about them, his stern warnings about deso-

lation and darkness on the earth uttered against a background of pillaging Assyrian armies that assaulted the inland cities and crushed them one by one, scattering their people far and wide.

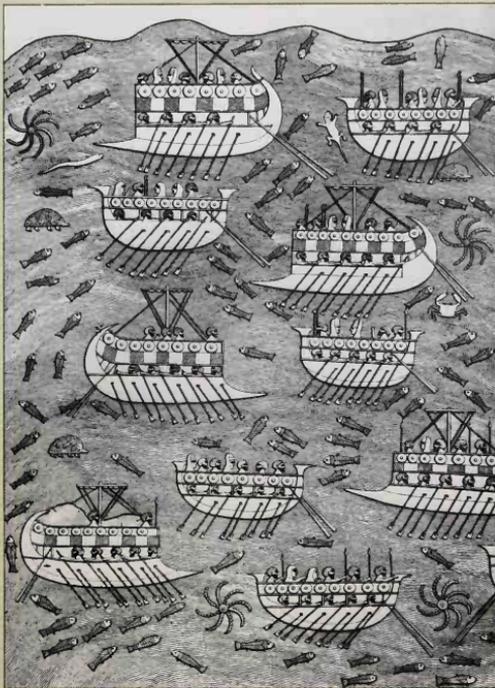
"Their arrows are sharp," said Isaiah of the Assyrians, "their bows bent, their horses' hoofs are as hard as flint, and their wheels like the whirlwind. Their roaring is like a lion, like young lions, yea, they roar. They growl and seize their prey; they carry it off and none can rescue it."

In due course the Assyrians reached the coast. For a time things were not too bad. The invaders had made it plain during their savage campaigns up in the stony plateaux that cities that resisted would be dealt with mercilessly—and they were. For those who acknowledged the pre-eminence of the Assyrian king, treatment would be much milder. In fact, one early invader, Ashurnasirpal II, took the trouble around 880 B.C. to summon 69,574 officials, ambassadors, assorted other bigwigs and just plain hostages from a number of different states, including Tyre and Sidon, to a huge levee, where for 10 days he "provided them with the means to clean and anoint themselves. I did them due honours and sent them back, healthy and happy to their own countries."

Since this was a bombastic ruler talking, carving out his exploits in stone to be remembered for all posterity, the quality of his entertainment—even the willingness of the guests to experience it—must be regarded with a good deal of suspicion. Whether the Tyrian and Sidonian representatives felt any happiness is doubtful. Certainly they were respectful, and very probably they carried gifts with them, carefully measured out so that they would be pleasing but not so munificent as to inflame Ashurnasirpal's cupidity.

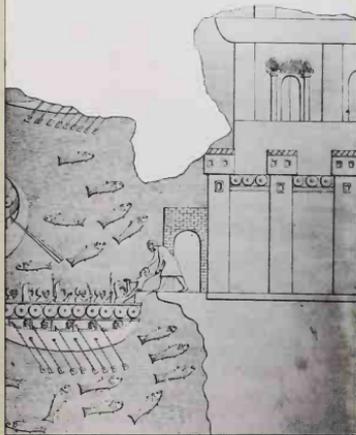
What drew the Assyrians was the wealth of the Phoenician towns, which could not really be concealed. They came back again and again, sometimes to quell "revolts", which actually were refusals to pay crushing tribute, sometimes for no excuse at all. To a man they were braggarts. They set up inscriptions to immortalize themselves and their deeds. Of his first visit to the coast around 840 B.C. the Assyrian king Shalmaneser III wrote: "I marched as far as the mountains of Hauran destroying, tearing down and burning innumerable towns, carrying booty away from them which was beyond counting. . . . I received the tribute from the inhabitants of Tyre, Sidon . . ." A few years later he wrote: "I marched against the towns of Hazel of Damascus. Four of his larger urban settlements I conquered. I received tribute from the inhabitants of the countries of Tyre, Sidon and Byblos." It is worth noting that he did not claim to have burned Tyre or Sidon. They may have been too strong for him; more likely they bought him off.

Over many years of Assyrian harassment the relationship that seems to have been worked out was peace at the price of reasonable tribute. Terrible turmoil continued inland for a century or more, but the Phoenician traders apparently managed to purchase the kind of relative stability that a mercantile society must have to prosper. Unfortunately, this did not last. The descendants of Shalmaneser became greedier and more power-hungry than he had been. Tribute no longer sufficed; conquest was the aim. During the Eighth Century B.C. some smaller coastal towns were actually annexed to the Assyrian realm, with Assyrian governors running them. By the end of the century the noose had begun to tighten around the neck of Tyre, possibly the strongest of the Phoenician towns.



A king flees Tyre

This drawing from an Assyrian relief depicts King Luli of Tyre slipping a five-year siege. He is escaping through a sea-gate of battlemented Tyre and sneaking his family to Cyprus in a fleet of warships (equipped with battering rams) and tubby cargo vessels. The original relief, found in the 1840s, was carved in two abutting pieces of stone, both of which are now lost.



ruled at the time by a notably stubborn and independent king named Luli.

Secure on his fortified island, Luli, who was also king of Sidon, in the past had watched the Assyrians come and go and had withstood at least one siege. Now he decided to risk another, calculating that he could hold out indefinitely against the Assyrian invader Sennacherib. He was mistaken. According to one account, Sennacherib turned the whole coast against Tyre, seized a fleet of 60 Sidonian ships and blockaded Tyre by land and sea. Luli held out for five years on Tyre but finally gave up. The wall carving shown on this page seems to show Luli slipping the blockade and escaping to the near-by island of

Cyprus. There is no way of telling for sure whether the reported co-operation of the other Phoenician cities against Tyre was a prudent, neck-saving course forced on them by Sennacherib or whether it was inspired by bitter intercity hatreds.

Sennacherib was followed by Esarhaddon and then by an equally bloodthirsty Assyrian ruler, Ashurbanipal, who went at the Phoenicians again. This time the rôles of the two principal coastal cities may have been reversed. Sidon was knocked flat, getting no help from the Tyrians, who concentrated on holding their own until a deal could be worked out. Apparently one was: "I marched against Baal, king of Tyre," wrote Ashurbanipal. "I surrounded him . . . seized

Buying off the Assyrians

Tribute from Tyre (the seagirt citadel represented at right) has been placed aboard loot-laden boats that are being hauled upon the beach by ropes. There, Phoenician porters carry the booty to the Assyrian king Shalmaneser III, who commissioned this memorial bronze about 830 B.C.



his [approaches] by sea and land. I intercepted and made scarce their food supply and forced them to submit my yoke." For all this boasting, Ashurbanipal does not claim to have breached Tyre. A compromise was worked out in which King Baal agreed to hand over a daughter and several of his nieces as concubines, all with large dowries.

A good solution for King Baal. Not so good for the young princesses, who were shipped to Assyria and disappeared from history. Worst of all for the "approaches" mentioned by Ashurbanipal. Those approaches were the ill-defended farmlands and town settlements of Uzu and near-by Akka on the mainland. Some idea of how warfare was conducted in those days may be gleaned from a carved statement written by Ashurbanipal when he departed the coast: "I killed those inhabitants of Uzu who did not obey their governors by refusing to deliver tribute which they had to pay annually. I took to task those among them who were not submissive. Their images and their surviving people I led as booty to Assyria. I killed those inhabitants of Akka who were not submissive, hanging their corpses on poles which I placed around the city."

All in all, the Assyrian presence on the Phoenician coast seems to have had three phases measured by an increasing escalation in violence and cruelty. The first consisted of sporadic raids and conquests, with the Assyrians content to depart after sweating as

much tribute as they could out of the Phoenician cities. The second established the principle of a continuing Assyrian presence, with resident Assyrian governors or agents, or even puppet kings under control of the Assyrians to ensure that tribute would be forthcoming on a regular basis. The third, stemming from Assyria's inability to prevent revolts and refusals to pay tribute, led to the destruction of cities and to the slaughter or deportation of entire populations. A gruesome lot, the Assyrians.

It is ironic that what little we know about who was who in the Phoenician cities during the period of their maximum harassment by the Assyrians is from the Assyrians themselves, and results from their unquenchable desire to record their exploits in stone. If it were not for the boasts of Sennacherib, for example, we would not even know of the existence of King Luli. With so little information about the rulers themselves, it becomes even harder to work out the nature of their rule and the extent of their powers.

That they were kings in the proper sense of the word—that their office was hereditary—we can be sure; monarchy was the familiar model for rule in all the old Semitic states. The word for king—*mlk*—is nearly the same in Hebrew and Phoenician. It was a potent word. Recognition as king gave a man special powers and the reverence and awe of his subjects. He stood in a closer relationship to the gods than



they. In fact, some Phoenician monarchs appear to have arrogated to themselves certain priestly as well as secular powers. One Tyrian high priest, Ithobaal, seized the throne after a series of palace murders. There is no record of his having given up his powerful priestly authority and perquisites after he became king.

Although kings and high priests undoubtedly came out of the same top drawer in Phoenician society, the latter had a different kind of authority. The Phoenicians' relations with their gods were propitiatory; that is to say, they felt obliged to make sacrifices to them in order to keep in their good graces and forestall calamities. Being fearful of their gods, they were equally fearful of the priests who represented the gods. The priests, after all, were the experts in dealing with the gods, in interpreting the gods' wishes, in blunting the gods' anger, in correctly carrying out the complicated rituals that were necessary to prevent evil from falling on an entire city, in knowing just how to accept the sacrifices needed to make the gods smile on the people. And if the priests could affect cities because of their special relationship with the gods, how much easier to affect the fortunes of one being.

That is why in all ancient societies spiritual authority carried such an immense weight. While not backed up by the threat of instant mutilation or imprisonment or death that a king could mete out by a wave of his hand, a priest was backed up by some-

thing equally intimidating: the whim of the deity, which could be used to cripple or destroy men—and even their descendants for generations—more terribly and more finally than could any king. This situation must have produced a very interesting tension between king and priest. How the two balanced out their respective powers is not known, although there may well have been considerable inherent overlap, resulting from the close blood ties that would have existed among individuals at the very top of Phoenician society.

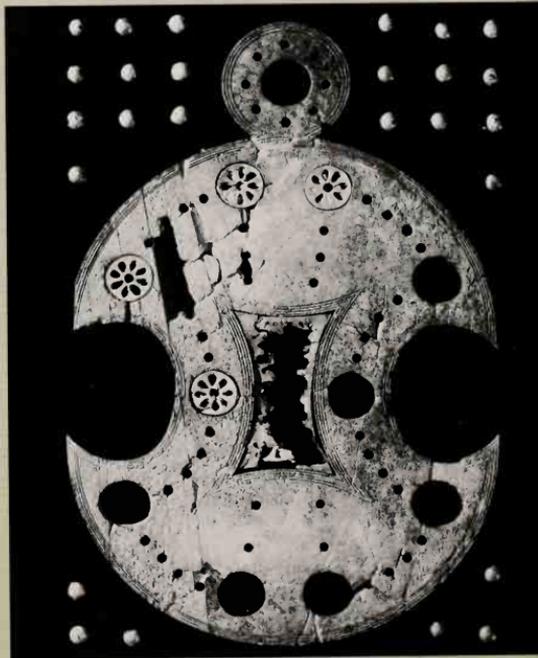
One thing they almost certainly would have to have had was wealth. The connection between power and wealth, close in all societies, was extraordinarily close in the mercantile societies of Phoenicia. An aristocracy based on wealth ran each city. To the extent that the rich traders and merchants could hold on to their wealth, dynasties of noble families appeared in all cities and constituted a ruling class, with priestly and other perquisites—either earned, bought or grabbed—gradually accrediting to them. Once acquired, those perquisites, together with the power and wealth that they conferred, were clung to as "rights". It is those rights, legitimized by law or custom, that perpetuate a ruling class.

In some such fashion a stratified society, all of whose layers were preoccupied with business, consolidated itself. Below the Phoenician nobility were lesser businessmen, *arrivistes*, a whole host of crafts-

men, dealers, shopkeepers and entrepreneurs of all sorts. Below them were the still smaller scroungers and scufflers that any mercantile society supports. Below them were slaves.

Just how widespread the use of slaves in Phoenicia was is difficult to measure. Written references to them are almost entirely lacking, and what little survives is made obscure by the fact that the word for slave could also be used to define the relationship between a man and his god or a man and his king. Nevertheless, slavery as an institution was commonplace throughout the Middle East; its existence in coastal Lebanon can be assumed. Clay tablets of a slightly earlier period from Ugarit and other places contain interesting references to slavery. From them we learn that manumission—a slave's right to buy his freedom if he could save up the money—was possible. We also learn that adjoining states had agreements for the return of runaway slaves. From a different source, Homer, we learn that the Phoenicians were slave traders. The main source of supply probably was prisoners of war, although there apparently was a steady drifting into slavery of some Phoenician citizens who sold themselves because they could not survive economically as free men.

All other Phoenicians, of course, were free men, citizens of their respective towns. The French historians Gilbert and Colette Charles-Picard make the important point that the Phoenician political unit, like the Greek, was a city-state. If that is so, it explains in yet another way why "Phoenicia" as a country never emerged, each city being too preoccupied with its own affairs and its own individuality, and too jealous of its own hegemony to endure being merged into a kingdom that embraced a large territory and a num-



This 12th Century B.C. ivory game board was found at Megiddo, southeast of Tyre. The gold balls probably were heads of pins that were moved from hole to hole according to rules now unknown.

ber of cities. In a city-state, citizenship is a valuable asset. And citizenship means, in theory at least, that all citizens will have a say in how things are run. A good deal is known about how the Greeks, through much social turmoil over a century or two, managed to evolve from highly authoritarian little city-states run by single rulers or small groups of autocrats into societies where lower-ranking citizens did have a vote and did exercise it.

There is almost no information about how—and to what extent—this took place in either Phoenicia East or Phoenicia West, but clues exist. One clue comes from Tyre. There, by about 800 B.C., the common citizens apparently had some muscle. They were strong enough to give one of their kings, Pygmalion, the backing he needed for control of the throne in a palace struggle with his sister Elissa, who was backed by a faction of rich aristocrats. Her husband (a high priest, incidentally) was murdered by Pygmalion, and Elissa with her friends fled west to Africa to found the city of Carthage.

Somewhat later in Tyrian history, in about 600 B.C., civic control is known to have rested in the hands of a panel of *suffetes*, administrators with some judicial authority. It is true that *suffetes* ran Tyre for only a few years and that they were imposed on the city at a time when it was subjugated by the Babylonians. But the very fact that there could be recourse to *suffetes* suggests that the office already existed and had some powers to offset the authority of the king. Furthermore, Carthage, founded by Tyrian refugees, had *suffetes* even earlier than 600 B.C. The office presumably was brought from Tyre, since the flow of influence in that direction is more likely than from colony back to mother city. Finally, in Car-

thage itself there is a good possibility that there never was a king in the traditional sense. Certainly by about 550 B.C. the Carthaginian leader—typically a general—was answerable to a council as well as a senate of 300 members and was not called king.

From these shreds of evidence we can guess that some kind of social progress through the dilution of kingly power must have taken place throughout Phoenicia. But undoubtedly it was slowed down along the Phoenician coast by a special circumstance. By the time ideas of suffrage and democracy were beginning to penetrate Greece and Rome, Assyria had succumbed to the Babylonians. The Phoenician cities fell increasingly under the thrall of Babylonian rulers and, in turn, of their conquerors, the Persians. The Babylonian and Persian potentates were absolutists of the most absolute. Nebuchadnezzar II or Darius the Great would have been dumbfounded at the thought that anybody could tell him what to do. The Phoenicians dealt with those awesome men as best they could. Badly with the Babylonian Nebuchadnezzar, a ruler of appalling cruelty, who in 572 B.C. finally succeeded in winning the second of the three great sieges lost by Tyre (this one lasted 13 years). Better against the Persian Darius, who was more enlightened, and who gave the Phoenician kings considerable autonomy. Still, the Phoenician thrones, in the face of batterings from the east, tended increasingly to become a kind of extension of the administrative arm of whatever eastern ruler was exacting tribute. He had his own representative there at the Phoenician king's elbow, and his job was to observe and report. Once, the Assyrian king Esarhaddon went so far as to instruct King Baal of Tyre: "You are not to open [any] letter which I send you without the

royal deputy. If the royal deputy is absent, wait for him and then open it.”

But this overview was for the purpose of top-level control and to keep tribute flowing. How the Phoenicians regulated their day-to-day affairs was probably of little interest to the imperial agent, and their details are unknown today. The king had a Council of Ancients to advise him and a “governor”, actually an administrative deputy, to see to the running of the city and the court. Beyond that, information is meagre. We do not know what sort of judicial system a Phoenician city had, how the city administration was set up, what the titles and duties of the officials were (other than those of the governor), how civic order was maintained or even who paid for it and how. In addition to the tribute levied by Mesopotamia, there must have been local taxes. Evidence for that comes from Ugarit, whose clay tablets list various kinds of taxes, and also—shades of today—tax loopholes.

We can be fairly sure of two things. First, since business was the business of the Phoenicians, society was certainly shaped to deal efficiently with it. There must have been a rather sophisticated expertise in contracts and agreements and an equally sophisticated machinery, based on a code of civil law, to handle the misunderstandings and arguments that flower in all mercantile environments. We can assume that the Phoenicians had a court system that was well adapted to the handling of civil cases and that the court calendars were flooded with them.

Second, we can assume that the tilt of power, privilege, favouritism—whatever word is chosen—was strongly in the direction of the mercantile upper class. There are continued references to nobles and aristocrats. Where titles exist, privileges follow; the

laws undoubtedly were written to favour the nobility. It would be nice to be able to trace the emergence of some sort of egalitarianism in an evolving Phoenician city. But aside from the few hints already mentioned, the evidence just is not there.

And yet the concept of a city-state—where citizenship is both a privilege and a responsibility—requires an egalitarianism of sorts. Phoenician cities must have had it. Therefore, the question becomes: How widely in society did it spread? To all citizens most probably, but considerably diluted as one went down the scale of wealth. The saving grace of a mercantile aristocracy is that it is fluid. Anyone—any citizen, that is—can work his way into it simply by becoming a rich man.

In that kind of society, with rich and poor alike engaged in manufacturing, banking, shipping or barter, something of the hum of daily Phoenician activity begins to be heard. Life for most of the citizens of Sidon or Tyre or Sarepta cannot have been very different from the bazaar-flavoured life of eastern Mediterranean cities today—with their family-owned glass shops, potteries, metal shops, woodworking shops, jewellery shops, all huddled cheek by jowl in their respective quarters (as the pottery concentrations at Sarepta suggest). The stocks of merchandise would have been displayed in crowded booths, with a great deal of haggling and bargaining going on constantly, much of it in the streets. Streets were surely narrow (as they were in an earlier Byblos) and buildings rather modest. Limited space on islands like Tyre, and the desire for the most easily defended stone walls ringing the mainland cities, would have tended to keep all buildings and activities jammed together.



Sidon did not get around to minting coins until nearly 400 B.C., and then only under the influence of the Persians, who had done it for some time. This Sidonian silver half shekel shows a war galley with shields and a high stern lying by a walled city—presumably Sidon. The reverse side is imprinted with the head of the Persian king and attests to the close Persia-Sidon ties at that time. Sidon was Persia's principal naval base. Sailors probably were paid off there in these coins, which may have been minted under the direction of a Persian governor.

Warehousing, shipbuilding and repair, ship chandlery and such specialized occupations as rope working and lumber storing were important ingredients of Phoenician trade. Much of this activity undoubtedly spilled out beyond the city wall. At Tyre, with all its mercantile and manufacturing ferment taking place on the tiny island citadel itself and probably on a larger scale on the mainland, there must have been a tremendous bustle of small-boat service between the two. The dye works, for example, were located ashore. But considering the vulnerability of shore-side warehousing, the finished products—being extremely valuable—were more likely stored on the island, where they could be easily guarded.

