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ARAMCO WORLD magazine

JANUARY-FEBRUARY 1971

OMAR—AS IN BRADLEY

A familiar and amusing sight on a highway bordering Lebanon's miles of beaches is this sturdy pushcart vendor with his ingeniously arranged display of stools for sale to beachgoers.

ARAMCO WORLD magazine

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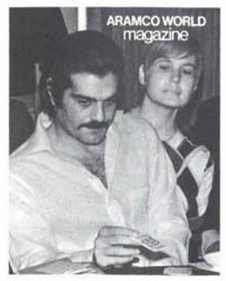
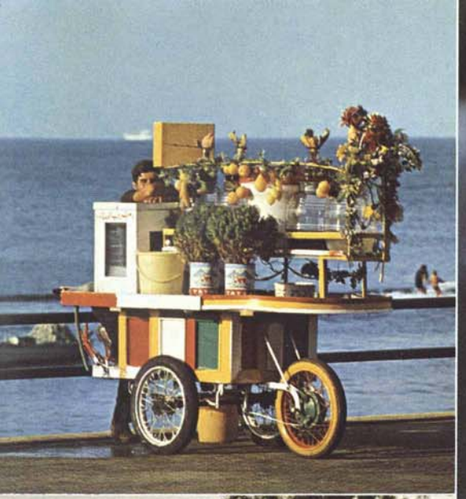
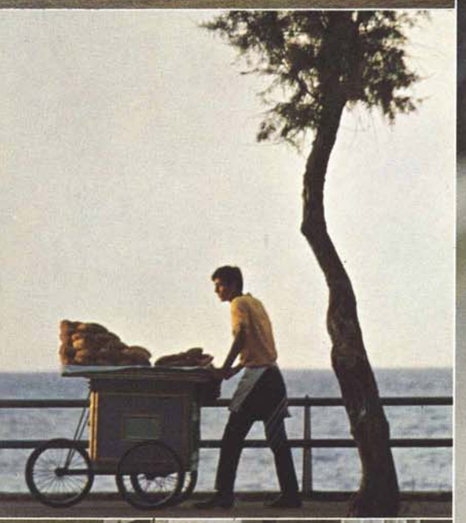
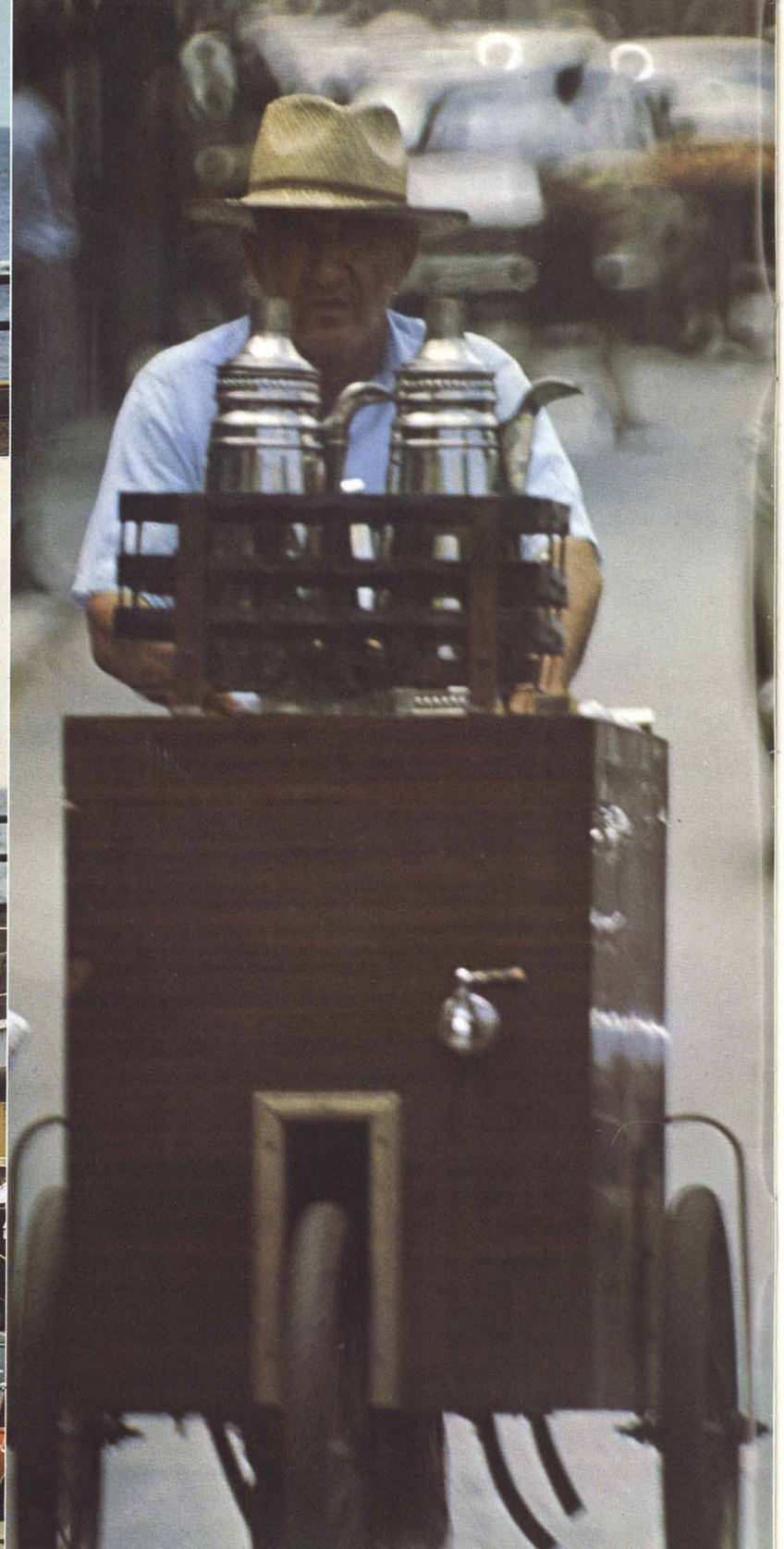


Cover: Critics of Omar Sharif may question his talent but not the dynamic good looks which catapulted him to stardom in *Lawrence of Arabia* in 1962 and which, as shown in Khalil Nasr's photo of him at Lebanon's VIIth International Bridge Festival, still attract the breathless attention of girls everywhere. Story on page 14.







Years ago pushcarts were common and colorful fragments in the noisy mosaic of American city life. On New York's immigrant-jammed, lower East Side, at Boston's bustling, historic Faneuil Hall, up on Federal Hill in Providence, along Roosevelt Road in Chicago, and in the busy market places of San Francisco, brass-lunged street vendors pushed and jostled their way into the economic life of America.

Most of them have disappeared by now, but in the countries that fringe the Mediterranean, the countries from which so many of the American street vendors emigrated, the tradition of the push-cart lives on. In such cities as Naples, Dubrovnik, Athens and Istanbul, thousands of pushcarts still take to the streets at dawn laden with an unimaginable variety of products that their indefatigable owners confidently expect to sell before the day is out.

In Beirut, especially, the ubiquitous pushcarts, laden with gravitationally-impossible piles of goods, have long been a source of delight—and service—to tourists. They have also been a not unimportant arm of the city's merchandising system. Pushcarts sell an extraordinary variety of goods: bright wooden stools with woven straw seats, ice cream, water

THE PUSHCARTS OF BEIRUT

PHOTOGRAPHED BY NIK WHEELER AND TOR EIGELAND

pipes, potted-plants, plastic kitchen utensils, plumbing equipment, hammers and saws, used and new dresses, men's suits, shoes, toys and books—to name just a few. Some pushcarts offer goods impossible to find elsewhere. Pushcarts also collect rubbish, deliver refrigerators and dispense hot and cold drinks. In the spring they stock strawberries, in the fall, hot chestnuts. When the season is right they're loaded with dates, sweet corn, almonds and apricots. Some, equipped with a dishpan and disinfectant-soapsuds to wash glasses, sell fresh orange juice. Others, equipped with hissing Coleman lanterns, offer flounder caught minutes before in the dark seas off a nearby beach. All cheerfully scream their prices to penthouse apartments, load up baskets lowered to them on a rope and send their goods skyward with an indifferent flourish and a bellowed reminder not to forget the money.

In recent years, unfortunately, they have also been a source of escalating irritation to drivers as they plod along busy streets, infuriatingly indifferent to blocked traffic lanes and blaring horns. And the Lebanese government, which has hopes of one day restoring the profitable western tourist industry, has begun a campaign to discourage what it sees not as a picturesque sight, but as a shabby outmoded reflection on Lebanon's status as a "modern" country. The campaign has been half-hearted so far, but the handwriting may be on the wall. Whether the pushcart people will read it is another thing. In the meantime they go pushing colorfully, insouciantly along as they have for generations.

THE GREAT GOOD LUCK OF MISTER SMITH

BY ROBERT S. STROTHER / DRAWINGS BY PENNY WILLIAMS

Somewhere under the vast hill that covered ancient Nineveh lay the missing 11th tablet. Could it be found? George Smith decided to try.

In the year of 1866, George Smith was employed as an engraver of banknotes in the city of London. He was a modest young married man with several small children, remarkable in his poor neighborhood only because he often spent half the night hunched over his desk in pursuit of an unusual hobby.

Six years later Smith suddenly found himself in the center of a controversy which swirled through Christendom, being hailed simultaneously as a hero of science and denounced as a blasphemous meddler. Four years more and he was dead at 36, struck down by fever, exhaustion, and heartbreak in far-off Aleppo.

That agonized death in Syria ended a career that in the short span of a decade had swung open a wide door on the early history of civilization. George Smith, by a stroke of incredible luck, had discovered on a jumble of neglected clay tablets proof that

man's cultural heritage was richer and far more ancient than had been supposed. It began, not with the ancient Greeks sung by Homer, but more than 20 centuries earlier in Babylonia, whose bloodthirsty kings, dimly glimpsed in the Bible, emerged from the tablets as eager patrons of agriculture and astronomy, engineering and the arts.

Hero worship started Smith on his hobby. The engraving shop of Messrs. Bradburry & Evans was not far from the British Museum where the fabulous treasures recovered recently from ruined palaces in the wicked old city of Nineveh were on display.

On a chance luncheon-hour visit one day, the rather frail young man saw at close range two giants of British archeology—Sir A. H. Layard and Sir Henry Rawlinson. Layard was famous for having discovered the Nineveh treasures. But in Smith's eyes, the burly Rawlinson was an even more glamorous figure, for Rawlinson, while leading the adventurous life of a political agent on the frontiers of the Empire, had brought off a dazzling feat of scholarship.

On trips to remote places, Rawlinson had copied mysterious inscriptions left by vanished civilizations, and then had taken up, as the most challenging possible puzzle, the task of reading them. After years of work he had succeeded in establishing the signs and rules of three of the lost languages so well that any scholar willing to put in enough close work could decipher them.

The cuneiform (wedge-shaped) writing of the ancient Assyrians was among Rawlinson's triumphs, although it turned out later that, unknown to archeologists at the time, George Freiderich Grotefend, a 27-year-old German school teacher, had cracked the same problem—on a bet—40 years earlier. Rawlinson and other scholars had gone much further, and it was mainly due to them that the clay tablets, buried in the wreckage of Nineveh 2,500 years earlier, now could be understood by the initiated.

