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SHEIKH MUBARAK PAHAD AL-SABAH
The Newsletter of Dar al-Athar al-Islamiyyah (DAI) is intended to share the wealth and beauty of Islamic culture contained within the extensive and comprehensive al-Sabah's collection of Islamic art, ranging from Early Islam to the 18th century, and the variety of scholarly and artistic activities associated with the collection.

The collection itself is organized according to both historical period and geographical region, and the reference library and the publications of the DAI are closely related to the collection.

The DAI has sponsored archaeological excavations in Bahna, Upper Egypt that date to the Fatimid period and, before the invasion, the art school associated with the DAI promoted skills in the various artistic genres that are represented in the collection. At present, our annual lecture series has been revived and is a focal point for historians and other specialists, featuring talks by prominent international scholars on various topics of Islamic art, archaeology and architecture.

2. The Lustrous Tradition in Ceramic Production
   [Abridged from a lecture by Dr. Oliver Watson, Chief Curator of Department of Ceramics and Glass, Victoria and Albert Museum, London, presented Nov 11, 1996]

6. Canaanite and Phoenician Beirut Finally Discovered
   [Abridged from a lecture by Dr. Lella Badre, Archaeological Museum, The American University of Beirut, presented March 13th, 1997]

8. The Mosque of Ibn Tulun in Cairo
   [Abridged from a lecture by Dr. Tareq Swelim, Assistant Professor of Islamic Art & Architecture, American University of Cairo, presented March 17, 1997]

12. Utilisation and Trade of Bitumen in Antiquity

16. Ottoman Provincial School of Miniature Painting
   [Abridged from a lecture by Prof. Tadeusz Majda, National Museum in Warsaw, presented on April 7, 1997]

18. Aesthetics and Islamic Art
   [Abridged from a lecture by Dr. Petra Martin al-Awadi, presented April 21, 1997]

20. Ancient Egypt and Africa
    - Common Roots
   [Abridged from a lecture by Prof. Hermann Jungreithmayr, Head of the Department of African Languages, University of Frankfurt, Germany and President of the German Oriental Society, presented on April 28, 1997]

24. Sultan Abdul Hamid II and Yildiz Palace (1876-1909)
   [Abridged from a lecture by Dr. Phillip Mansel, Historian, presented February 17 1997]
A Lustrous

Tradition
in Ceramic Production

Abridged from a lecture by:
Dr. Oliver Watson

The development of the lustre technique of decorating pottery is one of the great glories of Islamic ceramics and one whose history can be traced unbroken for a thousand years and more. Its technical difficulties are enormous, and the means by which they were passed on from generation to generation has an important impact on the unfolding of its history. In this lecture, I hope to illustrate the great flow of the tradition of lustre decoration, spanning hundreds of years and involving almost all the lands of the Middle East. We will meet individual potters whose lives were disrupted by some of the great events in Islamic history, and see how these influenced their art.

The tradition of lustre decoration on ceramics in the Islamic world is one of its greatest artistic splendours. It is a tradition that can be followed over more than a thousand years, and in all of the heartlands of the Middle East - Egypt, Syria, Iraq and Iran.

Kuwait is fortunate in having in the al-Sabah collection a splendid array of these wares which amply illustrate the lustrous tradition in its entirety through pieces of great beauty and importance.

Lustre is a kind of painted decoration, but of great technical sophistication and difficulty. Its difficulties lead to one of its most interesting characteristics - that it appears to have been held as a secret monopoly by only a few workshops at any one time. No potter could imitate lustre's effects without having been taught the secrets, which appear to have been handed down, generation after generation, from father to son or from potter to apprentice.

Lustre is an overglaze technique: the pigment, whose crucial ingredients are oxides of copper and silver, is painted into the hard-fired surface of a finished pot. The piece is then returned to the kiln, and fired again at a low temperature. At a point when the glaze just softens, the supply of air is cut off from the fire, providing an oxygen deficient (or "reducing") kiln atmosphere. This

LNS 188C
Jor, Syria, Damascus, thirteenth century AD
Inscribed with "Made for Asad al-Iskandarani" the work of Yusuf in Damascus.
extracts the oxygen from the metal oxides, leaving them as a thin film of metal - a mixture of copper and silver - bonded with the very top surface of the softened glaze. The lustre is extremely thin, in the order of a few microns - and is imperceptible to the touch. Its thinness is responsible for the dazzling mother-of-pearl and metallic reflections for which it is prized. It also means that a potter with no previous knowledge of the technique has no idea, even from a close examination of the piece, of how it was made. Crucial to the process are the secret of the formulation of the pigment, of the process of the reduction firing, and of the design of the special reducing kiln.

