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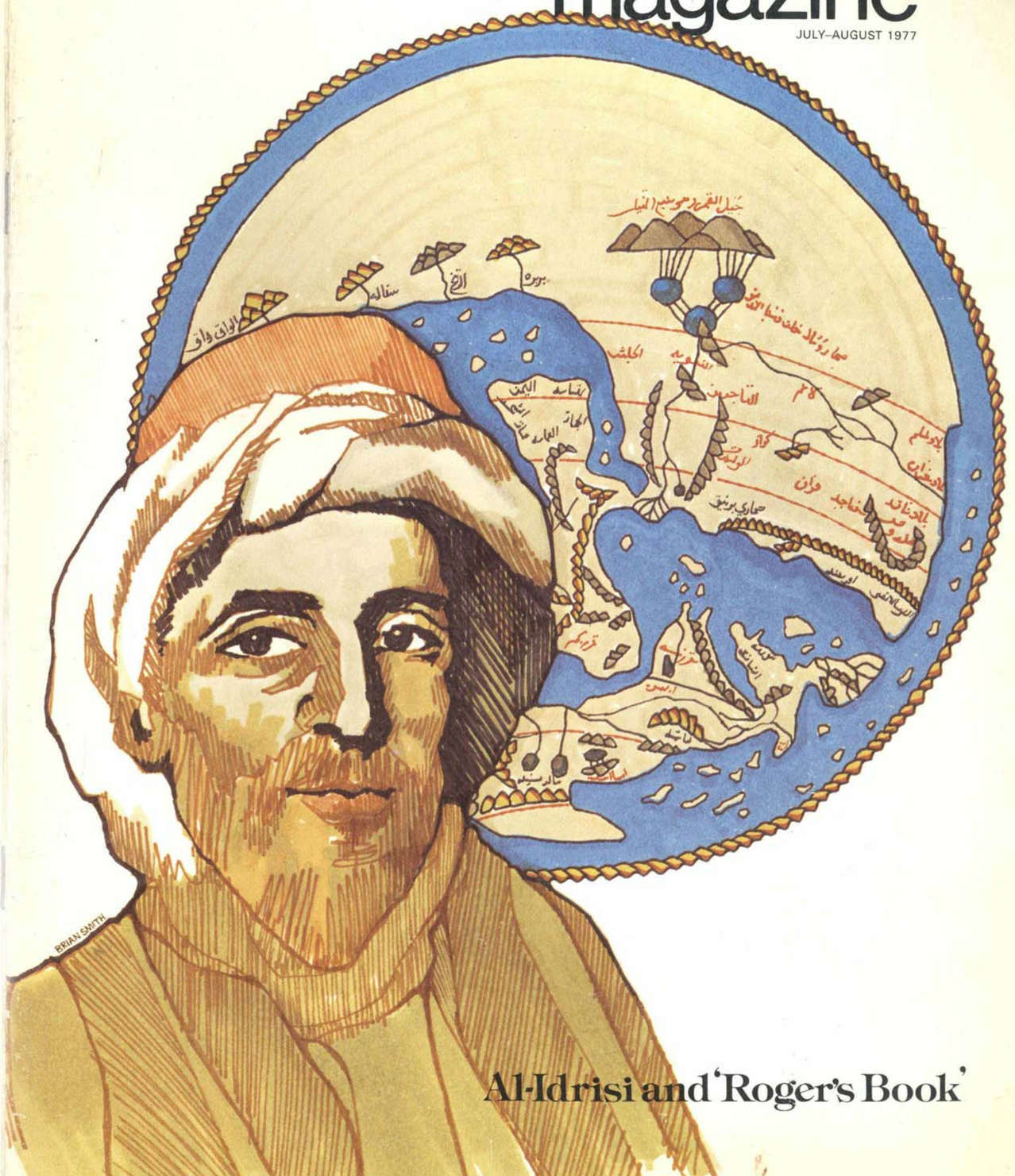
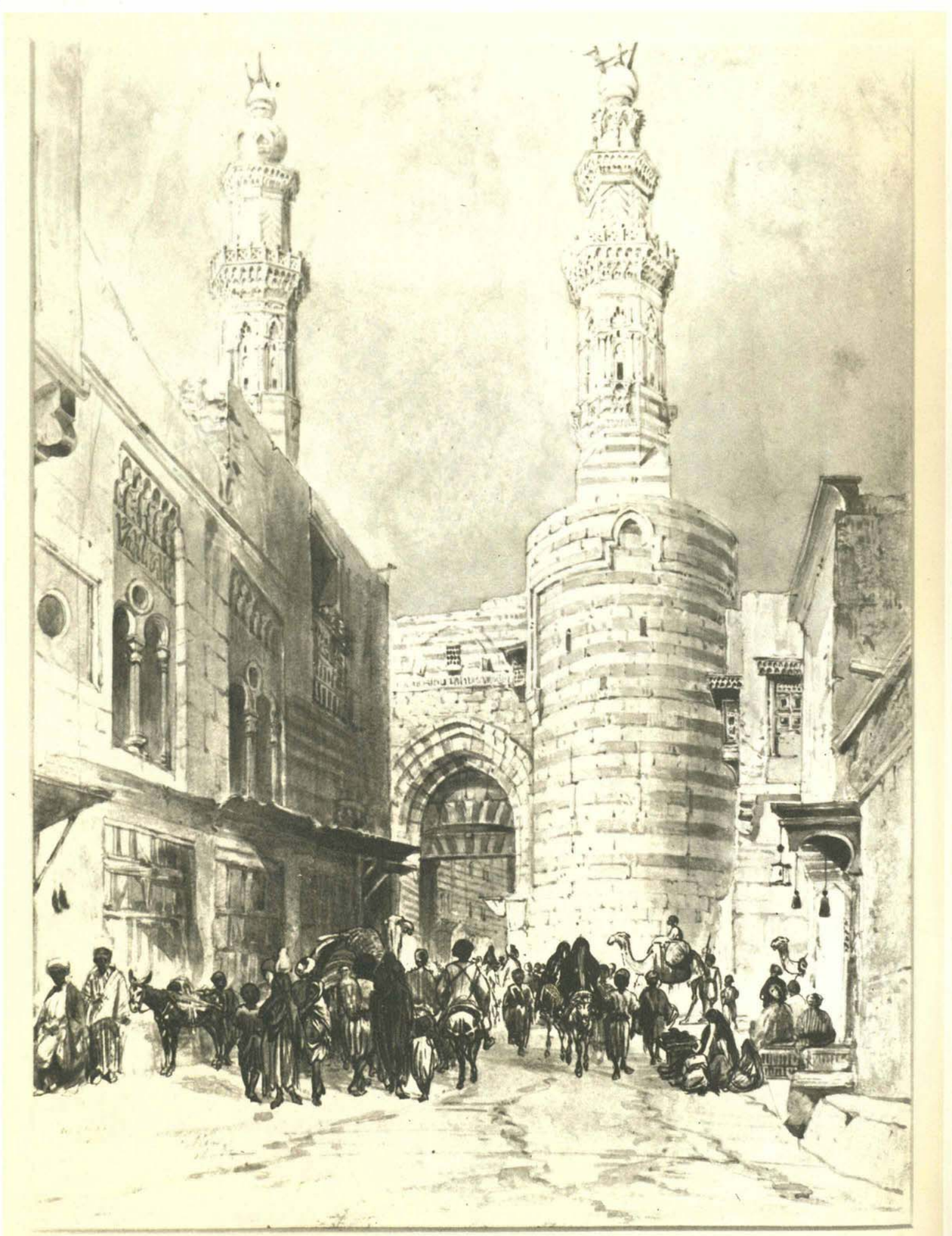
JULY–AUGUST 1977



Al-Idrisi and 'Roger's Book'



ARAMCO WORLD magazine

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Cover: Under the patronage of King Roger II of Sicily, the great Arab geographer and cartographer Al-Idrisi spent 16 years producing the first scientific geography of the known world – *Roger's Book*. From the meticulous and unprecedented research also came a great map engraved on an 80-inch silver disk. Rear cover: The word "Allah", repeated eight times makes up this calligraphic star.

◀ Bab Zooayleh, Cairo, is one of more than 1,000 illustrations made by British artist William Henry Bartlett during three Middle Eastern journeys in the early 19th century. Engravings on page 28

JAZZ CARAVAN

WRITTEN BY MORROE BERGER

To bring the best of American Jazz to the Middle East

Not long ago, a popular Turkish television quiz show flashed a quick view of an American jazz group on the screen and asked a contestant to identify it. Although the group had been taped while on tour in Ankara months before, the TV contestant quickly came up with the correct answer: Benny Carter and his Jazz Quintet. In Turkey, obviously, the band had made a strong impression.

That tour, part of the U.S. State Department's commemoration of America's Bicentennial Year, was an extension of a long-standing U.S. Information Agency effort to bring the best of American jazz to other countries.

So far, it has been an exceptionally successful effort. In 1956 Dizzy Gillespie made the tour with a full orchestra. In 1961 Louis Armstrong played in Egypt. In 1963 it was Duke Ellington's turn. And in 1976, Bennett Lester Carter, a vocalist, and four top musicians came together especially for the tour: Harry "Sweets" Edison, known for his years as a star with Count Basie; Gildo Mahones, a versatile and subtle pianist of superb technique; John B. Williams, a young bassist known for his work with classical orchestras as well as jazz groups; Earl C. Palmer Sr., a percussionist who, bridging the gap between jazz and rock, has been in great demand by top recording artists; and the vocalist, Millicent Browne, a dynamic personality known on several continents for her sensitive blending of words and music.

Carter himself, of course, needs no introduction. Born in New York in 1907, he was, in his early 20's, a leading alto saxophonist, trumpeter, arranger and composer whose bands, from 1928 to 1935, were acclaimed by both musicians and critics and whose arrangements formed a principal element in "swing," which began to sweep the United States and the world in the late 1930's. Many of his recordings have become classics and his arrangements were sought after by such other leaders as Fletcher Henderson, Benny Goodman, Glenn Miller, Tommy Dorsey, Count Basie and Louis Armstrong, and by such singers as Billie Holiday, Ella Fitzgerald, Peggy Lee, Pearl Bailey and Sarah Vaughan.

In the early 1940's Benny Carter began a new career in Hollywood—working on, or appearing in, such films as *Stormy Weather* (1943), *Snows of Kilimanjaro* (1952) and *The Guns of Navarone* (1961). Since the '50's he has written music for such television shows as *M Squad* and *Ironside.* In recent years, he has also given concerts—and presided over workshops and seminars—at such American universities as Cornell, Yale and Duke. At Princeton, furthermore, which awarded him the honorary degree of Doctor of Humane Letters in 1974, he is now a member of the Music Department's advisory council.

During the Bicentennial tour, Carter and his colleagues gave 19 concerts in 14 Middle Eastern cities: Istanbul, Ankara, Tehran, Isfahan, Shiraz, Islamabad, Lahore, Karachi, Kuwait, Damascus, Irbid, Amman, Cairo and Alexandria. And at each appearance they played such jazz "standards" as *In a Mellotone, Undecided, Take the 'A' Train, Perdido* and *Honeysuckle Rose* with each musician featured on other songs; Carter, the romantic *Misty*; Sweets Edison, the Latin-jazz *Wave* and his own *Supersweet*; Gildo Mahones, the wistful *Autumn Leaves*; John Williams, the contemporary *Skydive*; and Earl Palmer, the percussive explosion *Cute.* Millicent Browne accented her personal approach with *I'm a Woman* and *A Song for You* and the perennial jazz form in *Every Day I Have the Blues.*

The response of the audiences was uniformly enthusiastic. They loved Carter's lyrical alto saxophone, the quiet brilliance of pianist Gildo Mahones, Sweets Edison's piercing trumpet and wry humor, John Williams' pensive quality on bass and the crispness of Earl Palmer's infectious drumming. The audiences were so captivated by Millicent Browne that they even welcomed her nods in the direction of women's rights. In every city the hall, whatever its size, was filled to capacity.

Most of the audiences were composed of several kinds of people in different proportions. In every Middle Eastern city there were the diplomatic, professional and business communities—already familiar with American music. In most cities, they were far outnumbered by local fans familiar with American and European culture through study and travel. And, of course, at each concert there were the teenagers who, through radio and television, have become enthusiastic supporters of anything new in jazz and rock.

The jazz tour, however, offered more than just concerts. From the moment it was conceived, the tour was viewed as a broad cultural presentation too. For that reason Carter also joined me in conducting seminars on American music at which I spoke to university audiences on cultural and intellectual relations between Americans and the people of the Middle East, Americans of Middle Eastern origin, and the interaction between American jazz and Middle Eastern music.

For the same reason, Carter introduced each concert with a brief explanation of American jazz, pointing out that jazz is a combination of musical influences of several cultures, created by black Americans and characterized by improvisations, or variations, upon a base of written music, or themes. He also participated fully in the receptions and dinners and proved to be the perfect diplomat whether on stage or in the receiving line. In the presence of royalty in one country, for example, he modestly failed to mention that for several decades he has been known as "King" Carter—in the tradition of such jazz nobility as "Duke" Ellington, "Earl" Hines and "Count" Basie.

In Karachi, John Williams also joined the cultural presentations during a talk and demonstration I gave, with tapes of jazz and Middle Eastern music, to an audience of music students. In it we reviewed attempts by Americans to incorporate elements of Middle Eastern music into their own work and Amir Ahmad Khan, a producer with Radio Pakistan, introduced local players of the *sitar* and *tabla* who, with Williams, compared and demonstrated their music and instruments to an enthralled audience. At the same presentation Lutfallah Khan, a leading authority on oriental and western music, explained their similarities and differences in terms we could all follow.

Similar programs were equally successful. In Cairo, for example, Samha el-Kholy, director of the Conservatory of Music, gathered several hundred of her students from grade school to graduate school to hear musical examples demonstrating the fusion of American jazz and Middle Eastern music.

During the tour, of course, we *heard* jazz as well. In every city we found jazz experts and in Ankara and Cairo we found musicians sufficiently well organized to join the Benny Carter quintet during performances. In Ankara, for example, Erol Peçan, producer, drummer and band leader, joined the Americans along with Tuna Ötenel on piano and alto saxophone, and Selçuk Sun on bass. In Cairo, Salah Ragab, a former army officer who is a percussionist and jazz band leader, joined the quintet on *Caravan,* along with Sayed Salama on tenor saxophone and Bib Haneen, whose playing on the *tabla* with drumsticks was musically exciting and dexterous.

It was in Cairo, too, that Carter spoke at the opening of the Memorial Collection of American Jazz in the John F. Kennedy Cultural Center. This collection was a memorial to its original owner, Zareh Misketian, a native Cairene who, until his death in 1974, had been informal host to jazz musicians for nearly four decades. Carter told his audience how he had almost come to Cairo from Paris in the late 1930's with a group of colleagues who spent nearly two years there and in Alexandria as the "Rhythmakers."

There was yet a different kind of program in Kuwait: a discussion and demonstration of some elements and techniques of jazz. To illustrate changes in the use of several instruments, we played a tape of *Honeysuckle Rose* as arranged by Carter and recorded in Paris in 1937. The quintet then played the same tune in contemporary style. And to show the place of religious themes in the growth of jazz, the quintet played *When the Saints Go Marching In,* first as a hymn and then in the more famous Dixieland style.

Throughout the tour, the interaction between American jazz and Middle Eastern music came up regularly. In our time jazz has influenced formal and popular music everywhere, but in its own evolution jazz gathered up and transformed elements of music from several other cultures, including Middle Eastern ones. Jazz historians agree that Islamic influences in black and Arab Africa were felt in Muslim Spain, and that black American music reflects something of these musical cultures. From its earliest development in this century, jazz adopted Latin and Middle Eastern themes, at first sketchily, but in recent years more explicitly and perceptively.