A chance comment helped nudge George Smith toward fame. A Museum attendant remarked that it was a shame nobody took the trouble to read "them bird tracks" on thousands of clay tablets in the back room. Who could say what secrets in the long history of the Bible lands might not be revealed? Smith's vague ambition to emulate Rawlinson crystallized then and there into

a resolve: he would learn to read cuneiform. It seemed a daring goal for a man who had been forced by poverty to drop out of school at the age of 15.

It was not surprising that the tablets had been ignored in the excitement created by the tremendous finds Layard's diggers had hauled out of the ruined palaces of long-dead kings at Nineveh and its suburbs. The spectacular treasures are still among the most thrilling in the British Museum, just as similar objects taken from the nearby wreckage of Sargon's palace by the great French archeologist Paul Emile Botta are among the best in the Louvre. They include powerfully sculptured alabaster statues of human-headed lions and bulls with wings, fabulous five-legged beasts, friezes in beautifully executed bas-relief with scenes of war and the hunt, engraved chests, rich vases, well-minted coins, paintings, and a thousand other things—all from a highly-

organized civilization whose existence had been blurred by time into legend.

Nevertheless, while the Victorian public was flocking to the exhibit halls to see the wonders, George Smith plunged into his new hobby in the storeroom. Almost every day he slipped away from his engraver's bench to spend the noon hour poring over tablets or matching fragments broken by workmen in shoveling them around like so much coal. Tolerant Museum officials, noticing that Smith's sharp eye enabled him to see at a glance subtle differences not apparent to them, allowed him to make papier mâché "squeezes" for closer study at night.

Meantime, Smith was spending every shilling he could spare on books about Mesopotamia, the ancient "land of the two rivers," and about Nineveh and Babylon, its rival capitals in the days of the Old Testament. Within a few months, to the astonishment of the savants, Smith was deciphering cuneiform. With that accomplishment a lost world of marvels lay before him.

It was a fortunate chance that the tablets he studied came from the library of 30,000 "volumes" King Assurbanipal had collected 25 centuries before. That cultured young monarch, grandson of the bloodthirsty Sennacherib, was the world's first encyclopedist. His domain corresponded to the territory of modern Iraq and much of Syria, and its history runs back to ancient Sumer, first of all cities. The region had produced the first civilization in history, the first architecture, and the first science. Assurbanipal wanted to preserve in his capital all the knowledge men anywhere in the known world had gained.

"Seek out and bring to me the precious tablets for which there are no copies in Assyria," the King ordered his agents as far away as India and Egypt.

Works on farming and irrigation were especially interesting to the King. The land between the Tigris and the Euphrates rivers was made fertile in his day—as it had been for several centuries before him—by a network of well regulated canals, and

Assurbanipal wanted to make sure the methods he was sponsoring were as modern as any the Egyptians were using along the Nile.

The tablets poured in and were filed away in the King's vast new library which stood with equally splendid palaces and office buildings in a long row along the east bank of the Tigris. Already catalogued in the royal library were some astonishing books: a treatise on geometry as advanced as

the one Euclid wrote 1,500 years later (and which is still in use today); and an astronomical work on the *Saros*, or cycle of 223 lunar months over which eclipses repeat themselves. The Assyrians were keen astronomers, and had compiled at that time a continuous record of planet positions and eclipses which covered a far longer span of time than any similar record of our own era. They were good at arithmetic too. They divided the circle into 360 degrees of 60 minutes each, as we do today, and they found out that by giving numbers a value according to position, they could make a few symbols indicate enormous quantities. Other systems in use in antiquity were much more cumbersome, as anyone who has tried to multiply Roman numerals must know.

Archeologists smile over the story of an eager apprentice who could not sleep until he had deciphered the hieroglyphics on an

old bottle. The strange inscription yielded a humdrum message: "Please replace stopper after use." After practicing on similarly prosaic writings—deeds, accounts, and court decisions from the provinces—Smith moved up to more complicated inscriptions, and good luck marked his first try. He deciphered the Biblical story of Jehu's payment of tribute to King Shalmaneser, and thanks to the eclipse record, was able to establish the date as well. Sir Henry Rawlinson was impressed, and wangled a minor Museum job for Smith. In 1867 the eager young amateur's hobby became a profession.

Smith's luck held. His first feats as a professional were remarkable. He determined that the Elamites invaded Babylonia in 2280 B.C., and that a total eclipse of the sun had occurred at Nineveh in the month of Siva, or May, of 703 B.C. Those two solid dates were among the many he used to unlock the sequence of dynasties.

Smith's colleagues soon realized that he was a man of extraordinary powers. He could recall the complete contents of every tablet he had deciphered, how it looked, and where it was stored. When he went outside his special area to decipher some Cypriot inscriptions which had long baffled scholars, his friend A.H. Sayce hailed him as "an intellectual pick-lock" with a "heaven-born gift of divining the meaning of a forgotten language and of discovering the clue to an unknown alphabet."

Burrowing deeper into his treasure trove, Smith made an astonishing discovery. The "book" he was deciphering was the Epic of Gilgamesh, which is the very first written story in the history of mankind. Smith's copy had been stamped out on 12 clay tablets 3,000 years earlier, and it was an old tale even then.

But it was not the story's age that thrilled Smith. As he groped his way through the damaged eleventh tablet in the series, he could barely suppress an unscholarly shout. The narrative he was reading was nothing other than the Biblical story of The Flood—but the Epic of Gilgamesh was centuries old when Genesis was written!

Except for 17 lines missing with a lost fragment of the tablet, it was all there: the Lord's flood advisory warning, directions for building the Ark and stocking it with all the animals in pairs, the prodigious rainstorm. The landing on a mountain peak, the dispatch of birds as scouts, and the rainbow of promise at the end. Everything was the same except for Noah, who went under the name of Ut-Nipishtim in the earlier version.

Public interest in Assyriology, as archeological exploration in Mesopotamia is called, was especially keen in Britain and America a century ago. Everybody knew something of the background through familiarity with the Bible. The Prophet Abraham had walked its plains, Isaiah and other prophets had hurled curses—with good reason—at its cities, Daniel had emerged from his ordeal there, and Jonah was buried on one of its mountains. Beside the Waters of Babylon the captive Jews had wept for Zion, there they had marveled at the Tower of Babel, and there Nebuchadnezzar, who built the Hanging Gardens, had ruled in all his might and madness.

How much was inspired truth, how much legend? We know now, through recent excavations at Ur of the Chaldees by Sir Leonard Woolley, that the entire plain between the Mountains of Elam on the east and the Syrian Desert on the west—some 30,000 square miles—was once submerged by a tremendous flood, and that the Biblical story and that of Gilgamesh are echoes of a historical event remembered from the dawn of civilization.

But that's now. A century ago, all was in doubt. The raging debate over the creation of man which had been touched off by publication of Charles Darwin's *The Origin of the Species* helped bring interest in the findings of science on Assyria to fever heat. George Smith's discovery was well timed. His monograph on *The Early History of Babylon*, published in 1871, was eagerly read and hotly debated.

In a public lecture attended by William Gladstone and other notables, on December 3, 1872, Smith quietly announced that although part of the text was missing, the Epic of Gilgamesh showed that the Bible's account of the Deluge was merely a Hebrew adaptation of an age-old Babylonian story.

His statement created a sensation. People who regarded the Bible as completely original and equally inspired in every detail listened to Smith's summary with anger or dismay. Others who saw the sacred writings of the Hebrews as legends with some basis in fact were pleased. But almost everyone agreed in worrying about that missing fragment of Tablet Eleven. Smith really should have the complete text to work with. Perhaps the missing portion of the Epic of Gilgamesh had survived through 50 centuries and could still be found. It was that suggestion, shrewdly planted by George Smith and eagerly taken up by the public, that led to the great good luck of Mr. Smith.

Museum officials had been deaf to their employe's hints of a trip to Nineveh for a look around. The institution was hard up, of course, and Smith, after all, was a self-taught man in a minor post. Fortunately, the *Daily Telegraph* had a promotion man who knew a hot story when he saw one, and he persuaded the newspaper to offer a prize of 1,000 guineas to the man who would bring back from the ruins of Nineveh the missing fragment of the Flood story. As planned, it was Smith himself who took up the challenge.

For the ex-engraver, it was the chance of a lifetime, a dream come true. The Museum gave him a six-month leave of absence, and perhaps with the aid of the *Telegraph* he scraped together some money for expenses. In January 1873, he reached Constantinople.

Turkish government officials at that time were convinced that all archeologists were looking for gold. They scoffed at Smith's claim to be looking for a clay tablet, pointing out that the British Museum already had

several carloads of clay tablets, and two months of negotiations, backed by some mild pressure by the British Foreign Office, were needed to obtain the Sultan's "firman," or permission to dig. In March, however, Smith was aboard a horse, probably for the first time in his life, and crossing the Syrian Desert. Destination: Nineveh.

The remains of Nineveh are buried with an enormous mound or "tell" called Kuyunjik, which rises 90 feet from the desert floor on the east bank of the Tigris, immediately opposite the old Arab town of Mosul. Like all visitors to the site, Smith fell into melancholy thought on the vast span of human history cut off by destruction of the city by the Medes in 612 B.C. The site had been settled continuously since 5000 B.C., so that Nineveh had existed as a city almost twice as long as it has since existed as a ruin.

Nineveh's last years were its most splendid, but after Sennacherib made it the Assyrian capital, it lasted only 90 years. He had protected it with double walls and a 77-foot moat crossed by arched bridges, but it fell at last on that fateful August day, after a three-month siege. The troops of King Nabopolassar, father of Nebuchadnezzar, and his allies overran the ancient city with sword and torch. They slaughtered men, women, and children impartially, except for those they especially disliked, whom they impaled. When they left after days of wild murder and looting, Nineveh and all of its gorgeous buildings, including the finest library of antiquity, lay in smoldering ruins. The vengeful predictions of the Old Testament prophets had been carried out to the letter.

Rains over the centuries dissolved the mud-brick core of the wrecked buildings; dust from the desert created by destruction of the irrigation system swirled over the site, obliterating all signs of human habitation so thoroughly that when Xenephon and the 10,000 passed that way 300 years after the fall, they did not recognize it as a former city. Until the 19th century, when the great French archeologist Emile Paul Botta identified it, nobody even knew for sure where Nineveh had stood. Except for occasional stray samples dug out by

wandering Arabs, the clay tablets had remained under 20 feet of dirt, their hard-won knowledge lost.

Smith's heart sank as he began to realize the full enormity of his task. Nineveh itself had measured

three miles across, and it was the center of a "metropolitan area" which stretched 23 miles from the Palace of Sargon at Khorsabad (excavated by Botta) in the north to that of Nimrod in the south. That entire "Assyrian Triangle" is a mass of ruins, many of them left churned by archeological expeditions and by local robbers. The fragment Smith sought might be anywhere, if it still existed at all.

Assurbanipal's library was, of course, the logical starting place, but Layard's party had covered it up before hostile Arabs chased them off the "dig" 25 years earlier. Smith found it after a brief search, and then suffered a rude shock:

"This pit had been used since the close of the last excavations for a quarry," he wrote, "and stones for the building of the Mosul bridge had been regularly extracted from it. The bottom of the pit was now full of massive fragments of stone from the basement wall of the palace jammed in between heaps of smaller fragments of stone, cement, bricks, and clay, all in utter confusion."