Then there was the problem of delivery of food from the mainland. The Tyrians ate a great deal of fish, but their vegetable garden was a strip of coastal plain that the city controlled. It was intensively planted in cereals, grapes, olives, figs and dates. Some or all of these things could have been grown on the island too, but probably not in quantities large enough to support Tyre's population; the overriding need was for "office" space on a small island given over almost entirely to temples, palaces, government buildings, private housing and the demands of trade.

With all this buzz of business, there had to be a great deal of paperwork. It may seem strange that absolutely nothing of Phoenicia's files has survived in Phoenicia itself. The reason is simple. Paper—papyrus—has a short life in a climate like that of Phoenicia East. So has parchment. The sun-dried clay tablet lasts longer, but even it disappears in time unless it is artificially hardened by firing. Furthermore, Phoenician businessmen, being up-and-coming, probably used clay tablets very little and kept most of their

Aids to Elegance

The Phoenicians dealt extensively in pretty boudoir items, always taking care to see that the decorative elements satisfied their customers. For example, the Carthaginian bronze razor at left has incised on it a figure in keeping with a demand for things Greek: the mirror has a lotus handle, reflecting an earlier taste that demanded Egyptian motifs.



Bronze razor, Carthage, c. 250 B.C.



Ivory comb, Megiddo, c. 1250 B.C.



Silver mirror, Byblos, c. 1250 B.C.



Ivory cosmetic box, Ugarit, c. 1350 B.C.

records on the more conveniently handled and more conveniently stored—but more perishable—papyrus that was a major trade item with Egypt.

A switch from one writing material to another usually requires a switch in writing method. Long before the Phoenicians came on the scene, the method that had been worked out in Mesopotamia, where papyrus was hard to obtain but clay very abundant, was well suited to the latter material. A clay tablet is soft. Scratching thin curved lines on its surface is difficult, but it is easy to press small straight indentations into it. Mesopotamian scribes used a special writing tool for this purpose, and the impressions that it left were wedge-shaped. It is these wedge-shaped indentations, arranged in various patterns to form a large number of signs, that gave Mesopotamian writing the name cuneiform, a word that derives from the Latin *cuneus*, or wedge.

Cuneiform signs, though ideal for clay tablets, are something less than ideal for quick, easy writing on a paper surface because of their complexity. Therefore, as the Phoenicians (and presumably their most immediate ancestors) began using an entirely new writing material, they also began using a different set of simpler signs that could be set down more efficiently on that new material. This new set of signs led to the modern alphabet—one of man's greatest cultural achievements and widely credited to the Phoenicians. The story, however, is not that simple. The Phoenicians did not "invent" the alphabet, but they did have a large hand in developing it.

As far as experts can determine, writing starts with crudely drawn pictures: a man, a cow, a spear. In time a picture becomes so simplified or stylized that it no longer looks like a man but still means "man" to

anybody who can recognize the symbol—i.e., "read" the writing. A later development comes when those stylized signs no longer stand for objects but for sounds. At that point the sound-sign for "man" can do multiple duty: it can be used with other sound-signs to make entirely new words. For example, combined with three other sound-signs—"ip", "yew" and "late"—"man" makes a new word: "manipulate". Or combined with the sound-sign "snow", it makes another: "snowman", and so forth.

By 2500 B.C. Mesopotamian cuneiform, generally conceded to be the oldest-known form of writing, had already reached a point where it was based on abstract patterns of wedge-shaped sound-signs, several hundred of them. To the uninitiated they look like the letters of some strange alphabet. But alphabets are made up of individual letters—single sounds that cannot be simplified or reduced further. Mesopotamian signs had not reached that stage. Some of them represented entire words, some of them represented syllables, none of them represented individual letters. Therefore, a list of Mesopotamian signs can be called a syllabary, but not an alphabet.

As time passed, the number of word-signs in the Mesopotamian syllabary shrank considerably, while the proportion of those that represented syllables grew. By Babylonian and Assyrian times the cuneiform syllabary was down to six or seven hundred signs, of which about 150 were syllables; sounds like "we" or "wa", "mu" or "mo", "rid" or "red". These, of course, could be combined with other syllables to make literally thousands of words.

Cuneiform spread widely through the Middle East and was taken up by many tongues. A unique cuneiform system was devised by the people of Ugarit.

The oldest Phoenician sarcophagus found, dating from about 1000 B.C., is that of Ahiram, King of Byblos. It presents a puzzle because the inscription (detail on opposite page) that identifies it as Ahiram's apparently was added 300 years after it was made. Its original occupant is unknown. The sides of the coffin itself are carved with friezes of figures and with decorative motifs derived from Egyptian and Syrian styles.



however, and by 1500 B.C. they were using it on their tablets. Ugaritian script used 25 to 30 specially designed characters; superficially they looked like the old Mesopotamian syllables, but their inner purpose was quite different. They had been stripped down and simplified until—with a couple of exceptions—they had become single consonants.

The Ugaritians, like the Israelites and later the Phoenicians, were Semitic peoples who spoke variations of a single mother tongue: northwest Semitic. In writing the various dialects of northwest Semitic it is possible to get along without vowels, and so the Phoenicians and their neighbours eliminated them. In doing so they seem to have followed the example of the Egyptians, who also wrote without vowels and who may have transported that idea to places like Ugarit and Byblos, with whom they had long contacts. But the Phoenician coastal towns apparently were clever enough to take the Egyptian idea without the Egyptian signs. Egypt was mired in a complex system of pictorial hieroglyphics whose signs took time to draw and numbered in the hundreds. Only about 25 of them were true sound-syllabic signs. Here the Phoenicians appear to have stepped in with their epochal contribution to writing. According to the language expert Ignace Gelb, they lifted from the Egyptian system only the small number of flexible

sound-syllabic signs that it contained and produced from them an “alphabet”. What is more, the Phoenicians did not bother with the elaborate Egyptian signs: pictures of birds and human figures and drinking vessels. Instead they substituted much simpler signs they seem to have invented themselves: circles, crosses, slanting lines—things that look like modern letters, things that could be scribbled quickly on papyrus by busy bookkeepers.

I have put the word alphabet in the preceding paragraph in quotes because the Phoenician model contained no vowels—just 22 consonants. A true alphabet requires vowels, and if we are to be precise we should give credit to the Greeks for developing one, since it was they who took over the Phoenician letters and simply added some symbols of their own to stand for vowels. That, at last, was an alphabet.

Though their contribution to writing was enormous, the written heritage the Phoenicians have left us is disappointingly small, for all the reasons already discussed. The earliest-known text in Phoenician characters that is more than a few words long is an inscription carved on a large stone sarcophagus found at Byblos. The sarcophagus was subsequently determined to be the tomb of King Ahiram (not to be confused with Hiram of Tyre), who reigned in Byb-



los early in the 10th Century. When deciphered, the inscription turned out to be a warning to others, calling down a curse on them if the tomb was opened. Whatever else of Phoenician writing that has survived is also largely inscriptions, most of them carved on steles, or small stone monuments. They consist of short dedications to a god or goddess, and are monotonously alike. Beyond informing that the Phoenicians were devoted to erecting such monuments to their gods and giving us the names of a good many individual Phoenicians, they tell little else. The rich store of clay tablets from Ugarit, it is true, says a great deal about the Phoenician religion. But it should be emphasized again that Ugarit, in the opinion of many, lies just outside the time scale of Phoenicia. Also this is not “Phoenician” writing; it is in Ugaritic and other dialects, all of them written in cuneiform. This proto-Phoenician city was apparently destroyed before papyrus could replace the clay tablet there and, hence, the old Mesopotamian method of writing was retained. The kind of Phoenician documents that *would* inform: business accounts, stories, codes of law, historical writings, royal archives—all presumably written on papyrus—are completely non-existent in Phoenicia.

So we are left still wondering what kind of breakfasts people ate, where they gathered to gossip and

what the gossip was about. Even what they wore is vague. True, there are careful pictures by Assyrians and Egyptians depicting Phoenicians, but they usually portray important persons: trading emissaries, tribute-bearers, high-ranking captives. All wore long, dresslike garments, thickly embroidered and usually secured by wide belts. Their affinity to the formal attire of other Middle Eastern people is close, but it says nothing about what a carpenter wore to work every day. A comparable vagueness appertains to women’s dress. Although museums contain a considerable number of small female statuettes, clay models and ivory carvings made by Phoenicians, most are believed to depict goddesses.

In any event, we can surmise that Phoenician men were bearded. They wore their hair long and rather elaborately curled. Jewellery was abundant; the Phoenicians made and dealt in it in enormous quantities and certainly were connoisseurs of it for their own use. The jewellery included finger rings, bracelets, earrings, necklaces both beaded and made of metal links, and pendants of all sorts, including the flat, circular or oval plates known as plastrons. Displayed on the breast, plastrons were supported by fine necklace chains and decorated with enamel, jewels or delicately incised designs.

In any speculation about Phoenician dress three



The "woman in the window" is a familiar motif in small Phoenician ivory carvings, although who she was—goddess, priestess or private citizen—is not clear. What is clear is that she is looking out of an upper-storey window; the same row of small columns underneath the sill crops up in Assyrian pictures of Phoenician towns.

things should be kept in mind. First, as noted, their own representations of clothed figures are more often than not of gods and goddesses and may not be reliable evidence for ordinary dress. Second, they were not only borrowers but deliberate borrowers, seeking to satisfy the stylistic demands of their customers. Thus, though there may be a strong Egyptian or Mesopotamian cast to many Phoenician-made objects that depict clothing and even hair styles, it is impossible to state conclusively that the Phoenicians themselves dressed like the models they were copying. Third, the world changed during the course of Phoenician history. Early Phoenicia was oriental in its overall flavour; late Phoenicia became Hellenized as Greece rose. Greek manners and Greek styles turned out to be extraordinarily seductive throughout the Mediterranean. Late Phoenician and Carthaginian sites show that their own cultural traditions were no match for the Hellenism that began to blaze through the Mediterranean world after about 400 B.C. Sarcophagi begin to show the influence of Greek art. So does other statuary. Greek clothing styles begin to creep in. Greek and Phoenician gods begin to get confused with each other and are no longer easily sorted out. Even Greek mosaics have been found in the floors of Phoenician houses.

But all this was very late. During their heyday, and before they were ground down by the Babylonians, the Phoenician ports glowed with a special refulgence of their own—particularly Tyre. Tyre might be called the Paris of the ancient world. It was a centre of luxury, a place where the best of everything had been collected, where the finest Phoenician artists and craftsmen worked. The Biblical prophet Ezekiel, in a furious denunciation of this rich, pulsing city, gives

a stunning description of it, listing the extraordinary variety of its merchandise and its no-less extraordinary web of mercantile connections. Here are some excerpts from Ezekiel's tirade:

"Oh Tyre, you said, 'I am perfect in beauty'. Your frontiers are on the high seas, your builders made your beauty perfect; they fashioned all your timbers of pine from Senir; they took a cedar from Lebanon to raise up a mast over you. They made your oars of oaks from Bashan; they made your deck strong with box-wood from the coasts of Kittim. Your canvas was linen, patterned linen from Egypt to make your sails; your awnings were violet and purple from the coasts of Elishah. Men of Sidon and Arvad became your oarsmen; you had skilled men within you, Oh Tyre, who served as your helmsmen. You had skilled veterans from Gebal caulking your seams. You had all sea-going ships and their sailors to market your wares; men of Pharas, Lud and Punt served as warriors in your army; they hung shield and helmet around you. . . . Men of Arvad and Cilicia manned your walls, men . . . were posted in your towers.

"Tarshish was a source of your commerce . . . offering silver and iron, tin and lead. Javan, Tubal, and Meshech dealt with you, offering slaves and vessels of bronze. . . . Men from Togarmar offered horses, mares, and mules. Rhodians dealt with you, great islands were a source of your commerce, paying what was due to you in ivory and ebony. Edom . . . offered purple garnets, brocade and fine linen, black coral and red jasper. Judah and Israel dealt with you, offering wheat from Minnith, and meal, syrup, oil, and balsam, as your imports. Damascus was a source of your commerce . . . offering wine of Helbon and wool of Suhar, and casks of wine from Izalia . . .

A Medieval View of Alexander at Tyre

The exploits of Alexander the Great have fascinated people ever since he lived. Shown here are sections of a 14th Century illuminated manuscript —its pictures a blend of Byzantine, Moslem and European styles—telling of Alexander's siege of Tyre in 332 B.C. Unfortunately, the artist knew nothing of actual events. He was even unaware that Tyre was an island and that Alexander built a causeway to it. All the artist got right was that Tyre was strongly fortified and desperately defended. When Alexander actually took the city, he crucified 2,000 surviving males and sold the women and children into slavery.



wrought iron, cassia, and sweet cane. Dedan dealt with you in coarse woollens for saddle cloths.

“Arabia and all the chiefs of Kedar were the source of your commerce in lambs, rams, and he-goats. Dealers from Sheba and Raamah dealt with you, offering the choicest spices, every kind of precious stone and gold as your staple wares. Harran, Kannah, and Eden, dealers from Asshur and all Media, dealt with you; they were your dealers in gorgeous stuffs, violet cloths and brocades, in stores of coloured fabric rolled up and tied with cord.”

This is Phoenicia at its very peak—its vividness intensified by Ezekiel's dire prophecy: the subjugation of the citizens of Tyre by the Babylonians, which indeed came to pass in 572 B.C.

That assault by Babylon represents a watershed in Phoenician history. Tyre had a ghastly time at the hands of Nebuchadnezzar II and recovered slowly from the terrible 13-year siege he laid down. It would never again be the premiere city of the Phoenician world. For one thing, Tyre's colony Carthage, far to

the west and beyond the reach of Assyrian or Babylonian destroyer, was at the time nearly 250 years old and had become larger and more powerful than Tyre itself. From now on, Phoenicia West, growing increasingly away from the homeland in style, in politics and in its trading activities, would spin out a separate history of its own. More and more it would overshadow Phoenicia East in the Mediterranean.

But the old trading ports were far from done. Resiliency and accommodation had always been their long suit. They gritted their teeth and endured the Babylonians. Then in 539 B.C. Babylon itself fell to Persia—a miracle—and the cities of Phoenicia quickly addressed themselves to accommodating the new conqueror. To their vast relief, the Persians turned out to be relatively reasonable people with good ideas about running an empire. Persia continued to exact tribute, even made Phoenicia a part of one of its satrapies, or provinces. But Persia also shrewdly recognized the strategic importance of the area in its larger plans and permitted the Phoenician kings to



The illuminations start with an attempt by Alexander (wearing crown far left) to storm Tyre. Repulsed by arrows, he rides off. He then has a dream (above) warning him not to enter Tyre in order to parley. In truth, Alexander dickered with the Tyrians for an open city so that he might secure his rear while campaigning elsewhere. Refused, he attacked.

direct their own states. The monarchs were, in fact, elevated almost to the status of allies. They were happy to provide the Persians with war fleets, first for campaigns against the Egyptians, later against the Greeks.

Persian dominance of the Middle East was a stabilizing influence and helped Phoenicia in three ways. First, Persia established an internal message service—a kind of pony express with horse changes at regular stops along the way—that greatly speeded communication. Second, coinage, recently adopted by the Greeks and the Lydians, was taken up by the Persians shortly after their conquest of Lydia. They struck their own coins and made them the standard of exchange throughout their huge empire. For a trading people like the Phoenicians, access to such a standard was a godsend. Third, Aramaic, a Semitic dialect written in Phoenician characters, was adapted as the lingua franca from one end of the Persian empire to the other, from the Aegean Sea to India. It meant that all the bartering and record-keeping that the Phoenician traders had been engaging in could

now be conducted in a language that was almost identical with their own, and written in a script that they themselves had invented.

All in all, though the Phoenician ports were once again confronted with the problem of dealing with an immensely powerful empire from the east, Persian control was relatively benign and they prospered under it. They were even feisty enough to talk back. According to Herodotus, when the Persian king Cambyses conquered Egypt in 525 B.C. with the help of a Phoenician fleet commanded by Phoenician admirals, he then proposed to continue west and conquer Carthage as well. But the Tyrians objected strenuously, pointing out that Carthage was a colony of Tyre. That would be parents attacking their own children, they said, and declared that if this plan were pursued they would withdraw their fleet entirely. Cambyses quietly abandoned the project.

When the Persian kings Darius and Xerxes began cranking up plans for conquering Greece, all the major Phoenician cities jumped at the chance to help in



The reason for the dream-warning on the previous page is now made clear. Two of Alexander's ambassadors go to parley (above) and are crucified (right). The Greeks wrote that Alexander tried to enter Tyre by asking permission to make a sacrifice to Heracles at a temple inside the city; but the Tyrians, suspicious of his intent, would not let him in.



that venture. Greece had become their enemy too, interfering more and more with their trading activities in the Mediterranean. They therefore joined energetically in the plan to march a ponderous Persian army, supported by a Phoenician fleet, north around the Aegean Sea. This army would cross the Hellespont on a bridge of ships' hulls held together by cables, and then pour down into Greece, annihilating the Greek city-states one by one.

Unfortunately for the Phoenicians, they picked the losing side, although the loss was not their fault; they did their own and more. They helped with the bridge across the Hellespont, repairing and strengthening its cables and anchors when it was carried away by a storm. When Xerxes' other engineers were balked by constant cave-ins during their efforts to cut a canal through a peninsula in Thrace in order to get a more protected route, the Phoenicians showed how the cut could be successfully made by digging a wide "V". They provided a fleet of war vessels, troop carriers and cargo ships for the great Persian army as it rum-

bled south. They fought a gallant naval engagement in the Strait of Salamis (*pages 49-55*). But for all this help, the Persians were defeated in 480 B.C., and the Eastern Phoenicians lost their chance to eliminate the Greeks as trading rivals. In this period the Phoenicians also lost out in the west. The Carthaginians had been involved for years in a struggle with the Greeks in Sicily for control of that island. With eastern Greek cities faced by overwhelming Persian might, a faction in Carthage persuaded the government that now was the time to strike in Sicily, when the city-states back in Greece were too preoccupied with saving their own skins to send reinforcements to Sicily. Accordingly, a Carthaginian army landed in western Sicily in 480 B.C. but surprisingly suffered a catastrophic defeat at Himera.

As a result of those twin setbacks in east and west the Greek presence began to be felt with increasing strength everywhere: in Sicily in the west, throughout the Aegean and in Ionia in the east. The Mediterranean was becoming coloured by Hellenic



Alexander has another go at Tyre (left), this time successful, and rides off (above). His siege actually took seven months, during which the Tyrians protected their walls against battering rams by cushioning them, using skins stuffed with seaweed. As the outer walls crumbled, the Tyrians built others inside them, meanwhile raining red-hot sand on Greek troops.

ideas and traditions, rather than by Asiatic ones.

This coloration, strangely enough, took place during a near century of recklessly self-destructive wars among the Greeks themselves. Athens and Sparta were the chief protagonists, but their rivalry drew in virtually every one of the several dozen Greek city-states. When it was all over by 380 B.C., Greece was so enfeebled that it was no match for some rude country cousins from the north, the Macedonians. For the first time in its history the Greek peninsula was consolidated under the rule of one man, King Philip II of Macedon. And it was his son Alexander the Great who really set the stamp of Hellenism on the eastern Mediterranean by deciding to conquer Persia.

With an expeditionary force of tough Macedonian cavalry, Alexander destroyed the Persian armies in a couple of quick battles: at the river Granicus in 334 B.C. and at Issus in 333 B.C. Like all campaigners in the area, he instantly recognized that the Phoenician ports would have to be secure to him before he could strike south into Egypt or east into Persia. Ever prac-

tical, the Phoenician cities abandoned their erstwhile Persian friends, hauled in their canvas and prepared to dicker with the new conqueror—all the cities, that is, but Tyre. Safe on their island behind battlements that were stronger than ever before, siege-hardened and with a large fleet, the Tyrians were confident that they could stare down and eventually discourage this madly impatient Macedonian. Impatient he may have been, but he was also implacable. He set every able-bodied man on the coast to hauling stone and earth, dragging tree trunks down from the mountains, and built a causeway from the mainland to the island. Tyre fell in a last, furious, smoking siege. All its men were killed, 2,000 of them crucified. The women and children were sold into slavery.