The recorded examples we brought along showed this progression: from *Palesteena,* recorded in 1920 by the Original Dixieland Jazz Band, to the recent work of Ahmed Abdul-Malik, born in Brooklyn of Sudanese parents, who between 1958 and 1963 recorded several superb albums in which he brought together Middle Eastern and black American instrumentalists, playing his own beautiful and convincing arrangements and interweaving these two types of music. The most characteristic of these albums, unfortunately no longer available, are *Jazz Sahara* (Riverside, 1958) and *East Meets West* (RCA Victor, 1959).

Several song titles also reflect the interest of black American musicians in Middle Eastern themes—*Egyptian Fantasy* and *A Night in Tunisia,* for example, and two already mentioned, *Caravan* and *Palesteena.* In the 1950's prominent black American musicians adopted such names as Liaqat Ali Salaam, Sahib Shihab, Idriss Suleiman, Yusuf Lateef and Ahmad Jamal. All these facts were received by our Middle Eastern audiences with interest and surprise.

On the other hand, the Middle East made a strong impression on the musicians, too. As Benny Carter summed it up after the tour, the impact of the Middle East upon the visitors was considerable. "We travel a lot," he told the audience at the end of the concert in Amman, Jordan, "and the more we travel, the more we realize how important are the things we have in common with all the people we meet."

The jazz tour first originated in a suggestion made by Morroe Berger, director of Princeton University's Program in Near Eastern Studies.

ILLUSTRATED BY DON THOMPSON

A TOUCH OF TUNIS

Tunis, on North Africa's Barbary Coast, is actually two cities. One is modern Tunis, centered on the Avenue Habib Bourguiba, an extension of the six-mile causeway across the salt lake between the city and the Mediterranean, laid out with the rational precision of the 19th century and featuring the big hotels, restaurants, theaters, banks and offices.

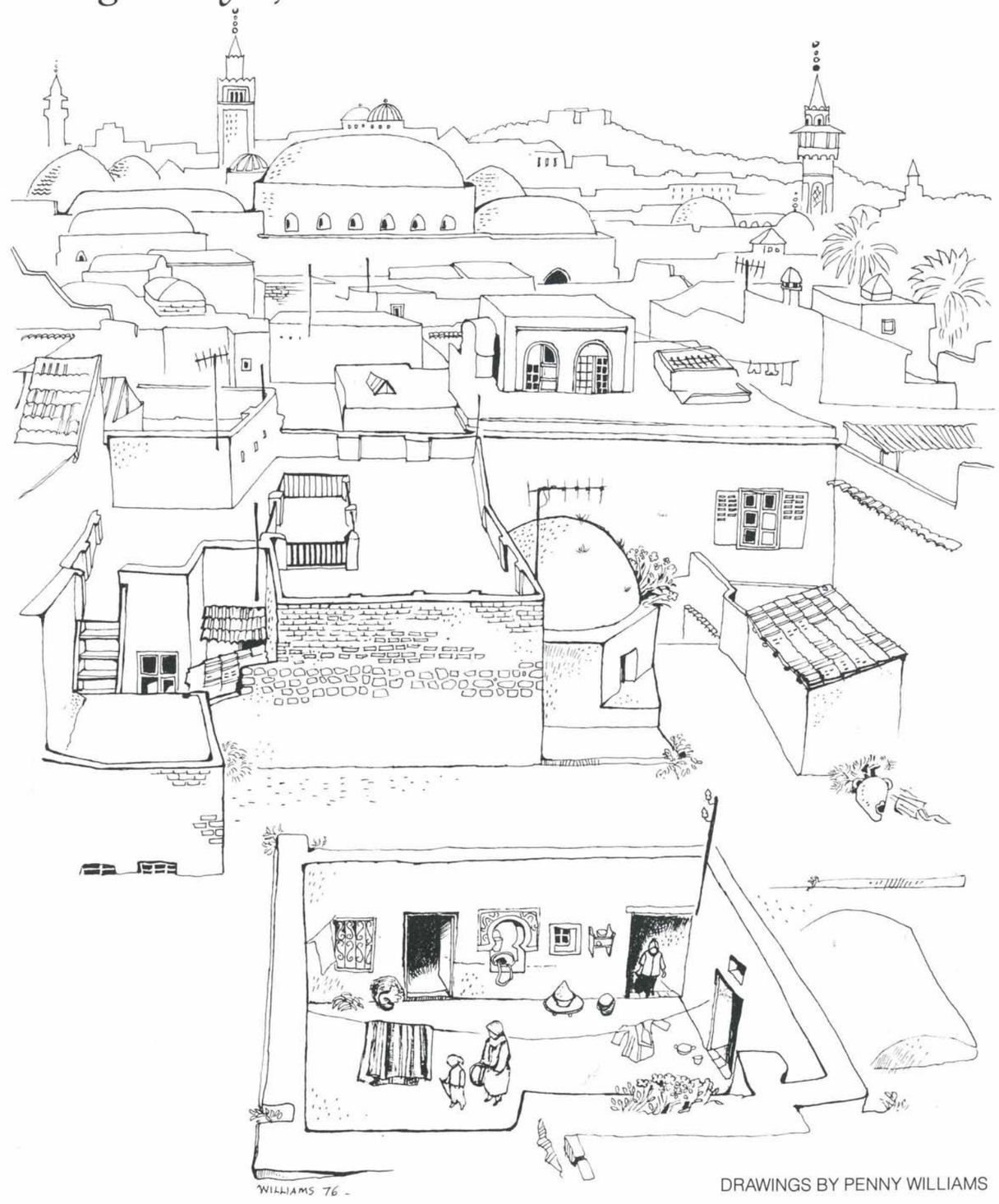
This modern city, however, is not the heart of Tunis. That lies elsewhere: in the old city, or Medina, a maze of narrow lanes, crowded markets, workshops and whitewashed dwellings sprawling down the hillside beneath the Kasbah, an old fort standing guard on the summit.

Over the centuries, many peoples have left their imprint on Tunis: the Romans, after destroying nearby Carthage; the Crusaders, rather surprisingly; the Ottoman Turks, the Moroccans, the Spaniards, and the French, who flavored the style of the city in many subtle ways. But one only has to walk through the Bab al-Bahr – the Sea Gate – into the old city, and start up bustling al-Zaytouna Street toward the eighth-century Mosque of the Olive Tree, to see which people left the most indelible impression. It was, of course, the Arabs who, for almost 1,000 years, made Tunis a flourishing center of commerce and craftsmanship, who built a city of beauty and taste with mosques, an important center of Islamic learning in medicine and law, and elegant residences set around garden courtyards.

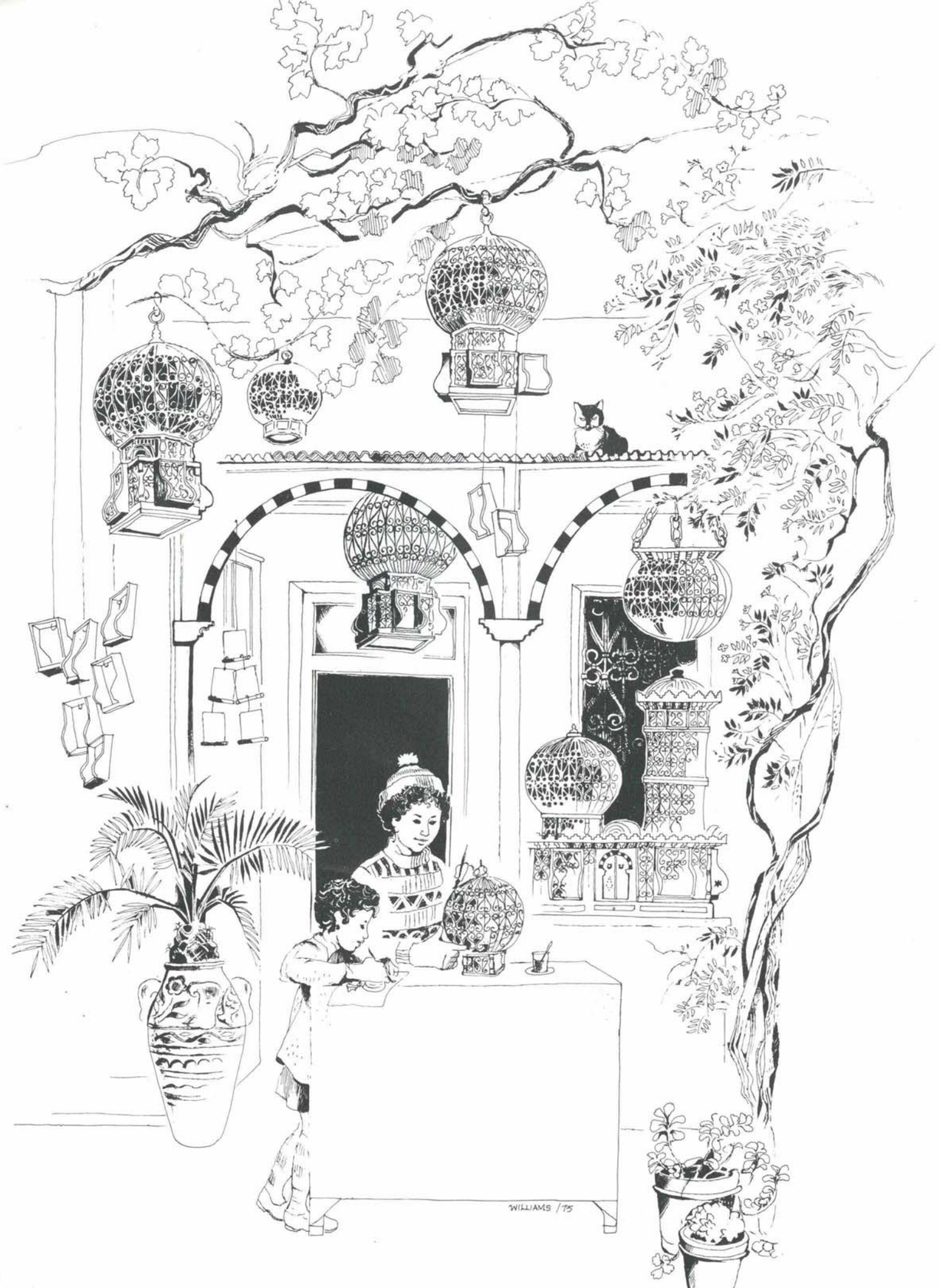
Today's invaders, the jet-age waves of European and American tourists, follow the same route. Leaving the new city behind, they quickly head for the covered suqs of the Medina, where craftsmen and shopkeepers, often one and the same man, weave and tailor cloth, cobble shoes, paint, carve, weld and hammer, each in his own small cubicle open to the passing throngs – and to the eye of artist Penny Williams.

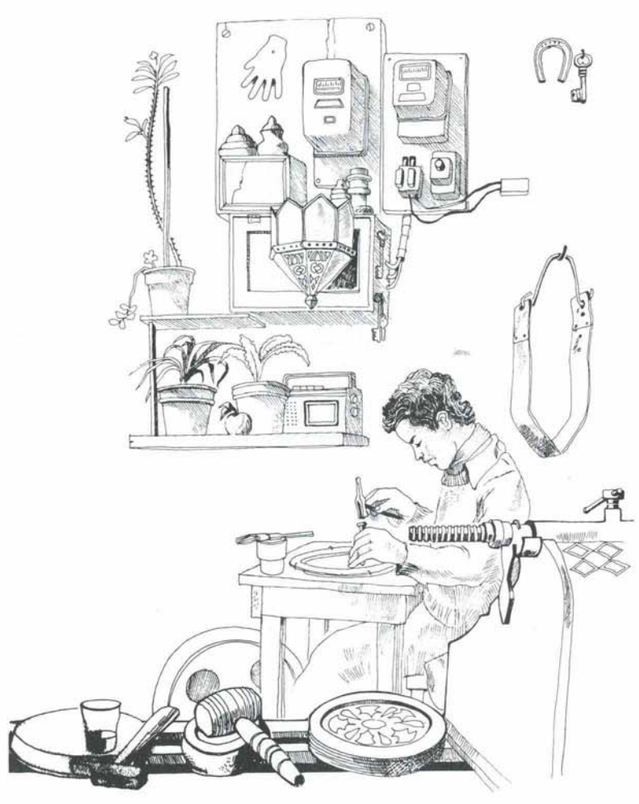
Miss Williams, a Canadian based in Beirut, lived in Tunis for some months last year and, as she has done before, began to record in her sketchbooks the people, the houses and the vanishing crafts of the old city, some of which are shown on the following pages.

Through the eye of a Canadian artist....