It seemed flatly impossible that *his* special fragment of clay could have escaped destruction in the violence that produced such a tangle of rubble, but Smith had the eye of a hawk and an indelible mental image of what he sought. Besides, 1,000 guineas was a lot of money in those days, especially to a young man who had rarely had a pound in his pocket.

Smith's great stroke of good luck, surely one of the most remarkable in the history of science, came on May 14, 1873. As usual, he had put the day's crop of cuneiform fragments in a sack and ridden back to the khan in Mosul where he and his horse were staying. Shortly after he sat down to examine them, he leaped out of his chair in joy. His million-to-one gamble had paid off. The fragment in his hand was the missing piece of the Deluge story, and it contained the 17 lost lines. He had succeeded, as he wrote later, in filling in "the only place where there was a serious gap in the story."

The rest was anti-climax. With bland disregard for the urgencies of journalism, Smith waited for several days before telegraphing the proprietors of the *Daily Telegraph*. It was well that he did. The newspaper created a great stir with the story of the discovery in its issue of May 21, 1874, but told Smith that as far as they were concerned his mission was accomplished. Fortunately, Smith had used the interval productively. By creeping under tons of rocks which threatened to collapse at any minute, he salvaged "two portions of the sixth tablet of the Gilgamesh series relating to the conquest of the winged bull," he wrote in his subsequent book, *Assyrian Discoveries*. He also turned up an invaluable "King List," or record of the succession and duration of the Babylonian dynasties, and pieces of a cuneiform syllabary or dictionary.

"I searched all around for other fragments of this remarkable tablet," he reported. "Large blocks of stone, with carving and inscriptions, fragments of ornamental pavement, painted bricks and decorations were scattered in all directions, showing how complete was the destruction of this portion of the palace ... One day a workman [uncovered] the edge of a tablet which was jammed between the blocks of stone. We extracted the fragment of tablet, which proved to be part of the syllabary, and joined the fragment already found." The greater part of the rest of this tablet was found "adhering to the roof of the trench." On June 9, after giving a dinner for friends he had made in Mosul, Smith left for England with his treasures.

Honors interspersed with some brickbats were showered on the young archeologist upon his arrival in London. Some skeptics hinted that the Deluge tablets were fakes, and Smith's alleged discovery an elaborate hoax. Although echoes of those charges appeared in print (by the Religious Tract Society) as late as 1925, all significant steam seeped out of the controversy soon after Smith's return. His evidence that the Bible account of the Flood was borrowed from Babylon was too convincing to be denied.

The British Museum promoted Smith, and income from writing and lecturing helped put his wife and brood of small children in easier circumstances. In 1874 he made another attempt to dig in Mesopotamia, but the Ottoman government, offended by some of his remarks on Turkish rule, gave him such a bad time about permits that he accomplished little. He spent the next few months translating and piecing together Babylonian accounts of "The Creation," "The Fall," and the "Tower of Babel."

There is a widespread superstition that Fate manages to balance off a resounding bit of good luck with another equally bad. In the last year of his life, Smith was given good reason for believing it. He did, in truth, have one final triumph which might alone have insured him an honored place in the history of archeology. He was held up in Aleppo, in March of 1876, by reports of Muslim riots and an outbreak of plague in the Mosul region. To pass the time usefully he explored the upper reaches of the Euphrates, and discovered the ruins of a vast city whose existence had barely been suspected. It was Carchemish, the lost southern capital of the Hittite Empire, and its discovery, Professor Sayce wrote at the time, "bids fair to rival in importance that of Nineveh itself." With that feat, Smith's good luck ran out.

Accompanied by Dr. Eneberg, a rising young Finnish archeologist, he pushed on to Baghdad, and after exasperating delays there, was allowed by the Turkish authorities to move on to Mosul. But the trip was in vain. The area was in political turmoil, the Arabs were hostile and the plague epidemic had not burned itself out. Although Smith had the Sultan's grudgingly given "firman," local authorities would not let him dig.

"At every turn he was baited by the most pettifogging quirks and scruples," the London *Times* reported indignantly, "until at last he could bear it no longer and resolved to return home."

At that point his friend Eneberg fell suddenly ill and died, and the grief-stricken Smith, his own health rapidly failing, set off on horseback for the 350-mile ride across the desert to Aleppo.

It was a terrible trip. Smith grew steadily weaker as he followed an old caravan trail along the Turkish border, hundreds of miles from any medical care, eating what he could find in the miserable villages along the way, sleeping whenever exhaustion compelled him to stop.

Between spells of delirium he faithfully made entries in his journal. Some suggested ways to make the best use of his unfinished archeological work; others expressed his growing concern for the fate of his wife and children (who were pensioned later). Almost the last entry read: "I have done my duty thoroughly ... I do not fear the change ..."

In the village of Ikisji on the Turkish border, Smith collapsed and was left to die in a hut which he noticed was of the same primitive style as those first built on the site of Nineveh. With his last reserves of strength, he tried to put his notes in order.

John Parsons, a dentist who had been sent belatedly to search by the British Consul, found him there and took him in a cart over 60 bone-shaking miles to the Consul's home in Aleppo. There the man England was hailing as "the greatest of Assyriologists" died on August 19, 1876. He is remembered in an occasional footnote as a very lucky man.

Robert S. Strother, now a roving editor for the Reader's Digest, *has worked for the Associated Press, and* Time *and during World War II put out the Middle East editon of* Yank. *He has contributed more than 50 articles to the* Digest.

SHUTDOWN AT PLANT 11

BY BRAINERD S. BATES

PHOTOGRAPH BY A. M. AL-KHALIFA

When it comes to shutting down a plant oilmen are about as enthusiastic as a mother of six who has to send her washing machine back for repairs. Shutdowns cost money, especially when they involve such key units in production as the Arabian American Oil Company's Plant 11 in Ras Tanura.

Plant 11 is the crude distillation unit in the Ras Tanura Refinery. It manufactures what oilmen call the "middle distillates" — mostly kerosene and diesel fuel. Since the yield accounts for more than half Ras Tanura's total throughput, Aramco's operations men did not exactly jump with joy recently when a shutdown was ordered to permit major modifications to increase its condensing capacity.

What they had to do, basically, was add two more fin-fan condensers, revamp the plant's overhead vapor system, and replace its feed distributor to promote a swirling effect to heated oil as it enters the distributor column in order to increase the rate at which gases leave the oil. This part of the job required the installation of a sizable new stainless steel distributor inside the distributor column, whose only access is through a manway only 24 inches in diameter.

The engineers responsible for the job also decided that as long as the crude distillation unit had to be shut down anyway, it might as well be thoroughly checked out on the general soundness of its condition—somewhat analogous to giving a man a head-to-toe physical examination while he's undergoing abdominal surgery.

Because the key to getting the job completed in the shortest possible time was extremely detailed advance planning, a full six months before any scaffolding was erected or the first bolt pulled, planning engineers had begun to calculate how long each step—even the most minute—would require and how many men would be needed on what job. Then advance planners formulated a detailed sequence of jobs by craft and duration, laid out in ascending order each successive task, along with its own manpower and time-duration data, diagrammed the information, translated it into computer language and fed it into a computer at Dhahran headquarters.

The computer data sheets which came back showed the relationship of each job segment to the undertaking as a whole, revealed the earliest and latest times a particular task could be started to keep the whole project on schedule, and indicated which one of a number of job sequences would consume the most time, a vital element in advance planning methodology called the "critical path."

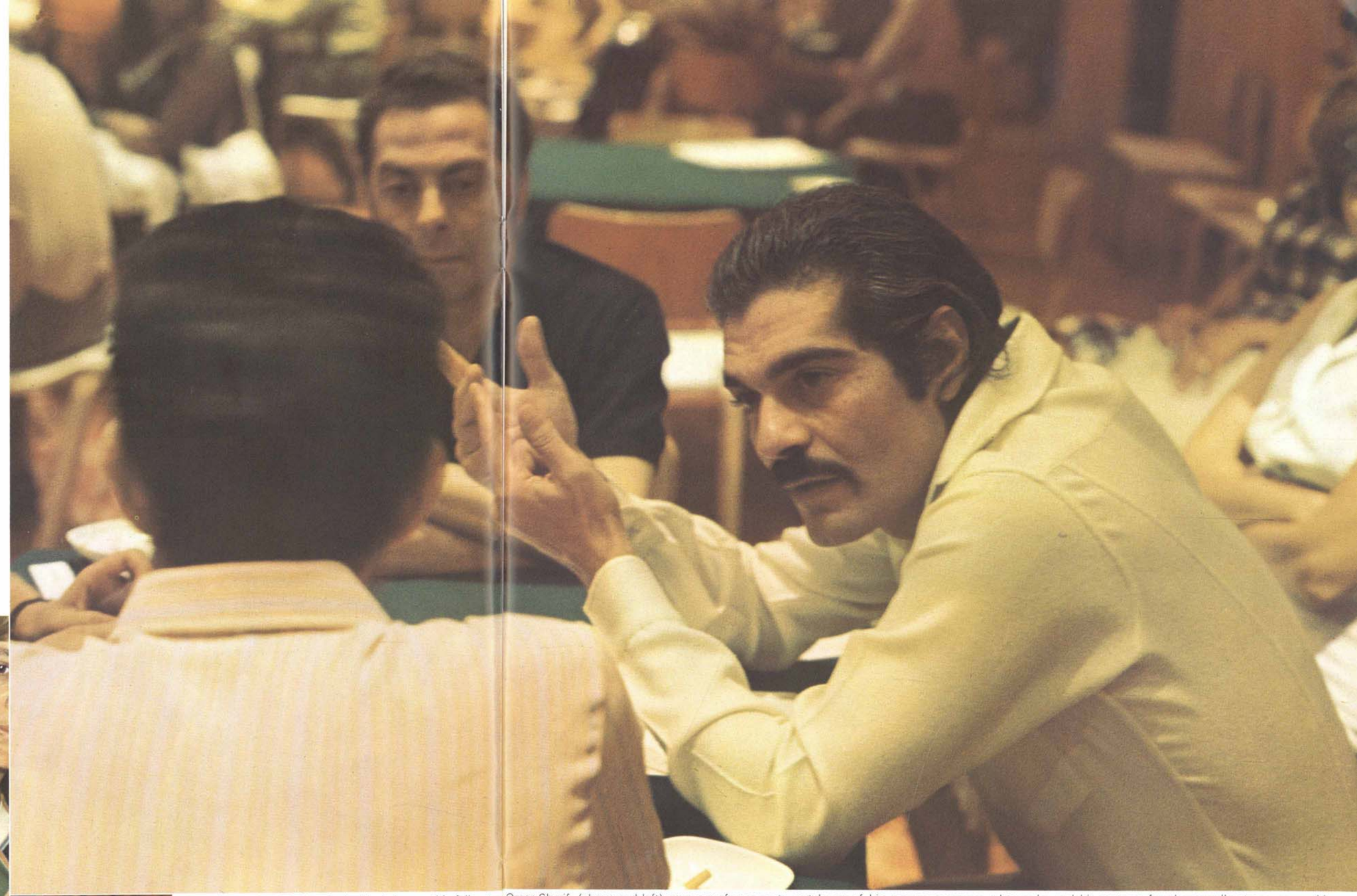
By now about 220 men from more than a dozen crafts, ranging from electricians and instrument men to welders, riggers and painters, had been assigned to the project. Those with more complex and critical assignments were brought to the plant well before it was shut down to receive thorough indoctrination as to what they would be doing when work got underway. These "dress rehearsals" cut down considerably on the amount of time Plant 11 was out of service.