Lustre is inevitably an expensive ware. The double firing alone probably doubles its cost, and the pigment contains expensive materials. The spectacular effects, if fired successfully, ensure that a premium price could be charged. No wonder that the potters who possessed the secret took care that it did not become common knowledge.

The First Lustre

Lustre appears very early in the Islamic period. By the late 8th century CE it is found on glass made in Syria, and possibly also in Egypt. Its association first of all with glass suggests that it may have developed from certain kinds of late classical enamelled glass where silver was used to produce a yellow stain. However, its story on ceramics occurs first in the 9th century CE, at the Caliphal palace city of Samarra, in Iraq, where it is applied as an overall coating to a tin-bodied ware with raised moulded decoration imitating metalwork. This has led some to believe that it was seen as a substitute for gold and silver dishes, disapproved of by pious Muslims. It was soon developed by potters as decoration for quite another ware, copies of Chinese white porcelains, then greatly fashionable. The Chinese originals were plain white; the Islamic potters soon bored of this and began to decorate their imitations, sometimes with blue painting and green splashes, but most spectacularly with lustre. On bowls in pure Chinese shape, lustre patterns of dazzling variety and in colours ranging from brilliant golden yellow to a deep ruby red were achieved. They took as their source of inspiration illuminated manuscripts, where contemporary Qur’ans displayed frontispieces in a similar style and with similar colour schemes. This style was gradually modified over the years, the number of lustre colours being reduced, eventually down to a single tone, and the patterns simplified. By the tenth century CE, new styles of painting had emerged: strange animals and human figures and human figures and human figures and human figures enclosed in "contour panels" of stippled dots. The contour panel and the stylization of the features suggest that the potters were looking to textiles, where both features are found, as a source for their ideas.

These changes took place over perhaps a hundred years, beginning with the first decades of the 9th century CE. An examination of the clay and other diagnostic features of the ceramic indicate that all the lustre wares were produced at one site - perhaps a group of closely related workshops, somewhere in the lower Euphrates valley. The wares were exported far and wide, being found in some quantity in Iran, Syria and Egypt, and as far away as India and Spain!

Lustre in Egypt

However, at some point in the tenth century CE, a dramatic change took place. Lustreware ceased to be made in Iraq, and production began in Egypt. We can only explain this by assuming an actual migration of potters; that they upped workshops and moved with their families, their tools and their secret recipes, hundreds of miles westwards, to establish themselves in the capital of the Fatimid caliphs. Their motives and the exact date of their move are not known, though it is probable that a mixture of social unrest in Iraq and the lure of a stable and wealthy regime, and hence a more profitable market, in Egypt were the cause.

We begin to find signed pieces, and the names of Muslim and others are frequently found painted on the base. It is difficult for us now to appreciate fully the great glory of Fatimid lustreware for it has to be judged largely from sherds, broken pieces dug up in the rubbish dumps of Fustat near Cairo. Complete pieces are rarer than in any other class of lustreware.

In Egypt, the lustre potters prospered for almost two hundred years. Their wares changed yet again. The bowl forms still owe a debt to the Chinese pieces of some two

![Lustre bowl](image-url)
hundred years before, but now they are more roughly made,less carefully thrown and turned, and often with a cheaper transparent glaze on the outside. As if in compensation, however, there is a new vitality in the painting. Naturalistic figures and animals are found, painted in a fresh engaging manner, while plant, geometrical, and arabesque designs become more complex and daring.

During the twelfth century CE a change is seen in the nature of the pottery. The potters begin to discard their standard clay body, and instead adopt an artificially composed “frit” body, made largely of crushed quartz, with a small amount of white clay to give plasticity. The advantage is that it can be thrown thinner, while its uniform whiteness makes slipping unnecessary. These later wares are sometimes found bearing the word “sāld” painted in lustre, which may or may not be the name of a potter.