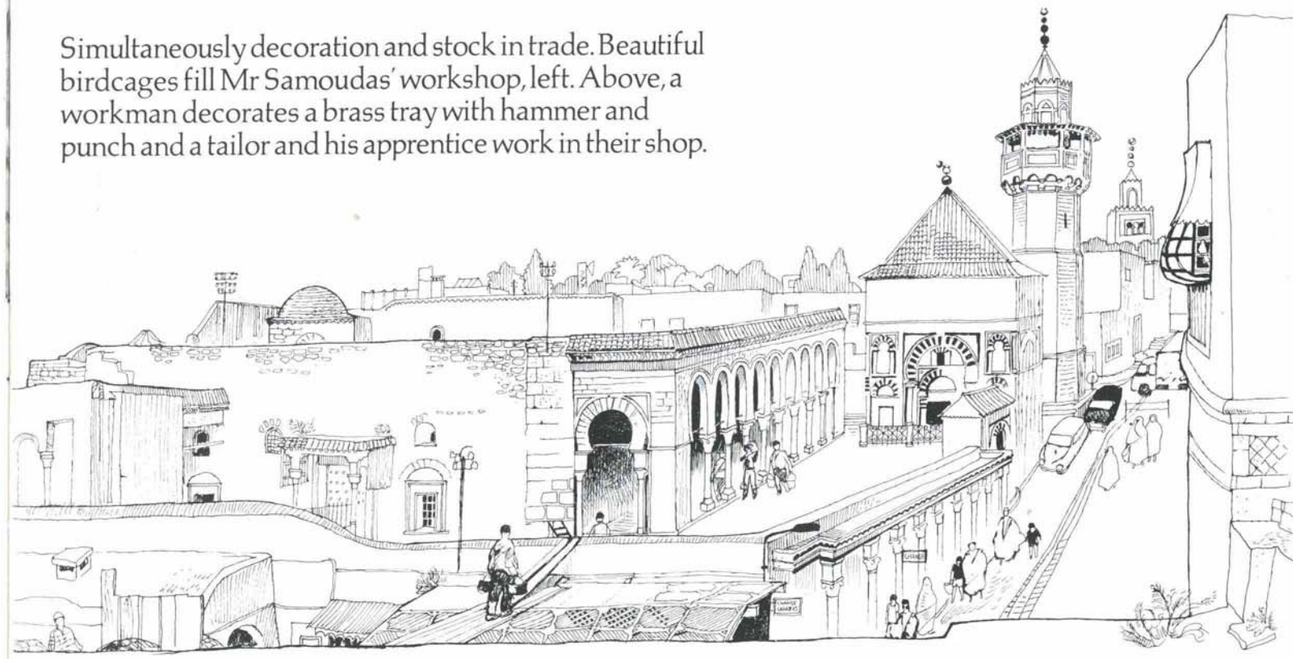


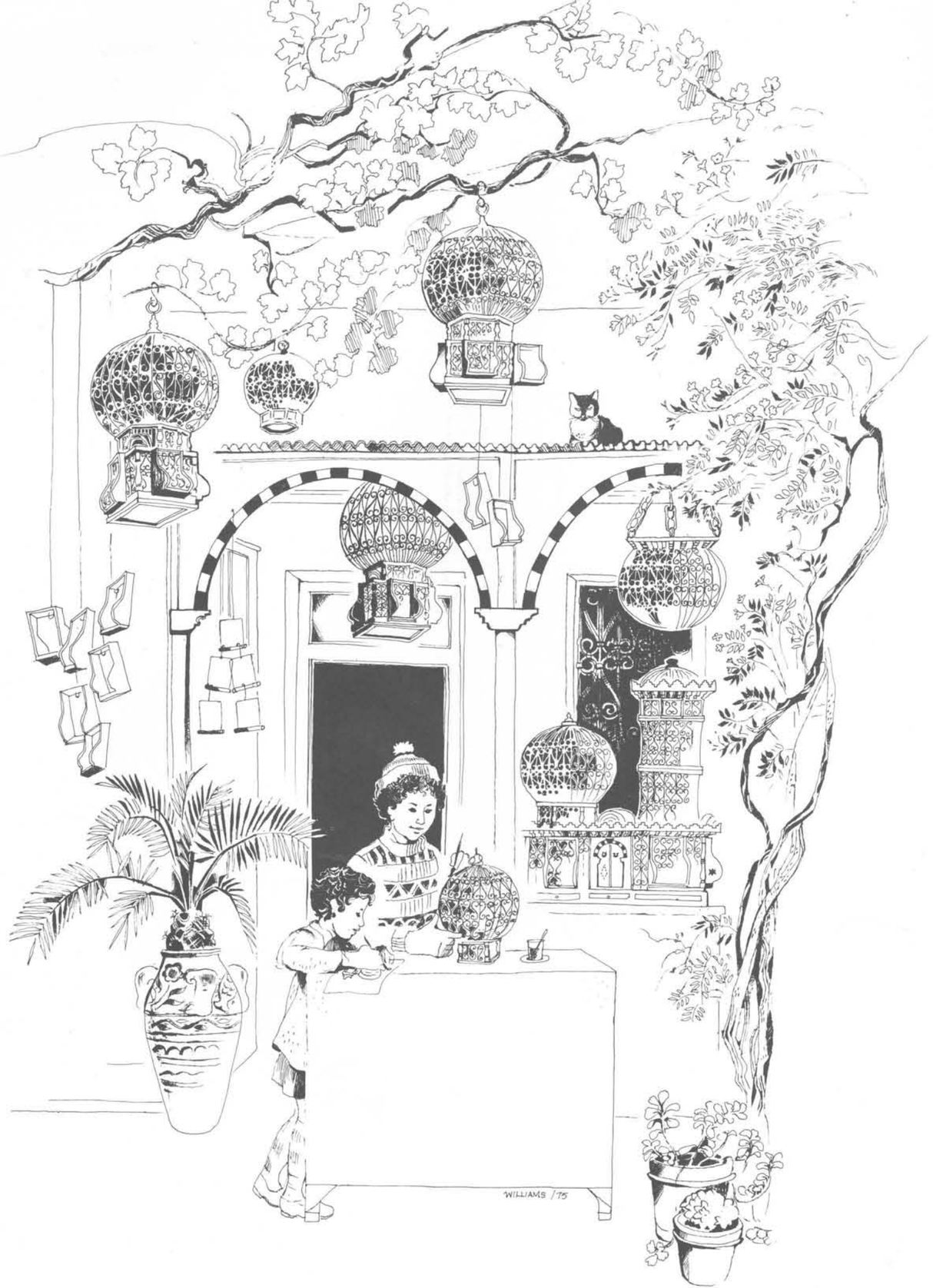
DRAWINGS BY PENNY WILLIAMS

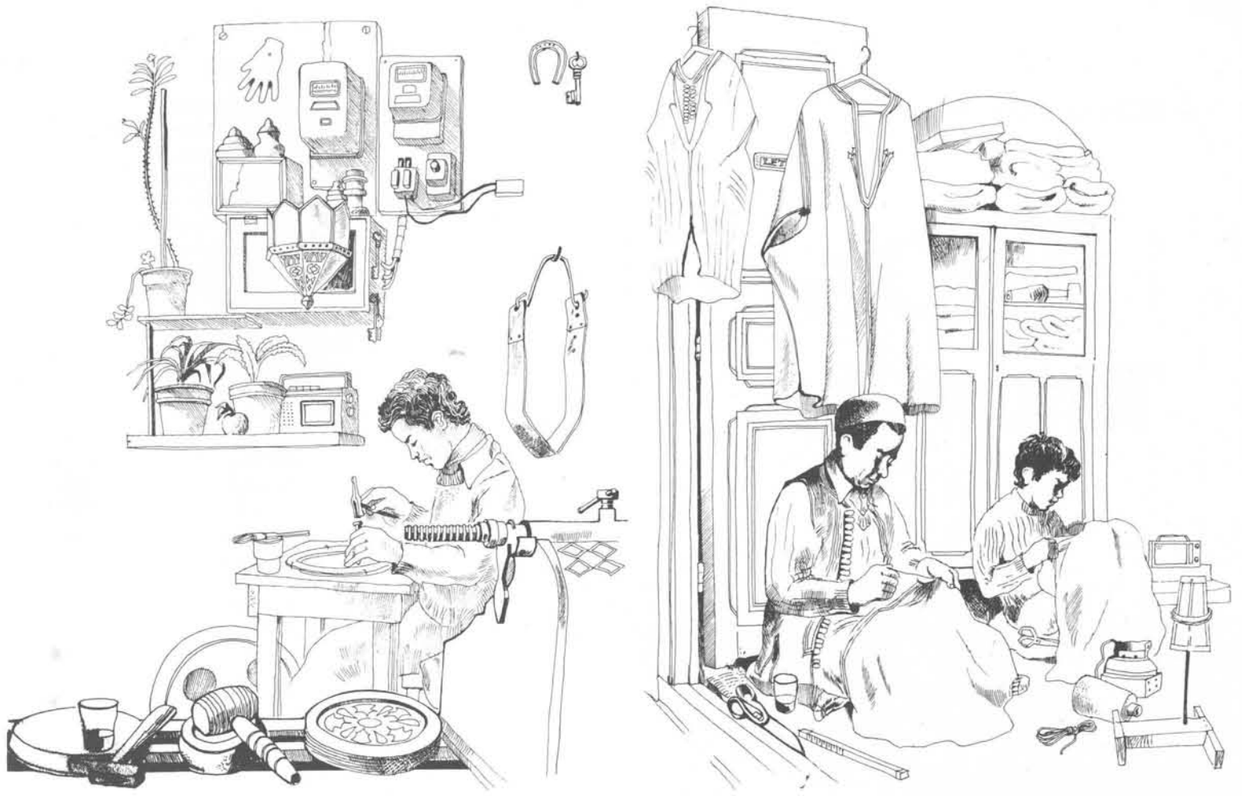




Simultaneously decoration and stock in trade. Beautiful birdcages fill Mr Samoudas' workshop, left. Above, a workman decorates a brass tray with hammer and punch and a tailor and his apprentice work in their shop.







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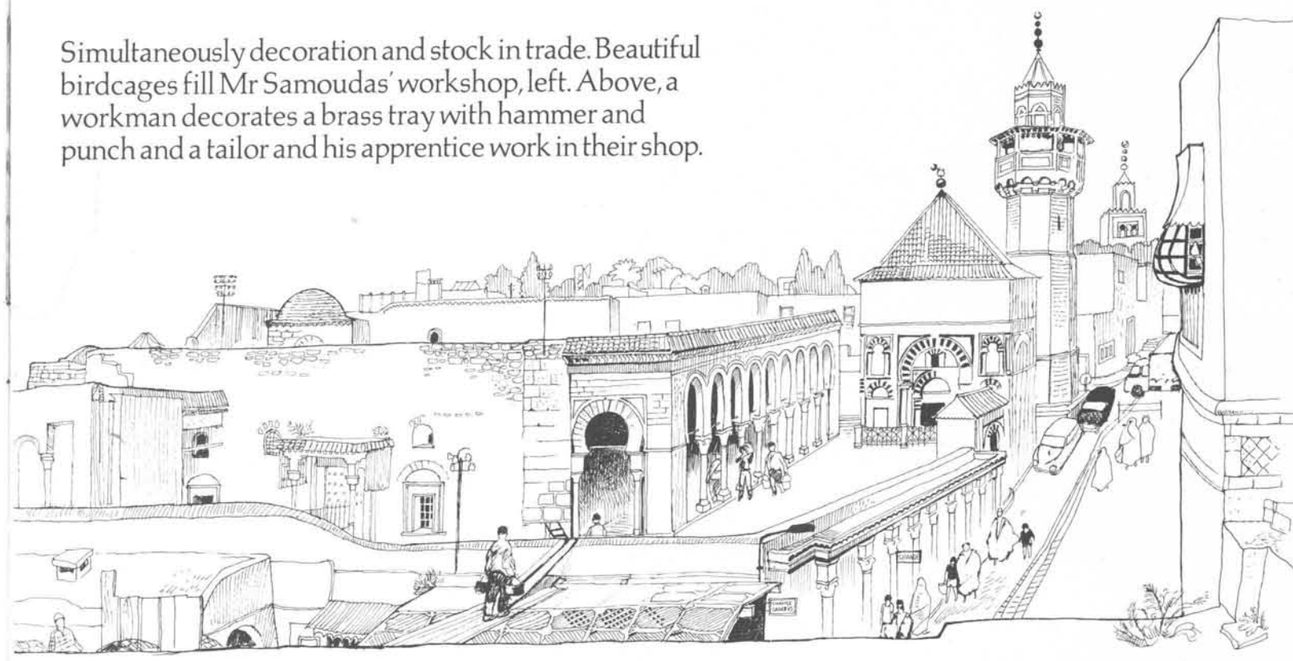


A little known legacy of Turkey's Ottoman past:

Topkapi's Turkish Timepieces

WRITTEN BY JAMES HORGEN

In 1923, when the last of the Ottoman Sultans left Istanbul for exile and the new Republican regime decreed that the dynasty's sumptuous palaces along the Bosporus should become museums, officials undertook a house-cleaning that uncovered rooms and closets stuffed with collections of art and royal paraphernalia, much of it long-forgotten gifts from emperors, kings and dignitaries who had once sought the favor of the mighty Ottoman court.

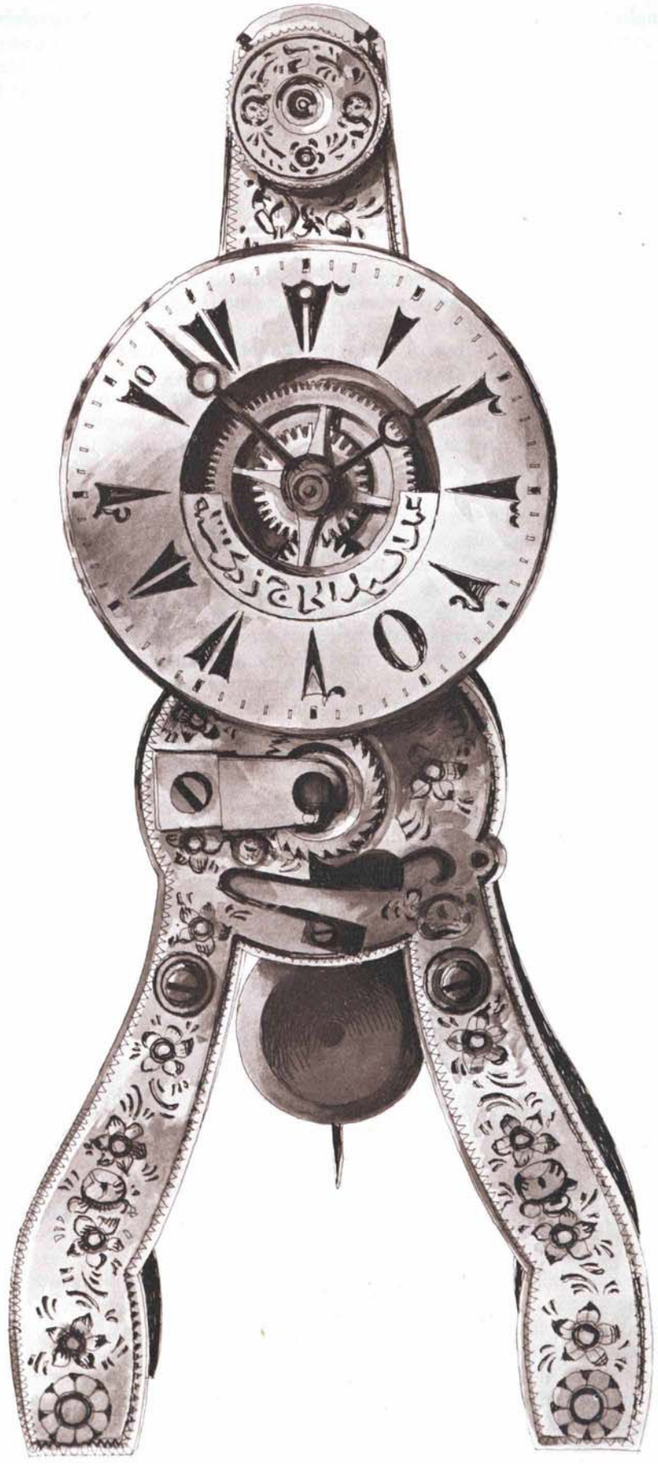
In the vast Topkapi Palace, they discovered a little-known legacy of Turkey's Ottoman past. Sorting through a collection of more than 100 splendid clocks and watches, most in perfect condition, they found among such gifts from Europe as 19th-century English and French floor clocks, a small collection of timepieces, dating from the 16th century, which bore craftsmen's names inscribed in Ottoman script. These were clocks and watches which had been made in the Ottoman empire, and in both the technical precision of their works and the lavish embellishment of their cases they were stunning examples of the clockmaker's art.

The Ottomans are usually thought of as soldiers rather than technicians, and even much of the "Ottoman" art and architecture created during their 400-year reign was the work of various urban minority groups, who themselves borrowed heavily from the legacy of Byzantium. How did it happen, then, that Ottoman craftsmen turned to the intricate and demanding art of clockmaking?

Religion was probably the main reason. As Muslims, Turks were obliged to pray five times daily, and since the time of the Prophet in the seventh century, Islamic religious leaders had been concerned with devising ways of determining these prayer times. Since timepieces were unknown in Arabia during the Prophet's lifetime, the desert Arabs worked out a rough method of determining prayer times by observing the varying phases of the sun. The first prayer, they decided, should be performed when a man could "discern his neighbor on the horizon," the second at noontime "when the sun was just beginning to decline," the third in mid-afternoon, the fourth in the evening "when one could still perceive the place his arrows fell," and the fifth "after some of the night had passed." Since the muezzin of each mosque decided whether he could "see his arrows" or not, prayer times were often irregular.

This method was used with slight changes until the Muslim armies moved out of the Arabian Peninsula into Palestine and Syria, where they first came into contact with sundials and water-clocks. Sundials, known since Greek times, were frequently used in conjunction with a simple waterclock, a bowl with rings marked around the inside that were revealed as water flowed out of the bowl at a steady rate through a hole in its bottom. As the "day" was reckoned from sunset (*Aramco World*, March-April 1969), the hours indicating midday and midnight continually varied with the seasons, and to remedy this Muslim scholars devised almanacs to determine the precise hours of prayer according to the degree of longitude of each area. Most mosques used this system until well into the 16th century when mechanical clocks came into use, although there was a clock in the main minaret of the mosque in Damascus as early as the 13th century.

The Ottomans were not the first Muslims to conceive of a mechanical timepiece; for the earliest descriptions of both theory and technique, they are indebted to earlier Arab scientists (*Aramco World*, May-June, 1976), who were the first to describe the use of astrolabes to measure the altitude of the sun in order to determine the time for prayer and determine the direction of Mecca. Notable among them were the mathematician al-Khwarizmi and the astronomer al-Qashrami. In Abbasid Baghdad, the



bibliographer Ibn al-Nadim was one of the first authors to write on the subject of time, giving details of mechanical clocks, sundials and waterclocks. The encyclopedist al-Jahiz, writing in the 9th century, boasted: "Our monarchs and scholars use astrolabes during the day and waterclocks during the night to ascertain the hour and have certain other instruments for measuring the shadows of the sun. . . ."