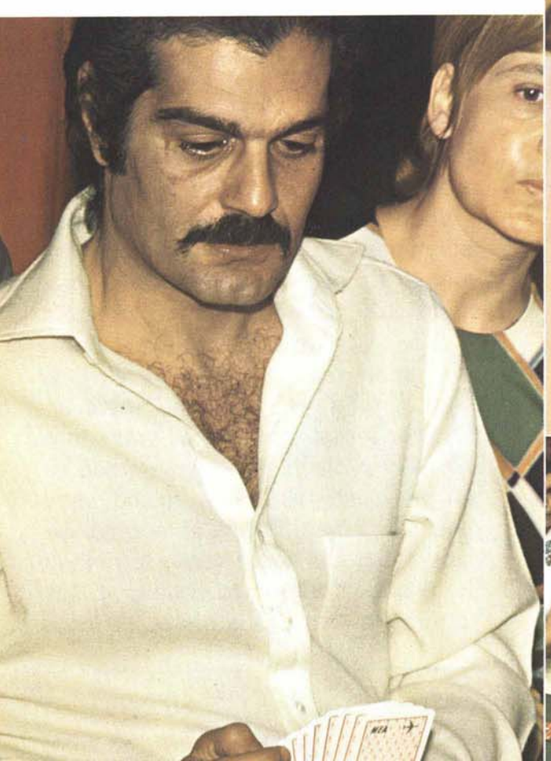
In order to make certain that the new stainless steel distributor would fit into the space allotted to it in the distribution column, the entire unit was first assembled in Ras Tanura's welding shop and carefully measured. It was then broken down into some 50 parts, which were carried to the work site, brought in through the narrow manway access, reassembled inside the column with 700 bolts and anchored by a complex welding procedure to the alloy-clad column walls.

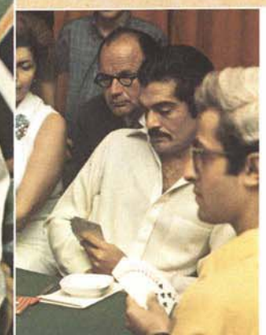
Such meticulous planning helped technicians and the work force involved to complete both the construction and maintenance projects in just 11 days. The relatively short time span required was in itself a boon. Even more important, however, the detailed planning that went into the twin projects enabled Aramco to tell its customers well in advance precisely when Plant 11 would be back on stream again, ready to deliver the products the ships calling at Ras Tanura Port would come in to load.

OMAR- as in Bradley

BY ARTURO F. GONZALEZ, JR.







At an international bridge festival in Lebanon this fall actor Omar Sharif, (above and left) gave a performance to match any of his numerous screen roles as he and his partners faced unusually strong competition.

In the Middle East they have a saying: "Support your local Sharif."

PHOTOGRAPHED BY KHALIL ABOU EL-NASR

Omar Sharif in the meaty role of guerrilla leader Ernesto Guevara in the film **Che.**

For years the leading men of the silver screen have fallen into rigid and distinct nationalistic patterns. The Americans sewed up the hardy cowboy roles; the Englishmen cornered the drawing room comedy market; the French were the lovers. If the world ever saw an Arab on screen, it was only as part of a cast of thousands besieging a Beau Geste fort or selling souvenirs in a scene set on the banks of the Nile.

But the times, as Bob Dylan sings it, "are a-changin'," and on the cinema scene today, one of the leading men most in demand is a slightly-built Egyptian with warm, moist brown eyes, slightly graying hair, narrow shoulders, a light moustache and millions of female fans around the world who passionately regard him as the man they'd most like to be marooned with in the Nile Hilton.

Omar Sharif looks intently at you as he speaks. It's his eyes that rivet your attention. They're coffee-colored, hot, liquid-looking. Only when he excitedly makes a point does he bring his hands into play, briefly diverting attention from his steady, intense gaze. When he's pondering an answer, he rests his chin, pensively, on his hand.

The attire is impeccable; the hand-tailored suit from London's Hutsman and Sons, the form-fitting shirt from Turnbull and Asser. Savile Row has come to the Casbah and been made a better place for it.

The clothes surround a slim man built like a swimmer, who says, a little sadly, that he doesn't exercise as much as he should, holding his weight down only "by not eating like a pig," usually just one meager meal a day. There's a gap between his front teeth that has to be covered up for the Cinemascope cameras, but never mind; his warm low voice has enthralled millions of fans in the half dozen major films he has made since David Lean discovered him for the western film world eight years ago.

Just as the teeth have been cosmeticized, so has Mr. Sharif's identity. He's really Michel Shalhoub, an Alexandria-born, Lebanese-Syrian who took his stage name, as do most other actors, for precise box office reasons. One story is he picked the Omar, after the American general, Bradley, and to recall the Persian pearl of wisdom, Khayyam. The Sharif suggests a cross between a sheriff and a sheik. That's what he says, anyway, and with a straight face.

He burst onto western screens in Lean's *Lawrence of Arabia*, making one of the most beautiful entrances in film history, riding out of shivering desert haze toward Peter O'Toole. O'Toole made big profits out of the film, but Sharif stole the show. "Everything was right in that film," he reflects today. Why did he get the part in the first place? "They wanted a Wog who spoke English," Sharif says with a wry grin.

"I wouldn't have become an actor if my parents hadn't sent me to a wonderful English school in Cairo," he recalls. "In fact, I think I owe my character to that English school. I was sent there because I was a fat little boy. My parents knew I would lose weight. They were right. The food was terrible. I ate cabbage and played football all day and I lost 28 pounds in a year."

The experience made an intense competitor out of him. He excelled on the football field playing for Egypt. He didn't excel in the world of business, however, failing miserably as a salesman in the family corporation. His father had to give him the sack. The acting career started then as he drifted into Cairo's flourishing Arab film world with the one gift that can guarantee success in Arab films: the ability to register sadness. "A film's success is reckoned by the volume of tears shed by the women in the audience," Mr. Sharif explains.

Making the jump to Hollywood was a gamble but Sharif's a natural crap shooter. "I think everyone was surprised to see me holding my own in *Lawrence*," he admits. "I was well known as an actor in Egypt before, but we were considered definitely second category to the Hollywood stars."

Now that he's crossed the great divide, he admits that being an Egyptian actor in the western screen world had distinct advantages. "It makes me sound interesting to people. Even exotic."

Exotic or not, it sometimes seems as if film-makers are holding a perpetual Support Your Local Sharif Week, using him in as many different roles as they do. He's played a Russian in *Dr. Zhivago*, a German

in *Night of the Generals*, an Austrian in *Mayerling*, an American in *Funny Girl*, a Mexican in *MacKenna's Gold* and a Cuban in *Che*, besides being the Arab chieftain in *Lawrence*.

Success has permitted Sharif to indulge in his major vice—cards. Much to the horror of his father. "My father encouraged me to indulge as much as I like in drink and women," Mr. Sharif recalls. " 'I don't mind any of that,' he would say 'as long as you don't gamble.' His theory, you see, was that a man can be totally ruined by gambling but can hardly lose his whole fortune through drink and women—only some of it."

Like many a son, Sharif has failed to take his father's advice. "I am a bridge fanatic," he reveals. "I captain the Egypt team in tournaments. I almost turned down the role in *Yellow Rolls Royce* because there was an important match coming up. Fortunately the starting date of the film was changed."

Says a London bridge correspondent of Sharif, "It's difficult to place a bridge player but he's probably the equivalent of a scratch player in golf. He is an imaginative player, sound, shrewd, very aggressive. He's a studious player—he got there by working at it. He's probably one of the 40 best in the world. He's that remarkable thing, an unspoiled film star."

"Bridge is my most important pastime," Sharif reiterates. "How do you get better? You have to love it, read about it, watch better players. It's a little like being an athlete. You have to have slept well, to be in training; you must have endurance and nerve."

He runs a professional team on the side—the Omar Sharif Bridge Circus—which toured five cities in the United States in 1970 under the sponsorship of a card-making company (and cost him a small fortune in one widely publicized marathon session.) "Bridge is my obsession," he admits. "The only clippings I keep are about my game."

Although, like most actors, he protests that acting really doesn't interest him, in unguarded moments he admits it's very important. He's been doing it since he was 19. "What else could I do?" he asks.

It's his English which gets him so many exotic roles—it's elegant and formal and faintly unfamiliar. "It has altered," he confesses. "When I finished English school in Alexandria, I had almost no accent in English. But then for 10 years, working in Egyptian films, I spoke no English at all. So when I began *Lawrence*, I had a marked accent. Now it's much softer, although I don't think I'll ever lose it completely. I don't think I would want to. I would hate to be like those perfectly-spoken Pakistanis, whose English accents are so impeccable that they're instantly suspect."

He takes quite seriously the occasional comment from critics that he really isn't a very good actor at all. He strives to improve. "I always believe what the critics write about me," he admits. "You need a bigger ego than I've got to dismiss them all as fools. My attitude is: if they criticizd me, then I must have done something wrong."

"The difficult thing in this profession" he goes on, "is knowing why you're in demand. What is it about you that's so special? Is it your talent, or is it just the fact that you've got pretty eyes? It's very hard trying to find out. That's why, when something is written about us, we spend so much time trying to find out whether it's true."

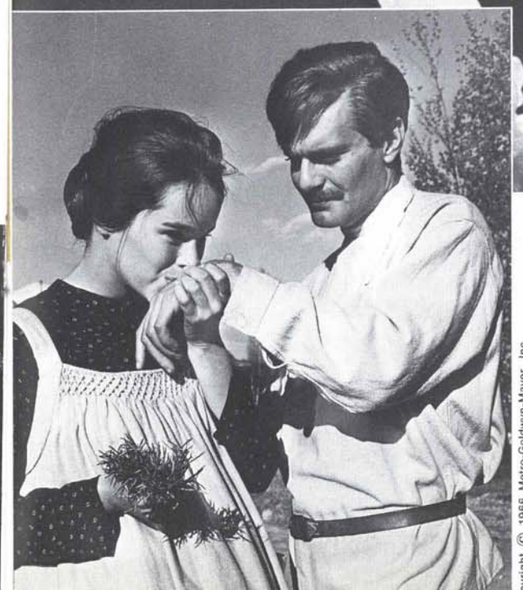
But there's never any fear on his part about taking on a new role. That competitive fire again. "Why should I worry? I have an enormous amount of nerve."

Sharif doesn't take a vocal position on the complex political issues which rend the Arab world. He's a moderate. "*Lawrence* was banned by the Arab League for all Arab countries," he reveals. They didn't consider the Arabs were well presented in the film. Sam Spiegel, the producer, rang me in Cairo and asked me if I could do anything. So I arranged for the late President Nasser to see it. He liked it, fortunately, and ordered the film to be released in Egypt without cuts. It broke all records there. Nasser had once before reversed an Arab League ruling over *Judgment at Nurenberg* so I knew he could do it if he chose. But no one else dared defy the ruling, so *Lawrence* was not shown in any other Arab states."