Lustre in Iran and Syria

The twelfth century CE sees another “migration”. The lustre potters cease making lustre in Egypt and move, but this time eastwards. Again, one might point to the economic decline and unrest at the end of the Fatimid period as the stimulus. The potters may have moved in two groups, or they may have all moved first to Syria, with some subsequently moving on to Iran. At any rate, by the end of the twelfth century, there are thriving lustre potteries in both countries. In Syria, the earliest wares, known as “Tell Minis” wares are very similar to the Fatimid wares from which they derive, but a distinctively Syrian style develops in the northern town of Raqqā, where a deep chocolate-brown lustre is painted in broad designs onto wares made of a soft sandy frit body. In Iran, in the central town of Kashan, lustreware is taken to new heights of sophistication. A new range of shapes, copied from contemporary silver or inlaid brass vessels is developed in

a fine frit body. Painting becomes ever more accomplished, as the Fatimid style is amalgamated with styles from book illustration, to produce a blend uniquely suited to the effects of lustre decoration. We discover more information on individual potters; Abu Zaid, the outstanding artist of the late twelfth and early thirteenth century CE who was also an accomplished potter in the newly discovered minaí polychrome enamelled technique. He cooperated in some large tile schemes with Muhammad Ibn Abi Tahir, the first recorded member of a lustre-potting family from which three generations of work survives, and whose grandson, an historian at the Mongol court, wrote a famous treatise on ceramic making in 1300 CE.

The fifty years from about 1170 to 1220 CE see in Iran and Syria an astonishing burst of creative energy, providing us with a mass of wonderful vessels and tiles. 1220 CE, however, marks the arrival of the Mongol invasion in Iran, a monstrous and cataclysmic event. Towns and cities were destroyed, thousands fled or were massacred, crops were ruined, livestock stolen. It would be several decades before the Mongols settled as rulers in Iran and began to rebuild the economy. Surprisingly, the Kashan potteries were not destroyed: there is a considerable, but not complete lull in production for some 40 years, and then the potters start work on a large scale again. Their designs often show influences from China, taken from the widely traded silks and other textiles. The potters concentrate now however on tilework rather than vessels, and series of buildings were decorated with lustre star-and-cross tiles, and with monumental mihrabs and inscription frizes. This series comes to an abrupt end in 1340 for reasons that remain unknown: death of the master potter? Lustre superseded by other more fashionable tiles? We shall perhaps never know.

The Mongol onslaught reached Syria somewhat later. Raqqā was devastated in about 1260, and this apparently
brought an end to lustre production there. Some potters moved to Damascus and produced a distinctive ware with gold lustre on a blue glaze. These are mostly known through a series of large vases that were apparently exported to Europe where they were greatly prized. But even this pottery finally succumbed to another onslaught, that of Timur Lang in 1400 CE. Lustre was never made in Syria again.

It was perhaps earlier in the twelfth or thirteenth century CE that some lustre potters had found their way to Spain, either from Egypt or from Syria. They laid the foundations for Europe’s most distinguished lustre pottery - Hispano-Moresque ware, produced first at Malaga for the Nasrid Muslim rulers of Southern Spain, then later at Valencia for the Christians.

The Last Iranian Lustre

The Lustre tiles of Kashan ceased abruptly in the 1340s CE. But this is not quite the end of the story. A handful of tombstones of the fifteenth and sixteenth century, and some fragments of a tiling scheme bearing the name of the Timurid Sultan Abu Sa'id show that the technique was preserved and handed on, if production was low and sporadic, and artistic ambition modest. It meant, however, that the technique was still alive, and it had its final flowering in the seventeenth century under the Safavids. A large number of finely-made bottles, bowls, cups and spitoons were decorated in a hard brilliant lustre, sometimes on a blue ground. The decoration is similar to border illumination in contemporary manuscripts. These wares were among the first Islamic ceramics to be prized by western collectors, and an excited vogue for collecting them grew up in later nineteenth-century Europe.

By this time however, production in Iran had all but ceased, and a few inept copies of earlier styles are all there was to show for one of the world’s most splendid ceramic traditions.
Canaanite and Phoenician Beirut Finally Discovered

Abridged from a lecture by Dr. Leila Badre

The excavation project in Beirut Town Center developed from the agreement between the Council of Development and Reconstruction (CDR), UNESCO and the Department General of Antiquities. Financing was made available by the Hariri Foundation and UNDP in the first phase and later by SOLIDERE when it was formed in the spring of 1994.

In October 1993 three soundings were launched in the Martyrs's Square. To date we count no less than one hundred excavations undertaken by local and international teams. The American University of Beirut team, directed by the Museum Curator, Dr. Leila Badre, was one of the three first teams which chose the site of the ancient Tell of Beirut, in October 1993. This site is located to the south of the modern harbor of the city. The choice of this specific site corresponded to Dr. Badre's personal interest in locating the old city which was mentioned in the ancient texts of Tell al Amarna of the 14th c. B.C., when it was called BIRUTA.