Of all the men who went against Tyre, Alexander is the only one whose handiwork still shows. His causeway remains. Swept by the tides, a steady deposition of sand gradually accumulated. Today the causeway is a quarter of a mile wide, supporting houses and a highway. Tyre is an island no longer.

Chapter Five: Of Gods, Priests and Sacrifices



Ugarit, that ancient Canaanite city up the coast from Byblos, was sacked and levelled by invading sea people or by pirates in about 1234 B.C., probably within a few decades of the fall of Troy. It could even be called an unsung Troy because Ugarit had neither a Homer nor a later history; it was never reoccupied or rebuilt. Rich as it was, it might never have been remembered at all except as a mound of earth-covered rubble had it not been excavated by the archaeologist Claude Schaeffer in 1929.

What Schaeffer found at Ugarit was by far the largest collection yet discovered of proto-Phoenician clay tablets dealing with religion and myths. Scholars argue over whether the Ugaritic texts properly can be called Phoenician. They do not argue over the many insights these valuable texts gave into what the Phoenicians believed.

An important fact that the Ugaritic texts help confirm is the connection between many of the religions of that time and that part of the world. Whether Canaanite, Assyrian, Babylonian or primitive Greek, the general structure of the pantheon was the same, although the names of the gods and goddesses—and some of their specific attributes—changed from place to place. Thus, though it cannot be established for certain that the cults that emerged in the various Phoenician cities are descended directly from those described in the Ugaritic texts, it is clear that the cults are closely related. It can be assumed that they

had a common Canaanite origin and diverged increasingly through the passage of time. With this model in mind, the Phoenician pantheon can be described.

Its head was a male deity called El in Ugarit. His name meant simply "god", and he seems to have incorporated within himself the widest aspects of a universal deity. He was called "the father of the gods", "the creator of creators". For all this, he seems to have been a rather passive deity who continued to exist as a shadowy father figure for the other gods and goddesses in the later pantheons of the many Phoenician cities.

The active rôle was taken by Baal, the god of storms. It is Baal's identification with strength, violence, youth, dynamism that characterizes his position as the leading male god throughout Phoenicia. Baal has come down to us as *the* Phoenician god, the one who personified for the Hebrew prophets a faith that was all too competitive with their own. The Bible is full of thunderous declamations against the evils of Baal. He represents, by extension, the entire non-Hebrew Semitic pantheon, with all its trappings of multigods, infant sacrifice, idol worship and so on.

Actually there was a great deal more to the Phoenician religion than Baal. It had a basic structure similar to those of a number of contemporary faiths, based on a very old myth that attempted to explain the mystery of the cycle of the seasons. El had a consort, the mother goddess, Asherah-of-the-Sea, whose son died each year to symbolize the cutting of the harvest and the drying up of the land. The son was then reborn to signal the return of spring and a new crop.

Elaborations on this myth are varied and interesting. In the Ugaritic texts Baal, who is associated with rain and life-bringing water, is the young god who

This ivory plaque, scarcely five inches in height, was found near Ugarit and shows a goddess flanked by two goats. It dates from the 13th Century B.C., a time just before the collapse of the Bronze Age culture of the Aegean. The Canaanite cities were still being influenced by Aegean styles, as the bare breasts and flounced skirt of the goddess show.

dies. He disappears underground. There Baal's sister Anat comes to his rescue, finds his body and retrieves it. In another text, cited by the Canaanite scholar J. Gray, Baal himself fights with Mot:

*They glare at each other like glowing coals:
Mot is strong, Baal is strong;
They thrust at each other like wild oxen:
Mot is strong, Baal is strong;
They bite like serpents;
Mot is strong, Baal is strong;
They kick like stallions;
Mot is down, Baal is down on top of him.*

The symbolism of the text is clear. The earth has managed to survive death and drought. The young god will appear, alive and healthy, at the time of the sprouting of the new crop in the spring.

In addition to these gods and goddesses, the Phoenician pantheon had a large number of others, some in charge of specific activities, like the Sidonian Eshmun, whose particular province was healing. Another, Dagon, was associated with wheat; still another, Reshef, with plague, and so on. To complicate matters further, identities were not stable. El and Baal, for example, assumed different names and somewhat different characteristics from city to city. In Tyre Baal became Melqart, and as such was duly exported to Carthage. The name derives from "mlk", meaning king, and "qrt", meaning city. But the god inside the new name was the same old Baal, active lord of storms, the presiding deity in most Phoenician cities. The leading female deity was the fertility goddess Ashtarte. Her name varies from country to country, even from one Phoenician city to another. In the Bible she is known as Ashtoret; in Babylon, Ishtar; in ancient

Greece, Aphrodite. But in Byblos she was known as Baalat, or simply "lady", clearly the feminine form of Baal, which means "lord".

An important characteristic the Phoenician faith had in common with others of its day was sacrifice. The ceremonies had two purposes. The simpler and more direct intention was to appease the god, make him think well of you, smile on your hopes, temper his wrath. The second purpose of the rites was the strengthening of the god himself. Giving up something to him, particularly something that was extremely valuable to you, enhanced his own worth and ultimately his power. Failure to honour the god regularly and properly not only weakened his desire to do well by you but also weakened his ability to do so.

The Phoenicians—it must be admitted of them—practised the ultimate in sacrifice: human lives. Other faiths succeeded in getting away from human sacrifice, as did the Phoenicians eventually. But they were late to do so. The Hebrews knew they practised it and were revolted. Even after Phoenicia East apparently abandoned human sacrifice, it continued in Carthage—and revolted the Romans.

For evidence of human sacrifice in Phoenicia East we have only a couple of references in the Old Testament. For Phoenicia West the evidence is irrefutable: hard evidence dug out of the earth. There is an old burial ground in Carthage from which thousands of small clay pots containing the remains of babies and young children have been recovered. Mixed with these urns are others containing the remains of young animals: kids, lambs, kittens, puppies. Clearly the Carthaginians had been making infant sacrifices but were also using substitutes in the form of those young animals. But—and here is the interesting and com-

An infant about to be sacrificed is held in the arm of a Carthaginian priest. This carving was made on a limestone obelisk that was found in the precinct of the goddess Tanit at Carthage, and dates from the Fourth Century B.C.



elling part—the substitutes were deemed ineffective. As late as about 320 B.C. noble families who had fallen into the habit of substituting young slaves, or perhaps animals, for their own children were blamed for a military disaster that had overtaken them. Since they had slighted the gods, they were forced to make restitution, and 500 infants from the best families were offered up.

By that time religious sacrifice in Carthage had been going on for about 400 years. Infants were brought to the Tophet, a sacred place containing an idol or a very old and holy stone, and killed there. As in the case of other contemporary faiths, sacrifice of flesh was accompanied by burning. This accounts for the many references to fiery furnaces, to “passing through the flames”. Apparently the tiny child was brought to the idol, calmed by a priest and its throat cut. It was then placed in the arms of a bronze statue that had a furnace or grate beneath it. There are hints that the arms of the god may have been operated mechanically in such a way as to drop the dead infant into the flames.

Certainly devices of one kind or another were used to heighten the awe of the worshippers and their belief that the deity was responding to acts of piety. In the case of a hollow statue of one goddess (page 107), holes were bored in her breasts, then plugged with wax. At an appropriate point in the rite, the wax would melt under the influence of heat, and milk, which had previously been poured into the statue, would then begin to flow miraculously from the holes.

In a harsh faith, interpreted to fearful people only by priests, the priestly power was obviously very great. Priests were numerous and divided into a hierarchy, with a high priest in charge of each temple

Graven Images from the Phoenician Pantheon

Two problems plague the identification of the “graven images” that the Phoenicians and their neighbours made of their gods. First, nearly all the peoples of the area had similar faiths and similar gods, though the names and attributes varied somewhat from country to country. Second, since most of the religious wall carvings and statues survive unnamed, it is necessary to infer from what the god is doing or carrying who he is. At left, for example, the message is pretty clear. The deity—from Ugarit—is Baal, the god of storms, of energy, of action. He stands before a tree of symbolic lightning, holding a spear in one hand and brandishing a club with the other. Opposite him could be another lightning-wielding Baal, this time from Syria. The next image—depicted in a long tight robe and a tall headdress—poses a puzzle. Could this be Astarte, goddess of fertility? No one knows. Beyond her is an Ugaritic figure of Baal, but with an Egyptian crown. And, finally, there is an unidentifiable Phoenician goddess with an elaborate Egyptian-style headdress and wearing a clinging Egyptian gown.



UGARIT: BAAL, C. 1500 B.C.



SYRIA: BAAL, C. 725 B.C.



LEBANON: ASTARTE, C. 1400 B.C.

UGARIT: BAAL, C. 1350 B.C.

LEBANON: DEITY UNKNOWN, C. 900 B.C.

A two-foot-high marble statue of a child is one of many similar sculptures found at the temple of Eshmun in Sidon. Eshmun was the Phoenician god of healing; the statues were made as thanks offerings or as pleas for a cure by the parents of sick children. After being dedicated to the god, the offerings often were broken and thrown into a sacred ditch near the temple.

and other subordinate priests under him. In addition the temples had scribes, butchers for cutting up sacrificial animals, lamp-tenders, barbers whose job it was to shave the heads of high priests, plus great numbers of general workers, temple assistants, gardeners, craftsmen and slaves.

The preoccupation of the Phoenicians with their faith was enormous. As a result, the priesthood had great financial as well as political and religious clout. Offerings were served up constantly: wine, perfume, incense, animals and sometimes simply fruits or vegetables. (Humans were reserved for special occasions or dire calamities.) The priests maintained lists of the tariffs imposed for each type of sacrifice. They prescribed the proper offering to expunge a particular offence, also the fee that went to the priest for accepting the offering and for performing the ritual that went with it. One such listing provided that for every ox sacrificed the priest would get a fee of 10 pieces of silver, and if the sacrifice were being made to relieve a sin (rather than being a mere expression of devotion to the god) a portion of the ox would also go to the priest. By such customs both temples and priests became wealthy, and the office of high priest became a plum jealously secured by certain noble families.

The size of the priestly hierarchy and its varied duties suggest that temples were large and elaborate places. This is not necessarily so. Indeed there is evidence that much Phoenician worship took place at small open-air shrines, which very often were simply designed. A rock or altar or small enclosure located in some exposed "high place" served very well. "Place" was important since divine powers were attributed to specific waters (springs or rivers), groves of trees and stones. The oldest-known shrine

at Carthage is a small square space cut into a rock. Devoted to the goddess Tanit, the shrine is scarcely a yard wide. Like many another Phoenician holy place, it drew its strength from its age and quite possibly from the sacred objects on or near the site. It may be, of course, that the unusually small size of this shrine reflects only the extreme poverty of those who first settled in Carthage.

A slightly larger shrine, recently discovered by James Pritchard at his exciting new dig at Sarepta, is in the form of a small oblong building with a raised altar at the back. Running around the inside perimeter of this building is a stone bench or platform with a plastered top. It juts from the wall like a low counter on which worshippers set out their offerings to the god. In addition to the foods and incenses that they regularly put down, the Sareptans also left a great number of small clay statuettes. Such little figurines have been found in a number of Phoenician sites, and were undoubtedly votive offerings of some kind. Whether they were actual images of the gods themselves is not easily answered. One of the figurines is nude, and that fact eliminates it as a god or goddess; in the long tradition of Semitic religions gods and goddesses were always represented fully clothed in rich garments appropriate to their station.

Even the clothed figurines may not be gods. Some of them are very full-breasted, others have swollen bellies—clearly they represent pregnant women. These features suggest that the little figurines were statues representing the petitioners, not the gods. They were carrying messages to the gods, pleas for answers to prayers. "Make me fertile," they seem to say; "ensure the safe delivery of my child."

Once placed in a shrine and dedicated to a god, a



clay figurine became a holy object, the property of the god. It could not be destroyed. Over many decades—perhaps centuries—the pile-up in a small shrine must have been extremely awkward. How some of the figurines were disposed of at Sarepta was discovered by Pritchard when his team dug through the plaster floor of the shrine. There, carefully buried in a rectangular excavation, were nearly 30 of them—three-dimensional prayers, one might almost call them, preserved for some 2,500 years.

Sarepta may also hold the answer to another important question about Phoenician religious life: the nature of Phoenician temples. There are indications that a far larger structure—as yet unexcavated—lies alongside the little shrine just described. Pritchard can scarcely wait to get at this larger building, for up to now knowledge of Phoenician temples has been

meagre. Elsewhere in Phoenicia several temple sites have been discovered, but all of them exist only as foundation outlines, their walls nowhere more than a few feet high. But they do follow so regular a pattern that it begins to be possible to describe the floor plan of a “typical” Phoenician temple.

It was an oblong building with three rooms: first a small anteroom, then a large main hall, finally a small holy-of-holies at the back. The latter was reached by a short flight of steps and contained an altar and an idol, or whatever object was worshipped there. Sometimes it was simply a sacred stone called a *betyl*. Pritchard’s small shrine at Sarepta apparently had a *betyl* standing directly before the altar; there is a place for it there in the floor, but the stone has long since been wrenched out and carted away.

A Phoenician temple probably was a rather high,

narrow, boxlike building with a tall entrance door. Steps went up to this door, which was flanked on either side by a free-standing column of wood, stone or bronze. The columns seem to have had names and distinct personalities of their own, and conceivably godlike properties.

The most detailed description of a Phoenician temple is in the Bible. It is not a direct piece of evidence since it describes a building commissioned by Solomon in Jerusalem and intended for Hebrew worship. Nevertheless, it was designed by Tyrian architects and built by Tyrian craftsmen. It fits the overall three-room model, even to the flights of steps and the columns at the front door, and adds many other details of a distinctly Phoenician flavour. It was made of heavy blocks of dressed stone, finished off inside with cedar, to which a good deal of gold ornamentation was added. It had large wooden doors, whose flanking columns were made of bronze by a Tyrian metalworker who also fabricated a number of bronze water troughs and other containers for use both inside and outside the temple. Despite fundamental differences in the two faiths, the similarities of some of the temple details are remarkable.

An important aspect of the Phoenician religion was belief in an afterlife. Evidence to this effect is abundant and varied and shows strong Egyptian influences. The Egyptians took great care to preserve the bodies of the dead. They became master embalmers, employing methods and materials that are not entirely understood today. Embalmed bodies were sometimes put in wooden mummy cases shaped like human bodies and with the owners' faces painted on them, sometimes in bulky coffins hollowed out of solid blocks of stone, which were also body-shaped and

had faces carved on their lids. Archaeologists call the body-shaped cases "anthropoid" coffins.

At some point in their history the Phoenicians, who had previously been using large clay burial urns or tombs built up of brick or stone, began adapting the anthropoid models of the Egyptians. A few have shown up in Phoenicia East, notably a superb black basalt coffin that was used for the burial of the Sidonian king Tabnit. It was discovered, along with some other extraordinary finds, in a burial ground outside Sidon in 1887. The find was unusual because it had not been broken into previously and looted by grave robbers.

For more than 2,000 years Sidon has been plagued by tomb robbers. Worse in a way, local vandalism and the need for handy blocks of stone to build houses, walls, sheds for animals, even to pave roads and make gutters has done irreparable damage to a vast honeycomb of underground tombs that was a thousand years abuilding. So rich was the store of dressed stone buried in the ground that local farmers had long made a practice of renting out their fields to anyone who wanted to come and quarry them.

Sidon was a city as old and rich as Tyre. Through a good part of its later history its prominent people were using two kinds of coffins. One was roughly house-shaped and was supposed to provide a domicile for the corpse after death. The other, an anthropoid coffin, was a substitute body in case the one inside decomposed completely. Efforts to prevent decomposition were taken by borrowing embalming methods from the Egyptians. Since the Phoenicians had long been supplying the Egyptians with cedar oil for embalming purposes, it is a near certainty that they were thoroughly familiar with Egyptian tech-

niques. However, no method of embalming could be depended upon to counteract the dampness of the coastal climate in Phoenicia and the slow seepage of water into a tomb and, finally, through its cracks into the coffin itself. The few Phoenician mummies so far recovered are, with one exception, badly decomposed, and the linen bands that they were wrapped in have almost entirely rotted away. What bits of bone or cloth have been found are all from stone sarcophagi. If the coffin was made of wood—and many probably were—then coffin, along with body, disappeared long since.

At Sidon the cemeteries were in the low hills surrounding the city. There shafts were sunk into the ground and chambers for the coffins led off from them. Sometimes these chambers were vaulted with stone blocks, sometimes cut from the mother rock. Often several were connected to a single shaft, branching off at different levels. Steps were cut into the sides of the shafts so that the grave workers could get up and down. When a sarcophagus was finally in place, the chamber was walled off and the shaft sealed at its entrance with stone and then completely covered with earth.

The Sidonian stone sarcophagus that came into being about the Fifth Century B.C. was an extraordinary object. It took the Egyptian anthropoid shape, with a human face carved on the lid, but that face was in the Greek style. The result was a unique form of sculpture, not limited solely to Sidon but nevertheless peculiarly and characteristically Sidonian. Of the few score recovered from throughout the Phoenician world and now in museums in Europe and the Middle East, nearly every one comes from Sidon.

Clues to the nature of Sidonian burial practices be-

gan to surface in the middle of the last century. At the time Sidon, like other coastal Lebanese cities, had resident foreigners. Many of them were amateur archaeologists, and there was a lively clandestine traffic in grave objects and statuary not only among some of the foreigners but also between local dealers and collectors in Europe. I say "clandestine" because the graves were nominally the property of Turkey. What is now Lebanon was then part of Turkey—the once-great Ottoman Empire in the last stages of imperial decay. Places like Sidon were of little interest to the corrupt and listless sultans rotting in their capital at Constantinople (now Istanbul) some 600 miles north. The sultans were either powerless to hinder the steady despoilment of Sidonian treasures or unconcerned by it. As early as 1860 this indifference began to frustrate European archaeologists working in the area. One, the Frenchman Ernest Renan, explored more than a hundred tombs at one necropolis, only to find that all had been looted, their sarcophagi smashed and their carved stone ornaments hacked off and carted away. Within seven years the necropolis itself had been totally vandalized, with most of the stones that made up its vaults showing up in new buildings in downtown Sidon. A fascinating historical site had disappeared.

In that same year an American missionary and antiquarian, William Eddy, was sitting at his home in Sidon one evening when local workmen burst in to tell him of a stunning discovery, a number of extra-large and beautifully ornamented sarcophagi in a series of connected chambers at the bottom of a shaft that was a full 20 feet across. Eddy went immediately to the site, had himself lowered down the shaft and by the light of a lantern examined the coffins.

Poking about in mud and dripping water, and nearly asphyxiated by bad air, he was able to explore five separate chambers with no less than seven sarcophagi in them. One was a black Egyptian design, a couple were of the Phoenician anthropoid type. But the others were of Hellenic design, far outstripping in richness of detail anything previously found at Sidon. They were large marble caskets, their sides richly decorated with figures in high relief.

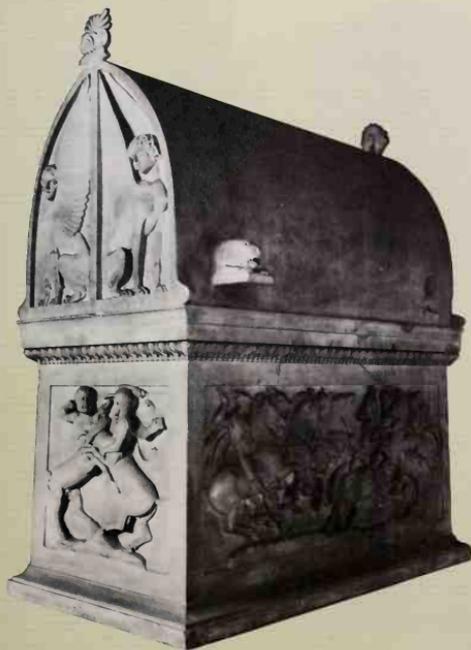
After recording as careful a description of them as he could under the circumstances, Eddy was hauled up again and a message sent to Constantinople. Luckily, the director of antiquities for the museum there was a French-educated, honourable official named Hamdy Bey. Instead of allowing the finds to be broken up and trickle into the black market, he went immediately to Sidon, posted round-the-clock guards and in the name of the sultan took possession of everything at the site. Eventually all the sarcophagi found a safe resting place in the Imperial (or Topkapı) Museum at Istanbul, where they may be examined by scholars today.