What the "certain other instruments" were can only be guessed, but they may well have been a primitive form of geared clock. During the reign of the famous Abbasid Caliph, Harun al-Rashid, mention is made of "a clock that strikes at the hours," which he sent with a delegation to the Emperor Charlemagne along with several waterclocks (*Aramco World*, March-April, 1977). These clocks may have been, in the opinion of many European historians, the first in Europe.

By the 16th century, the date of the first Turkish clocks, many books had appeared in Arabic and Persian on the subject of time, with such titles as "How to Determine the Time of Prayer and the

Direction of Mecca," and "How to Repair Sundials," suggesting a wide interest in the subject. Two books in particular laid the groundwork for the Turkish clockmakers.

One, by the Arab scientist al-Jazari, called the "Book of Knowledge of Mechanical Contrivances," also known as the "Treatise on Automata," furnished detailed drawings of over 50 mechanical devices, including clocks. The other, by the astronomer Taqi al-Din Muhammad ibn Ma'ruf, published in Istanbul, described the mechanics of astrolabes and observational telescopes as well as weight-driven clocks. These indicated hours and minutes and could determine the time of prayer "without having to observe the heavenly bodies," that is, when indoors or on overcast days.

The detail provided by al-Jazari and Taqi al-Din amounted to a "how-to-do-it" manual for the Ottoman clockmakers, who seem to have been the first among Muslims to actually go ahead and construct an elaborate mechanical timepiece.

As in medieval Europe, where the first geared clocks are believed to have appeared in monasteries to help regulate the daily prayer services, so in Istanbul the first Turkish clocks were made in the *tekkes*, or monasteries, of the so-called "Turkish monks," the Mevlevi Dervishes, better known to Westerners as the "Whirling Dervishes." The Mevlevis were considered the most intellectual of the Dervish orders and were well known for their interest in music and the arts. They acquired an interest in making mechanical clocks, their elders now suggest, to help initiates of the order observe fixed prayer times during long periods of meditation. More reliable than sundials and not requiring as much attention as a waterclock, the clocks also provided a focus for the communal life of the monastery.

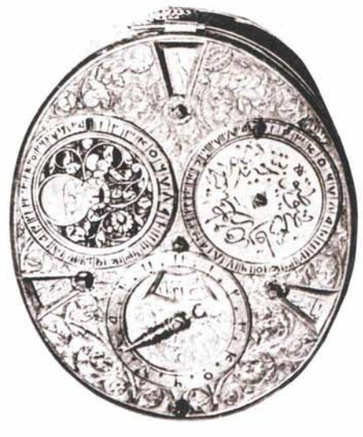
As artisans, the Mevlevis prided themselves on producing flutes, embossed swords and other *objets d'art*. Clockmaking required a combination of talents. The purely mechanical aspect drew upon the genius of scholars like Taqi al-Din, who had studied Arabic and Persian scientific writings, while making the outer encasement required the coordinated skills of metalworkers, cabinet makers and jewelers. Available manuscripts say very little about the actual method of manufacture, but it is apparent that the Mevlevis spent several years on each timepiece, with only the most basic of hand tools. Occasionally, the same artist would make the entire apparatus, from the inner gearwork to the intricately embellished case.

The outer design frequently took the shape of the Mevlevi headdress. This consisted of a felt hat like a tall, overturned plant pot, encircled at the base with a turban; it served as a symbol of the order and usually appeared as a sign on top of the *tekke* or on the Dervishes' gravestones.

An extraordinary example of encrusted jewel work and embellishment is the round wall clock signed by Shahiz, made about 1650. Covered with filigree work with inlaid rubies, emeralds and diamonds, the face is in the form of a wreath in blue enamel with white numbers, and the back—which, of course, was rarely seen—is also richly engraved with leaves and fleurons. A pocket watch, made by Meshur Sheyh Dede in 1702, shows, as well as hours and minutes, Gregorian and Arabic calendars and the signs of the Zodiac.

A clock made by Mehmet Sükrü in 1853, thought to be the only one of its kind, has a double escapement mechanism which permits it to operate unaffected by extremes in temperature. Another, made by Ahmed Dede about 1865, has a combination escapement and pendulum mechanism which is also insensitive to variations in temperature and is accurate to less than one second per 24 hours.

Many of these timepieces, now on display at the Topkapi Palace, were presented to the Sultan by the Mevlevis as a sign of their loyalty. A 16th-century illuminated manuscript shows a pro-



cession of different artisans before Sultan Murad III, and an account of their visit in a royal diary mentions among those who presented themselves to the Sultan the "magic" Mevlevi clockmakers. As the assembled audience watched in amazement, the diary tells us, they entered the hall with an oversize model of a clock gearwork mounted on a wagon. A hammer automatically struck the gearwheel, turning a second wheel which, the chronicler observes, "could perform the work of a dozen persons." The Sultan and his audience burst into applause and cheered the clockmakers as they pulled their display away.

The first non-Turkish clocks appeared in Istanbul early in the 16th century, when a delegation sent to Germany by Suleiman the Magnificent to attend the investiture of the Emperor Maximilian returned with several "clocks of value." An English traveler who visited one of the Sultan's palaces in the early 1700's described "tables of silver and precious woods, along with Persian carpets, Venetian mirrors and a gold English clock with a dome made of diamonds."

Soon the Sultan's various palaces were filled with clocks given by visiting European dignitaries, including floor models which played Turkish melodies, watches with an enameled portrait of the Sultan and dome-shaped table models in baroque style.

European clockmakers later opened branches in Istanbul and by the 18th century they were designing for the "Turkish market" models featuring a face with Arabic numerals and somewhat garish "oriental" encasements. These clocks became a common feature in well-to-do houses along the Bosporus.

Ottoman clockmakers also began to imitate the imported models. One of the last known Turkish clocks, made in Istanbul by Ismet Dersadet in 1900, is a large table clock mounted in tortoise shell, bearing the coat of arms of Sultan Abdul Hamid II and patterned closely after a popular series of 19th-century English clocks.

The small number of Turkish clocks in the Topkapi Palace collection doesn't indicate, as might be assumed, that European competition eventually forced the Turkish clockmakers out of business. In fact the Turkish clocks were, from the beginning, a labor of love by scholar-craftsmen motivated by religion, their interest in art and devotion to the Sultan. They were never concerned with profits or large-scale production. In fact, before the Republican regime banned all Dervish orders in 1923, the Mevlevis probably actually made few more than the some 30 timepieces known to have survived in the Sultan's palaces and in the houses of their order, a uniquely Turkish contribution to Muslim craftsmanship.

James Horgen, formerly with Aramco's Arabian Research Division, writes on Arab history.

Al-Idrisi and 'Roger's Book'

WRITTEN BY FRANCES GIES

An Arab geographer compiled the first scientific map of the world

In the year 1138, the royal palace at Palermo, Sicily was the scene of a long-awaited meeting between an unusual Christian king and a distinguished Muslim scholar. As his visitor entered the hall, the king rose, took his hand and led him across the carpeted marble to a place of honor beside the throne. Almost at once the two men began to discuss the project for which the scholar had been asked to come from North Africa: the creation of the first accurate—and scientific—map of the entire known world.

The monarch was Roger II, King of Sicily; his distinguished guest the Arab geographer al-Idrisi. Born in Ceuta, Morocco, across the strait from Spain, al-Idrisi was then in his late 30's. After studying in Cordoba, in Muslim Spain, he had spent some years in travel, covering the length of the Mediterranean, from Lisbon to Damascus. As a young man with poetic pretensions he had written student verse celebrating wine and good company, but in the course of his journeys he had discovered his real passion: geography.

Al-Idrisi's writings tell us less about his own character and personality than about those of the man who became his host and patron. Roger II, son of a Norman-French soldier of fortune who had conquered Sicily at the beginning of the 12th century, was an anomaly among Christian monarchs of his time. His co-religionists, commenting on his oriental life-style, complete with harem and eunuchs, disparagingly referred to him as the "half-heathen king" and "the baptized Sultan of Sicily." Educated by Greek and Arab tutors, he was an intellectual with a taste for scientific inquiry, and relished the company of Muslim scholars, of whom al-Idrisi was one of the most celebrated.

Such cultural communication at a time when Crusaders and Muslims were battling in the Holy Land and while Mediterranean pirates of both faiths plundered each other's ships and ports may seem surprising. But Crusades and piracy notwithstanding, medieval merchants did brisk business across the frontiers of religion, and inevitably ideas were exchanged as well as products.

Sicily in particular was a meeting ground for the two civilizations. Captured by the Arabs in 831, the island had remained in Muslim control until the end of the 11th century. Like Muslim Spain (see *Aramco World*, September-October, 1976), it was a beacon of prosperity to a Europe caught in the economic slow-down we call the Dark Ages. The occupying Arabs had built dams, irrigation systems, reservoirs and water towers, introduced new crops—oranges and lemons, cotton, date palms, rice—and exploited the island's mines and fishing grounds.

Early in the 11th century a band of Norman adventurers, the Hautevilles, had ridden into southern Italy to wrest it from the Byzantine Greeks and the Muslims, and in 1101 Count Roger d'Hauteville capped his career by conquering Sicily. Four years later, he passed the territory on to his son, Roger, who in 1130 was crowned king as Roger II.

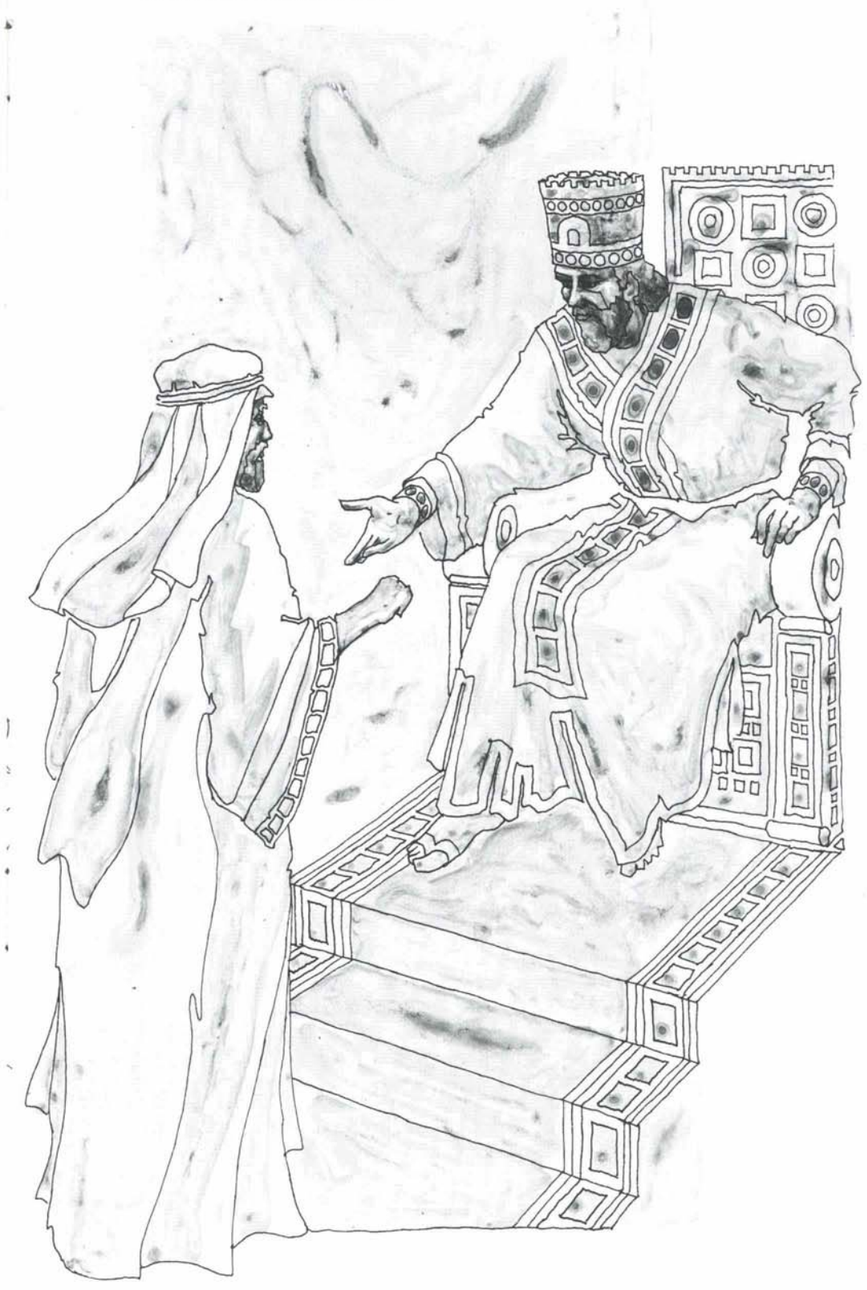
Tall, dark-haired, bearded and corpulent, Roger, from a magnificent palace in Palermo, ruled his kingdom with a balanced mixture of diplomacy, ruthlessness, wisdom and skill that has led many historians to term his kingdom the best-governed European state of the Middle Ages. His energy was a legend—one commentator remarked that Roger accomplished more asleep than other sovereigns did awake—and his court boasted a collection of philosophers, mathematicians, doctors, geographers and poets which had no superior in Europe—and in whose company he spent much of his time. "In mathematics, as in the political sphere," al-Idrisi wrote of his patron, "the extent of his learning cannot be described. Nor is there any limit to his knowledge of the sciences, so deeply and wisely has he studied them in every particular. He is responsible for singular innovations and for marvelous inventions, such as no prince has ever before realized."

Roger's interest in geography was the expression of a scientific curiosity just awakening in Europe, but inevitably he turned to a Muslim for help. Christian Europe's approach to map-making was still symbolic and fanciful, based on tradition and myth rather than scientific investigation, and used to illustrate books of pilgrimage, Biblical exegesis and other works. Picturesque and colorful, European maps showed a circular earth composed of three continents equal in size—Asia, Africa and Europe—separated by narrow bands of water. The Garden of Eden and Paradise were at the top and Jerusalem at the center, while fabulous monsters occupied the unexplored regions—Sirens, dragons, men with dogs' heads, men with feet shaped like umbrellas with which they protected themselves from the sun while lying down.

A few practical maps did exist—mariners' charts showing coastlines, capes, bays, shallows, ports of call and watering and provisioning places—but in a typical medieval divorce of science and technology, these remained in the hands of navigators. Information from travelers, too, filtered only very slowly onto Christian maps. What King Roger had in mind, therefore, was something as factual as the mariners' charts, but encompassing the whole known world. The mission he entrusted to al-Idrisi was intellectually Herculean: to collect and evaluate all available geographical knowledge—from books and from on-the-spot observers—and to organize it into an accurate and meaningful representation of the world. His purpose was partly practical, but mostly scientific: to produce a work which would sum up all the contemporary knowledge of the physical world.

To carry out the project, Roger established an academy of geographers, with himself as director and al-Idrisi as permanent secretary, to gather and sift information. He wanted to know the precise conditions of every area under his rule, and of the world outside—its boundaries, climate, roads, the rivers that watered its lands, the seas that bathed its coasts.

ILLUSTRATED BY BRIAN SMITH



The academy began by studying and comparing the works of previous geographers—principal among them 12 scholars, 10 of them from the Muslim world.