The AUB Museum team was lucky in its search. The results were very important and very impressive. The exact location of ancient Beirut is now known - its size has been determined by the discovery of the successive fortification system throughout the periods between III and I millennia B.C. Its very first urban occupation goes back to 2300 B.C., since then it had a continuous occupation to the present time. All the periods are represented including the
Phoenician one 1200-600 B.C., which surprisingly was totally absent from the historical texts. We now know that Beirut was also a Phoenician city, a harbor where trade was practised with Egypt, Cyprus and Greece. Evidence for this is well attested in the discovery of large amount of imported material, basically warehouses full of complete jars ready for the exportation of olive oil, dry raisins, wheat etc... The importation was probably that of wine, among others.

A cemetery dating back to 1700 B.C. was discovered with children buried in jars, adorned with necklaces and some domestic vessels were placed around them to accompany them in their after-life.

Thanks to the AUB Museum team discovery, several new pages have been added to the history of Beirut.

The great importance of this discovery led the Minister of Culture H.E. Mr. Michel Edde to declare the site of the ancient tell a classified Historical Site, to be spared from the Reconstruction Project and to be transformed into an archaeological park for future generations.

1. Beirut: Phoenician storage room (ca 7th century BC)
2. Beirut: Monumental entrance to the city (18th century BC)
Ahmad Ibn Tulun was sent to Egypt in 868 to be the governor of al-Fustat, and by 870 he was made Governor of the whole of Egypt. He soon broke away from the Abbasid Empire, and established his own dynasty, when he refused to send back the annual tribute. Although he had broken away from the Abbasid Caliphate, he wanted his people to remember the glorious capital, Samarra, in which he was born and raised. He ordered the construction of a new city, al-Qata'I, where he built his palace. He thought that it would be good for the Egyptians to have a great, new city to remind them of their imperial Islamic past, which until then, Egypt did not really have.

The great disaster for the city al-Qata'I and the consequent end of the Tulunid dynasty came when the Abbasids reconquered the country in 905. They completely leveled the city, and had the foundations of its great palace plowed to remove all its traces. Only two structures survived: the aqueduct - parts of which still survives in the area of “Messetim”, south of Cairo - and the Mosque of Ibn Tulun.

The mosque was always regarded as a masterpiece of architecture. When Ibn Tulun built it in the ninth century, he gave instructions to his architects: “I want you to build me a mosque that will never be destroyed, no matter what happens in Egypt; if Egypt is destroyed, I want the mosque to survive; if Egypt is burned, I want the mosque to survive.”

Ibn Tulun's wish came true because he had a genius architect who built the mosque on a hill called “Jabal Yashkur”. It was a sacred hill to the people of the area, who linked it with sacred legends: it was believed to be the place where Noah’s ark landed; the place where Moses spoke to God; the place where the prophet Harun or Aaron, the brother of prophet Moses, was allegedly buried; and the place where the prophet Abraham was about to make his sacrifice. It was a legendary hill, full of sacred memories.

The study of the Mosque of Ibn Tulun immediately evokes the memory of the great scholar of Islamic architecture K. A. C. Creswell. Creswell's research continued and superseded all work before him, providing a thorough description of the mosque as well as accurate floor plans and an exhaustive bibliography. It is indispensable for any later research on the Mosque of Ibn Tulun. Although at the
Egypt since the ninth century. Interestingly, Frank Lloyd Wright used this technique in his 20th century building of the Imperial Hotel, in Tokyo. Here we have a ninth century architect using a very modern technique.

The mosque has interesting and quite unique crenellations that were never repeated again in Egypt. Although the Samarra mosques also had crenellations, those at Ibn Tulun are quite different, forming as such one of its salient features and one of its mysteries.

Around the mosque in Saliba Street there is a little dome on the tomb of Sidi Haroun al-Huseini, near Bayt al-Kritiya, which is now the Gayer-Anderson Museum in Cairo. Behind the mosque are three chambers, which are referred to as the Dar al-Imara, previously the official reception hall of Ibn Tulun and possibly also the center of the administration of al-Qata‘. But given the great importance of the Dar al-Imara, as the main archive for the entire country, it is unlikely that it could have been restricted only to these small chambers, but may have occupied all this area. On one side of the mosque, there is the 14th century Mamluk Madrasa of Sanghatmish, which is still in use today as a mosque.

One of the mosque’s mysteries is the ziyada, the additional area, which some early mosques also had, particularly those at Samarra. According to historical sources, the Mosque of Ibn Tulun also had a medical clinic, located next to the minaret. It is possible that this clinic was primarily intended for use by the ill or injured among the Friday congregation, although it probably functioned throughout the week, like other clinics and hospitals in the Islamic world.