The superb Hellenic-style coffins represent the last gasp of Phoenician art as it surrendered to the overpowering influence of Greek aesthetics. As to who commissioned them or who ultimately occupied them there can be only conjecture. They date from about 300 B.C. and were obviously made for very important people, perhaps for the local dynasts or governors who inherited this part of Alexander's empire after his death. They are made of Pentelic and Parian marble of the highest quality, the former imported from mainland Greece, the latter from one of the Aegean Islands. But they probably were carved on the spot by Phoenician craftsmen. As in everything else

they came in contact with, the Phoenicians down to their very last days were still adapting either the materials or the artistic innovations of others—sometimes both—and turning them to their own use.

Getting the sarcophagi out of their underground chambers was a difficult job because of the delicacy of their carvings and their great size and weight. One—now known as the Sarcophagus of Alexander because its friezes show the Macedonian king in combat and on a lion hunt—is 11 feet long and weighs 15 tons. Hamdy Bey solved the problem of removal by digging a slanting tunnel into the hillside and hauling out the sarcophagi on rollers, one at a time. While he was underground supervising this work he happened to glance at the ceiling of one of the chambers and noticed that some time in the past a small hole had been cut there by tomb robbers. Forcing his way up through the hole, he found himself in another chamber at the bottom of a second and entirely unsuspected tomb shaft about 20 feet away from the other larger one. This was not as deep as the other and was entirely unconnected to it. It, too, had its separate burial chambers. The one that Hamdy Bey had crawled into was empty; tomb robbers had cleaned it out. But by some fluke they had not noticed that one of the walls had been bricked up. Hamdy Bey ordered the bricks removed and found another room with a floor made of thick, close-fitting flagstones. He ordered them pried up, only to find another layer of flagstones and beneath them a third layer. Below it was a great stone slab. Apparently somebody—or his heirs—had taken great pains to make sure he would not be disturbed.

That somebody turned out to be a Sidonian king. When the last slab was removed and Hamdy Bey was



The versatility of Phoenician sculptors is revealed in this sarcophagus, one of eight magnificent Greek-style specimens found in 1887 at Sidon. This one is known as the "Lycian" because it follows a style of funerary art practised in Lycia in southwestern Anatolia: an exaggeratedly arched lid and screens of bear and lion hunts running around the sides. Its occupant is unknown. Date: about 400 B.C.

able to shine a lantern into yet another chamber, he found himself staring at the black basalt face of an Egyptian anthropoid sarcophagus. When it was taken out of the vault, it proved to have carved on it a long inscription in the Phoenician language. It identified itself immediately:

"I, Tabnit, priest of Astarte, King of Sidon, the son of Eshmunazar (who was also) priest of Astarte and King of Sidon, am lying in this (coffin). Whoever you are who might find this (coffin), don't, don't open it and don't disturb me, for no silver has been given me, no gold, no jewellery whatever has been given me. Only I myself am lying in this (coffin).

"Do not open it, do not open it, do not disturb me, for such a thing would be an abomination to Astarte. But if you do open it and if you do disturb me, may you not (have any descendants) among the living under the sun, nor any rest (with the dead)".

This inscription recalls others that have been taken from Phoenician tombs and coffins. It is clear from the sorry record of Phoenician tomb desecration that such a curse almost never worked. But in this case it did. When Tabnit's sarcophagus was opened, there lay King Tabnit inside. He was stretched out, almost intact, on his back on top of a sycamore board with a depression carved in it as a resting place for his head. His body had been strapped to this board with rope laced through six silver rings attached to the board. Two of the rings were still in place and there were bits of rope still in the coffin. Both body and board were floating in an oily brownish liquid.

Here, at last, was a chance to learn something first hand about the secrets of Egyptian and Phoenician embalming, for Tabnit was extraordinarily

The Sarcophagi of Kings Tabnit and Eshmunazar

One of the most stunning Phoenician archaeological finds ever came in 1855 with the discovery of a black basalt sarcophagus (*far right*) buried in a hillside near Sidon. An inscription carved on it in Phoenician characters identified it as the coffin of King Eshmunazar, son of Tabnit, King of Sidon. But who was Tabnit, and where was he buried? Why did the son have so magnificent a coffin when there was no sign of the father?

The answer came 32 years later. In a tomb a mile away, a matching sarcophagus was found, inscribed with Tabnit's name. Near by was a second, empty coffin upon which no face was carved. Scholars believe it was intended for Tabnit's wife.

The experts are still arguing, however, about how the three sarcophagi got to Sidon, particularly since Tabnit's obviously was secondhand: it had the name of an Egyptian general, Pen-Ptah, inscribed on it. Was Pen-Ptah a military resident in Sidon who ordered three coffins made in Egypt for himself and members of his family—the last one never finished because he did not know who might occupy it? Was he later forced to flee Sidon, leaving his property to be confiscated? More likely, Tabnit scented a bargain during the Persian conquest of Egypt and ordered an agent to snap up the three handsomely crafted, ready-to-use sarcophagi for the royal family.



The coffin of King Tabnit is Egyptian down to its last detail, even including the name of the man who originally owned it, Pen-Ptah. When the sarcophagus was first opened in 1887,

Tabnit's mummy (right) was inside it. Still soaked by the oily, brownish embalming liquid and lying on a plank of sycamore wood,

Tabnit was extraordinarily well preserved. His remains, though now deteriorated, may still be seen at the Archaeological Museum in Istanbul, where the coffin too is on display.



The sarcophagus of Tabnit's son, King Eshmunazar, is a near twin of the father's, but covered with Phoenician writing. Now on display in the Louvre, the coffin is actually not as wide as it looks here; the foreshortening was caused by the hard-to-photograph location of the sarcophagus.



well preserved. He was a slender but strongly muscled man about five feet five inches tall. His skin was still intact, soft to the touch, and revealed that he had had smallpox. He had a large aquiline nose, a prominent chin and wavy reddish-brown hair that showed signs of having been tinted. An incision had been made in his chest to remove his stomach. The eyes were missing. Otherwise, except for bits of his nose, lips and chest that had been exposed to the air, his body was in remarkably good shape. Even more surprising, the organs were also in good condition. That strange oily fluid, plus a quantity of fine sand in which Tabnit's body was partially embedded, had done a good job of preservation.

Hamdy Bey supervised the careful rolling-out of Tabnit's sarcophagus through the tunnel he had dug, then went off to lunch. While he was gone some overzealous members of the work crew succeeded in upsetting the coffin. All the fluid ran out on to the ground and was lost. With it went the secret of Tabnit's preservation.

Tabnit was the son of the Sidonian king Eshmunazar—his coffin inscription makes that clear. He was also the father of another Eshmunazar who was buried near by in another black basalt sarcophagus that is now in the Louvre. The sarcophagus of the second Eshmunazar has a very long inscription on it that confirms descent from his father, Tabnit. It also contains the interesting information that his mother, Tabnit's wife, was also Tabnit's sister, a priestess of Astarte. Here again is that strong suggestion of the close linkage between priestly and royal power in Phoenicia, and of the attempts to keep as much as possible of both in the hands of a single family.

Two Eshmunazars and a Tabnit. Three names are

added to the list of Sidonian kings, bringing the known total to 18. But they are sprinkled over a thousand-year span and show once again how sparse our knowledge is of the details of Phoenician city history. The typical Sidonian anthropoid coffin—that marble object with an Egyptian shape and a Greek face—is of no help in enriching that history, for it never carried any inscription at all. It was simply an oblong block of marble, vaguely body-shaped and with a removable lid. It was turned up at the foot, Egyptian style, and in some instances actual feet were carved there. Usually the face was stylized to a certain degree but, as the examples on page 116 show, attempts were made at portraiture.

Looking at those calm, smooth countenances with their staring eyes, we do get glimpses of the individuals who lay beneath them. And that individuality and a sense of lifelikeness were once far stronger than they are now, for the Phoenicians—again following Greek tradition—carefully painted the statues. Traces of colour remain on many of them. One in particular, dug up at Sidon, has its paint extraordinarily well preserved. The hair is dark red, a pale flesh tint has been given the face and the lips are red. The eyes have been done with great care: brown iris and black pupil, very pale blue for the white of the eye, a dot of red in the corner, and individual eyelashes—painstakingly painted in. This sarcophagus was jarringly lifelike when found and was the gem among a memorable hoard of 11 anthropoid coffins unearthed in a network of two tomb shafts near Sidon in 1901. Although work has continued sporadically at Sidon ever since and many further finds have been made, nothing compares to this single haul or to the spectacular Tabnit-Alexander finds of 1887.



Evidence that the Phoenicians were skilled dentists crops up in this jaw of a man found in an anthropoid coffin at Sidon. As a result of pyorrhoea, his front teeth had loosened and were fastened together with a gold wire. The device apparently served its wearer well for many years; parts of the wire were covered by salivary deposits.

A curious fact revealed by the excavations at Sidon is that the Phoenicians were expert dentists. The upper jaw of a woman found in one sarcophagus had two teeth from another individual neatly fastened to her own with gold wire. Whether the dental work was for cosmetic purposes (the new ones were front teeth) or to give her something to bite with is not clear. But in the case of a man found in another sarcophagus the utilitarian nature of his dental work is obvious (*page 119*). He was suffering from pyorrhoea and was faced with the loosening or loss of six of his teeth. All these were held in place with a single strand of gold wire woven most dexterously among and around adjacent firmer ones. Their owner wore this device for years, for the teeth are well worn down, showing extended use.

Although the fashion for anthropoid coffins flourished in the east, it never caught on in Carthage and other western Phoenician cities. Only a few scattered examples have been found in these places. What Carthage did do was to take the tomb shaft west and develop it. Some shafts in burial grounds in and around Carthage are as much as 100 feet deep and reflect the efforts to which people went to keep their graves from being disturbed. There usually are only three or four coffin chambers in each of these monster shafts, indicating that accommodation of large numbers of corpses was not their purpose.

Where and when the Phoenicians first turned to cremation—as a substitute for regular burial, or inhumation—is not clear. The older coastal Canaanite practice, strongly influenced by the Egyptians, was interment. Cremations seem to have crept in during the upheavals and invasions of the 12th Century B.C., for isolated instances of it crop up here and there



Anthropoid coffins from the Sidonian burial ground lie side by side in the National Museum at Beirut. They date from the Fourth and Fifth centuries B.C. Usually made of marble, they derive from Egyptian models, but their faces show the strong Greek influence that continued to crop up in Phoenician art.

throughout the Levant after that time. The practice probably was carried west to Carthage and there strengthened by contact with local North African custom, because there is a great deal more evidence of cremation in Phoenicia West than there ever was in burial sites in Phoenicia East.

Though the westerners may have lagged as makers of sarcophagi, they were very active makers of grave-stones, or steles. Steles are known throughout Phoenicia East and reflect a long tradition of erecting votive shafts or commemorative stones of one kind or another. In Phoenicia West they are enormously abundant. Motya alone has produced hundreds of them; Carthage, thousands. Steles come in a great variety of sizes and shapes, but a typical one is a rough oblong of sandstone or limestone, sometimes with a pointed top, usually with some decorative elements crudely carved on its face. Many a Carthaginian stele bears the symbol of the goddess Tanit: a triangle topped by a horizontal bar and with a circle over that (*page 131*). These three elements easily combine to suggest a human figure dressed in a shirt. Tanit apparently also had some lunar connection, for her symbol is often surmounted by a crescent moon.

Just who Tanit was, or how she crept into the Carthaginian pantheon, is something of a mystery. When the Tyrian princess Elissa fled to found Carthage, she took with her a high priest of the goddess of Astarte and 80 young maidens. Thereafter Astarte's cult, with local modifications to absorb the names and traits of Greek and Roman gods that make the Phoenician pantheon so confusing, persisted in one way or another throughout the history of Carthage.

Tanit may even have made her way back east and into the pantheon of the eastern cities. In 1971 a car-

go of small clay Tanit figurines was found scattered over the sea bottom only a mile off the coast of Israel near the ancient Phoenician city of Akka. The ship that carried them had vanished. The Israeli archaeologists who made this find think that the vessel was travelling east—perhaps from Carthage, the heart of Tanit worship—and was swamped in a storm just before it could make it into a safe harbour. If it had been going west to Carthage, the archaeologists reason, it would not have sunk so near the point of departure; its captain never would have left home port in the teeth of a storm.

Baal himself was carried from the east to Carthage, but emerged there with the name Baal Hammon, or "lord of the perfume altar", reflecting the great amount of incense offered up in his rites. His exact status in Carthage is muddled, for the chief male god of the mother city Tyre was Melqart, who also was transported to Carthage and worshipped there for many centuries. Indeed, in the early years of Carthaginian history a devout contingent reportedly went back to Tyre every year on a state visit for the express purpose of paying Carthage's respects to Melqart at his temple there.

Melqart, then, represents ties with the old regime back home and is thus an expression of political conservatism in the new western city. He was the patron god of the old noble families in Carthage, particularly of the Barcids, from whom a succession of brilliant generals descended: Hamilcar Barca, two Hasdrubals, a Hannibal and a Mago. We get faint echoes of political struggles within Carthage, of class against class, in the ups and downs of the gods in whose names the various factions fought with each other. In the long run the older pair—Melqart and As-

tarte—lost popularity to Baal Hammon and Tanit.

They also lost something in function. In time Tanit took the place of Astarte as earth mother to the Carthaginians. She became the consort of Baal Hammon in the familiar Phoenician trinity of father, mother and son. According to Gilbert and Colette Charles-Picard, Tanit's sudden surge to supremacy can be traced to a catastrophic defeat the Carthaginians suffered at Himera in 480 B.C., when they tried to drive the Greeks out of Sicily. This repulse turned Carthage inwards, more and more towards Oriental and African things. In that atmosphere Tanit sprang to prominence. Some scholars believe that she had African origins and that her rise to supremacy reflects Carthage's own geographical position: a small Phoenician enclave, set down in the midst of a large native population of Libyans, Numidians and Berbers, and inevitably affected by both intermarriage and exposure to local beliefs.

However that may be, the great number of votive stones dedicated to the holy Tanit found in Carthage after about 500 B.C. attests to her supremacy from that time on. But she, in turn, had her day. Though the Carthaginian priests were determined to keep the purity and distinctiveness of their religion (not to

mention their own authority), they were forced by circumstance to give ground gradually to Greek and Roman gods, who were not only overpoweringly attractive in themselves but who also bore the standards of a more progressive, more flexible and more interesting society, with livelier art forms and a more enlightened policy with respect to manufacturing and trade—and finally, in the case of the Roman gods, an overwhelming army.

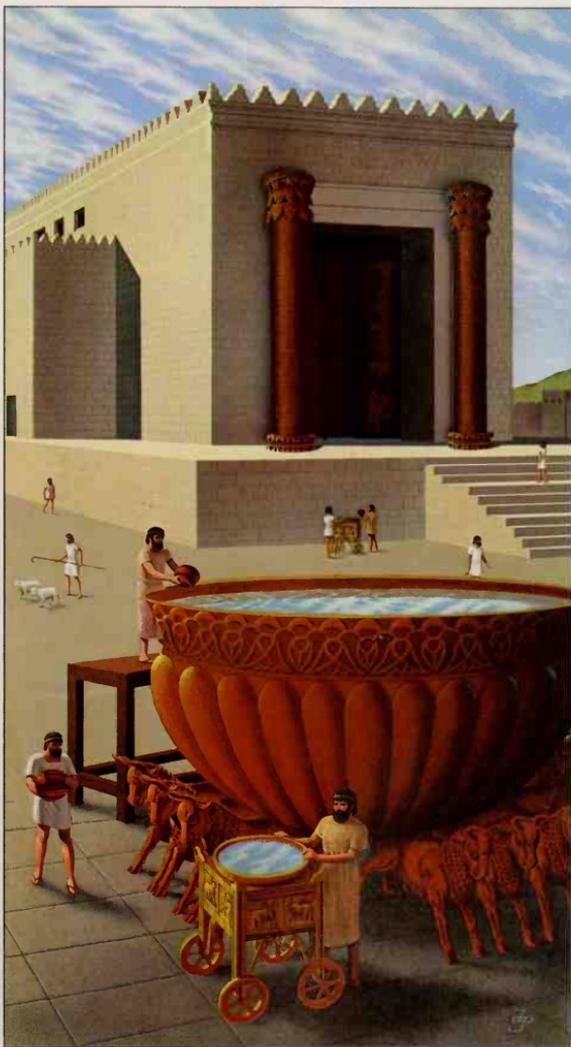
In the east the Phoenician gods and the Phoenician way of life were rapidly cannibalized by Greek gods and Greek ways. By Alexander's time Melqart was already half a Heracles, as he was in Carthage too. Baal Hammon, the last of the cruel idols to whom babies were sacrificed, was absorbed into the Romans' Saturn. Mother Tanit became Mother Juno. After the fall of Carthage in 146 B.C. its priests still hung on for a few generations, turning their attentions more and more to an African constituency. They kept their language alive for a while among the Numidians, but only for a while. The great god Baal, who had spoken with a brazen clang in many cities for a thousand years, toppled. His retinue of priests faded into anonymity. The tongue in which he had been worshipped fell to a whisper, then into silence.

The Temple Built for King Solomon

Considering how the prophets of Israel hated the Phoenician god Baal and all his works, it is ironic that the best description of a Phoenician temple comes from the Old Testament. David, the warrior who united Israel in about 1000 B.C., had little time for temple-building, but his son Solomon was determined to erect a magnificent shrine to glorify both his country and his God. Unfortunately, his people lacked the necessary skills, so Solomon contracted with King Hiram of Tyre for a team of architects, masons, carpenters and smiths who, predictably, followed a design that was widespread in the area.

The temple was a narrow stone box with walls 10 feet thick. The Bible gives its dimensions in cubits—which is awkward for scholars since there were two different standards: the regular cubit (17½ inches) and the royal cubit (21 inches). Experts are now agreed that the royal cubit was employed. On that basis, King Solomon's temple had the following approximate inside dimensions: length 135 feet, width 35 feet, height 50 feet.

Thick-walled, of stone blocks which the Phoenicians laid without cement, Solomon's temple was approached by a flight of 10 steps. Two bronze columns, named Jachin and Boaz, flanked the entrance. In front was a bronze holy-water basin weighing 30 tons and supported by 12 cast-bronze bulls, symbols of the Phoenician's own god, El.

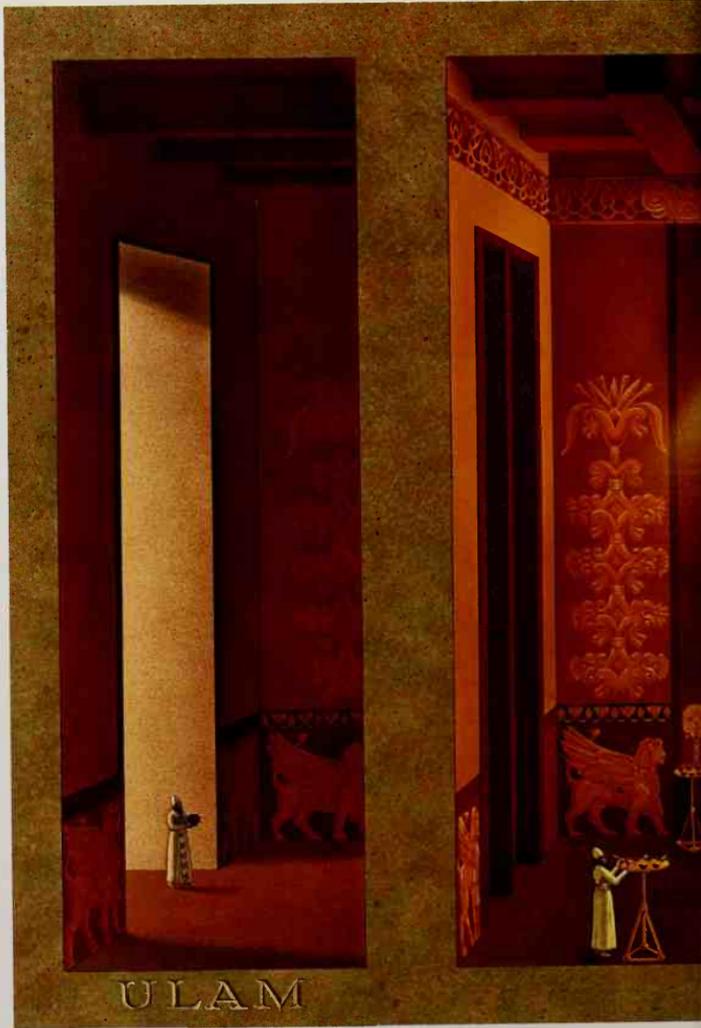


The Interior: A Design Drawn from the Bible

A Phoenician temple had three parts: an anteroom, then a main hall, finally a secret holy-of-holies. This basic layout suited Solomon admirably since the Hebrew and Phoenician rituals had much in common, differing mainly in the insistence of the Hebrews on worshipping a single God who had delivered them from bondage in Egypt and found them a home in Canaan.