The reason behind the Muslim domination of the field of geography was simple: economics. While medieval Europe had become fragmented and parochial, both politically and commercially, the Muslim world was unified by a flourishing long-distance commerce as well as by religion and culture. Muslim merchants, pilgrims and officials used so-called "road books," itineraries that described routes, traveling conditions and cities along the way. Some of the early authors of road books were on al-Idrisi's list: Ibn Khurdadhbih, an eighth-century Persian who was director of the postal and intelligence service in Iran; al-Yaqubi, an Armenian who in the ninth century wrote a *Book of Countries*; Qudamah, a 10th-century Christian who had embraced Islam, served as a tax accountant at Baghdad and written a book discussing the postal and tax systems of the Abbasid Caliphate. Others belonged to a later tradition of systematic geography, like the 10th-century scholars Ibn Hawqal and al-Mas'udi, who produced books intended as something more than practical guides for the tax collector or the postman: as additions to the fund of human knowledge.

Al-Idrisi's two geographers from the pre-Islamic era were Paulus Orosius, a Spaniard whose popular *History*, written in the fifth century, included a volume of descriptive geography; and Ptolemy, the greatest of the classical geographers, whose *Geography*, written in the second century, had been entirely lost to Europe, but preserved in the Muslim world in an Arabic translation.

After examining at length the geographical works they had collected, the king and the geographer observed that they were full of discrepancies and omissions, and decided to embark on original research. Sicily's busy and cosmopolitan ports provided an ideal

place for such an inquiry, and for years hardly a ship docked at Palermo, Messina, Catania or Syracuse without its crew and passengers being interrogated about the places they had visited. The commission's agents haunted the ports, and if they discovered a traveler who had visited any particularly exotic region, he was conducted to the palace at Palermo to be questioned by al-Idrisi or even by Roger. What was the climate of the country, its rivers and lakes, mountains, coastal configurations and soil? What of its roads, buildings, monuments, crops, crafts, imports, exports and marvels? What, finally, were its culture, religion, customs and language? In addition, scientific expeditions were dispatched to areas on which information was lacking. These expeditions were accompanied by draftsmen and cartographers so that a visual record of the country could be made.

During this research, al-Idrisi and Roger compared data, keeping the facts on which travelers agreed and throwing out all conflicting information. This process of collecting and assessing material took 15 years, during which, according to al-Idrisi, hardly a day passed when the king did not confer personally with the geographers, studying accounts that disagreed, examining astronomical coordinates, tables and itineraries, poring over books and weighing divergent opinions.

Finally, however, the long preliminary study was finished and the task of map making began. First, under al-Idrisi's direction, a working copy was produced on a drawing board, with places sited on the map with compasses, following the tables that had already been prepared. Then a great disk almost 80 inches in diameter and weighing over 300 pounds was fabricated out of silver, chosen for its malleability and permanence.

Al-Idrisi explained that the disk merely symbolized the shape of the world: "The earth is round like a sphere, and the waters adhere to it and are maintained on it through natural equilibrium which suffers no variation." It remained "stable in space like the yolk in an egg. Air surrounds it on all sides. . . . All creatures are stable on the surface of the earth, the air attracting what is light, the earth what is heavy, as the magnet attracts iron."

As his comment suggests, al-Idrisi thought that the world was round. Nor was he alone. Contrary to a still popular misconception that up to the time of Columbus everyone believed the world was flat, many scholars and astronomers since at least the fifth century B.C. had believed that the earth was a globe. In the third century B.C. the Alexandrian astronomer Eratosthenes measured a degree of the earth's circumference with amazing accuracy, arriving at a figure with an error of either 1.7 or 3.1 percent. (The variation in the amount of his error is due to modern uncertainty as to the exact length of the measurement he used.) Ptolemy, four centuries later, estimated the circumference with much less success —at almost 30 percent less than its true extent. And in the ninth century, 70 Muslim scholars, working under the patronage of Caliph al-Ma'mun, gathered in the Syrian Desert to determine the length of a degree of latitude. Rather than rely on travelers' guesses of distance, as previous astronomers had done, they used wooden rods to measure the road they traveled until they saw a change of one degree in the elevation of the polestar. Their calculation resulted in a figure for the earth's circumference equivalent to 22,422 miles, an error of 3.6 percent, almost as accurate as Eratosthenes' estimate and a considerable improvement over Ptolemy's.

By al-Idrisi's time, Muslim astronomers had made great strides in methods of reckoning latitude. (Longitude remained a problem until the 17th century.) Arab geographers had corrected some of the errors of Ptolemy and other Greek scientists. The mathematician al-Khwarizmi reduced Ptolemy's estimate of the length of the Mediterranean Sea from 62 to 52 degrees; the Spanish Muslim astronomer al-Zarqali further adjusted the figure to the correct 42. Other Muslim scholars, like the Iraqi astronomer al-Battani and the Persian al-Biruni, composed tables giving the latitudes of leading cities.

Al-Idrisi himself gave three figures for the earth's circumference, without deciding among them: Eratosthenes' approximately correct estimate, a slightly smaller figure arrived at by Indian asronomers, and a still smaller number—though larger than Ptolemy's—which was apparently agreed on by Sicilian scholars.

Cartography, nevertheless, remained in a primitive state. Although Ptolemy had discussed several kinds of projection, the problem of flattening out the surface of a sphere so that it could be represented on a map was not solved until the 16th and 17th centuries—the Age of Exploration—and none too satisfactorily even then. The great geographer Gerardus Mercator commented, "If you wish to sail from one port to another, here is a chart . . . and if you follow it carefully you will certainly arrive at your port of destination. . . . You may get there sooner or you may not get there as soon as you expected, but you will certainly get there." Al-Idrisi's silver disk, or "planisphere," was a form of projection considerably in advance of others of its time.

On the disk, according to al-Idrisi's own account, were incised "by skillful workers" lines marking the limits of the seven climates of the habitable world, arbitrary divisions established by Ptolemy running east and west and bounded by parallels of latitude, from the Arctic to the Equator. Below the Equator, an unexplored southern temperate zone was thought to be separated from the familiar northern one by an impassable area of deadly heat. Following the rough sketch prepared by al-Idrisi, the silversmiths transferred the outlines of countries, oceans, rivers, gulfs, peninsulas and islands to the planisphere.

To accompany the silver map, al-Idrisi prepared for Roger a book containing the information gathered by the geographers: *Nuzhat al-Mushtaq fi Ikhtiraq al-Afaq* (The Delight of One Who Wishes to Traverse the Regions of the World), or more simply, *al-Kitab al-Rujari* (Roger's Book). The text contained 71 part maps, a world map and 70 sectional itinerary maps, representing the seven climates each divided longitudinally into 10 sections.

Modern geographers have attempted to reconstruct the features of the silver planisphere by using a combination of the maps of *Roger's Book*, which has survived in several texts, and its tables of longitudes and latitudes. From this reconstruction it is evident that, like Ptolemy, al-Idrisi pictured the habitable world as occupying 180 of the 360 degrees of the world's longitude, from the Atlantic in the West to China in the East, and 64 degrees of its latitude, from the Arctic Ocean to the Equator. The planisphere showed the sources of the Nile—not explored by Europeans until the 19th century, but evidently known to 12th-century Muslim travelers—and the cities of central Sudan. The Baltic area and Poland were represented much more precisely than on Ptolemy's maps, showing the fruit of the geographers' investigations. The British Isles also were

treated with a surprising knowledgeability, probably due to contacts between Norman England and Norman Sicily. An element of subjectivity entered into the fact that southern Italy was represented as larger than the north, and that Sicily occupied a substantial part of the Western Mediterranean, in contrast to Sardinia and Corsica, which shrank in scale. Not surprisingly, the best part of both map and text, accurate and detailed, dealt with Sicily itself.

Distortions, omissions, and misconceptions notwithstanding, the superiority of al-Idrisi's map over the world maps of medieval Europe is striking. Contrasted with the quaint and picturesque, but almost totally uninformative maps of the Christian scholars, the features of Europe, North Africa and the Middle East are easily recognizable in al-Idrisi's representation—Britain, Ireland, Spain, Italy, the Red Sea and the Nile.

The book that accompanied the great silver planisphere was even more remarkable. The first medieval "general geography," and the most elaborate description of the world produced in the Middle Ages, *Roger's Book* undertook a stupendous task, that of systematically describing the habitable world, beginning with the first section of the first climate at Ptolemy's prime meridian, the Canary Islands. It proceeded from west to east and from south to north through each of the 10 sections of the seven climates. Each section opened with a general description of the region, then a list of the principal cities, then a detailed account of each city, with distances between cities: "From Fez to Ceuta, on the Strait of Gibraltar, heading north, seven days. From Fez to Tlemcen, nine days, following this itinerary: from Fez turn toward the great river of Sebou. . . ."

The first division of the first climate began in the Western Sea, the "Sea of Darkness." "In this sea are two islands named the Fortunate Isles. . . . Nobody knows of habitable land beyond that." To the south al-Idrisi pictured a great river, the "Nile of the Negroes," a composite of the Senegal and the Niger, that flowed from Central Africa west to the Atlantic. Via this river the salt trade was carried on with the Sudan. Al-Idrisi described the lost city of Ghana (near Timbuktu, on the Niger) as "the most considerable, the most densely peopled, and the largest trading center of the Negro countries." In the fourth section of the first climate, al-Idrisi located the sources of the Nile in their approximately correct position, though he pictured the "Nile of the Negroes" as joining the "Egyptian Nile" at that point.

Al-Idrisi gave a detailed description of Spain, where he had spent his student days. He praised Toledo, with its defensible site, fine walls and well-fortified citadel. "Few cities are comparable in the solidity and height of buildings, the beauty of the surrounding country, and the fertility of the lands watered by the Tagus. The gardens of Toledo are laced with canals on which are erected water wheels used in irrigating the orchards, which produce in prodigious quantity fruits of inexpressible beauty and quality. On every side are fine estates and well fortified castles."

Sicily, naturally, came in for special praise; it was "a pearl of the age," and al-Idrisi told the story of the Norman conquest of the island by Roger d'Hauteville, "the greatest of Frankish princes," followed by the succession of "the great king who bears the same name and who follows in his footsteps."

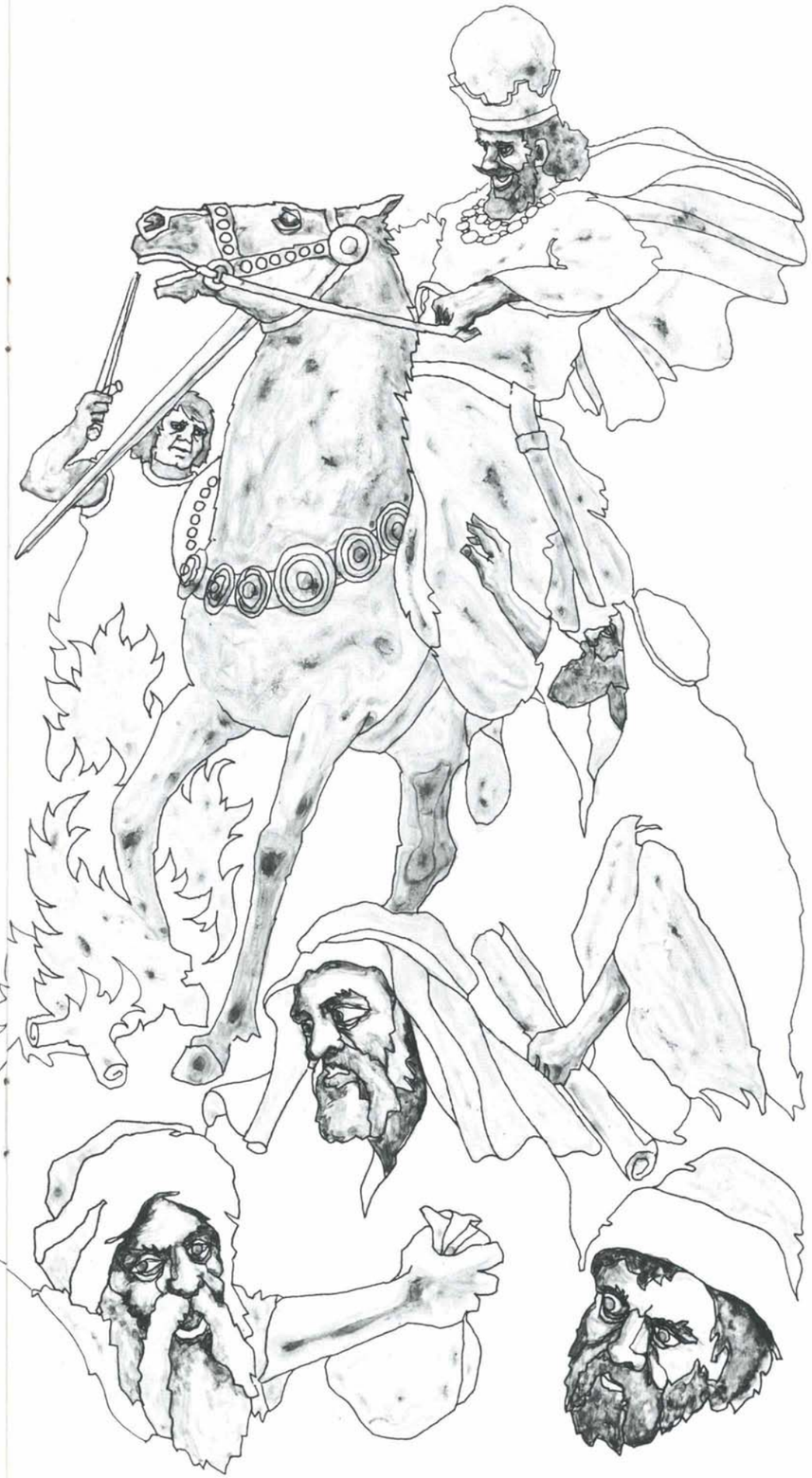
Every area had its fascinations. In Russia, winter daylight periods were so short that there was hardly time for Muslim travelers to perform all five obligatory daily prayers. The Norwegians had to harvest their grain when it was still green and dry it at their hearths "since the sun shines very rarely upon them." As for Britain, it "is set in the Sea of Darkness. It is a considerable island, whose shape is that of the head of an ostrich, and where there are flourishing towns, high mountains, great rivers and plains. This country is most fertile; its inhabitants are brave, active and enterprising, but all is in the grip of perpetual winter." Al-Idrisi gave the names of many English towns, principally ports, with the distances between them. Hastings was a "considerable town, densely populated, with many buildings, markets, much industry and commerce;" Dover, to the east, was "an equally important town" not far from the mouth of the "river of London, the broad and swiftly flowing Thames." London, however, was mentioned only as "a city of the interior."

Towns of France were also described, again with emphasis on the ports, particularly those of Britanny and Normandy; but cities of the interior were also listed: Tours, then, as now, a wine center "surrounded by numerous vineyards;" Chartres, an agricultural market (its famous cathedral had not yet been built); Meaux, "the center of the land of France;" Bayeux, Dijon, Troyes, Orléans, Le Mans and many others. Paris (Abariz) earned a condescending reference as a town "of mediocre size, surrounded by vineyards and forests, situated on an island in the Seine, which surrounds it on all sides;" however, "it is extremely agreeable, strong, and susceptible of defense."

The impressive assemblage of facts from travelers' accounts and geographical writings was interrupted now and then by fables, some taken directly from Ptolemy, some from popular folklore. The Strait of Gibraltar, according to *Roger's Book*, did not exist when Alexander the Great—as medieval legend had it—invaded Spain. Because the inhabitants of Africa and Europe waged continual warfare, Alexander decided to separate them by a canal, which he cut between Tangier and al-Andalus (southern Spain). The Atlantic rushed in, inundating the land and raising the level of the Mediterranean.

Al-Idrisi's Rome had an oriental magnificence; ships with their freight sailed up the Tiber to be "drawn thus loaded right up to the very shops of the merchants." There were 1,200 churches; the streets were paved with blue and white marble; in a magnificent church encrusted with emeralds stood an altar supported by 12 statues of pure gold, with ruby eyes. And the city's "prince," he wrote, "is called the Pope."