Ibn Tulun told his architect that he did not want columns used in his mosque. When the architect asked why, he replied, because if you use columns in my mosque then you will get the materials by destroying ancient monuments, churches, and synagogues, and we do not want to do this. What he really wanted to explain to his architect is that he wanted his mosque to look like the one he used to pray in on Fridays, the Great Mosque of Samarra, which is built with brick piers. Instead of building columns, which was the standard practice in the architecture of Egypt before and after Ibn Tulun, they built piers. These fired brick piers have a rectangular section with four engaged columns, the whole covered in stucco. The capitals of the piers have stucco decorations. The Great Mosque of Samarra has the same design as the piers, but with four sided columns. These piers are another of the Mosque of Ibn Tulun’s mysteries, though they are not elegant.

The arches give the building its beauty that every visitor has felt and fell in love with. These piers and arches have been especially admired since the 18th century.

The first floor plan of the mosque and the elevation survey was made by Protem, during the Napoleon’s expedition in Egypt from 1798-1801. The arches were greatly admired by various French artists and scholars, including Protem and the savants of the Description de l’Egypte, like Marcel.

An ingenious study made by Hautecoeur and Wiet in the early 20th century discovered that the arches had interesting ratios and proportions. If you divide the arch in two, you find that the ratio, the relationship between the square between the piers, and the arch, applies to the ‘Golden Section’. The ‘Golden Section’ is the rule in architecture that the Greeks used to reach the ultimate degree of harmonious perfection.

I have been trying to interpret the aesthetics of the building. The mosque is pierced by 129 windows, which are all pointed arches with stucco grills. Many of these grills have been restored during the Fatimid and Mamluk periods, and even in modern times. The grills are composed of geometrical and floral patterns, but are different from each other in their designs. These windows are spaced in such a way that they are not centered visually with the arches in front of them. The only way to center the windows with the arches in front of them is to step right or step left, and in doing this, you begin to walk around the building.
The architect has imposed on you, causing you unconsciously to walk around the building. This, I think, is part of the aesthetics of the building; spacing the windows in a way that is comfortable, but at the same time, having them not centered with the arches in front of them.

There is a contrast in view between standing out in the open court, looking at the mosque, and its interior. Outside, you notice that the whole building is horizontal. There is this harmonious horizontality of the building from the middle of the court, but, once you enter the the miqwaq, or the arcades themselves, you are struck by this fantastic vertical effect.

The mosque has wonderful Qur’anic inscriptions, on a wooden frieze, which runs about 30 centimetres below the ceiling of the whole mosque. The frieze was original, though most of it has disappeared and only fragments survive; it was intended to present the whole Qur’an, and it was more than two kilometres in length. In the late 19th century, a scholar called Corbett made a study of the mosque and he calculated, by the size of the letters, that the length of this area in the mosque could only contain one fifteenth, or one seventeenth, of the whole Qur’an. The point is not whether it was the whole Qur’an or only part of it, the point is that this was the first mosque in the world to have such a lengthy, continuous, Qur’anic inscription. Before this, only extracts were presented, or the founder would choose certain verses from the Qur’an that would reflect the message that he wanted to convey. Marcel recorded some of this from the qibla wall for the *Description de l’Egypte*.

According to historical sources, we know that on Fridays Ibn Tulun used to walk in a great procession from his palace to Dar al-Imara, the administrative building. He would enter one of the rooms, change his garments, perform his ablution, and prepare for the prayer. Once the mu’adh in has called for the prayer, Ibn Tulun would walk through a door, which still survives, into the mosque, to the Maqṣura area where he would pray directly in front of the mihrab.

The minbar is one of the masterpieces of woodwork of the late 13th century. The star panels and the carvings are absolutely fantastic. It is probably one of the best minbars ever made in the whole Islamic world, at least in the Mamluk period.

The minaret, with its spiral shape and external staircase, stands out from all of the others in Cairo, providing another powerful symbol of the Mosque of Ibn Tulun. Although unique in Egypt, it is clearly modeled after an earlier prototype at the mosque of al-Mutawakkil at Samarra. Several restorations have obscured its earlier proportions and disrupted its once harmonious profile.

The Mosque of Ibn Tulun is a mysterious building which is unique in Egypt in its construction and history. Its firebrick construction, piers, windows, arches, minaret, and its domed maqṣura area are all interesting features worthy of further study. Its location and its history as a place of refuge and lodging also add to its uniqueness and wonder.
Top: The interior of the Amr mosque
Bottom: Engraving from the 19th century showing interior.
Utilization and Trade of Bitumen in Antiquity

Abridged from a lecture by Dr. Jacques Connan

About ten years ago an archaeologist from the Louvre Museum entered my laboratory with a piece of black material and asked me to identify the bitumen in it and its source. It came from a beautiful object from Susa in the Louvre. The material fascinated many people, especially archaeologists, who wanted to know how it was prepared, because it was hard enough to be carved like stone.