The reconstruction on these pages, again based on the Bible, has the small anteroom, or *Ulam*, at left. Temple activities took place in the main hall, or *Hekal*. Twice each day—early in the morning and at dusk—sacrificial services were held: animals were offered up outside and incense was burned inside. The 10 tripods are light stands whose lamps are being lit by assistant priests. A high priest ignites incense on the altar in front of steps leading to the holy-of-holies (*overleaf*). In the centre of the hall is a low table with 12 small loaves of bread on it, one for each of the tribes of Israel. The walls of the *Hekal* are panelled in cedar, decorated with Phoenician winged sphinxes and lotus patterns.

The lofty hall, the scent of cedar and incense, the richly ornamented walls dimly illuminated through the high recessed windows—all contributed to the mystery and beauty of the temple service. The reverence was intensified by a sense of God's near presence—just up the steps and behind the doors of the holy-of-holies.



With its coffered ceiling, inlaid floor and richly decorated walls, Solomon's temple achieved his wish



HEKAL

that it dazzle the world. It took seven years to build, was completed about 950 B.C. and levelled by the Babylonians in 586 B.C. No trace survives.

The Holy-of-Holies: A Throne for God's Presence

The holy-of-holies was a windowless, dark cube, also panelled in cedar but less elaborately decorated than the sumptuous *Hekal*. No one could enter here except the high priest, and he only once a year, on the Day of Atonement, when he made a special blood offering as a plea to God to cleanse His people of their sins.

This reconstruction is based on a second striking difference between the Hebrew and Phoenician faiths. The Hebrews did not believe in idols, and although the presence of God dwelt in this holy room there was no statue or image of Him there, only a small box—considered God's throne—inside which were kept the stone tablets of Moses, with the Ten Commandments inscribed on them.

Guarding God's throne (known as the Ark of the Covenant because it represented the pact between God and the Hebrews that they would worship only Him) were two large sphinxes whose outstretched wings brushed the walls and met overhead. Made of olive wood, they were 17 feet high and inlaid with gold. The Bible refers to them as cherubim.

Nothing is known of what went on inside the Phoenician version of the holy-of-holies, except that the room contained whatever image the Phoenicians worshipped. It was there that the *betyl*, or holy stone, probably was enshrined. But who among the Phoenicians had access to it is a mystery.



The doors to the holy-of-holies—made of olive wood and inlaid with gold—were opened once a year.



The winged sphinx, a motif repeated on the walls and on the Ark itself, was introduced by the Phoenicians, who in turn had found it in Egypt.

Chapter Six: The Rise and Fall of Carthage



The history of Phoenicia West is really the history of Carthage. Very little is known about most of the towns and trading posts that the Phoenicians scattered throughout the Mediterranean. But Carthage is different. Its origins, though shrouded in myth, have a freight of fact behind them. The flavour of its society, though veering away from Phoenicia East through centuries of separation, can be tasted. Its history, though full of gaping holes, can be traced because Carthage grew so big and powerful that its competitors, the Greeks and Romans, became obsessed by it, wrote about it and ultimately learned to hate it as only the deadliest of rivals can hate.

According to legend, Carthage was founded in 814 B.C. as a result of a struggle for the throne of Tyre between King Pygmalion and his sister, Elissa. Elissa was married to the high priest Archabus, who was not only one of the richest men in Tyre but also her uncle. Here, yet again, is that persistent hint of the interweaving of secular and priestly power—both sustained by money—that runs through the fabric of Phoenician life.

Whether Archabus, backed by a faction of aristocrats, was himself ambitious or whether he was egged on by his ambitious wife is not known. Whatever the case, King Pygmalion had Archabus murdered. He then set out to recover as much of Archabus' fortune as he could get his hands on. Luckily for Elissa, now in fear for her own life, her

husband's fortune had been sequestered. This circumstance gave her just time enough—on the pretext of collecting it and turning it over to her brother—to outfit secretly a fleet of ships, load the fortune aboard, scoop up a cadre of badly frightened aristocratic supporters and flee to Cyprus. There Elissa picked up another high priest, this one dedicated to Astarte. Elissa also recruited—or shanghaied—80 maidens who, legend goes on to say, were to serve as religious prostitutes in a temple to Astarte that she would establish. So reinforced, she set sail for Carthage.

Selecting an easily defended promontory, Elissa then proceeded to bargain with the local Libyan tribesmen for its purchase. There is a nice story connected with this. The tribesmen were persuaded to agree that she might buy only as much land as could be covered with an oxhide. But, by cutting the hide into very thin strips, Elissa was able to encircle a sizeable area on and around a hill, which ultimately became the stronghold of the city and was eventually named Byrsa.

What are we to make of this story? First, it is a tale told by Greeks, who saw the Phoenicians as sharp and crafty traders: a scheme like that would have been entirely in character for Elissa. Furthermore, it is a scheme the Greeks themselves might have cooked up, and there is an echo of reluctant admiration in it. Their greatest hero, Odysseus, was a trickster who got by on wiles and lies rather than on strength. Finally, there is the fact that *byrsa* is the Greek word for "hide". Does that explain the Carthaginian citadel's bearing the name Byrsa? Or is it a later attempt to explain the coincidence with a good story? Donald Harden points out that *byrsa* could also be a Greek rendering of the Semitic word for "for-

This eight-inch terra-cotta figurine of a fertility goddess was unearthed on the island of Motya in 1971. Hollow inside, it has an opening in the top of the head and a hole in each breast. Before a religious rite it could be filled with liquid, which during the ceremony would appear to flow magically after the wax plugging the nipples was discreetly melted.

tress". "Carthage" itself comes from two Phoenician words: *qart* (city) and *hadast* (new).

At any rate, things were surely hard for Elissa and her small band of nobles set down in the midst of strangers—hostile ones at that. Their history for a hundred years is a blank, except for two more stories, both written much later by Romans.

The first story is told by Vergil in his epic poem *The Aeneid*. There Elissa, under the name of Dido, emerges as a beautiful and sensual queen who dawdled away her days in an opulent palace with a young lover—a refugee from Troy named Aeneas. But Aeneas grew tired of her and left—so Dido killed herself. Vergil's version is pure myth; the fall of Troy took place some 400 years before Carthage was founded. Furthermore, Dido certainly had no fine palace to dawdle in. The early Carthaginians probably were very poor for some years and quite dependent on their contacts with Tyre.

However, as will be seen, suicide did repeatedly strike a chord in the harsh soul of Carthaginian life. It was not out of character for Elissa to have killed herself, and a better reason for her having done so is given by the Roman historian Justin writing several hundred years after the fact. According to his account, while Carthage was still young and feeble, an uncouth and forbidding neighbouring chieftain demanded of the city's elders that he be given the beautiful Elissa for a wife. The alternative: destruction of the struggling little colony. This put the elders in a difficult bind: sure she would refuse, they were afraid to relay this demand directly to their imperious queen and equally reluctant to relay her refusal to the chief. With what Justin called "Carthaginian artifice", they finally decided to inform her that they

themselves were being asked to go and live with the neighbouring tribesmen in order to civilize them, but that they feared to do so because of the dangers and squalor of tribal life. Predictably, Elissa upbraided them for not being willing to promote the city's welfare at the expense of their own skins. As soon as she had said that, the elders revealed to her the true demand of the neighbouring prince, and Elissa was trapped by the example she had attempted to impose on the elders. So she took three months to prepare a large funeral pile. On the appointed day, she sacrificed a number of individuals (Justin does not say who they were), then climbed up on the pile and stabbed herself.

Did Elissa-Dido actually live? Did she found Carthage and, if so, when? Of her existence there can be no doubt; she is known to have been the sister of King Pygmalion, and all classical historians agree that Pygmalion's sister was the founder of Carthage. Whether Elissa founded the city in panicky flight or whether the new colony was a deliberate step in a Tyrian plan to get a toehold in the west, beyond the reach of Assyrian tormentors, is another matter. With the west opening up and the metal trade beginning to boom, it would have been to Tyre's advantage to have a strong base along the trade route, halfway to Spain.

As to when this happened, Elissa's own identity provides a clue. She was the grandniece of the notorious Jezebel of the Bible, a Phoenician princess. Since it is known that Jezebel lived in about 850 B.C., Elissa would have been a mature woman about 40 years later, well able to carry out the large task of establishing a colony in Carthage. Therefore the traditional date for her having done so—814—is probably within a few years of being correct. How-

The sign of Tanit—the goddess who rose to supremacy in Carthage—was a triangle with a bar across the top and a circle above that, making a small skirted figure found on many votive shafts. The dolphin is a fertility symbol.



ever, that does not sit well with the awkward problem of Phoenician pottery dating.

As noted, archaeological research at Carthage has given us nothing that can be dated earlier than about 735 B.C., and so we are still left with the apparent problem of accounting for that gap of almost 80 years. Here the work of James Pritchard at Sarepta may help. Carbon dating of objects 3,000 years old or less is not refined enough to tag them precisely. A 50- to 100-year error is inevitable. Pritchard feels, however, that the huge hoard of pottery shards that he has turned up at Sarepta may finally provide a precise tag. Pritchard's sequencing of shapes and styles is so extensive and precise that once he has found a "hard" object to go with his pottery—an Egyptian inscription, say, containing the name of a king whose dates are known—then he will know how old the pieces of Sarepta pottery are. Egyptian goods were handled by the Phoenicians as trade items, and may well have been stored near kilns Pritchard has found. Since the Egyptians were fond of carving names and family histories on nearly everything they made, Pritchard feels it is only a matter of time before he finds the cross check he needs.

Once that has been accomplished, he can then address himself to another enigma: the red-slip problem. Red-slip refers to a kind of pottery finish that was in wide use at Sarepta from an early date. It was the Phoenicians' way of providing a non-porous surface to the interior of a pot by painting it with a watery mixture of extremely fine, reddish clay, then using a small tool or pebble to smooth this red-slip material into the surface of the pot as it revolved on the potter's wheel. With the raw clay surface sealed by the red-slip, the pot was then fired in a kiln, and

Bronze Punic armour, consisting of breast- and backplate, with shoulder straps and girdle to hold them in place, was found in a Third Century B.C. tomb near Carthage. The design is Italian and suggests that the owner was an Italian mercenary serving in Hannibal's army.

came out with a glazed interior that is recognizable anywhere. Although non-porous pots were made long before the Phoenicians came on the scene, the particular red-slip they used appears to be uniquely Phoenician. Thus the problem now is to learn where and when Phoenician red-slip got its start. It turns up in Carthage and other western sites in large quantities. The presumption is that it was exported there from Phoenicia East. If this turns out to be so, and if the date of its first use in the east proves to be an early one, and—finally—if older Phoenician red-slip pots at Sarepta are found to match some of those found at Carthage, *then* all experts can agree with considerable relief that Carthage was (at last on archaeological evidence, instead of the shakier literary evidence they have had to lean on in the past) as old as tradition claims.

From its humble start Carthage grew rapidly to become the strongest and the wealthiest of the many Phoenician outposts in the west. In its wars—initially against the Greeks and later against the Romans—it rallied its African neighbours, ran the campaigns, maintained a large war fleet and directed commercial policy. The dreams other western Phoenician towns may have had for an independent commercial destiny—such as the mother cities back east had enjoyed—were ultimately crushed by the takeover policies of Carthage, spearheaded by a succession of power-hungry generals. Carthage initially offered a unified anti-Greek front to the other Phoenician towns and trading posts, and under that banner came as close as the Phoenicians anywhere would come to creating a solidified empire.

It was a great achievement, if not always a healthy

one. The Carthaginians had two problems that their eastern relatives did not have, but they also had new opportunities for experimenting in government and developing new kinds of trade relationships with their neighbours. The Carthaginians' history was on the whole violent, their religion sombre and cruel, their government autocratic. They did not trust their leaders and killed many of those who failed them. Their art was undistinguished. For all that, they were a force to be reckoned with in the Mediterranean for more than 500 years. At times they controlled a large section of the then-civilized world. In fact, they were occasionally the only civilizing element in that world.

Their two special problems over the course of several hundred years were the Greeks and the native Africans. The former were the equal of the Carthaginians in adaptability, energy, intelligence and fighting skills. The two peoples became bitter commercial rivals and fought long, inconclusive wars. The Africans presented a different kind of problem. They lived round about in enormous numbers, and in the city's early days were strong enough to exact an annual tribute for the land that Elissa's people occupied. But as Carthage grew in strength it also grew in land, spilling out to occupy the surrounding farm country. It was extremely fertile, and the aristocratic families acquired large holdings, which they cultivated intensively. Eventually they stopped paying the Libyan tribute. The original inhabitants were driven off the land, employed as farm labourers, or they hung on as heavily taxed small farmers. They were not allowed Carthaginian citizenship, were held in low esteem, probably treated very badly. They became an unreliable element in Carthaginian society. Being much more numerous than the Carthaginians, the na-



tives posed a constant threat and on several occasions actually revolted.

The most famous revolt came after Carthage had just lost the first of three bitter wars against the Romans and had been saddled with a crushing indemnity that left it unable to pay its mercenary troops: ex-slaves, renegade Greeks, dispossessed Sicilians, tough recruits from Spain—the scum of the Mediterranean. In 241 B.C. the mercenaries rebelled and succeeded in fomenting an uprising among the Libyan population. Three and a half years of chaotic guerrilla fighting ensued, marked by chilling atrocities on both sides. Finally the revolt was put down, but it left Carthage so enfeebled that it could not resist further pressure from the Romans to give up its holdings in Sardinia.

But all this was much later. The Carthaginians' early enemies were the Greeks, who began trickling into Sicily only about 80 years after the founding of Carthage. A group came from Chalcis in 735. Another came from Corinth in 734, a third from Megara in 728. Within 50 years there were Greek settlements all over eastern and central Sicily, each entirely in-

dependent of the others and of mainland Greece as well. Little is known of Greek and Carthaginian relations during this early period. But as the Greek settlements spread, Carthage soon decided that they must be contained. It began beefing up a settlement at Motya off Sicily's western tip, eventually turning it into a walled town. Later Carthage also made an alliance with the Etruscans, a people who ruled a powerful kingdom in central Italy. With their co-operation Carthage was able to establish a presence in Corsica and gain control over a few coastal settlements on the island of Sardinia. Gradually, the Carthaginians—aided by the alliance with the Etruscans—were able to exert more and more influence over Sardinia and Corsica. This meant that the routes west to Spain, both north and south of Sicily, were in Carthaginian hands. The Greeks were effectively shut out of the wealth that trade with Spain would provide, and the Carthaginians could now devote themselves to the metal monopoly in Spain.

This they did intensively and became rich, but in an unhealthy way. Carthage treated this fountain of silver and tin much as the Spanish conquistadors a

couple of thousand years later would treat the gush of gold that poured into their laps from the New World. Both regarded their discoveries simply as mines, as sources of treasure to be got cheap and sold dear, to finance armies, to enrich the aristocracy.

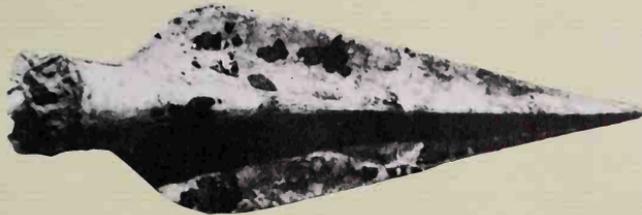
Similarly, Carthage initially did little with its wealth but entrench the nobility and finance the wars that the leaders were intent on waging as part of their mercantile policy. Carthage was not so much a handler and fabricator of all sorts of fine trade goods (like its mother city, Tyre) as it was a bulk dealer in metals, ivory and other raw materials. These, through trade, ultimately fell into the hands of its competitors, who often used them more creatively. Whether Greek or Egyptian goods stood in the stalls next to those from Carthage, the former put the latter in the shade. Thus, Carthage had to control its markets not through the excellence of its products but by force—through its ability to bar competition. Its customers, unable to get anything better, had to accept a range of poor-quality goods that Carthage was peddling. The Carthaginian economy depended on tremendous volume rather than on quality, and flooded the west with its output.

It is easy to blame Carthage for not having a better imperial experiment, but judgments of this nature are foolish. People do what they can within the limits of their own experience, their own culture, and in response to specific external pressures. The Carthaginians inherited an authoritarian, aristocratic way of life dominated by a rigid religion. Since they were exposed to Greek pressures, the Carthaginians moved to contain them by utilizing the leadership produced by their traditions.

The earliest rulers of Carthage are unknown. There are references to a King Malchus, but that name probably comes from an old Semitic word for king or lord and may refer to a title and not a single man. The first Carthaginian leader whom history recognizes by name is “King” Mago. Actually Mago was a general, head of a very powerful and wealthy family of aristocrats. He won victories against the Greeks in Sicily, and around 550 B.C. established a dynasty of military leaders—the Magonids—that was to be prominent in Carthaginian military affairs for 150 years or so. Mago may or may not have been the actual head of the Carthaginian state. According to most sources, the Carthaginian generals were elected, and appear to have served at the pleasure of a council recruited from a small group of noble families. This council set mercantile policy and more or less ran the country’s affairs to suit themselves. That Carthage ever had a succession of kings is doubtful. Families seem to have been the power centres, and they strove bitterly among themselves.

It is against this background that Mago emerged. He is reported to have pushed an aggressive foreign policy in Carthage, to have built up the war fleet, to have made a military alliance with the Etruscans and to have created the first mercenary army in Carthage. Mercenaries were a necessity, for there were too few honest-to-goodness Carthaginians to make up more than an officer class. But mercenaries also cost a great deal, as did the maintenance of an adequate fleet. The money was supplied largely by the metal trade, which the new military strength protected.

The new policy, together with the colony’s isolation from Tyre, inevitably led Carthage away from the traditional Phoenician posture of peaceful trader



The original of this iron lance head from the Isola Lunga wreck (page 35) rusted away long ago—yet its shape could be re-created. Encrustation had covered the disintegrating metal and a cavity was formed inside. When filled with plaster, the hollow yielded the duplicate shown here.

and into the rôle of hard-boiled imperialist. If Carthage was to be the policeman of the western trading empire, Carthage would have to be paid for that service. As the other Phoenician settlements in the west fell under Carthaginian dominance, they ultimately found themselves with little or no direct share in the metal trade, and nothing to say about when and where wars would be fought—except that they were expected to help wage and finance them.

There were plenty of wars. At first the campaigns were generally successful and enhanced the stature of the Magonids who, according to the French historians Colette and Gilbert Charles-Picard, “managed to surround their power with a mystic aura by playing upon nationalism and religious fanaticism”. The mystique required that the generals themselves act as proper models of the hard Punic faith, and they did. At least two of them are reported to have committed suicide on the field of battle when they realized that their side had lost. Here is another aspect of that same dark strain of expiatory sacrifice that required the killing of babies to wipe out national sins or failures.