But it was *Funny Girl*, in which he kissed Barbra Streisand, that caused a real furor. "One Egyptian magazine," he said, "published a picture of me kissing Streisand, and said: 'Bar this ... actor from Arab nationality.' My answer was, 'I never ask a girl her religion before kissing her.' "

Such opposition was not new. Before *Lawrence*, critics in the Arab world blasted him often. "You see, I was the first person ever to kiss their screen idol, Fatin Hamama. She was a sort of Cinderella in Egypt. She'd been filming ever since she was seven and never once been kissed. She had her first screen kiss with me—in my first film, too—and they hated me for it. Then I married her and it really got bad."

He confesses that he's not a political animal. "I have no interest in politics. I never read political articles in newspapers." Or at least that's how he felt until he started to make the film, *Che*. He then became quite interested in what made Guevara the political animal he was. "It was a shock to discover how totally incorruptible the man was," Sharif admits. "Nothing could buy him, nothing. He



With Barbra Streisand (above) in the fabulous **Funny Girl** and (at left) with Geraldine Chaplin in scenes from **Doctor Zhivago.**

wasn't interested in women, cars or money. To someone like myself, totally corruptible, it was inexplicable. How could someone have no self-pity like Che? I am full of it. It's a very Mediterranean thing, self-pity. I cry over myself all the time."

Sharif continues, "He was the antithesis of me. I do nothing. He cared enough to give his life, cared so much he didn't mind dying. I have too many passions for such idealism. Passion for bridge, passion for horses, passion for my work, passion for just living. Yet I feel for him in this role. It has changed me. Everyone asks me about it, of course. I have been forced to find out where I stand."

Sharif is now separated from the popular Fatin after 11 years of marriage and a son. "It's my opinion," he says sadly, "that two stars married to each other whose work keeps them apart for lengthy periods, should separate. And besides no man should marry until he's about 35. By this time he has reached a maturity of mind. He doesn't want to rush around living it up. He wants to settle down. He wants security. It works both ways, of course. A girl shouldn't get married until she's at least 28."

He has not divorced his wife yet. Quite possibly it's because the two are still very fond of each other and both are deeply in love with their two children, one his, one hers. Tarek, the oldest son, spends a great deal of time with his father. He goes to school in London part of the year. "The Headmaster hasn't actually said as much, but I get the impression that he does not approve of my being a film star," Sharif says wryly.

The boy has played in one film with his father. "I don't want him to be a child actor," Sharif insists. "After *Dr. Zhivago* he was impossible. He thought of himself as someone special. When he did it, he was only seven and I thought he would not be influenced, but he was. It was a mistake. But I want him to be an actor when he grows up. I admit that. I want to stay in his life, you see, and if he became a lawyer or a doctor, I could not."

He adds proudly, "Tarek's already a very good card player—gin rummy, not bridge."

Separated as he is from his wife, he says, "Me a lady's man? It's a myth. I think I am a failure with just one girl. It seems that the only women I have met in the last five years have been actresses and bridge players. Actresses are fun but are not often for marrying. Bridge players are usually too old."

Looking ahead, he reveals, "Personally, I can't wait for the time to come when I have enough money to retire from filming and can devote myself fully to championship matches." The only personal ornaments he drags from hotel room to hotel room when he is on a film tour is a gold plaque which is always hung carefully in the living room. It simply reads, "Bridge Tournament Champion."

Quite obviously, he wants to settle down. The strain of reaching the pinnacle of show business has given him an ulcer which means a strict diet and not very much alcohol. "All I do is keep traveling," he explains. "Hotel room after hotel room. Two months here, three months there. I have no place to rest and grow strong and everybody needs that. Now I'm just buying a house in Paris and I'm going to stay and travel as little as possible. Somewhere where I can keep a few books and my bridge trophies."

Even if Mr. Sharif leaves the screen world, his impact will be lasting. Not because he is a great actor. But because in thousands of cinemas throughout the Arab world, and in front of millions of TV sets, Arab boys will grow up seeing this Egyptian. And saying to themselves ... if he can, why can't I?

"The times, they are a -changin'. "

Arturo F. Gonzalez, Jr., author, correspondent and travel editor, has worked for Time *and the* Reader's Digest *and contributed to* Argosy, Cue, Cosmopolitan, *and the* Saturday Review. *He is also the author of* Eugene Nickerson, *a biography.*

In **Lawrence of Arabia** (above) the stars were Peter O'Toole and Anthony Quinn (left) but it was Omar Sharif they talked about.

Into space, down to earth, across the Atlantic, back to space, over the Alps, and into Lebanon. It's ...

THE BIG SIGNAL

BY ELIAS ANTAR

At 12:18 p.m. on June 21, 1970, 112,000 soccer fans in Mexico City's Azteca Stadium rose in hysterical delight as Brazilian soccer king Pele scored the opening goal in his country's 4–1 victory over Italy in the World Cup Final. A fraction of a second later and halfway round the world thousands of Pele's fans in Lebanon did the same—thanks to a new satellite ground station that these days can bring a live telecast from Mexico to the Middle East with the twist of a switch.

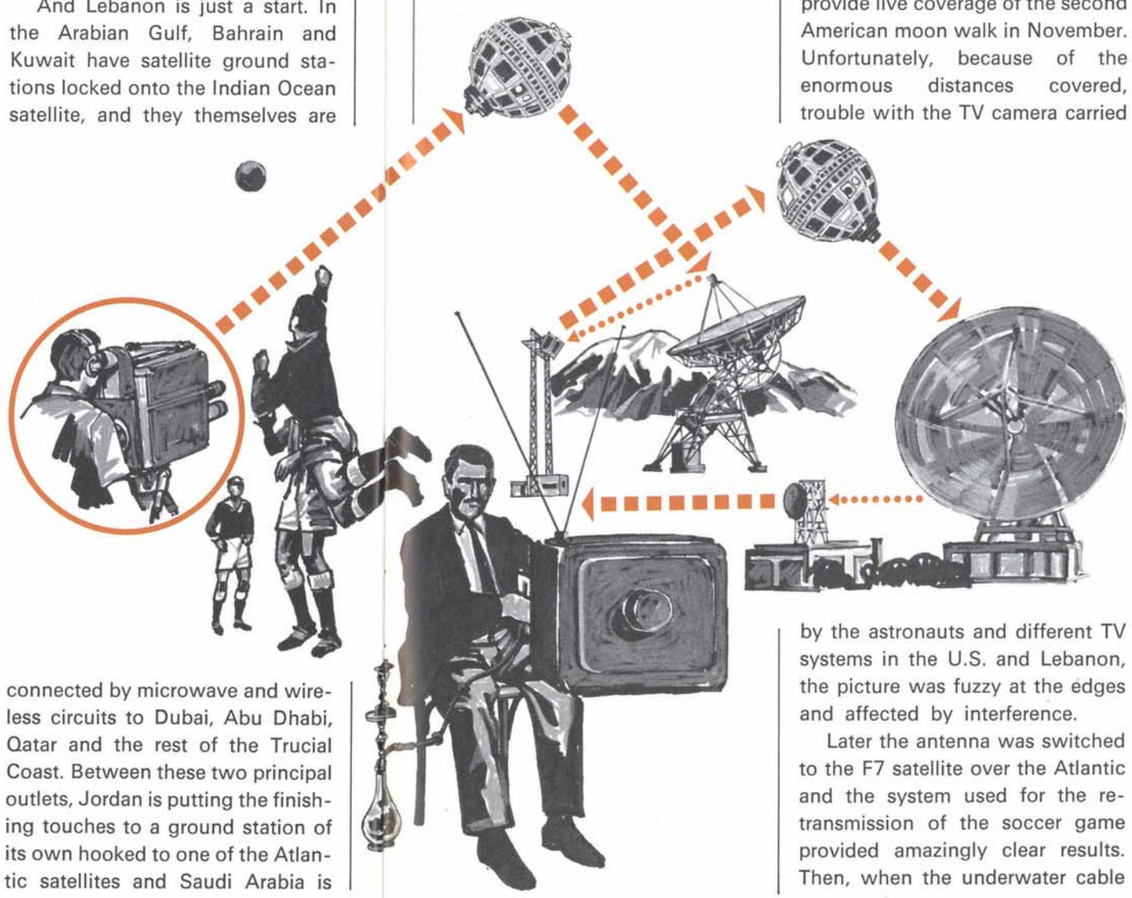
The telecast—which viewers in Lebanon said was sharp and clear—gave no hint of the fantastic route it had followed after stadium cameras caught the action and flashed it to a satellite ground station at Tulancingo, 60 miles northeast of Mexico City. From Tulancingo, the TV signal shot 23,000 miles into space to the Intelsat III F6 satellite in stationary orbit above the Atlantic Ocean, bounced another 23,000 miles back to the Raisting ground station in the Bavarian Alps, moved 675 miles by microwave circuit to another satellite ground station at Pleumeur Bodou, on the French channel coast, caromed into space again where the Intelsat III F7 satellite picked it up and transmitted it to Lebanon's Arbaniyeh ground station and the country's two television stations which broadcast the image to Lebanon, Syria and Jordan—all in a fraction of a second.

Although they may not have realized it, the thousands of Lebanese who saw Pele triumph were also witnessing their country's coming of age on the world communications scene, a development which is also true of much of the Arab East. With satellite ground stations already in operation or under construction in four countries and two more planned in a fifth, with submarine cables crisscrossing the seas, and internal links extending rapidly in all the Arab countries, communications are improving at an unprecedented pace. If the pace continues, the next two or three years should see the Arab East firmly hooked into the world communications system and truly fulfilling its potential as an intercontinental communications crossroads.

By virtue of its geographical position and its traditional contacts with many countries, Lebanon is playing a leading role in this development. Lebanon is now being linked with the West through an undersea cable stretching 2,108 miles between Beirut and Marseilles, France, and with the East via its satellite ground station whose dish antenna was to be turned around in early 1971, from the Atlantic satellites, to aim at one over the Indian Ocean. Lebanon is also to be linked to Egypt and Syria via a communications cable, partly underwater and partly underground.

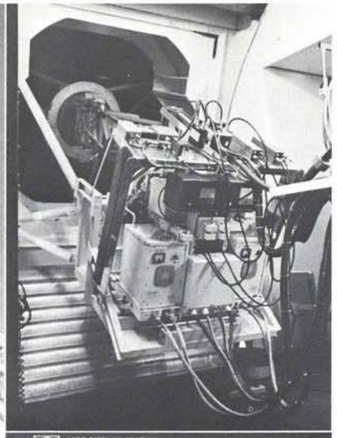
And Lebanon is just a start. In the Arabian Gulf, Bahrain and Kuwait have satellite ground stations locked onto the Indian Ocean satellite, and they themselves are planning for two ground stations, one on the Red Sea coast at Jiddah and one in the inland capital of Riyadh, 550 miles to the east. Iraq will channel its communications to the West via Kuwait and Lebanon and will use the Kuwait-Bahrain outlet for communications with the East.