Bitumen is found extensively in what I call “Bitumen Civilisations”: Iraq, Syria, Iran, the Arabian Peninsula, the Canaanite countries, and Egypt where it was used for mummification (figure 1). I worked for French excavations at Mehrgarh in Pakistan and on some samples from Mohenjodaro. Most older samples were created around the Neolithic Period, 6000 BC, but I have covered up to AD 600 and we have samples, especially in the Gulf, from the Islamic period.

We have recorded Egypt’s utilisation of bitumen in mummification starting around 1500 BC. It may have begun earlier, but mummies are generally guarded by curators who do not like to relinquish ancient samples. However, there are many samples of mummies from the Intermediate Period around 600 BC, and the Roman Period.

Bitumen frequently oozes to the surface in three main areas: in northern Iraq, near Kirkuk, in an area called Magda in old cuneiform texts. The best known area is Hit. Susa is in Luristan province. In Khuzistan, oil seepage frequently

Tripod cup in bitumen mastle. Susa, around 2000 B.C.-(Cat n°221- Sh 2737- n°221 in Connan&Duschesne, 1996, photo J.Y. Chambault).
occurs in the mountains, where Miocene tectonic activity shifted petroleum from depth to the surface. Bitumen is a ubiquitous natural resource of these areas, so these early populations found many uses for it.

The most frequent ancient use of bitumen was probably as mortar in construction: not for ordinary construction, as it was reserved for kings. This mortar, a mixture of bitumen, straw, clay and sand, was used in temples, palaces and terraces, perhaps the Hanging Gardens of Babylon, and Ziggurats, notably the Tower of Babel. The Ishtar Gate was one of Babylon’s eight gates, close to Nebuchadnezzar’s southern palace. Upon the baked brick walls was a representation of the god Marduk, Babylon’s protector, and you can see traces of bitumen used as mortar.

Bitumen was, and still is, used for waterproofing. Bitumen-coated mats are found in very old excavations, especially for burying the dead, or making waterproof roofs. It was used to waterproof or reinforce baskets. Bitumen is also seen inside and occasionally outside jars, in bathrooms, water pipes, cisterns, boats and sarcophagi. There is a clay sarcophagus in Bahrain completely covered and sealed, inside and outside with bitumen.

Another use of bitumen was for making Guffahs, round boats, even early in this century, to cross the Tigris. These reed boats are coated outside and inside with a 1 cm thick crust of bituminous mixture as waterproofing. Such a boat is exhibited at the Marine Museum in Paris. Its covering is a mixture containing 30% bitumen from Hit, as in the recipe of antiquity. The know-how of ancient Mesopotamia survives in Iraq.

Bitumen was the glue of antiquity. Flint implements were stuck to their handles with a bitumen mixture, and Mesopotamian statues were fixed to their bases by bitumen. Bitumen was used as decorative material. Examples (gates and lyres) from treasures found in graves of Ur (2500 BC) are exhibited at the British Museum, with a temple pillar from Uruk in the same area. This was a palm trunk covered with bitumen and inlaid with as mosaic of stones-like pink limestone, black shale, and mother-of-pearl. It was probably at the entrance of the Ninhursag palace, about 2500 BC.

I did my archeometric study of bituminous mixtures from Uruk VI in Iraq, which was excavated by a team from Paris University. This excavation, which stopped shortly after the invasion of Kuwait, was particularly interesting for the layers discovered, from around 6000 BC to the Ur period, 3500 BC; almost 3 millennia of history in a single location.

Some calibrations were done on bitumens from the Ur and Suse, which are completely different. When you plot all the points from the Tell el-Oueili on a diagram, you can see that some bitumens may be from Suse, others from Northern Iraq or other sources. Hence, the Tell el-Oueili samples are of different origins. In the Ubaid 0, 1 and 2, Tell el-Oueili bitumens came from Iran, from Khuzistan, and Luristan. When you examine the cases and plates excavated from the Suse Acropolis now exhibited at the Louvre, you see that their decorations are similar to those of the Ubaid culture, in Iraq. Obviously, this civilization of ancient Iran was closely linked to the Ubaid culture during
that period. The bitumen used in Tell el-"Oueill then came from Iran. But, when you examine the results of the Ubaid 3 and 4 periods, the bitumen no longer came from Luristan and Khuzistan, but was imported from the Mesopotamia area in Northern Iraq.