The Magonid leadership, in addition to being durable, had another asset. It spoke for all of Phoenicia West, not just one city. These two factors permitted Carthage the luxury of a coherent—if not always intelligent—foreign policy, something the Greeks never achieved before Alexander the Great. The Greeks were habitually their own worst enemies. It was their chronic inability to get along with one another—especially in Sicily—that eventually led to a battle between the Magonid Hamilcar and Gelon the Greek at Himera in 480 B.C. Terrilos, also a Greek, was an ally of the Carthaginians. When Gelon became too ag-

gressive and too successful, Terrilos called upon his Carthaginian ally, Hamilcar, to help bring about the downfall of Gelon.

As it happens, this battle took place at the same time the Persians—with the help of navies from eastern Phoenicia—were invading Greece itself. Although traditional histories suggest that Carthage knew about the Persian invasion, there is little reason to believe that this influenced the Carthaginians in any way. More likely was the Carthaginian wish to keep any single Greek settlement from gaining too much control in Sicily. Whatever the case, Carthage did go to the aid of Terrilos, only to be soundly defeated in Himera, a Greek town near Palermo. After defeat, there was only one thing for the Carthaginian general Hamilcar to do, and he did it: he killed himself. The survivors struggled home in their splintered warships. The Magonid power was eroded. According to the Charles-Picards, rival groups of aristocrats took over the city and governed it through a court of magistrates. Taking stock of their situation, these new autocrats found Carthage bankrupt and nearly defenceless, and apparently decided to embark on an entirely different policy. They withdrew into a kind of shell, banned the import of all foreign goods and concentrated on expanding Carthage’s African holdings and building up its resources.

They did this for 70 years, and the ruins of Carthage speak to that long programme of austerity. There is a pronounced paucity within that time period of the luxury goods previously imported by the nobility. Instead, trade with internal Africa was intensified. Caravan routes picked their way south through the Sahara to certain reliable oases for an expanded traffic in gold, ivory and slaves. Marine exploration

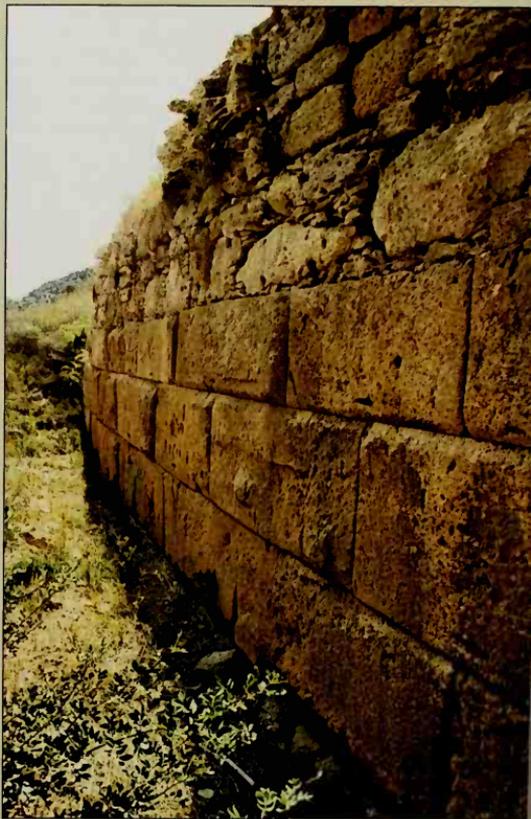
Carefully squared stone blocks, some of them five feet long, form the base of an outer defensive wall at Motya. Inside it lay an older wall, and the space between had been filled with rubble and concrete. The finished double wall was more than 18 feet thick.

was pushed, and it was during this period that the two admirals, Hanno and Himilco, may have made their famous expeditions down the African coast and to Britain (pages 12-13).

Throughout this period, the Romans began their rise. However, the real enemy was still the Greeks. During the 70 years that Carthage turned inwards, the Greeks were occupied by one internal war after another. Waves of these city-state conflicts washed as far as Syracuse, the main Greek settlement in eastern Sicily and an ally of Sparta in the many bloody battles that city had with Athens.

By 410 B.C. the Carthaginians realized that Syracuse was becoming a very powerful force in Sicily. Once again Carthage was persuaded to help one Greek city—this time Segesta—defeat another and, in so doing, weaken the power of Syracuse. The Carthaginian leader was a general named Hannibal. He is not the Hannibal best known to posterity, but one of a dozen or more famous generals who bore the name. (There is also a bewildering cluster of Hannos, Hamilcars, Hasdrubals and Hamilcos littering Carthaginian history—some related, some not.) At any rate, this Hannibal landed with his armies near Motya and stormed the near-by city of Selinus for nine days. With that victory under their belts, the troops were joined by many Sicilians. Together these forces launched an attack on Himera, the very town where Hannibal's grandfather Hamilcar had been so soundly defeated 70 years before. Hannibal won this battle, too, and had the grim satisfaction of avenging his grandfather's death by sacrificing 3,000 captured Greek soldiers.

After this success Hannibal returned to Carthage and his army disbanded. A few years later, he—now



quite old—was called to lead another attack on Sicily. Hannibal died in 407 B.C.—presumably of the plague—leaving his aide and possible relative Himilco in command of the army. Our knowledge of what took place over the next few years is quite sketchy. We do know that the Carthaginians continued to be active in Sicily and involved in the various internal Greek city squabbles there. The key Greek figure during this period was Dionysius, an especially ruthless general from Syracuse. As soon as Dionysius was able to consolidate his position among the many Greek settlements, he turned on the Carthaginians and struck right at the seat of Carthaginian power in Sicily: the island of Motya.

Sicily is a volcanic island made up of steep grey rocks plunging into the sea, of dusty little coastal towns, of steep valleys hidden in the hills. Much of Sicily can be so described, and this is what one sees as one goes out from Palermo towards Motya, a dot of an island perched at Sicily's extreme western tip.

Here the violent Sicilian landscape subsides. The hills sink down. Stone walls line the shore. Stone jetties stick out into the lagoon. There is an abandoned stone windmill—a great many stones here, all carefully squared, many of them in big blocks, worn and old. Opposite the saltworks—about half a mile away, floating low on the shallow bay—lies Motya. All that is visible on it from the shore is a grove of trees and a modern Italian terra-cotta villa.

Much of the worked stone on this shore was once on that island in the form of fortifications, towers, pavements and buildings. More of it came from the Punic graveyards on the near hillside. All of it bespeaks an energy and activity at Motya that is long

gone. Nothing moves there now. The jetties and fields are completely deserted. The waters of the lagoon have silted up and are clogged with weeds. The surface is glassy and empty.

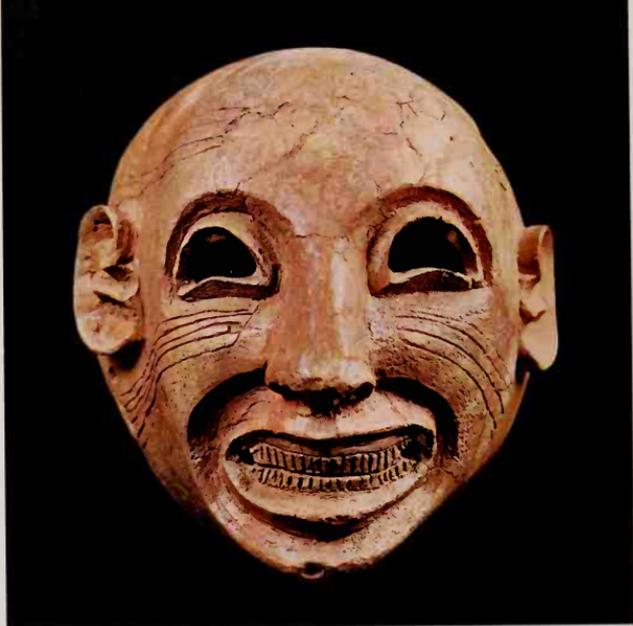
In 397 B.C., when Dionysius stormed the city, Motya was anything but silent. It was a humming city, completely surrounded by a thick wall, its bay full of ships. It was this busy, bristling stronghold that the Greeks felt they had to reduce. Dionysius brought an army to the shore, just north of the island, where the Motyan burial ground was. Today, looking down into the water, one can make out the remains of a causeway that the islanders had built to connect their stronghold to the mainland. Today it runs as straight as a string a foot or so beneath the surface, though it is broken in a couple of places. The Motyans tried to destroy their causeway in a last-minute effort to protect themselves. But why they should have tried, why they should have felt they could succeed, why Dionysius should have felt he needed to destroy them—all these things are hard for today's visitor to understand. From the mainland shore Motya seems as innocent and defenceless, as needless of destruction as a garden.

But row out to the island, following a twisted channel that still makes it possible for fishing boats to come and go in the lagoon, and one's view changes. This was a fortress once, a miniature Troy whose outer walls stood 30 feet high. The roots of those walls are there now, ringing the island. The thick stone structures were strengthened at intervals by still higher stone towers. The stoutest of these towers guarded the town's main entrance. There was a heavy double gate there with a stone barrier in the middle dividing a two-way street that ran up into the town.

Masks to Exorcise Evil Spirits

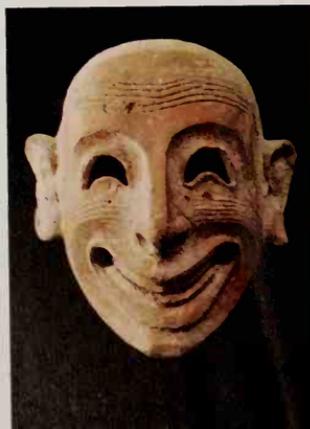
Grinning masks made of terra cotta have turned up in many tombs at Carthage and other Phoenician sites located in the western Mediterranean. Carthage's trade contacts with Africa promoted the long-held belief that the masks were inspired by neighbouring cultures, particularly since many bear what seem to be tattoo marks. However, this theory was exploded by the discovery in 1960 of a 13th Century B.C. mask at Hazor, an old Canaanite town near Tyre, proving that their use pre-dates Carthage and that the practice was originally eastern.

The masks are less than life-size—too small to be worn—and are mostly found in tombs. Almost all experts agree that they were aimed at guarding the deceased by scaring off evil spirits with their grinning expressions. Their date: 700-500 B.C.



From Tharros, Sardinia. The left ear has been restored.

From Motya



From San Sperate



From Carthage





From Carthage. The scratches in many of the masks led some authorities to conclude that they represented tattoos.

Inside was a second gate in case the first did not hold, and inside that a third, all overhung by those flanking towers, set at an angle so that a withering fire could be directed downwards at any attackers who tried to cross the causeway and storm the outer gate.

Standing on top of what is left of Motya's walls—imagining oneself positioned 15 or 20 feet higher yet, well stocked with arrows, crouched behind a slot in the stone parapet, with fellow townsmen similarly deployed all along the battlement, looking down at a lagoon bristling with Carthaginian ships—one wonders how Dionysius cracked this tough nut. According to the historian Diodorus, Dionysius brought a fleet of his own to help his army clean out the Motyans. But when he arrived and saw that the causeway had been broken, he and his army went inland to capture other Punic settlements, leaving the crew of his fleet to rebuild the causeway. He had just returned to lead the attack on Motya himself when the Carthaginian navy, alerted to the danger, came pouring around the end of an outer island and up the Motya channel. Dionysius' fleet appeared to be trapped and lost. But he mobilized all his troops for a heart-straining effort of pushing in the mud, gasping in the weeds. They managed to shove his fleet through the shallow far side of the lagoon, over some shoals and even across the end of the outer island and safely to sea. The lagoon was too shallow for the Carthaginian ships to follow. They were forced to retire, leaving besieged Motya to its fate.

Dionysius went quickly to work. The lagoon that over the centuries had provided such a useful anchorage for the Motyans now revealed a fatal flaw. It was too shallow to prevent the inexorable inching up of siege engines along the causeway and against Mo-

tya's wall. What happened beneath that wall as the engines battered away at it has been pretty well worked out by archaeologists. The Greeks did come up the causeway, which they had rebuilt, and launch their main attack at the town gate. A great many arrowheads and lance tips have been found there, a far heavier concentration than in any other part of the island, attesting to the desperate fighting that went on in front of the gate. Apparently the Syracusans broke through it, only to find themselves in a casbah-like maze of strongly built houses several storeys high, each a fort in itself. The Motyans got up on the flat roofs and crept from one building to another to counter any concentration of Greeks below. As a result, though badly outnumbered, they sentenced the invaders to days of the nastiest kind of alley combat before resistance was broken.

Motya could have given up at once, as the eastern Phoenician towns so often did, and might well have been shown a little mercy. But there was a tenacious streak to the Phoenicians. Having once made the decision to take a siege, they would not give up, even when their cause was hopeless. Ritual suicide again—this time on a mass scale? Perhaps. Sidon suffered dreadfully in the aftermath of one siege, Tyre from three. Carthage was defended literally to the last man. And so, it seems, was Motya. It was totally crushed. The invaders went on such a rampage of killing in the alleys that the Greek commander was able to stop it only by ordering the survivors into the temples and forbidding his soldiers to go in after them. Thereupon the city was looted of all its valuables and probably put to the torch.

Today the flat area in the centre of the island, once jammed with buildings, is a vineyard. Much of the

old stone, as previously noted, has been carted away to make jetties on the mainland. What is left is underground. A plough occasionally bangs into a block or column. Bits of pottery are constantly turned up, and once in a while an entire vase. What else lies beneath the vineyard is really not known, for there is a great deal of work left to be done at Motya. Its systematic exploration was begun about a hundred years ago by an Englishman, Joseph Whittaker, who eventually purchased the entire island and wrote a book about his efforts there. The work is being carried on today by the Italian archaeologists Sabatino Moscati and Vincinzo Tusa, as well as by a team from the University of Leeds in England. But funds are small and the work goes slowly.

Still, a great deal has been learned about Motya. For many years archaeologists thought that Motya was a "pure" site in the sense that its rubble had not been turned over again and again by succeeding generations of citizens. Traditional historians relate that after its fall there were few, if any, Motyans left to rebuild it. The city was abandoned, and the survivors moved to another Carthaginian town, Lilybaeum, on a peninsula not far away. In the past few years, however, scholars have decided that Motya was reoccupied—probably as early as 396 B.C.—by Greeks and Romans. Thus it is no longer possible to classify all the ruins as Carthaginian.

That Dionysius burned Motya in 397 B.C. is evident from the great amount of ash and charred wood among the ruins. Many of the buildings that have been uncovered so far reveal foundations and probably lower storeys of stone, with floors of stone or plaster. But the ash deposits suggest that the upper storeys were made of wood. The main gates to the

town probably were of wood also; there are sockets in the walls to show where their hinges were hung. Piles of nails and cinders have survived in the rubble at the town entrance, just where they would have been had the gates been burst open, broken up and then completely burned.

Not far inside the main gate is a potter's shop. A kiln survives, together with a stock—laid out to dry—of the yet-to-be-glazed red-slip pots that the Motyans made in large quantities. They also did a great deal of fishing, weaving and dyeing, using looms murex for the latter. Although the nets and looms they used have long since disappeared, the weights employed as sinkers or loom weights have not. They are all over the place in the ruins, the cheaper ones of terra cotta, the better ones of marble.

All sorts of little whiffs of Motyan daily life come steadily on the warm air. Large stone drums have been discovered. They were first thought to be rain barrels, but later were found to have their bottoms reinforced with cement. Some had traces of iron linings. Apparently they were used to grind corn. In due course the debris in the main street leading from the outer gate was cleared away. The street has ruts ground into its paving representing centuries of travel by heavily loaded creaking Motyan carts, whose size can be calculated by measuring the distance between the ruts. Less worn are several flights of steps running down from the walls to the waterfront. At least one flight had been installed such a short time before the siege that it had no time for wear at all. Covered ever since by debris and dirt, the stone surfaces are as square and smooth as they were on the day they came from the quarry.

Greek influence is everywhere. Clearly there was

Loom weights have been found in great numbers in the rubble at Motya. Made of small bits of terra cotta or of stone, each with a hole in it, they were used to hold thread taut while weaving and were decorated with colours and designs that suggest family ownership. The one at far left bears the imprint of a running figure.



much traffic between Greeks and Motyans. Here, as everywhere else in the Mediterranean world, old local styles were no match for the overwhelming attractiveness of Greek ones. The best-preserved foundation of a private house has a mosaic floor that combines Greek and Phoenician patterns, and a Greek-style portico outside.

It seems Greeks, too, lived on Motya before and after 397 B.C.—presumably artisans and traders, but residents permanent enough to have their own temples. Even though the two peoples were long-time enemies, there apparently was considerable contact between them. Certainly there were Greeks in Motya when the siege occurred, some probably as awkwardly caught there as were Japanese businessmen in California at the outbreak of World War II. But the corrosive hatred of Greek for Greek suggests that a good many of the ones reported to have assisted in the defence at Motya were simply enemies of Dionysius, that they felt far safer with the Motyans than they did with him.

Across the island the Motyans had a second entrance to their walled town. This was the sea gate. Instead of opening on to a street, it led, via a paved ditch or canal, to a rectangular pond the Motyans had cut out of their little island. Its paved walls have now been carefully uncovered and the accumulated

silt removed. Today it looks like a large swimming pool a bit under 170 feet long and about 10 feet deep. It may have been a cothon: a man-made basin for the repair and stocking of ships, similar to those found at Carthage, but much smaller and in a better state of preservation. (Not everyone agrees with this interpretation; some specialists think that the cothon was used as a tank in which fish were stocked—perhaps to be used as a ready food supply.)

Throughout the rubble at Motya are large numbers of steles, those simple gravestones or small commemorative shafts that were a hallmark of the Punic faith. The island's cemetery itself has been located, and confirms that the early Motyans burned their dead. Later, when either the island cemetery became too crowded or when Motya became strong enough to do so, the cemetery was moved to the mainland, and cremation was abandoned in favour of inhumation. But on the island, most probably to save space, nearly all the graves that have been found thus far—in one rather crowded plot—contained a number of urns with human ashes inside them.

The Motyans apparently had a connection with an earlier, more primitive people. Whether they conquered them, elbowed them aside or moved in amicably with them is unclear. But they did absorb some of the burial customs of those earlier peoples,



who seem to have had one foot still in the Stone Age, since some of the tools and weapons that were put in those oldest graves were made of worked flint. These predecessors, though capable of making clay pots, had not refined the craft. The graves contain vases of an extremely crude nature, shaped by hand instead of on a potter's wheel.

These simple little fragments of a simpler culture are very interesting, for they suggest how it was that the Carthaginians were able to exploit their markets so successfully for so long. It can be assumed that many of the peoples with whom they came in contact—on the islands of the western Mediterranean, in Spain, in Africa and along the Atlantic coast—were similarly backward in their technology. A Carthaginian clay pot, no matter how inferior it may have been in contrast to one made in Athens or Crete or Egypt, still would have seemed a marvel of symmetry to a man who had never before seen anything like it and was therefore delighted to give up much more valuable material in order to get it.

In 1919 another burial ground was located on Motya, not far from the first one. Here the urns were very small, most of them not more than a foot tall. One after another they were opened and, like the urns at Carthage, contained the ashes of only the very young—animal and human babies. This was no or-

dinary graveyard where the dead were laid away, but a holy place, a Tophet, where the living young were sacrificed in an offering-up of one's first-born—or, as a substitute for the first-born, an animal.

That, for the present, is about all that can be said about Motya. Its abrupt end as a Carthaginian settlement in 397 B.C. makes it a fascinating place to visit, more so in many ways than two Carthaginian cities that continued in Sicily: Panormus (modern Palermo) and Lilybaeum (modern Marsala), the two bases from which Carthage continued its struggle with the Greeks for control of Sicily. That battle went on with various ups and downs for another century, with neither side able to gain a decisive edge over the other for any length of time. For Carthage it was a period of growing power and prosperity. The city was beautified and enlarged. An increasingly big hunk of African hinterland came under its control. Until the Third Punic War, which resulted in the city's fall, Carthage had been invaded only a couple of times. Its campaigns were fought overseas and it was not exposed to the recurrent rapine and pillage that had scarred many other ancient states.