Al-Idrisi presented the planisphere, a silver celestial sphere and the book to his patron in 1154, just a few weeks before Roger died at 58, probably of a heart attack; he went on to compose another geographical work for William I, Roger's successor. This work is said to have been even more extensive than his earlier one, but only a few extracts have survived.



In 1160, however, Sicilian barons rose in rebellion against William and during the disorders looted the palace; in a great fire in the courtyard, they burned government records, books and documents—including a new Latin edition of Roger's book which al-Idrisi had presented to William. At the same time, the silver planisphere and celestial sphere disappeared, apparently cut up and melted down.

Since the barons had attacked the Muslims of Sicily with particular ferocity—killing, among many others, a famous poet named Yahya ibn al-Tifashi—al-Idrisi fled to North Africa where, six years later, he died.

As he had brought the Arabic text with him, however, his great work lived on, winning widespread fame, serving as a model for Muslim geographers and historians for centuries and providing the great Muslim historian, Ibn Khaldun, with practically all his geographical knowledge.

It was not, however, available in Europe. Although the Arabic text of *Roger's Book* was published in Rome by the Medici press in 1592, it was not again available to Europeans in Latin until the 17th century. In the 1400's, therefore, Christopher Columbus had to rely on other sources of information. Using a globe prepared by a German cartographer named Martin Behaim—based on Ptolemy's miscalculations—Columbus also added in Marco Polo's equally misleading estimates of distances and concluded, incorrectly, that by sailing west from Spain he could reach Japan or India after no more than a 4,000-mile voyage.

It is a curious thought that had Columbus been aware of the true distance—from al-Idrisi's estimates—he might have hesitated to undertake his epoch-making voyage and might never have discovered that new world which came to light one morning on the far side of the "Sea of Darkness."

Frances Gies has collaborated with her husband on five books, four of them about the Middle Ages. A book on medieval women is next.

Calligraphy: The Art of Islam · In the Name of God

WRITTEN BY CAROLINE STONE

بسم الله الرحمن الرحيم

"In the name of God the Compassionate, the Merciful!"

These are some of the most frequently used words in the Arabic language. The Holy Koran—the word of God as revealed to Muhammad—begins with them, and so does every *Surah*, or chapter, but one. Muslims say these words before beginning any undertaking, before eating, before opening a book and, of course, before beginning to pray. They write them at the heads of letters, inscribe them on coins and print them at the beginning of chapters in books. The Prophet Muhammad said, "He who writes *Bismillah* ('In the name of God') beautifully obtains innumerable blessings."

These words are so important—not only to every Arabic speaker but to Muslims everywhere—that it is hardly surprising that over the centuries they have come to be written in very special ways. Calligraphy—literally "beautiful writing"—is an Arab art, and in writing the *Bismillah* and a few other phrases, particularly those invoking the name of God, calligraphers surpassed themselves: such phrases, for example, as *In sha'Allah*, "God willing;" *Ma sha'Allah*, "As God wills;" *Huwa Allah*, "He is God;" and *Alhamdu li-llah*, "God be praised." Perhaps as important as the *Bismillah* in calligraphy is the Profession of Faith, or the *Shahada: La ilaha illa Allah, Muhammad Rasul Allah:* "There is no God but God, Muhammad is His Messenger."

Calligraphers also devoted great efforts to writing and elaborately decorating the name of God when it stood alone. Others concentrated on the name of the Prophet or sometimes simply his title, *Rasul*, "Messenger," which can be seen carved on one of the columns of the very ancient mosque in Kairouan, Tunisia (*Aramco World*, Jan-Feb., 1967).

How did decorative writing come to achieve such importance in religion and art? As is generally known in the West today, figurative art—especially sculpture with its connotation of idolatry—was forbidden to Muslims, and so in compensation the Islamic world raised architecture and the applied arts to a very high level of perfection. Ceramics, glass, metal-work, wood and stone carving, carpets, textiles and embroideries were all elaborately developed. But

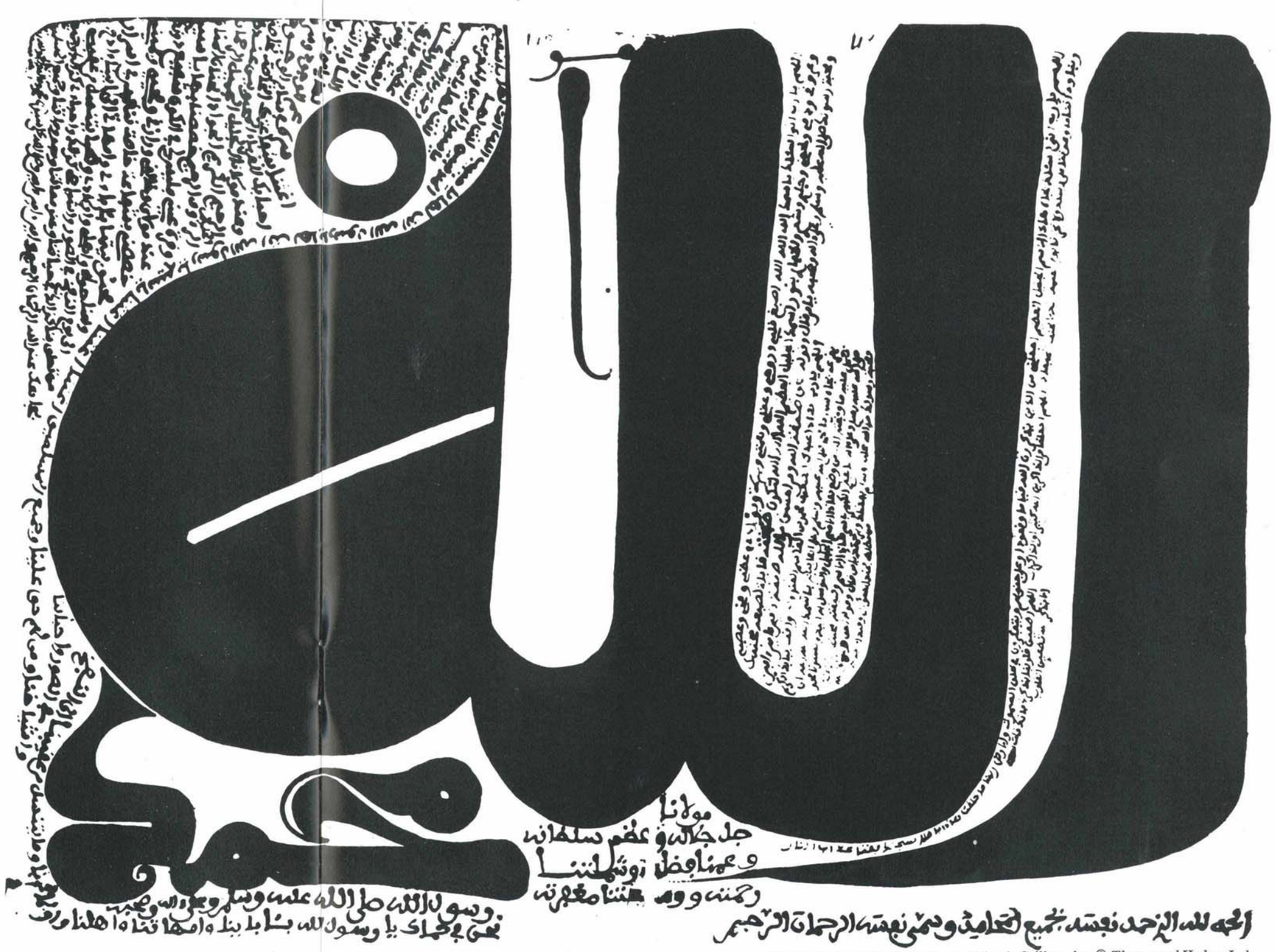
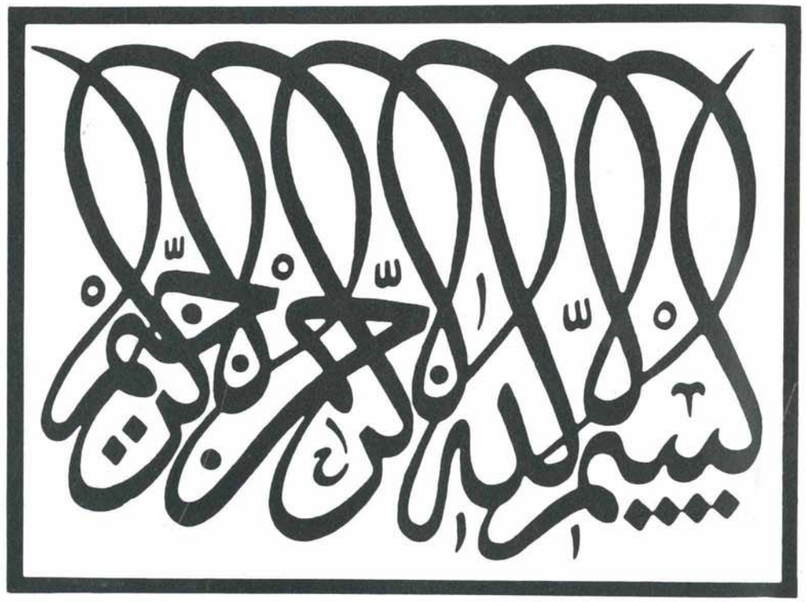


Illustration from The Splendour of Islamic Calligraphy, © *Thames and Hudson Ltd.*



the art of arts was undoubtedly calligraphy (*Aramco World*, May-June, 1976).

There were many reasons for this. First, of course, calligraphy was inextricably bound up with the Koran, which many pious Muslims did—and still do—copy by hand at least once in their lives. It was also a skill available to anyone, and since many people, including women, could and did write, interest in penmanship was high and it was much cultivated. Many great men of the Muslim world, as well as professional calligraphers, were famous for the beauty of their handwriting. Lastly, calligraphy was also intimately involved with all the other arts. Look carefully and you will frequently see an inscription on a sword blade or a mosque lamp, painted on a bowl, woven into a prayer carpet or, in relief, around a door or minaret. And here again, one of the favourite phrases is *Bismillah al-Rahman al-Rahim*.

At the time of the Prophet, Arabic writing was predominantly of a square formal type which later developed into what is known as Kufic. Soon, however, as it became necessary to have a quicker cursive script, ***nashki*** evolved, and the older Kufic came more and more to be used only for copying the Koran and for monumental decoration, except in the conservative lands of North Africa, where it was retained for general uses.

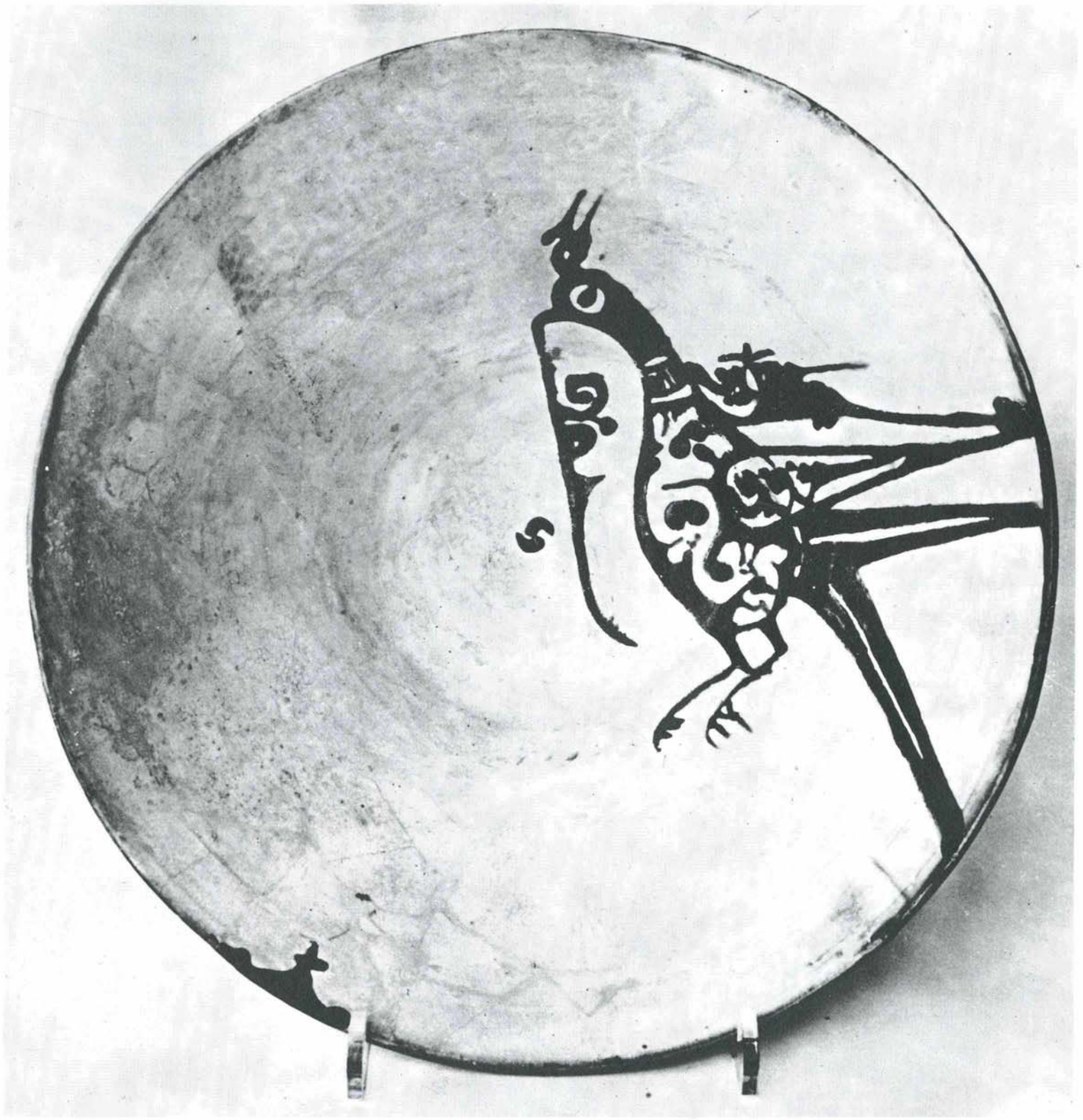
As Islam spread, so too did calligraphy. Soon it could be found everywhere, not just in terms of geography, but in new and imaginative forms in art and architecture. Not content with leaving their favorite words running along the line of a page, artists of the Muslim world began to twist them into circles or squares—small to fit a plate or large to decorate a mosque wall. From Kufa in Iraq and from the great pottery centers of Iran came 9th- and 10th-century dishes with the *Bismillah* shaped like a bird or drawn with one splendid swirl of a brush—so that even to eyes familiar with Arabic script it seems almost illegible. In one particularly beautiful example of the art a bird, whose body is composed of the word *baraka*, "blessing," holds the word *hamd*, or "praise," in its beak.

The mosque architecture of Iran and Central Asia also gave calligraphy a new dimension—literally. There, architects wrapped vast raised inscriptions many feet high around the domes of mosques and up the minarets, and on the walls and at the gates they made what looked like labyrinths in turquoise, blue, yellow, black and white tiles.

Once again, these inscriptions might be made up of the name of God, the name of the Prophet, the *Shahada*, or even a *Surah* of the Koran repeated over and over again in an infinitely elaborate pattern.