Professor Jean-Louis Hurtul of the Sorbonne informed me that the bitumen fits with accepted facts. During this time, the powerful Ubaid culture extended throughout the North, where the Halaf culture had previously dominated. In the historical records, the Halaf culture disappeared and the Ubaid culture appeared in many reference sites of that period. During this period, bitumen from Northern Iraq was also discovered in Babylon.

In the Ur period, the bitumen origin again changed to Hit on the Euphrates. I am aware of another account about the bitumen trade along the Euphrates, during the Ur period. Ur was so powerful and rich that its inhabitants established many trading posts along the Euphrates, and Hit bitumen was even transported to the present border with Turkey. Bitumen travelled downstream towards the sea and upstream towards present-day Turkey.

The origin of the black colour on mummies has been a subject of debate. In studying balms of Egyptian mummies, I have documented several types of bitumen, and also identified beeswax and colophony resins.

A painting documents how Dead Sea bitumen was gathered and transported. The Arabs gathered big blocks which appeared in the Dead Sea: one cubic metre of pure bitumen. This geologic area is known for tectonic activity, and everyone knows the story of Sodom and Gomorrha. These movements carry big blocks of bitumen up to the surface of the Dead Sea, and the peoples around fought each other to gain control of the bitumen. We have documents from the period of Cleopatra that grant control of the bitumen to a member of her family. When bitumen could be seen from the shore, they went out in boats to gather it and bring these blocks onshore, where they were cut into pieces, put on camels and taken to Egypt to be used for mummification.

Susa, in Iran, is surrounded by oil wells, bitumen seepages, or even asphaltite veins sometimes called bitumen dyes. Asphaltite veins occur as solid bitumens, especially in Iran's Luristan province. There are many occurrences of bitumen throughout the Zagros Mountains. The discovery in Susa of artifacts made of so-called bitumen-mastic raised difficult questions. Is it an artificial or natural substance? Is it a bitumen-based product? If so, where is the bitumen from?

One must be very careful, since all black materials are not necessarily bitumen or bitumen-based products. We often encounter materials that look like bitumen. They could be even mineral, manganese oxide, which is also very black. So the first question we had to answer was: are all black materials, classified as bituminous mixtures, really prepared with bitumen? Lastly, this probably took me the most amount of time: what was the amount of time that was required to produce bitumen mastic? This substance is the artifact material that was carved like stone. That was the real mystery when I started my study.

A careful examination of thin sections of the two main types of materials, bitumen and bitumen mastic, provided some answers on their preparation. First, the bitumen category looks like petroleum (fig. 2). This is due to the fact that bitumen was mixed with only clay, sand, and carbonate at low temperatures, around 120°C. This bitumen material can still be extracted with a solvent, like petroleum. In bitumen mastic you can recognise small grains of pure re-crystallised calcite mixed with a black substance formed of bitumen and clays (fig. 3).

The striking difference between bitumen and bitumen mastic is the colour, brown for the first, black for the second. The black colour probably indicates that the primary bituminous material was re-cooked to transform it into a very hard material with mechanical properties that allowed it to be sculpted like stone. The other material, bitumen, is not hard enough, and would
break into pieces if carved. A material had to be hard enough to be handled like stone. That is obtained by a re-cooking process, which is why it is so black. Apparently bitumen mastic is thermally transformed material.

New features have recently come to light in a study on samples from Iran. All earlier research assumed that the substance referred to as bitumen mastic was artificial. Recent preliminary results on outcrop samples from Iran have reopened the question of the origin of the substance by highlighting a simpler explanation. In brief, a natural substance, similar to the bitumen mastic of Susa, has been discovered in a set of samples from the Sargelu formation in the Zagros mountains. This natural material is presently under study to establish whether its properties are similar to those recorded in the Susa artefacts.

Finally, to discover the origin of the bitumen or bituminous extracts from bitumen mastic, we have been comparing survey information from many oils taken from sub-surface petroleum reservoirs, to information gathered from oil seepages, solid bitumens, oil shows and source rocks at the surface. We were very fortunate because Susa is on the rim of two main petroleum provinces. One province is shown in green and the other in red and blue. The red and blue occur in the mountains and the blue in the plains. The "blue" crude oils (Kazdahun source rocks) were preserved at depth for the reservoirs were not affected by the major tectonic movements that shaped the Zagros mountains. They did not migrate to the surface.