Despite these advantages, Carthaginian affairs were by no means as serene as they should have been. The Sicilian wars, while waged away from home,

nevertheless made themselves felt in the pocketbook. The mercenary army was always a heavy drain on the treasury, and so the prosecutors of the wars, the generals and admirals who headed up the campaigns, came under mounting criticism for their inability to win lasting victories. Being a Carthaginian general—while it may have been immensely profitable—was never a sinecure. Now it became increasingly risky. Reinforcing the built-in hostility of all Carthaginians to anyone who grew too powerful or too successful was the hostility of the court, or Council of 104. This body of narrow-minded, jealous mercantile aristocrats was unforgiving, quick to second-guess its commanders, quick to jerk them back to Carthage for trial at the first sign of failure. As time passed, the council grew harsher. By the outbreak of the first war with Rome in 264 B.C. the job of Carthaginian field commander had become positively lethal. According to legend, one military leader was crucified for having allowed himself to be captured in a surprise attack. Another lost a town and was heavily fined. A third was crucified for suffering a defeat while at sea. A general named Hasdrubal was crucified for failing to capture Palermo, and another named Hannibal was crucified by his own soldiers after a battlefield loss.

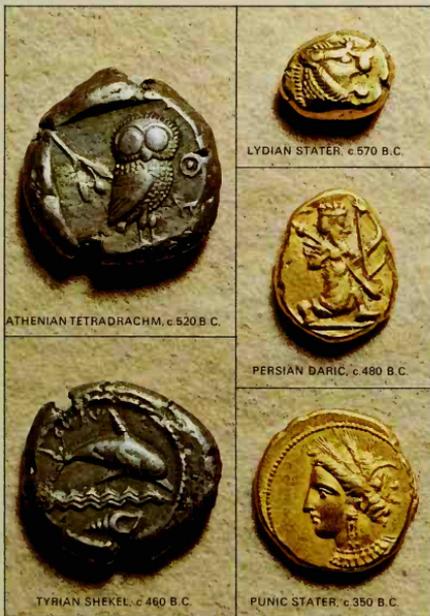
Under such circumstances, why did anyone want to be a general? For wealth, honour and social eminence, of course. But there may have been deeper reasons. Many of the men chosen for Carthaginian military leadership were smouldering hawks with a long passion for command and a dream of power. The council was not above using them to pursue the mercantile aims of its members, confident of its ability to keep them in rein. The generals, for their part,

vied for command, hoping they could keep on winning and thus stay in the council's good graces.

In the inevitable atmosphere of mutual suspicion, a consistent foreign policy became hard to maintain. Carthage's failure to find a better solution to the problem of delegating power to—and trusting—its generals partly explains why they did not succeed in driving the Greeks from Sicily, even when all of Greece was hopelessly divided in the chaotic aftermath of the death of Alexander the Great. A final Greek spasm in Sicily was contained only with the help of the Roman forces, and Carthage suddenly found itself face to face with a new and even more formidable enemy.

Now, for the first time, the essential weakness of Carthage was revealed, Roman power was based on real estate: over a good many decades a big section of Italy had been solidly welded by conquest or by treaty into a single political unit—the whole defended by a large and vigorous citizen army. The basic Carthaginian power was built around money—money to pay others to do their fighting for them. Aside from the farming areas immediately surrounding Carthage (and teeming with discontented second-class non-citizens), the empire had no property but trading posts. Its primary interest was wealth rather than imperial dreams. It regarded warfare as just another tool in the pursuit of wealth, and was willing to invest in mercenaries, as it would in any other kind of merchandise, when it felt that they were needed to ensure the continuing flow of money.

Although Carthage behaved in an imperial way, often acting as if it controlled an empire, what it really controlled was trade. The North Africans, whom the Carthaginians treated in such a high-handed manner



ATHENIAN TETRADRACHM, c. 520 B.C.

LYDIAN STATĒR, c. 570 B.C.

PERSIAN DARIC, c. 480 B.C.

TYRIAN SHEKEL, c. 460 B.C.

PUNIC STATĒR, c. 350 B.C.

The introduction of coinage by others was enormously helpful to traders like the Phoenicians. The oldest coins found in the Mediterranean are Lydian and Greek. Since weight, not size, counted, the earliest were irregular lumps with a design stamped on them to guarantee value. Such a lump is the Lydian coin at top right, made of electrum, a silver and gold alloy. The Greek coin bears the letters "A H E" to indicate it was minted in Athens. Persia first produced coins in about 480 B.C. with designs showing a running king; then Tyre some 20 years later; and Carthage 100 years later yet. At bottom right: the goddess Tamit, on a gold Carthaginian stater.

for so long, were never under secure control. Nor were the other Punic cities in the west. Nominally subservient to Carthage, they were never a "part" of Carthage. They ran themselves, picking up whatever crumbs of trade they could. Out of long dissatisfaction with the size of those crumbs, some defected when the showdown with Rome came.

It came, predictably, over Sicily after a series of petty disputes over control of that key island. In 264 B.C. war broke out. It dragged on for more than 20 years, and was decided humilatingly for Carthage with, of all things, a naval disaster. The Romans had started the war with no knowledge of naval strategy whatsoever and no fleet; they had to use a captured galley as a model in order to build squadrons of their own. But the Romans quickly reached parity with the Carthaginians, and from that time on were certainly their equals at sea.

When the Romans finally won the First Punic War, they expelled the Carthaginians from Sicily and exacted a staggering tribute in silver over a 20-year period. It was Carthage's inability to pay both the tribute and the money due its mercenaries that led to the latter's revolt. The man who finally crushed the revolt was a tough and brilliant general of the old stamp. That man was Hamilcar Barca, founder of the so-called Barcid Dynasty. Disgusted by the scorpion-like political atmosphere at home, anxious to achieve something of the power his ancestors had enjoyed, possibly aware that if he stayed in Carthage he probably could never shake himself free of the oppressive and jealous hand of the council, Hamilcar Barca made the bold decision to return to Spain where he had led troops, and there try to establish a power centre for himself. He did so in 237 B.C., with his nine-year-old

son Hannibal, exacting an oath from the little boy that he would pledge himself throughout his life to the destruction of Rome.

The Barcids—five of them: Hamilcar; his son-in-law, Hasdrubal; and his three sons, Hannibal, Mago and another Hasdrubal—were extraordinary men. Of soaring ambition and incredible vigour, they vaulted right out of the narrow mercantile shell that had constricted the Carthaginian autocrats. They saw the necessity of combining mercantilism with an ongoing military and political policy. They quickly carved out a large private fiefdom for themselves that comprised almost the entire southern half of Spain, a far larger territory than that of Carthage itself. They subdued the native Iberians and developed a small but extremely able mercenary army financed by the Spanish mines, which they now controlled and whose output they expanded. The Roman indemnity was paid off. A second capital, New Carthage, was founded. This city in Spain became the independent power base that Hamilcar had long dreamed of ruling.

The Spanish enterprise was firmly established before Hamilcar was killed in battle in 229 B.C. His son-in-law, Hasdrubal, expanded it, but was murdered by an angry tribesman in 221 B.C. Hannibal inherited control at the age of 25, having been trained for the rôle since boyhood. He was another Alexander and endlessly inventive.

Many stories have come down to us about this particular Hannibal. One says he carried an assortment of different-coloured wigs and uniforms with him so that he could go anywhere in battle without being marked down by an enemy sharpshooter. He sta-

tioned lines of elephants in swift-running rivers so that their bodies would calm the waters and enable men, horses and baggage trains to cross places where otherwise they would have been swept away. He is reported to have ordered his troops to use boiling vinegar (probably sour wine) to crack rocks high in the Alps, and thus make a narrow track down a steep descent that was hopelessly slick and icy.

Hannibal had a truly Alexandrine vision of empire. Most of the people then living in northern Italy, France and Spain were members of a huge, squabbling, semi-civilized confederation of tribesmen known as the Celts. It was Hannibal's idea, having subdued many of the Spanish tribes and welded a potent army out of them, to rally all the tribes for a general uprising against the Romans. Once Rome was crushed, he would turn the entire western Mediterranean into a Carthaginian empire, which he planned to govern from Carthage. To get this plan moving he would, of course, have to deal with the Romans directly.

This posed an immense military challenge: how was he to get at them? And, if he succeeded in that, how would he beat them? They had a formidable reputation as fighters, and a large fleet. They had flattened Carthaginian armies and navies the last time around. To balance that past record Hannibal had supreme confidence in his gifts as a general and in the quality of his army, well seasoned by several years of active campaigning in Spain. Operating in the field, away from the hindrances of the Carthaginian government—a sole commander able to pursue his own policy through good times and bad—he felt he could win. He also knew he would be up against Roman generals chosen by public vote

Rome's unwitting tribute to its ancient enemy Carthage is this relief from Trajan's column, carved two and a half centuries after Carthage's fall. It shows a trireme, fully decked without Greek-style outriggers. The inspiration for the design seems to have been Phoenician. According to history, when Rome decided to become a sea power, it copied Carthaginian warships.



This profile is believed to be that of Hannibal the Great, though some scholars attribute it to the god Melqart. It is from a Carthaginian silver three-shekel piece minted in Spain between 237 and 207 u.c., at the time Hannibal was campaigning against the Romans.



for specific campaigns, then recalled and replaced by others chosen the following year. The Roman generalship was a political plum—usually awarded to aristocrats; few of these political generals had any military experience at all.

Finally, Hannibal proposed to fight not in Sicily, not in the distant tip of Italy, not at sea but in the Roman state itself, where it would doubtlessly hurt the Romans most.

Wasting no time, he captured Saguntum, a Roman-protected town in eastern Spain, and then headed overland for Rome, fighting or temporizing with the various tribes he encountered as he went along. He accomplished the incredible feat of marching an army—with elephants—over the Alps in the autumn of 218 B.C., through snowstorms, howling gales and sleet, with boulders being rolled down on him in the narrow defiles by fractious mountaineers. Most of his elephants died of cold and starvation in the mountains, and his army was in sorry shape when it reached Bologna, where he wintered and recruited new troops.

By spring Hannibal was again engaged by a Roman army, and won the first of a series of masterful battles, set pieces that are classics in military strategy even today. Knowing that the Roman generals were rash and inexperienced, all of them burning to make heroes of themselves, he slyly led them into trap after trap and obliterated entire armies. For the better part of two years he ranged over a hostile country, living off the land, fighting constantly, and had the Romans on the brink of defeat before they came sufficiently to their senses to put the command of their field forces in the hands of a wily old general named Fabius.

Fabius, nicknamed “Cunctator”, the Delayer, un-

derstood that General Hannibal’s principal weakness was that the longer he remained in Italy the more surely his army would shrink through illness, desertions and casualties. It was not being properly supported from Carthage; therefore, if it could be kept in a continuous state of harassment, but never engaged in large-scale combat, it would ultimately exhaust itself and have to leave.

Fabius put this strategy into effect. Hannibal, desperate for battle, dangled every lure he could think of in front of Fabius. He marched back and forth, left his camp undefended, exposed tempting detachments to be gobbled up. To no avail. Fabius watched Hannibal’s supplies dwindle, meanwhile devoting most of his energies to holding off a fiery faction back in Rome that was excoriating him for cowardice. Eventually Rome replaced Fabius with a vain demagogue named Varro, who took command of the army at Cannae and within days suffered a catastrophic defeat. The strategy Fabius had advocated was hurriedly reinstated.

Through one grinding, bloody year after another Hannibal managed to maintain himself or a military force in Italy, fighting much of the time. He took a number of important Italian cities—some by storm, others by defection of the inhabitants. But slowly his initiative crumbled. The more Italian territory he controlled, the more effort he had to expend to maintain that control. Meanwhile the Romans carried the war to Spain. That all-important province, from which Hannibal derived men and money, was in turmoil. It became yet another place for him to worry about as resources stretched ever more thin. His brother Hasdrubal was killed, then his brother Mago. Both had served him well as generals.

As the war continued a Roman general finally emerged who was a match for Hannibal. His name was Publius Cornelius Scipio, himself the son of another outstanding Roman general by the same name. After several victories in Spain, Scipio returned home and announced his plan to take the war to Africa. Two years later his army won a smashing victory against the local Carthaginian army. In a panic, the Carthaginians recalled Hannibal.

Once home the grizzled military genius was smart enough to know he was badly outgunned, and he sought a parley with Scipio in the hope of working out a peace treaty. Their meeting, whether historically accurate or not, has been dramatically described by the Roman historian Livy:

"Keeping their armed men at some distance the generals, each attended by one interpreter, met, being not only the greatest of their own age, but equal to any of the kings or commanders of all nations in all history before their time. For a moment they remained silent, looking at each other and almost dumbfounded by mutual admiration. Then Hannibal was the first to speak:

"If it was foredoomed by fate that I, who was the first to make war on the Roman people and who have so often had the victory almost within my grasp, should come forward to sue for peace, I rejoice that destiny has given me you, and no one else to whom I should bring my suit. For you also, amongst your many distinctions, it will prove not the least of your honours that Hannibal, to whom the gods have given the victory over so many Roman generals, has submitted to you, and that you have made an end to this war, which was memorable at first for your disasters and then for ours. . . . Consequently we discuss terms

of peace while fortune is favouring you—a situation most ominous to us, while you could pray for nothing better.

"As for myself, age has at last taught me, returning as an old man to my native city from which I set out as a boy, success and failure have at last schooled me that I prefer to follow reason rather than chance. In your case I am apprehensive alike of your youth and of your unbroken success. . . . It is not easy for a man whom fortune has never deceived to weigh uncertain chances. . . . The greatest good fortune is always the least to be trusted. In your favourable circumstances, in our uncertain situation, peace, if you grant it, will bring you honour and glory; for us who sue it is necessary rather than honourable. Better and safer is an assured peace than a victory hoped for. The one is in your own power, the other in the hands of the gods. Do not commit the success of so many years to the test of a single hour."

Hannibal went on to say that the Carthaginians would give up all Sicily, all Spain and all Sardinia, plus any smaller islands lying between, and would henceforth confine themselves to the African coast. His speech was a clever one but, according to Livy, it moved Scipio not at all.

When Hannibal was through talking, Scipio began. "Prepare for war," the Roman general bluntly said, "since you have been unable to endure a peace."

The two met the next morning near the inland city of Zama. Hannibal was defeated and the Second Punic War came to an end.

The loss of the war was crippling to Carthaginian ambitions. Pinned down along a narrow strip of coastal Africa, prevented by treaty with Rome from waging war, denied the wealth of Spain with which

to rebuild a trading capability, the fleet burned by order of the Romans, their territory reduced to a small holding in the countryside directly around the capital, scarcely able to raise a huge annual indemnity for war damages, the Carthaginians were beset on their own back doorstep with an even graver problem. In earlier years, while the issue of the war still hung in the balance, the Romans had recruited the help of a Libyan tribal leader, Masinissa, to stir up trouble in North Africa. The end of the war found him at the head of a desert kingdom and with a large force of predatory, prowling tribesmen as his subjects. Under the terms of their peace treaty with the Romans, the Carthaginians had sworn not to take up arms against Masinissa or anyone else in Africa.

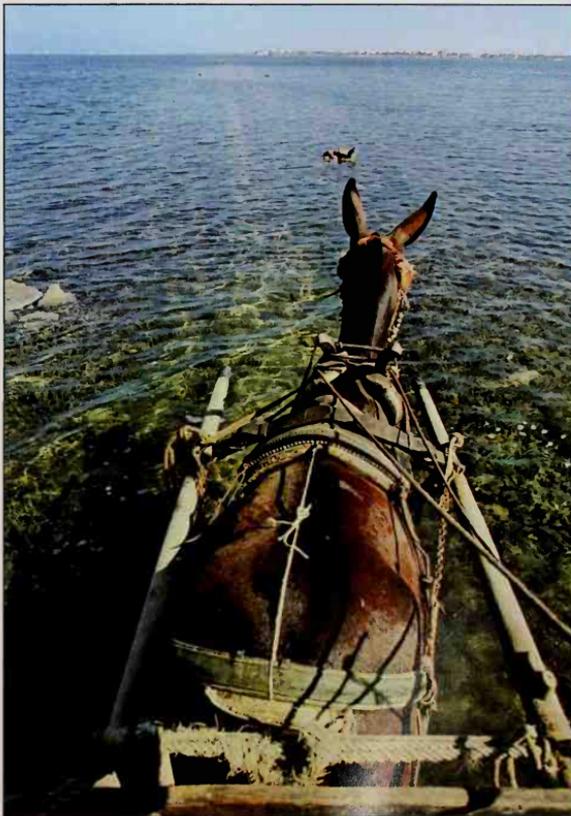
For more than four decades the Carthaginians honored this clause in the peace treaty. Time and time again a representative from Rome was required to mediate disputes. Meanwhile Masinissa became ever bolder and greedier. His raids and nibblings finally provoked the Carthaginians into a reprisal. That was all the Romans needed. Jealous of even the feeblest recovery efforts of Carthage, they fell on it again. In 149 B.C. the last of all the great sieges endured by Phoenicians both east and west was played out at

Carthage. By the winter of 147-146 B.C., the inhabitants had barricaded themselves on their peninsula behind a maze of walls and defensive ditches. For some months they held off the Romans, slowly being squeezed into a smaller and smaller perimeter. Starving, hopeless, they nevertheless fought on. Finally they were penned in the fortifications on top of the Byrsa Hill, where Elissa had established her citadel some 667 years earlier. There was a large temple to Eshmun on top of the hill. At the very end the handful of survivors set fire to the temple, crowded inside and burned themselves alive.

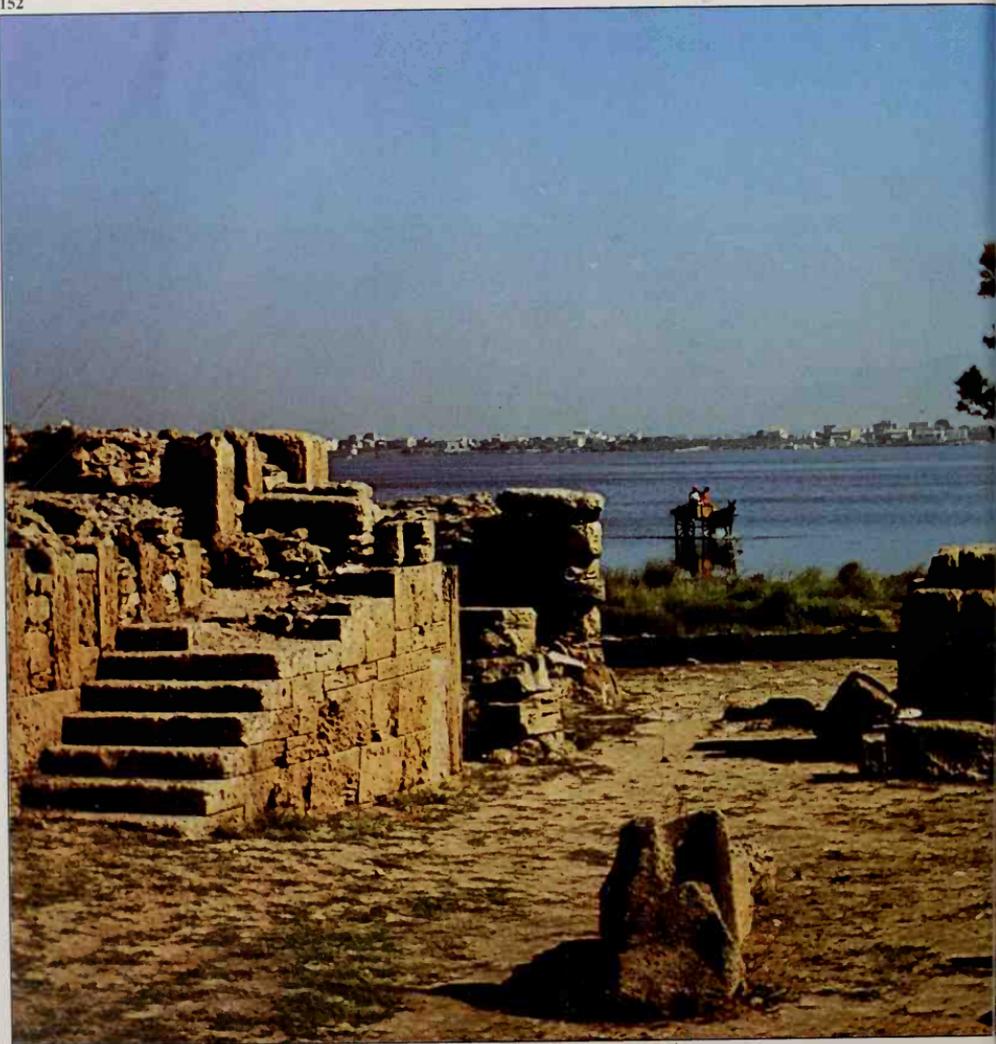
It is curious that with all the violent deaths in between—the political murders, the crucifixions of generals, the barbaric treatment of slaves and lesser people, the horrible atrocities of the mercenary war, the ritual mass slaughter of war prisoners, the sacrifice of no one knows how many infants in homage to Baal—the beginning and end of Carthage, both, should have been marked by self-destruction. Like Carthage's founder, Elissa, the last survivors of the city committed mass suicide, either in despair or in a final act of acknowledgment to their fiery gods. Carthage was in many ways a dark place, and its end seems fitting to its history.