Versions of these can be seen

today outside many mosques in Iran, including modern ones. For those who know Arabic, part of the pleasure of gazing upon them undoubtedly comes from the "crossword puzzle" element—staring at an apparently abstract arrangement of colors until the words suddenly leap out, or slowly tracing the



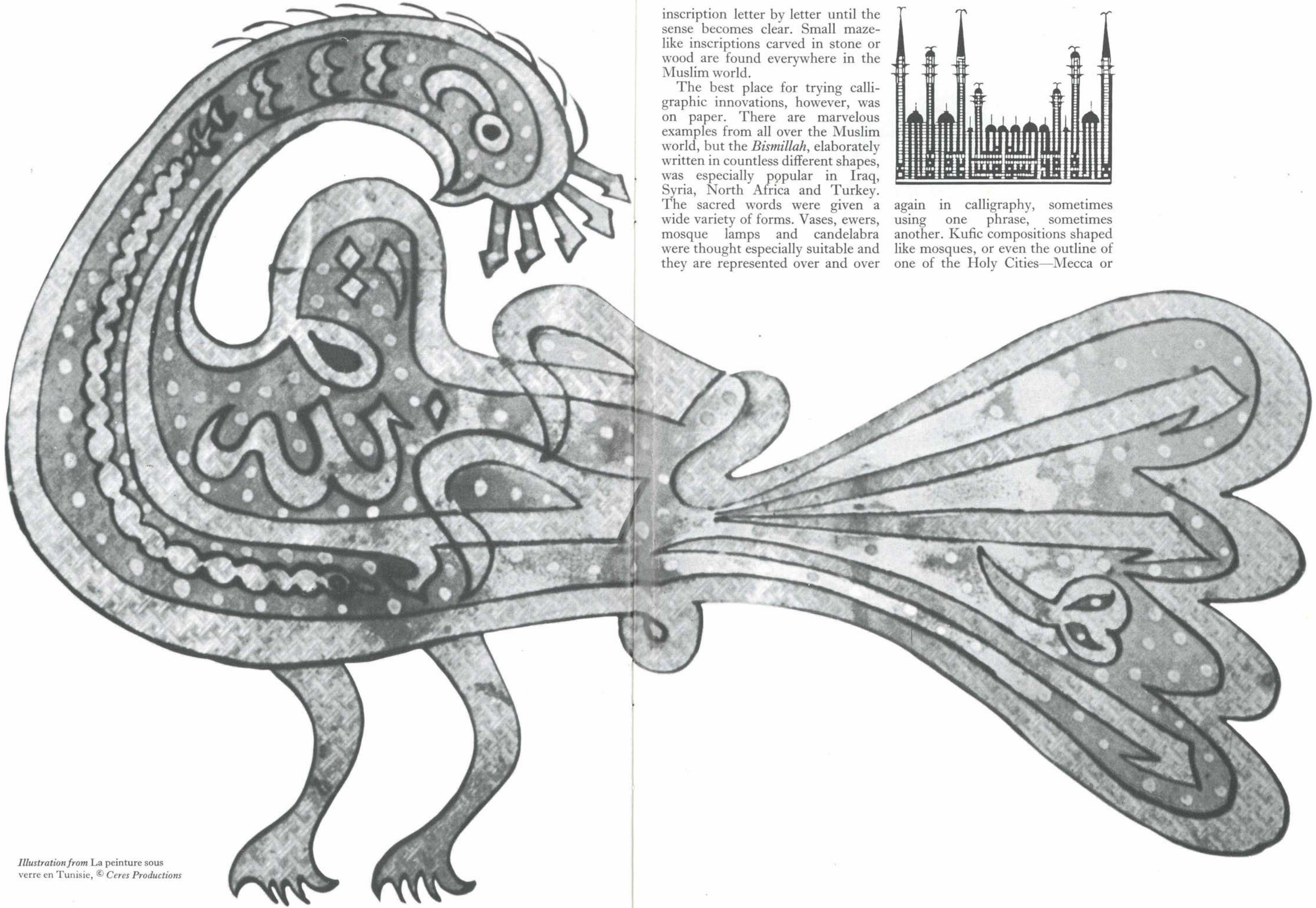


Illustration from La peinture sous verre en Tunisie, © *Ceres Productions*

inscription letter by letter until the sense becomes clear. Small maze-like inscriptions carved in stone or wood are found everywhere in the Muslim world.

The best place for trying calligraphic innovations, however, was on paper. There are marvelous examples from all over the Muslim world, but the *Bismillah*, elaborately written in countless different shapes, was especially popular in Iraq, Syria, North Africa and Turkey. The sacred words were given a wide variety of forms. Vases, ewers, mosque lamps and candelabra were thought especially suitable and they are represented over and over

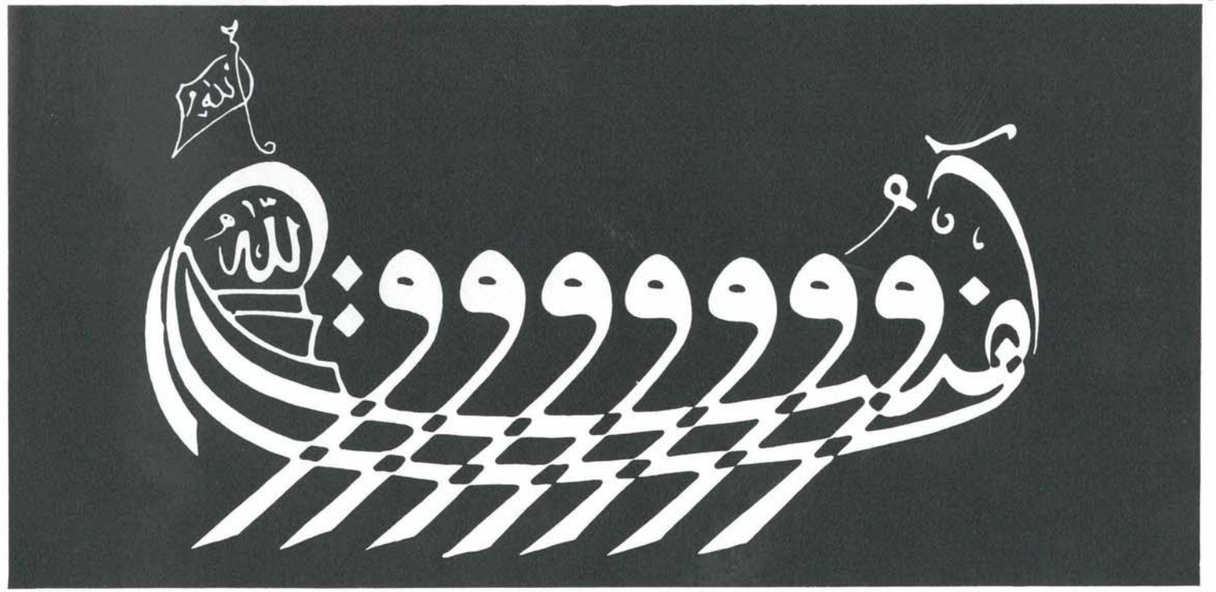
again in calligraphy, sometimes using one phrase, sometimes another. Kufic compositions shaped like mosques, or even the outline of one of the Holy Cities—Mecca or

Illustration from The Splendour of Islamic Calligraphy, © *Thames and Hudson Ltd.*

Medina—were particularly popular.

Another favorite form was an apple or pear with its leaves. This was sometimes used for a holy text, sometimes for genealogical trees, of which a particularly fine example is the family tree of the Sa'ud dynasty, which can be seen today framed in homes, offices and schools all over Saudi Arabia. In this design the male issue of the line is represented by an apple containing the appropriate name, and the female issue by a pear.

From fruit it was a relatively short step to animals. As mentioned earlier, birds were particular favorites. Cranes or storks were the most common, but in Tunisia there are also examples of peacocks and parrots painted on glass and in Iraq pheasants or perhaps quail. Lions



were not unknown and occasionally an exceptionally imaginative calligrapher would produce *al-Buraq*, the winged horse on which, according to tradition, Muhammad made the *Mi'raj*, or Night Journey from Medina to Jerusalem, and thence to Heaven.

Of course these are by no means the only shapes. Sometimes a *Surah* of the Koran or other pious phrases would be woven into the form of a boat with the *waw's*—the conjunction "and" in Arabic—elongated into the oars. Yet another design was the star and crescent of Islam. In one example the star is the *Bismillah* and the crescent moon the *Shahada*.

One style was particularly Turkish and derived from the *Tughra*, or signature of an Ottoman sultan, which was made extremely elaborate to avoid forgeries. The same manner was adopted for the *Bismillah*, sometimes against a background of flowers.

But these elaborate decorative compositions were not always used exclusively for sacred texts. In Turkey, where calligraphy was particularly popular, a favorite form was a poem of unrequited love written in the shape of an eye weeping tears. All kinds of visual puns of this kind were possible.

Although intricate calligraphy is not practiced as widely in today's Muslim world as it has been during other periods over the last 1,000 years, it is by no means dead as an art form. It was not uncommon as an educated amusement until early in this century, when it declined with the advent of printing. Now, happily, it is being revived by a number of young artists who are interested in traditional calligraphy. Undoubtedly, as the Middle East resumes its important role on the world stage, the interest will continue to grow. Perhaps the situation can best be summed up by a modernistic piece of calligraphy in the shape of the Hand of Fatimah, which was designed as a greeting card by Lebanese artist Mouna Bassili Sehnaoui a few years ago. It reads *Ma sha' Allah*, "As God wills."

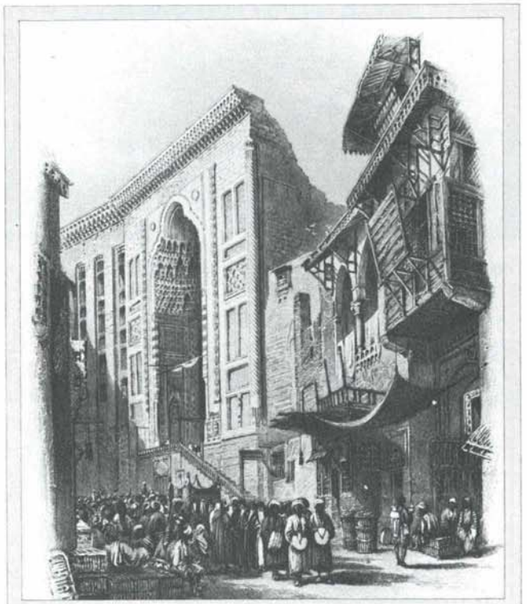
Caroline Stone specialized in medieval languages at Cambridge and is currently preparing an English version of al-Mas'udi's "The Meadows of Gold."

WILLIAM HENRY BARTLETT: BROODING GOTHIC

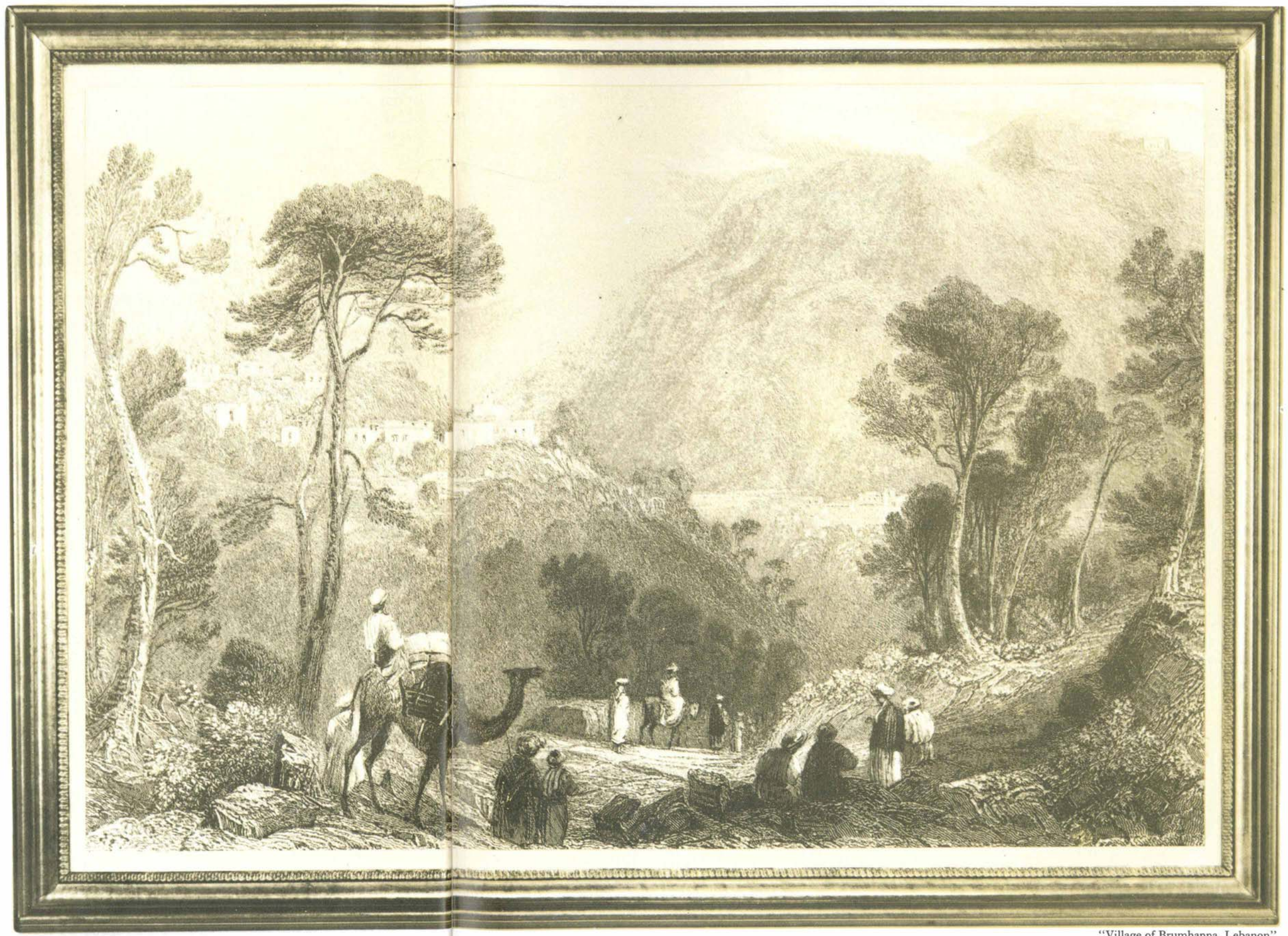
WRITTEN BY JOHN M. MUNRO

Most Westerners who know the Middle East are familiar with the handsome prints by the 19th-century British artist David Roberts (see *Aramco World,* March-April 1970). Less well known—until recently—was a younger contemporary of Roberts', William Henry Bartlett, another industrious British artist who left an extensive visual record of the Middle East as it was more than a century ago.