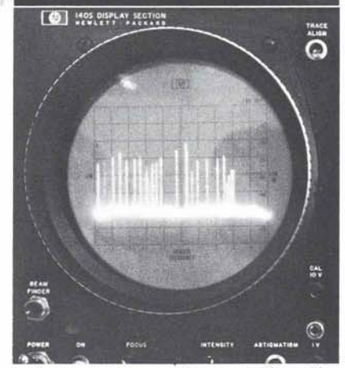
When these systems become integrated over the next few years, the peoples of the Arab East will have virtually instant communication with most parts of the world. It will be possible, for instance, for a trader in Dubai to phone a customer in Morocco or Japan. A lawyer in Alexandria will be able to consult with his client in Beirut or Paris without the frustrating delays and technical breakdowns that have been an all too frequent and unfortunate reality in the Arab East thus far.



connected by microwave and wireless circuits to Dubai, Abu Dhabi, Qatar and the rest of the Trucial Coast. Between these two principal outlets, Jordan is putting the finishing touches to a ground station of its own hooked to one of the Atlantic satellites and Saudi Arabia is

1. Lebanon ground station antenna locks onto satellite.





2. Sensitive tracking gear focuses on F6 satellite.

In keeping with its role as a trend setter, Lebanon inaugurated its $3 million, American-built ground station in September 1969 when its antenna was locked onto the Intelsat III F6 satellite over the Atlantic Ocean—just in time to provide live coverage of the second American moon walk in November. Unfortunately, because of the enormous distances covered, trouble with the TV camera carried by the astronauts and different TV systems in the U.S. and Lebanon, the picture was fuzzy at the edges and affected by interference.

Later the antenna was switched to the F7 satellite over the Atlantic and the system used for the retransmission of the soccer game provided amazingly clear results. Then, when the underwater cable to Marseilles goes into full operation in early 1971, the antenna of the earth station will be turned around to line up with a satellite over the Indian Ocean. In 1972, the government is to build another antenna to be linked to an Atlantic satellite, thus giving Lebanon satellite communications with both East and West, instead of the present combination of satellite and underwater cable.

The ground station, besides being capable of handling TV, can transmit telephone, telegraph and Telex calls with unprecedented clarity. When it went into operation, the quality of voice transmission was found to be so high that radio correspondents based in Beirut were able to broadcast to the U.S. and elsewhere using their house phones instead of the complicated studio arrangements previously utilized. To improve service even further, the government plans to provide television facilities con-

nected to Arbaniyeh permitting TV correspondents to make live news broadcasts. With present communications facilities, it takes 10 or 12 hours for TV film from the Middle East to reach screens in the United States or Europe. Until the second antenna is built, TV broadcasts from Lebanon will be beamed up to the Indian Ocean satellite, down to a ground station near Rome for European distribution and up again over the Atlantic to the U.S., Canada and Latin America.

The cable to Marseilles, shared equally between Lebanon and France, was to have cost $20 million. It was officially inaugurated in August 1970 and when it goes into full operation it will handle 120 voice (phone) channels, later to be increased to 220. One voice channel can accommodate 24 Telex or telegraph channels, but the cable cannot handle TV signals.

Internally Lebanon is also installing an automatic telephone system throughout the country. Already in operation in Beirut and major towns, the system will eventually link most villages by dial telephone via microwave relay stations, which use no wires and provide very clear signals. The country's Telex system, which was the first to go into operation in the Middle East back in 1962, is being expanded to handle 2,000 subscribers by the end of 1971, an increase of 1,550 over present figures.

Elsewhere in the Middle East, Egypt and Syria have signed a protocol with Lebanon to lay down a communications cable from Alexandria to Beirut and onwards to Damascus. Bids are now under consideration and the link will take 10 months to construct once a contract has been awarded. Connections between the three countries will be vastly improved in both quality and efficiency, and Egypt and Syria will have instant communications with Europe using the cable from Beirut to Marseilles. There are no plans at present to connect the Alexandria-Beirut-Damascus cable to the Arbaniyeh ground station. The cable is to cost about $6 million, to be shared equally among the three countries.

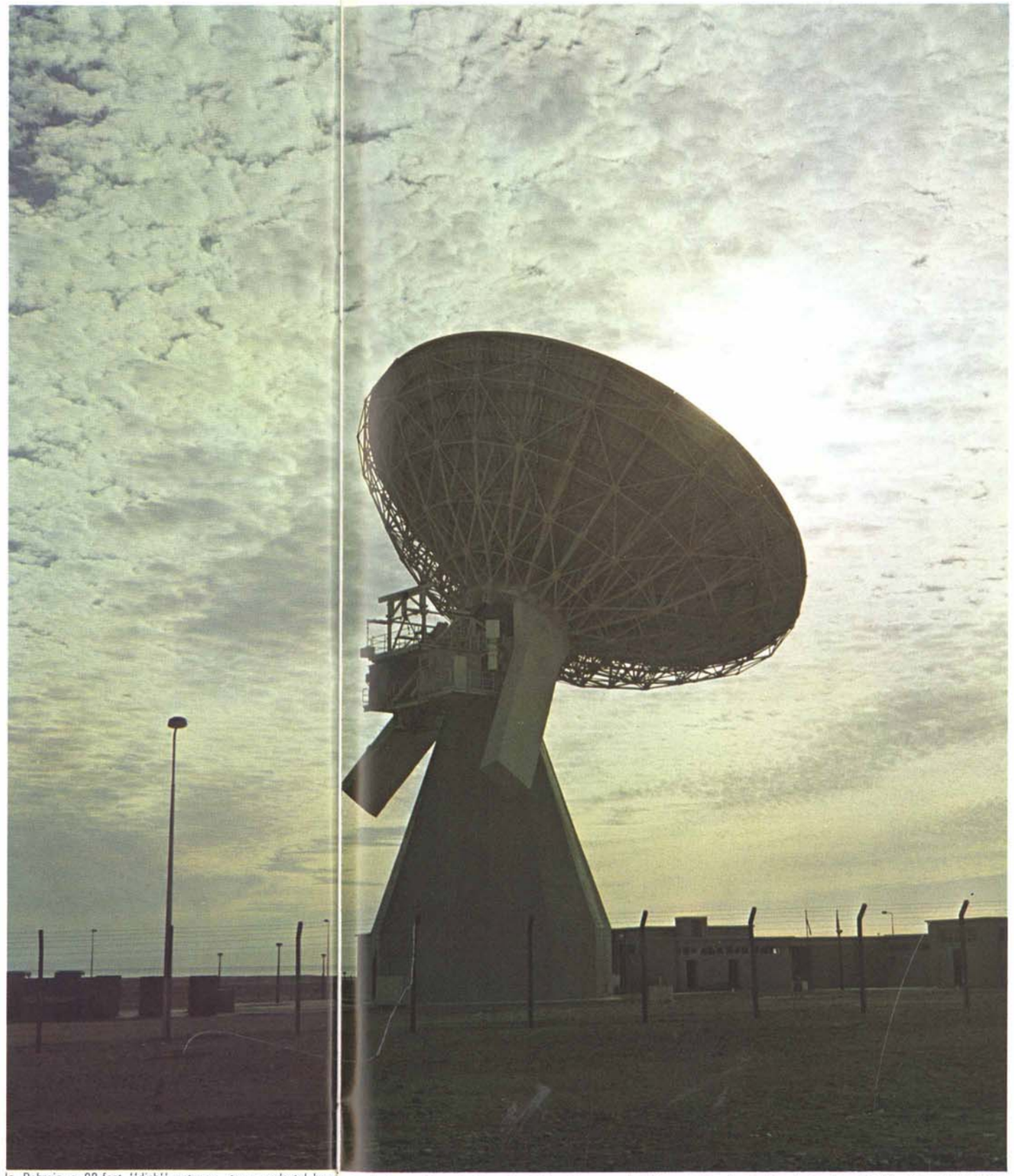
In cooperation with Italy, Egypt is also building an $8 million, 1,000-mile underwater cable from Alexandria to Catanzaro in southern Italy. The project, scheduled for completion in two years, will provide Egypt with 120 voice channels to Europe and the U.S., later to be increased to 160.

While looking to its links with the rest of the world, Egypt is also constantly expanding its internal telephone net. In the 1920's, Cairo's telephone system had only three digit numbers and the exchange was manually operated by a team of girls. Now the bustling capital of almost five million people has a six-digit automatic dial system which is constantly being extended, though it is still lagging behind the demand for more and more phones.

Syria has launched a five-year plan to develop its communications system. The main element is to be a $30 million underground cable linking Damascus to all the country's main cities to replace the present haphazard system of overhead wires. In addition, Syria is considering a "troposcatter" radio system linking it to Moscow and eventually making it the outlet for all communications between the Arab East, the Soviet Union and Eastern Europe.

In a flat valley ringed by low hills 12 miles north of Amman, Jordan is putting the finishing touches on a Japanese-built ground station costing $4.5 million. It will be aimed at a satellite over the Atlantic Ocean and will allow the country to vastly expand its existing Telex and phone links to London and Rome.

In the Gulf, the huge Kingdom of Saudi Arabia is planning not one but two satellite ground stations to be linked to a satellite over the Atlantic. At first, the two stations will serve to link the two cities via satellite, an arrangement that is cheaper than a direct microwave system of relay stations on the ground. Later, it is planned to use the stations to provide connections between Saudi Arabia and the rest of the world. Internally the kingdom has completed nearly 70 percent of a new telephone network in Mecca and was to inaugurate a new 14,000-line automatic telephone network in Jiddah early this year. Riyadh already has 16,000 lines and plans for 24,000 more. The Eastern Province has 10,000 lines in Dammam and Al Khobar and coverage of the rest of the province is planned. By July 1972, the country is also to start operation of an internal Telex network costing $1 million.



In Bahrain a 90-foot "dish" antenna atop a pedestal has an aluminum skin optically adjusted to a tolerance of 40 thousandths of an inch yet able to resist 80-mile-an-hour winds.

Nearby Kuwait, meanwhile, has recently inaugurated a ground station which is linked to a satellite over the Indian Ocean, and provides 24-hour communications with Britain, West Germany, Japan and other countries plus Bahrain, which in turn is linked to other Trucial Coast states. Kuwait, in addition, has Telex lines with Aden, at the southwestern tip of the vast Arabian Peninsula.

Bahrain has also opened a $5 million ground station which is linked to the Intelsat III F3 satellite over the Indian Ocean. Acting as one of the two focal points in the region, Bahrain has microwave links to Qatar, Muscat, Dubai and Abu Dhabi. It is expanding its internal telephone network at a cost of about $8 million.

Even the emirate of Abu Dhabi, now undergoing a phenomenal boom because of oil revenues, is expanding its communications. It has awarded a $7.2 million contract to install an electronic telephone exchange system that will be one of the most advanced public telephone systems anywhere in the world. The new equipment will expand the present system by 3,000 lines—quite a jump in a country whose total population is only 47,000 people.

In Yemen phone links until a few years ago depended on a ramshackle system inherited from the Ottoman Turkish invaders at the turn of the century. It connected—in a manner of speaking—the twin capitals of Taiz and Sanaa with the port of Hodaidah by a system of wires hung on poles. A goat scratching its back on one of the poles was enough to knock it down and disrupt communications for days. But Yemen recently installed a German-built microwave system between the main cities and a British company is now to supply facilities for phone, Telex and telegraph links to the outside world.

Elias Antar, an AP correspondent in the Middle East, is a frequent contributor to Aramco World.

EPHESUS: Hostess to History

BY LOUISE PURWIN ZOBEL/PHOTOGRAPHED BY WILLIAM TRACY

They came to Ephesus: Androcles, Xerxes, Alexander, Hannibal, Cleopatra, St. Paul and The Virgin Mary.