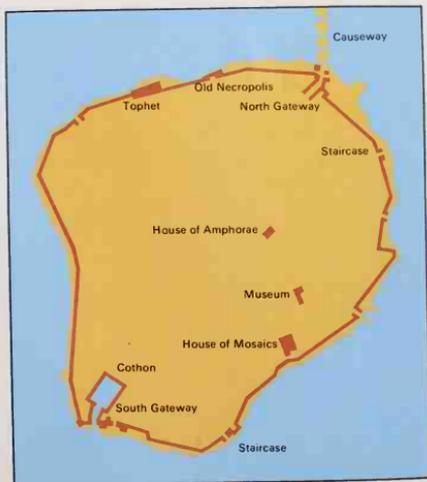
Motya: A Key Outpost in Western Sicily

About 600 B.C., when Greek colonists were pouring into eastern Sicily, the Carthaginians decided to counter the competitive expansion by fortifying Motya, a small island at Sicily's western tip (*maps below*). Motya was well chosen. It had an excellent anchorage, thanks to the sheltering arm of Isola Lunga to seaward. The water in the lagoon was shallow enough for the construction of a causeway to Birgi on the mainland. This shallowness ultimately proved fatal, for it enabled a Greek siege army to approach with siege engines in 397 B.C. and use them to pound down Motya's walls, then destroy the city. Before that, however, Motya's strategic importance was great. Relying as well on two other settlements, at Solunto and Panormus (Palermo), Carthage was able to keep the Greeks out of the western Mediterranean for more than 200 years.



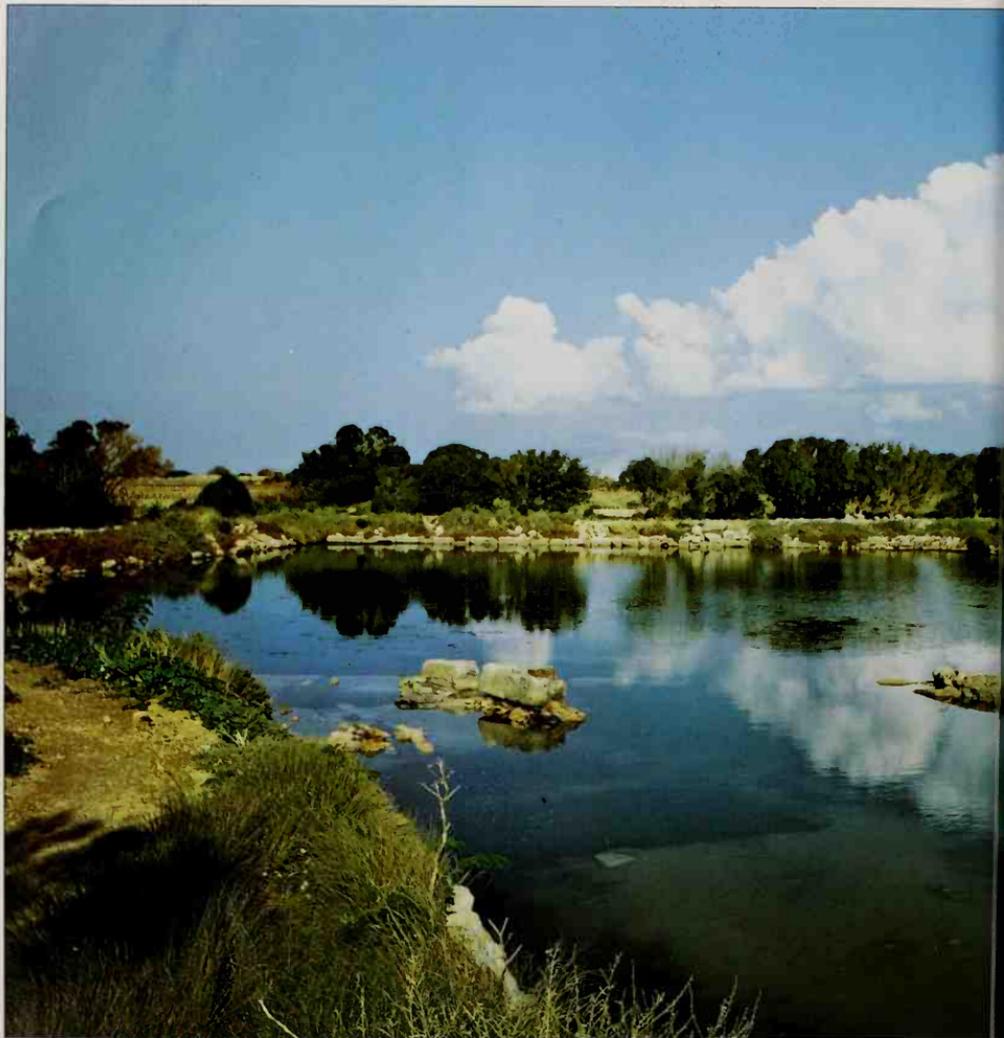
Motya's causeway, now a foot below water, is still used by Sicilian carts. Projecting stones mark its course to Birgi, one mile away.

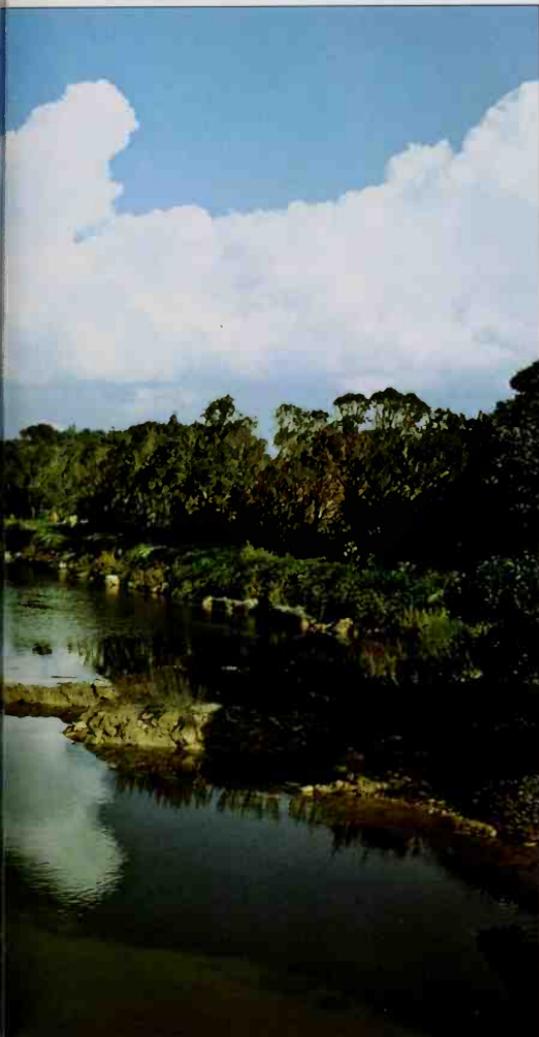




A circular island one-third of a mile wide, Motya was ringed by a thick wall about 30 feet high, strengthened by towers at intervals. There were two heavily fortified entrances: a northern one, connected by a causeway to the mainland, and a southern one that served as the island's sea gate and was connected to a cothon, a man-made inland harbour. Other important archaeological finds are: external staircases, an early burial ground, the Old Necropolis, with the Tophet near by, where infant sacrifices were made, and two dwellings—the House of Amphorae and the House of Mosaics.

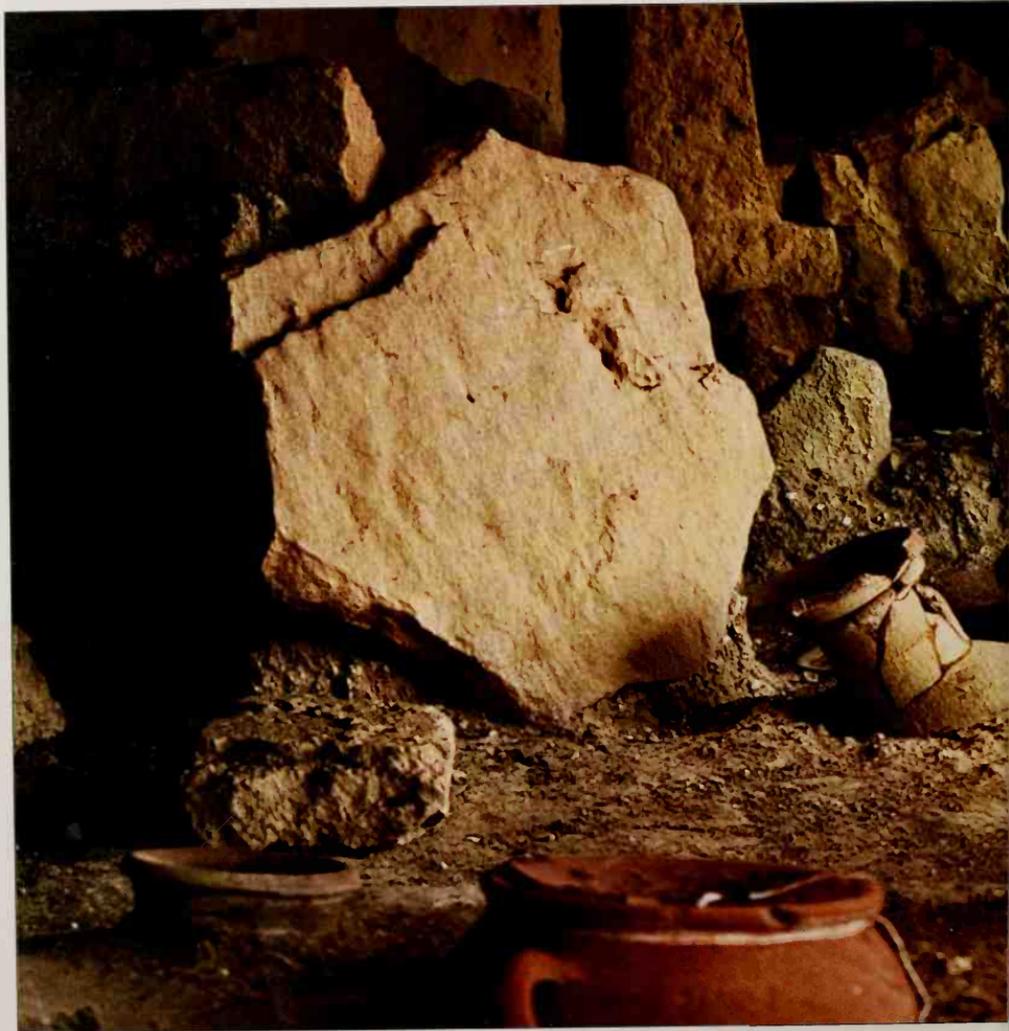
Motya's north entrance opened on the causeway, over which a cart is seen approaching. It was flanked by two extra-large towers angled so that they looked down on a series of gates, all of which an invader would have to break down if he hoped to enter the city using this approach. Steps to one of the towers are at left. In the centre of the picture is Motya's main street, divided down the middle by the ruins of a wall that separated incoming from outgoing traffic. Ruts from Motyan carts are still visible in the paving.



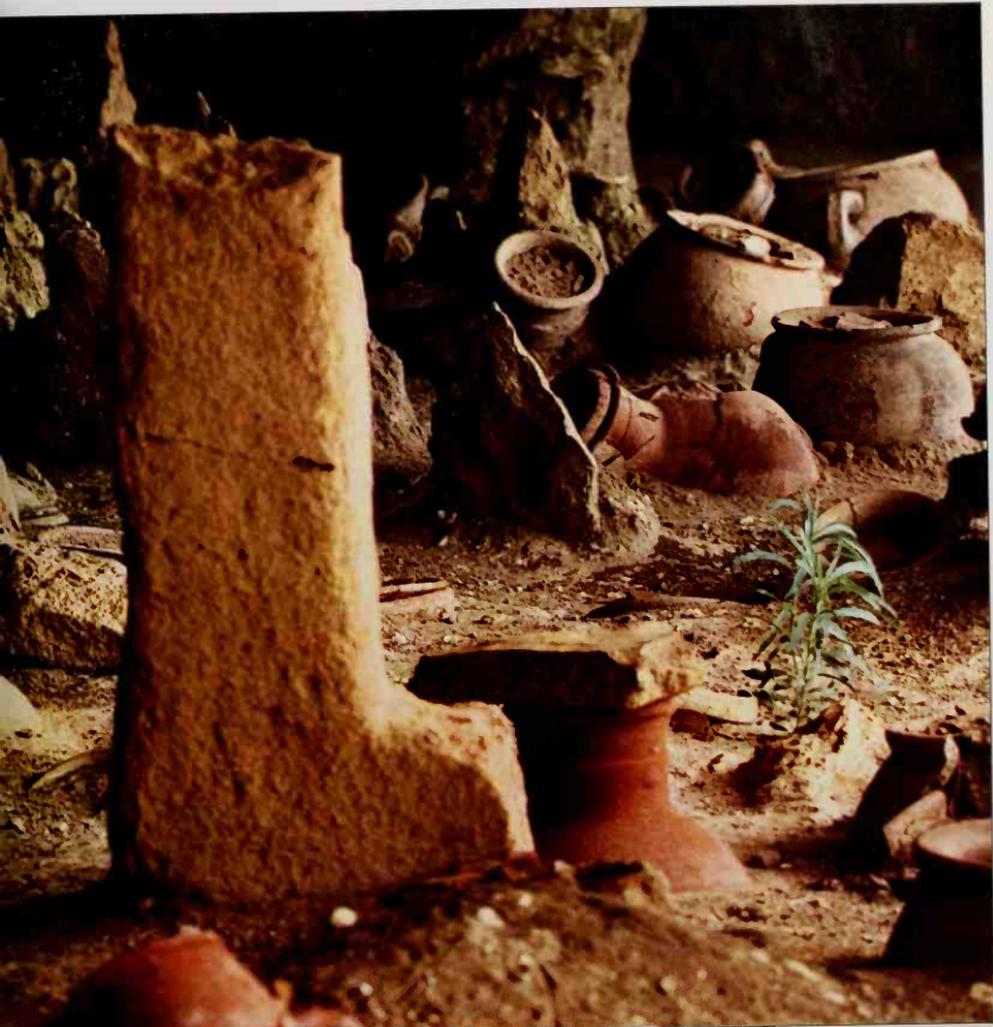


Stone blocks line the entrance to Motya's cothon. Some have holes in their sides, suggesting that poles were inserted in them to hold a vessel in place while hull repairs were completed. This entrance, also, had its defensive towers. During the siege of Motya the channel was blocked with three big rocks.

Motya's cothon is the smallest but by far the best preserved of Phoenician examples. It is 168 feet long, 115 feet wide and about 10 feet deep at its maximum. It was entered by the paved channel in the foreground, some 23 feet wide, and had quays on either side for the unloading of cargo. Once inside the cothon, a ship presumably would have been tied up to a wall, preparatory to undergoing repairs, refitting and reloading.

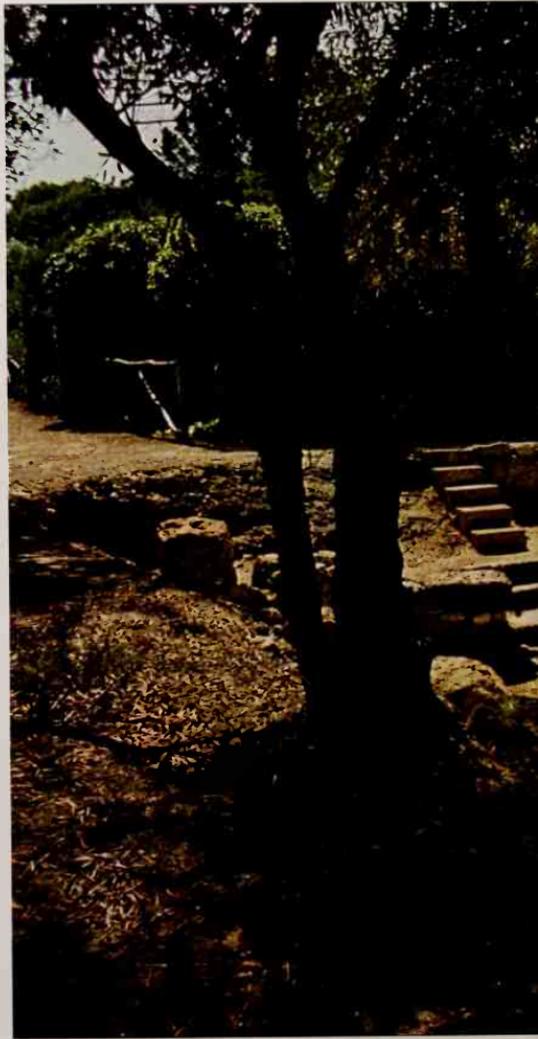


Motya's Tophet, or sacrificial area, has been excavated to reveal some of the clay urns that still hold ashes of infants and baby animals sacrificed



there. The stone at centre is a stele, or gravestone. Steles are common at Motya, and often bear the symbol of the goddess Tanit (page 131).

The House of Amphorae, so-called because of the many clay containers found in it, was excavated in 1968. It is a peculiar mixture of what may have been an old Motyan pottery works and a later structure—perhaps a private home—built by a Greek owner after the city's fall. The Greek column in the centre of the picture suggests that history. Evidence for the earlier pottery works is found in the nearest corner of the excavation. The waist-high platform there may have been for the working of clay. It has a stone rim around it, a smooth top and a drain-off channel.



The House of Mosaics is named for the designs in the floor of its portico. They are made of light and dark pebbles set in mortar. The lion and bull shown here are Phoenician in character, but the edge design is Greek—another fascinating combination of styles. A cultural mix would have occurred naturally at a place like Motya, where Greek artisans and businessmen are known to have lived before and after the fall of the town.





far left of each of the chart's four sections identifies the great geological eras into which the earth's history is divided by scientists, while the second column lists the archaeological ages of human history. The key dates in the rise of life and of man's outstanding accomplishments appear in the third column (years and events men-

tioned in this volume of *The Emergence of Man* appear in bold type). The chart is not to scale; the reason is made clear by the bar below, which represents in linear scale the 4,500 million years spanned by the chart—on the scaled bar, the portion relating to the total period of known human existence (*far right*) is too small to be distinguished.

Geology	Archaeology	Years B.C.	Geology	Archaeology	Years B.C.
Holocene (cont.)	Neolithic New Stone Age	9000	Holocene (cont.)	Bronze Age (cont.)	2500
		8000			2000
		7000			1500
		6000			1400
	Copper Age	4800		Iron Age	1000
		4000			900
		3500			800
					700
					500
	Bronze Age	3000			200
		2800			0
		2600			

Two thousand million years ago

One thousand million years ago

First oxygen-breathing animals (900 million)

First animals to possess
backbones (470 million)

First men (2 million)

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