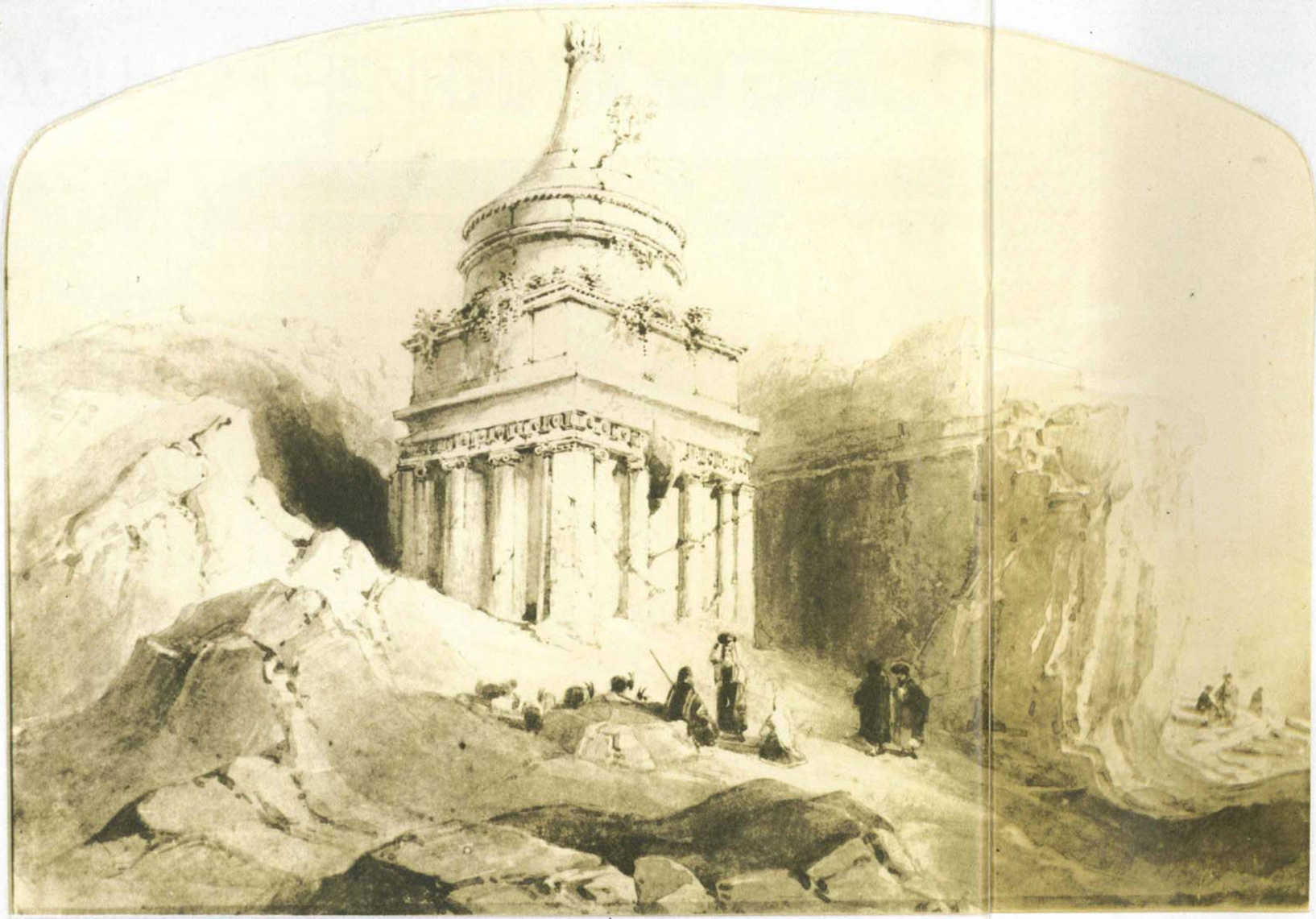
Bartlett has been called the poor man's Roberts, and certainly if one compares his brooding, shadowy engravings with Roberts' meticulously drawn lithographs he does seem wanting. Yet Bartlett's landscapes have their own particular charm, and many people like the fact that they frequently resemble a 19th-century stage set for a Wagner opera more than the real scene they supposedly depict. Today the hundreds of drawings and sketches which Bartlett brought back from his travels are being sought by collectors as avidly as Roberts' were a decade ago.



"Mosque of Sultan Hassan, Cairo"

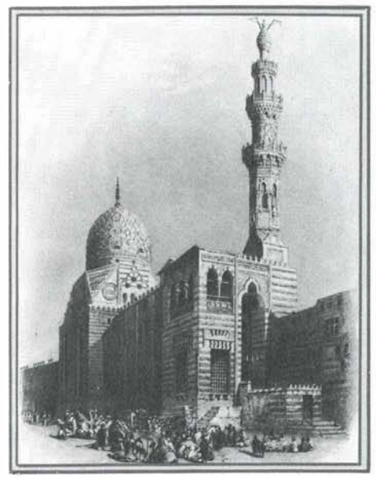


"Village of Brumhanna, Lebanon"



"Valley of Jehoshaphat"
'Jerusalem Revisited'
Seawright Collection

Left:
"Tombs at Petra, Jordan"
Seawright Collection
Centre:
"Tomb of Sultan Kaitbay, Cairo"
Right:
"The Garden of Gethsemane"
'Walks about Jerusalem'
Seawright Collection



William Henry Bartlett was born in Kentish Town, a suburb of London, in 1809. In 1823, he was apprenticed to John Britton, an architect, who sent him around England to sketch and study from nature. Although Bartlett's talents are more readily apparent in his landscapes than in his buildings, after his return to London Britton sent him to Bristol, Gloucester and Hereford to make drawings for his *Cathedral Antiquities of England*, a series of engravings published between 1814 and 1832. After this Bartlett also produced a number of elaborate drawings for Britton's *Picturesque Antiquities of English Cities*, which appeared in 1828–30.

Although Bartlett continued to devote much of his energy to drawing scenes in his native Britain, he also began, after 1830, to travel more widely, at first visiting the principal cities of Europe and then, moving eastward, exploring Greece, Turkey, Syria, Palestine, the northern Arabian Desert and Egypt. He toured the Middle East again between 1842 and 1845, and returned for a third visit in 1853.

These journeys provided him with more than 1,000 drawings, which were published with descriptive texts by writers who accompanied him on his travels. His output was prodigious and a steady stream of travel books was published, embellished with his illustrations: *Switzerland* (1836), *Syria and the Holy Land* (1836–38), *Holland and Belgium* (1837), *The Waldenses* (1838), *Beauties of the Bosphorus* (1840) and *The Danube* (1844). From 1836 to 1852 he also made four voyages to the United States and Canada which provided him with material for *American Scenery* (1840) and *Canadian Scenery* (1842).

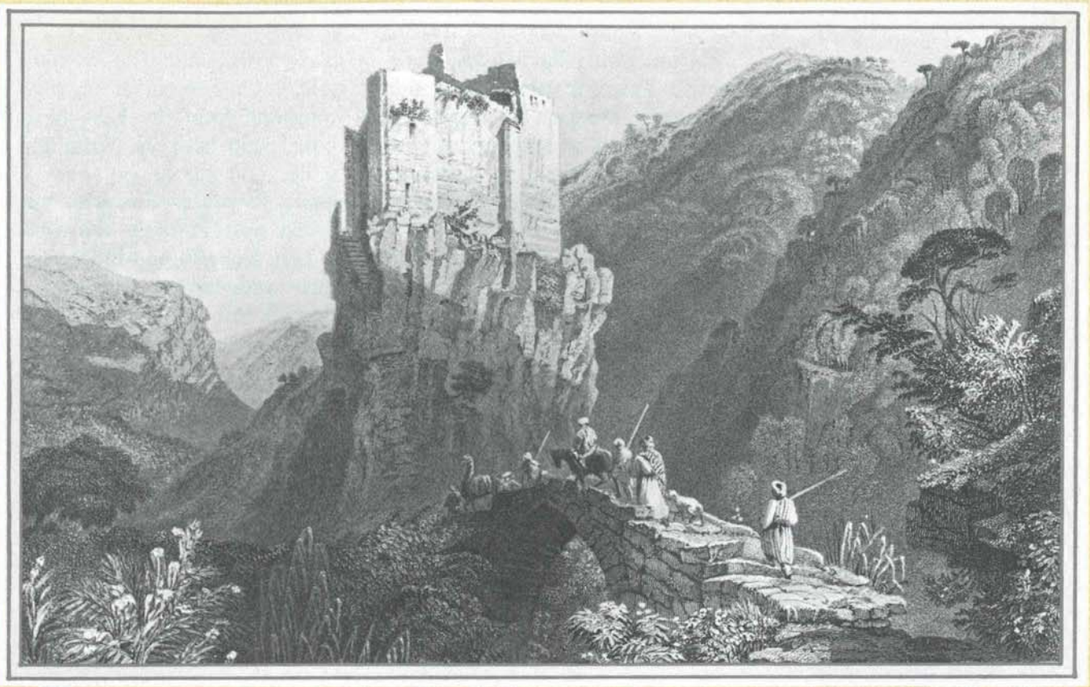
Eventually Bartlett began to write his own texts to accompany his illustrations. He produced *Walks About Jerusalem* (1844), *Forty Days in the Desert* (1848), *The Nile-Boat or Glimpses of Egypt* (1849), *Gleanings on the Overland Route* (1851), *Footsteps of Our Lord and His Apostles in Syria, Greece and Italy* (1851), *Pictures from Sicily* (1853) and *The Pilgrim Fathers* (1853). On September 13, 1854, while returning from the East, he died on board ship between Malta and Marseilles, and was buried at sea. His last book, *Jerusalem Revisited*, was published posthumously the same year.

Like Roberts, and indeed like most early 19th-century landscape artists, Bartlett had an unflagging eye for the picturesque. Unlike Roberts, however, whose somewhat frigid pageants are invariably saved by his steady devotion to detail, Bartlett preferred the Gothic effect, revealing a distinct preference for ruined castles, dark chasms, precipitous headlands and desolate wastes, which he rendered with greater feeling for drama than fidelity to fact.

Although Roberts posed his human figures in graceful attitudes of studied negligence, they were nevertheless an integral part of his overall design. Bartlett's doll-like people, however, seemed to be included almost haphazardly, their presence even distracting from the overall drawing.

Most collectors agree that as an artist Bartlett was clearly Roberts' inferior. He was more the journeyman — a reliable craftsman who appears to have aspired no higher than to be a reasonably faithful illustrator of the scenes he witnessed on his travels. Yet, thanks to his ability to work rapidly, his output was astonishing and the drawings he left make up perhaps the most complete visual record of the Middle East as it was during the first half of the 19th century.

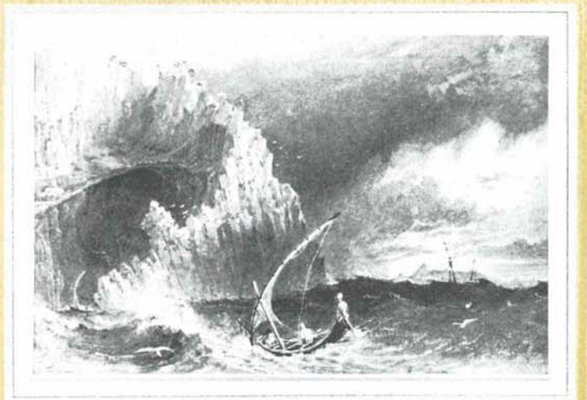
John Munro specialized in 19th and 20th century English literature and has published eight books in his field.



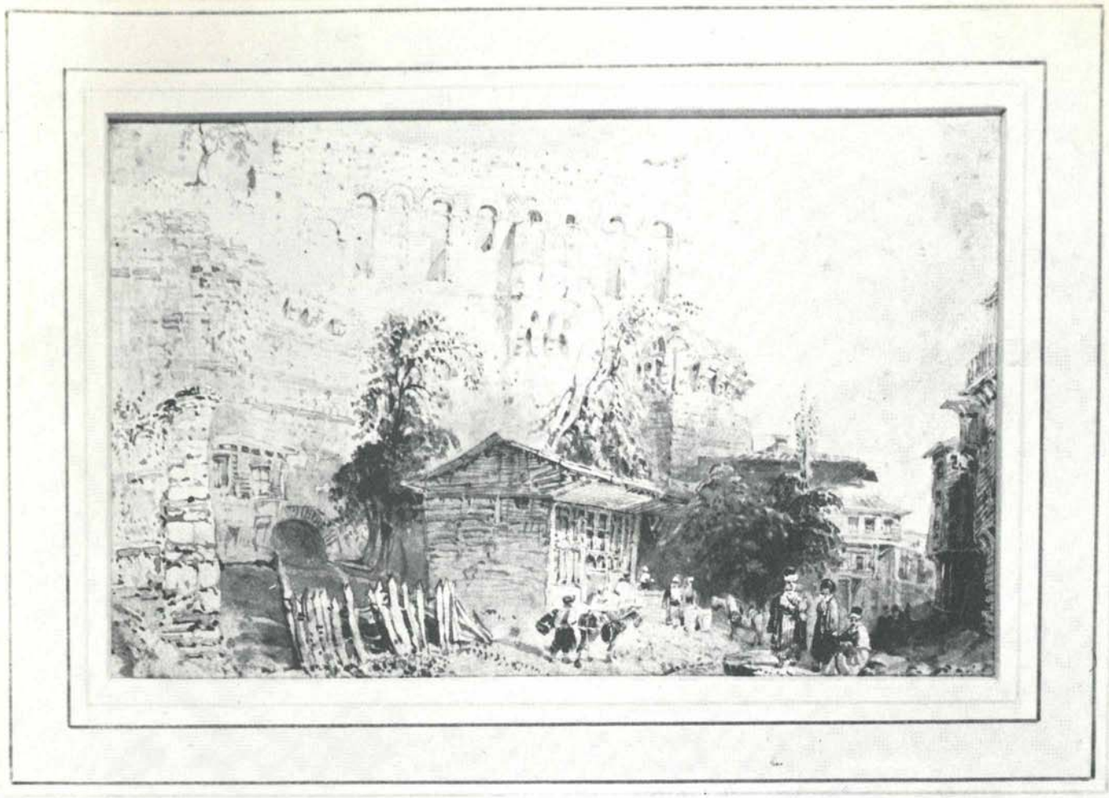
"Castle near Batroun, Lebanon"

"Memnomium, Thebes"
Seawright Collection

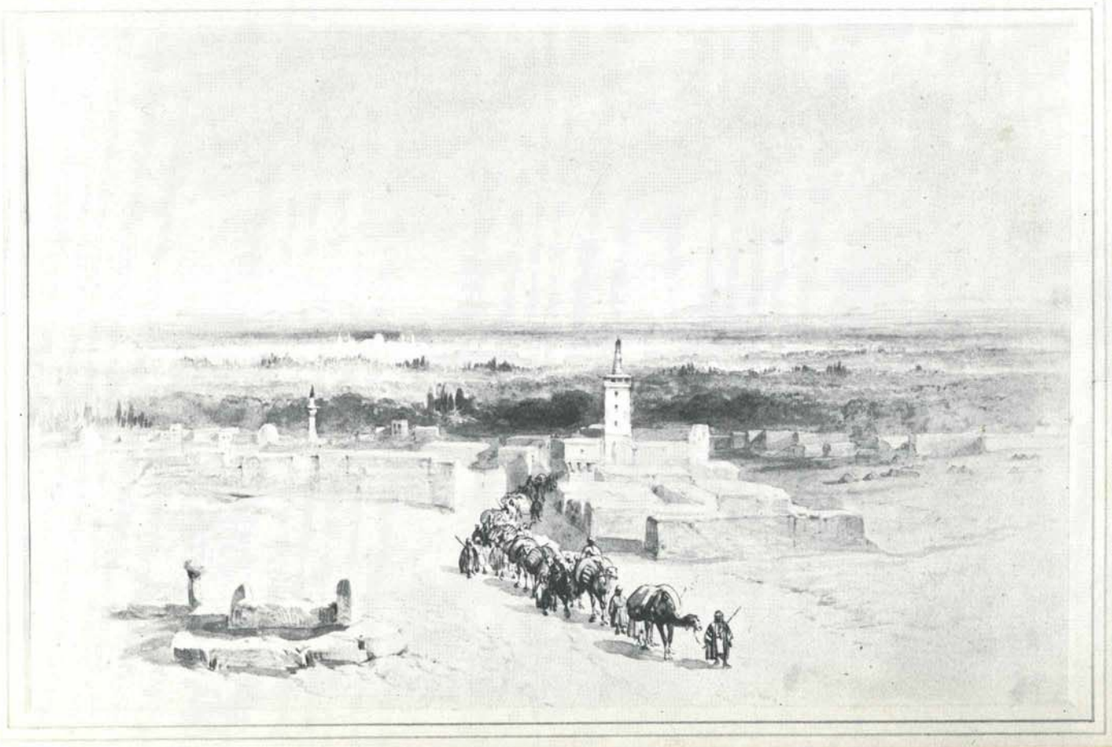
"Village of Eden"
'Views of Syria, The Holy Land'
Seawright Collection



"Coast of Asia Minor"
near Anamour
Seawright Collection



" Palace of Belisarius '*Beauties of the Bosphorus*' *Seawright Collection* "



" Caravan leaving Tunis *Seawright Collection* "