Minoans came first and after them Trojans, fleeing from fallen Troy. Later came Androcles of Athens, Croesus, Xerxes, Alexander, Hannibal, Julius Caesar, Cleopatra, St. Paul and the Virgin Mary. They came to Ephesus, hostess to history.

It is hard to imagine Ephesus in this role today. Hidden away in the rural quiet of western Turkey, her gracious ruins now play hostess only to colonies of storks nesting on marble columns that patrol her rusty brown hills and look down on a purple swamp that was once a harbor.

That harbor—a perfect crescent facing directly toward Athens—was one of numerous geographical blessings that would insure Ephesian growth and prosperity later: the congenial climate, the fortuitous accessibility to the nearby mountain passes from which one day caravans from the Asian hinterland would come; gentle foothills; soil rich in loam; and three rivers—the Maeander, Little Maeander and Hermos—watering a fertile valley.

If recent excavations are reliable, these advantages were not lost on such early peoples as the Minoans, Amazons, and Carians. But it was a Greek named Androcles who in 1100 B.C. led a boatload of colonizers to the coast of Asia Minor and became the founding father.

Androcles, son of Codrus, the last Athenian king, did not choose the site of Ephesus rashly. He postponed decision on the precise spot for his colony until messengers, sent to consult the Delphic Oracle, returned to say that "a boar and a fish" would indicate the right place. He then waited a few more days until, as they cooked fish over a fire, sparks ignited nearby brush and flushed a boar. When they killed him near Mount Coressus, Androcles decided that was the ordained site to build a city.

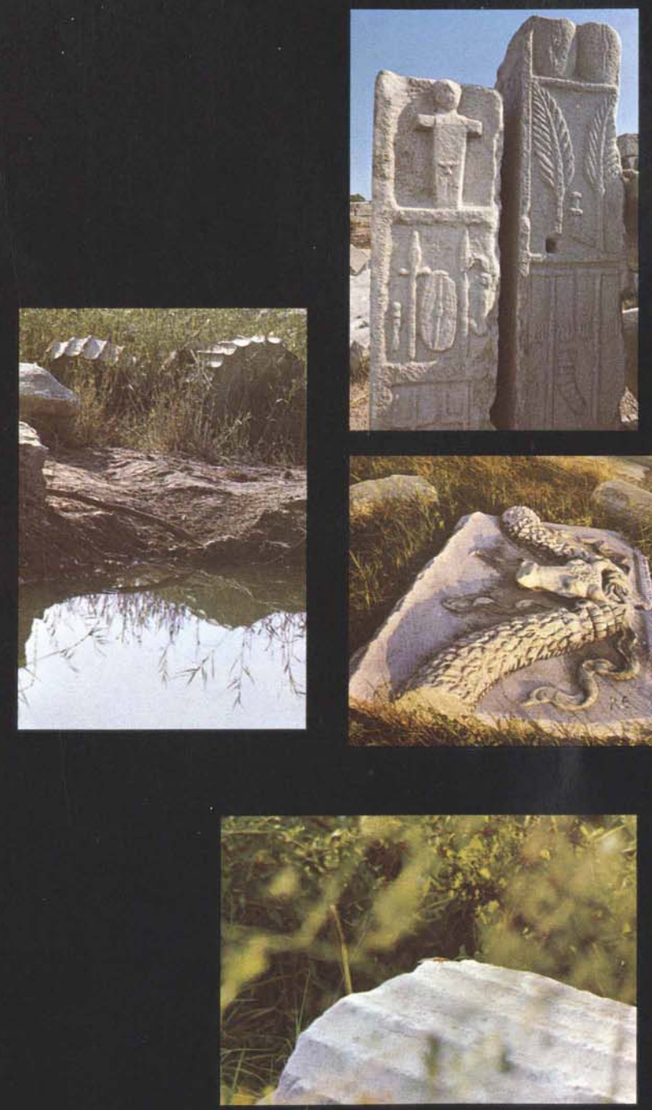
It was a beautiful city. Beside the deep bay he constructed wharves and warehouses, but conveniently close he built an agora, with market stalls and counting houses. Above, on the slopes, he put the homes of wealthy merchants, and his acropolis, vestiges of which can still be found. He also built three temples, one to Athena, one to Apollo and one to Artemis, formerly "Cybele."

From the beginning Ephesus was an important center of religion and although fire, war and earthquakes demolished many temples the Ephesians always rebuilt them, each time more elaborately. Their most ambitious undertaking was a magnificent new temple to Artemis which was under construction when, in the sixth century B.C., King Croesus arrived at the Ephesian gates as Lydian conqueror. Ephesians, recalling that temple precincts traditionally remained unmolested, searched every house for scraps of rope and knotted a single cord that stretched a mile, from the temple sanctuary to the city walls. They sacrificed as usual at the temple altar and then declared the whole town part of the temple precinct.

Crafty Croesus was not deterred from occupying the town, but he proved a gentle, generous conqueror, who placated Artemis with such marvelous golden calves and marble columns that even the Persian Xerxes, on his bitter, scorched earth march back to Susa (after the Persian defeat at Salamis), declined to destroy it. It stood, in fact, for two centuries until, in 356 B.C., a madman named Herostrates burned it down.

During this period, Ephesus served as a political pawn among Persians, Athenians, Spartans, Milesians, and others, each invader leaving such destruction behind that debris still covers those Hellenic milestones. Although American, British, Austrian, Italian, and Turkish archeologists have explored her various sites for over 100 years, only about 25 per cent of the ruins have been excavated. This was partly because some of the ruins endured to serve different purposes in different eras. Stones from older layers of Ephesian civilization were often utilized in construction of newer buildings. Houses of religion were converted to living quarters, animal shelters, cisterns, or shrines to different religions.

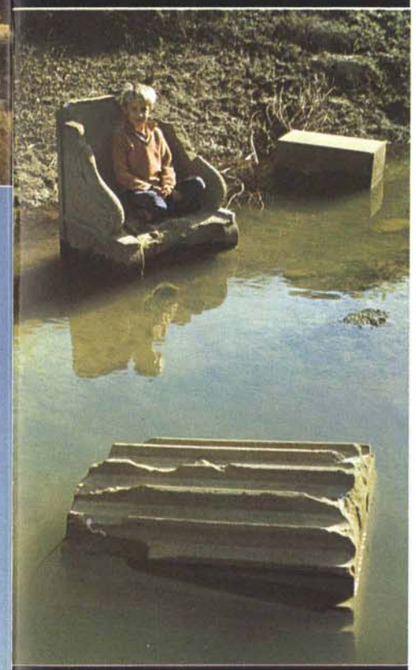
Whatever happened, the Ephesians rebuilt. When Alexander the Great marched



What was once a magnificent natural harbor welcoming the shipping of the ancient world is now a swamp strewn with the marble remnants of a glorious history.

The agora (right) was the central market place in Roman times and the harbor road (below) was once lined with busy shops.

PHOTO BY KATRINA THOMAS



Broken columns lying in pools of swamp water are all that remain of many of Ephesus's famous temples.

through Asia Minor on his fourth-century empire-building route he found Ephesians doggedly beginning still another new sanctuary and offered to finance the project. If they would inscribe his name on the architrave as donor of the temple. The Ephesians tactfully told him that, "It is not fitting for one god to dedicate a temple to another."

Perhaps later they regretted their refusal as building costs soared and the ladies of Ephesus had to pawn their jewels to pay for such famous artists as Praxiteles, Phidias and Scopas to come and decorate it. But when it was finished it was larger than four Parthenons, was visible for miles from land or sea, and became the Seventh Wonder of the World.

In the third century, however, invading Goths destroyed this wonder and its ruins gradually disappeared under 20 feet of silt. When the 19th-century English architect John T. Wood finally found its sculptured Ionic columns and lion-headed gargoyles, he sent them to the British Museum and, although an abortive attempt at further excavation was made last year, the only traces of the great structure are a few marble fragments among the fig trees now covering the temple site.

In the meantime there had been a serious change in the Ephesians' harbor. The Little Maeander River (which gave a verb to our dictionary) had changed course and, as it capriciously dug new gorges across the plains, began to deposit mud in the harbor. Soon the perfect harbor silted up and large commercial and war vessels could no longer enter it. In time the silted harbor turned into a swamp which provided a breeding ground for malaria-bearing mosquitoes.

General Lysimacus, heir to Alexander, solved the dual problem by dredging the harbor and moving the town up the slopes of Mount Pion. He laid out a new city, with grids of streets intersecting at right angles, central squares occupied by beautiful, marble-pillared public buildings. He enclosed the city with five miles of ten-foot thick unmortared walls. He cut giant cisterns and put up a central market place designed to serve a city of half a million people, an enormous water clock, now back in place, and the Ephesian Great Theater, its 25,000 seats making it one of the largest in Asia Minor. Carved into the side of Mount Pion, the Great Theater remains an acoustically perfect shell.

Despite the beauty of the new city, the sentimental Ephesians showed no inclination to leave their homes on the plain and move up to it, so Lysimacus, to encourage the move, cut off drainage canals in the old town. After the first heavy rain, the people had no choice but to evacuate the flooded lowlands.

This period, the Hellenistic period, was probably the richest era in the city's history. Drawn by the Seventh Wonder of the World—as well as an astute advertising program—pilgrims from Europe and Asia, anxious to share in Artemis's obviously generous blessings, overflowed hotels and caravanseries. They joined Ephesians at the coffee houses, reveled in games and races at the stadium, laughed and wept at comedies and tragedies at the theater. They picnicked beside cool streams, where elegant statues decorated the sacred groves. They thronged the shops, drinking in the smell of exotic spices, buying quantities of Egyptian ivory and Chinese silk, Indian cotton and British tin. They concentrated on the more pleasurable aspects of their religion.

As time went by, Ephesus extended her hospitality to many major figures: Hannibal, after escaping Carthage a few hours ahead of the Romans; Lucullus, whose name is now synonymous with gastronomic luxury, and who in Ephesus arranged gourmet banquets and presented the first gladiatorial combat in Asia Minor; Julius Caesar, who promised tax reform and relief from looting armies which never quite materialized; and Marc Antony twice, the second time to

spend a winter's carnival with Cleopatra before the Battle of Actium.

After Octavianus Augustus defeated Antony at Actium, Ephesus, as capital of the Roman Province of Asia, reached its zenith. Though still fighting the meandering river and silting of the harbor the Ephesians in this period enjoyed a reduction in tax burdens, invigorated commerce and industry and new construction along the valley and lower slopes of Mount Pion and Mount Coressus.

By this time Artemis had become Diana, but, still ensconced in the Seventh Wonder sanctuary, continued to draw such wealth into the city that it became a crucial part of the growing contest between Christianity and paganism. When St. Paul arrived at Ephesus to confront Diana's adherents at the Ephesian Great Theater, he was assaulted by thousands of pagan voices reverberating among the olive trees. "Great is Diana of the Ephesians!" they called insultingly.

Although Paul was disheartened by the outburst, he was not discouraged. He

Here, it is believed, lived the Virgin Mary.

taught at Ephesus for three years, making many converts and establishing it as a center of Christianity.

Diana was not Christianity's only rival. The Ephesians had also created a magnificent temple to the Egyptian deity Serapis. There was an enormous temple to Domitian, elegantly terraced and surrounded by shops, a two-storied fountain house dedicated to Trajan, and a finely-chiseled, round-arched temple to Hadrian. This temple was part of the Scolastikia Baths, named for a fourth-century Christian woman who installed complicated piping systems and rooms for thousands of bathers.

Other public gathering places were the library and the agora with a huge gate between. Built about the time of Jesus' birth by two former slaves, the gate is a status symbol. While its inscriptions thanked the emperor for freedom, those liberated slaves also proudly indicated their success as free merchants in the marketplace.

While the agora provided a central market, other mercantile establishments lined the streets of Ephesus: wine shops, medical clinics, commercial bakeries and brothels. On Arcadian Avenue, where sailors from all over the world sauntered from the harbor up to town, artisans hammered silver into perfume bottles and molded ox bones into kitchen cutlery. At night the flicker from oil burning lanterns was reflected in the bay's black stillness, for this was the first street in the world to have regular street lighting.

At one end of Arcadian Avenue, was the Great Theater and around the corner was the Odeon, a smaller theater, used for intimate recitals.

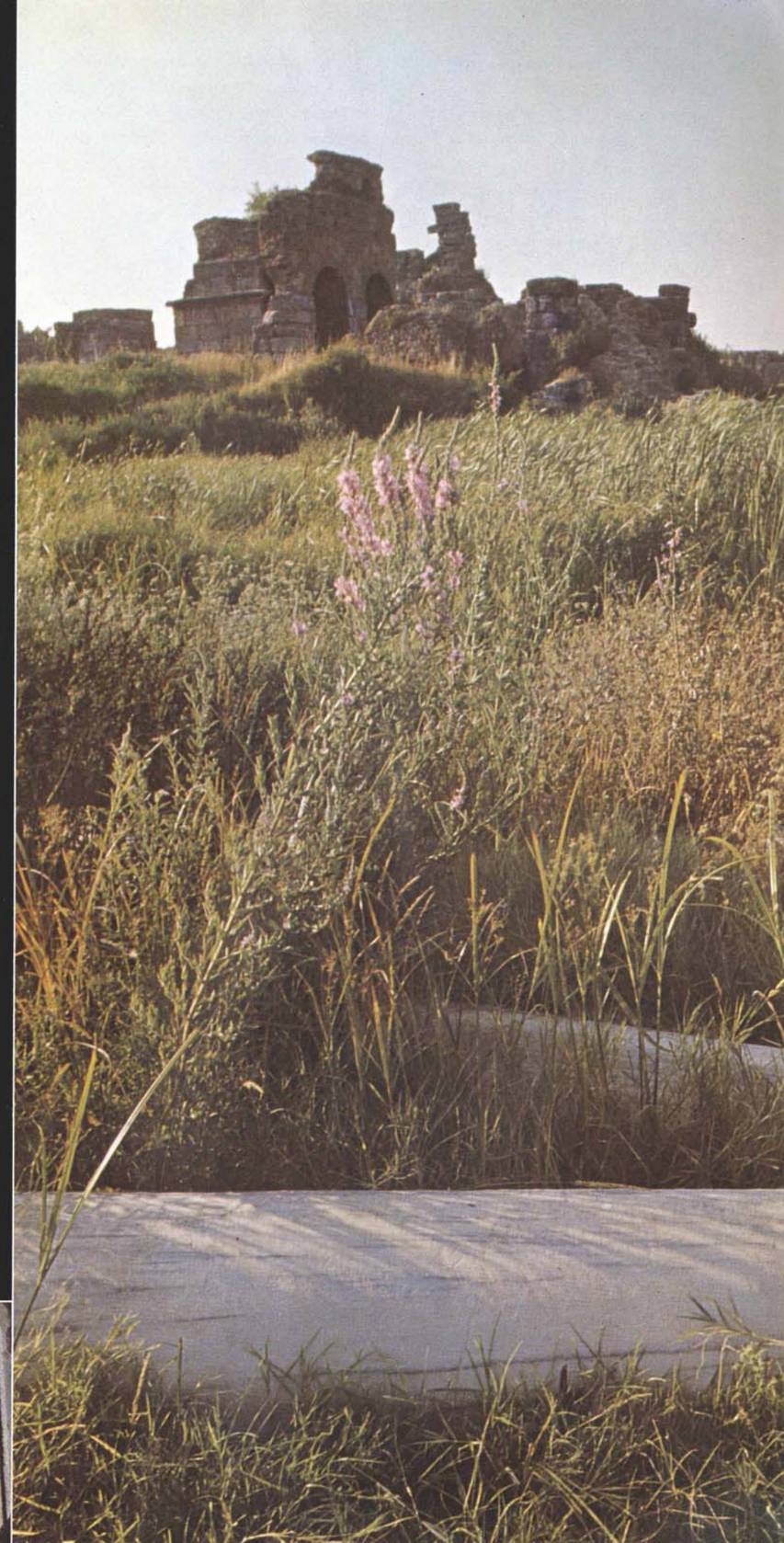
Near the Odeon, in a 20th-century tobacco field, archeologists found the main waterline to ancient Ephesus, with pipes of varying sizes, branching off in different directions. Sewage systems have been discovered too. An intricate drainage arrangement served apartment houses in the main part of town.

Those apartments were possibly the first multi-family dwellings in the world. They sparkled with opulence, from ceilings glittering with gold leaf to floors paved in mosaic designs. In terraced courtyards where families relaxed on summer days, fountains played and flowering vines climbed up the walls. Paintings and frescoes by famous artists, whitewashed over by later Christian tenants, are being rescued from the ruins piece by piece. Careful scraping of the whitewash reveals the original brilliance of the red and yellow paintings.

Down near the harbor stands another historically significant building: the first church in the world dedicated to the Virgin Mary and the site, in 421, of an Ecumenical Council at which far-reaching decisions were made and Mary's divine maternity was first proclaimed. In 1967 Pope Paul visited "Haghia Maria" (also called "The Double Church") during his trip to Turkey, and 2,000 villagers listened to him read St. Paul's *Epistle to the Ephesians.*

Other Christian shrines at Ephesus fringe Ayasuluk Hill, north of the Seventh Wonder temple and the Graeco-Roman town. St. John is known to have lived there

In the crosses of St. John (below) and church ruins (right) are hints of Ephesus's role as a center of early Christianity.



and it is believed that he wrote his Gospel on the spot where he is buried.

It was not until 300 years after St. John's death that Ephesians finally abandoned their goddess Diana. Bowing to the fourth century edict of Theodosius prohibiting pagan cults, they ceremoniously buried Diana's statues. Several of these statues, finely-carved, larger than life-size, were recently discovered under ruins of the Roman Prytaneum.

By the Christian era, earthquakes and erosion were ruining the gentle slopes and fertile valleys of Ephesus. The people were fighting back but the harbor was silting rapidly and the site of Ephesus had begun to shrink. New walls, using old ruins, enclosed a much smaller town, including only part of the Roman city. As the seat of a large Christian diocese, however, it retained its importance and in the sixth century the Emperor Justinian built a lavish brick and marble basilica over St. John's tomb. One of the largest churches in Christendom, it had six soaring domes, a multi-colored marble courtyard, frescoed walls, mosaic floors and monograms of Justinian and his Empress, Theodora on top of the columns.

Between the sixth and twelfth centuries, thousands of pilgrims from all over the world climbed Ayasuluk Hill to visit this shrine. Celebrations, attracting large crowds, were held annually on the anniversary of John's death with special processions and illuminations of the city.

The Ephesians, meanwhile, had left the unhealthy swamps to build a new town on the hill around John's Basilica, and by the eighth century when the Arabs occupied the Byzantine-built citadel, the lowland city had begun to disappear. By the time the Crusaders came through it was completely deserted, its name almost forgotten. Although still a commercial trading center, by the 13th century earthquakes, erosion, silt in the harbor and malarial mosquitoes had reduced Ephesus to a relatively obscure village.

In the early 14th century, there was a revival of Ephesus when the rulers of nearby Aydin took over, repaired the Citadel, built new baths, civic buildings and mosques—one, the magnificent Isa Bey Mosque, also on Ayasuluk Hill, now a museum.

The Ottoman Turks ended the revival when they captured the city in the late 14th century, lost it to Tamerlane, storming out of Asia, and then reconquered it 24 years later. By then, unfortunately, St. John's Basilica, which had been turned into a mosque, had been destroyed and the harbor was irretrievably silted. For the next five centuries, Ephesus, now five miles from the sea, was an unkempt little village known as "Ayasuluk." In an attempt to modernize Ephesus, Mustafa Kemal Ataturk built paved roads, brought in power and put up buildings. But the impact was slight. Camels and bullocks still linger on the right-of-way, straw shacks with tin roofs hug the hillside, and women work alongside their men, hoeing cotton and tobacco. And the nesting storks still patrol the hills and the purple swamp where, in a strange, aloof isolation, the hostess to history awaits the return of her faded glory.

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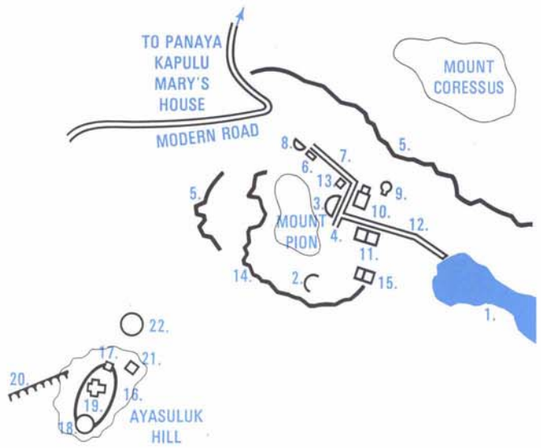

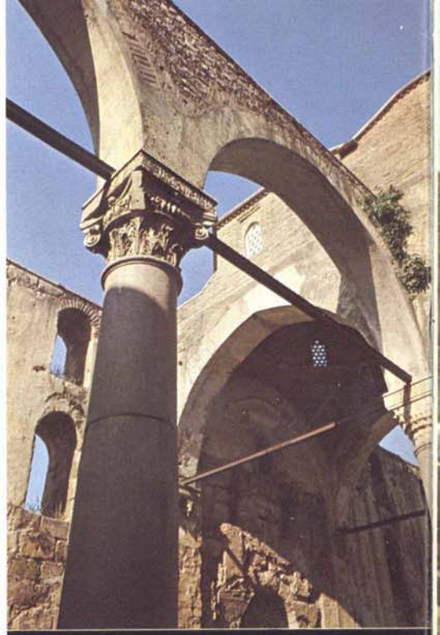

Classical columns and Roman arches in this unusual mosque show the mixed heritage of Ephesus.

1. Old Harbor
2. Stadium
3. Great Theater
4. Marble Sacred Way
5. Hellenistic Walls
6. Prytaneum
7. Curetia Street
8. Odeon
9. Temple of Serapis
10. Library and Agora
11. Newer Agora and Baths
12. Arcadian Avenue
13. Scolastikia Baths
14. Byzantine Walls-early
15. Double Church
16. Byzantine Walls on Ayasuluk Hill-later
17. Gate of Pursuit
18. Citadel
19. Basilica of St. John
20. Aquaducts
21. Isa Bey Mosque
22. Site of Artemision

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