To answer archaeologists' basic questions: the Louvre collection comprises two main categories of bituminous artefacts: bitumen and bitumen mastic. Bitumen is less represented because it was mainly related to ordinary objects, like mortars, mats, roofs, baskets, which were not systematically collected by earlier archaeologists (who preferred beautiful objects and treasures). This bitumen category is only well-documented from modern finds. Bitumen mastic is the category which was used for beautiful masterpieces of art.

Bitumen was a natural asphalt which is still very soluble in chloroform despite weathering processes. It was used for baskets, spindle-whorls, beads, mortars, and coatings on potsherds. Bitumen mastics were thought to be artificial mixtures of bitumen, calcite and clays, which were subsequently heated, below 250°C. It so, bitumen was the first composite substance hard enough to be sculpted like stone. This explanation is under revision for a natural substance similar to bitumen mastic was found recently in the Zagros Mountains. Bitumen mastics come mainly from Luristan province as seen from their chemistry, in agreement with the location of the natural substance discovered. But we also have samples of mortars from Khuzistan, especially during the Achemenid period.

I am now engaged in an extensive project mainly related to the Gulf. I have been working in Bahrain, Saudi Arabia, the Emirates, Kuwait and Oman. We have finished a complete paper on Bahrain, where we revealed two sources of bitumen, from Northern Iraq, but also, unexpectedly, from Iran. In Bahrain, we delineated three periods where bitumen was imported from Iran: the Dilmun period, around 2000 BC; the Achemenid period; and the Islamic period. Much pottery from Mesopotamia has been uncovered in excavations in Saudi Arabia, especially around Dharan. I am also working on archaeological sites in Kuwait (Farayka, Umm an-Namel, Alkaz) where the origin of the bitumen is not yet established. These future data will provide a better understanding of bitumen trade routes in the Gulf.

Map of the main natural bitumen deposits which spurred the development of the so-called "bitumen civilisations"
The Baghdad school preferred to illustrate works of the Baghdad poet Fuzuli and Lamîtî Celebi, and the miniatures were characterised by their dynamic structure and original colour composition, executed with intricate brushstrokes. These miniatures were in no way provincial in nature, being of very high quality, a quality to vie with the Saray style.

Apart from this short-lived school, which was active for only 15 years, no other centre of miniature painting emerged in any sustained fashion throughout the Ottoman provinces. There is, however, one group of illustrated manuscripts, works dating back to the 16th, 17th and 18th centuries which throw some light on the state of miniature painting outside the Saray during the Ottoman period.

This group of manuscripts consists of illustrated copies of the well-known *Ajr b al-makhluqat wa gharîb al-maqlubat (The Wonders of Creation and Oddities of Existence) of Zakariya ibn Muhammad Al-Qazwini (d. 1283). This work was the most popular of its type in the Islamic world. Written in the 13th century, it is an encyclopaedia on geography, history and cosmography of its time, which gradually became one of the most influential and popular literary text throughout the Islamic world. Known generally as the *Ajr b al-makhluqat, the work is divided into four sections: a muqaddima in four parts, two maqasas and one khatima. After his four introductions, in the first part, Al-Qazwini gives extensive information on the heavenly bodies (ulwiyyat) - namely the forms, movements and descriptions of the stars, and on the fixed stars, the constellations, the lowest heavenly sphere (talabat al-afa'la) and the angels. The chronological information is divided into 13 sections. In the second part, the author deals with subhuman phenomena and with the seas, islands, metals, plants, trees, animals, human beings, jinn, giants (dlîv), birds and reptiles, ending with a conclusion in which all the strangest monsters of land and sea are described.

Al-Qazwini's work was much loved throughout the Ottoman world. It was often translated into Turkish from the 14th century onwards. To date, eight different translations have been identified, the most renowned of which is the 15th century translation of Yazîzîgîlu Ahmed Bijan. This was frequently copied, but no illustrated versions of it have been uncovered. One other well-known translation is that of Mustafa ibn Saaheb Sûrûrî (died 1562), which was made for Crown Prince Mustafa, the son of Sultan Suleyman I, but left incomplete on his death, to be completed at the beginning of the 18th century by Rodosîzade. This version was illustrated both at the Ottoman Court school and other unidentified centres from the end of the 16th century to the mid 19th century. Of the latter, nine manuscripts are known, illustrated largely in a provincial style. These are beyond the subject of this paper.

Here, we discuss six illustrated copies of the work both in Arabic and Turkish, the miniatures of which were executed within the Ottoman Empire. These miniatures are notably similar to each other, both from the point of view of iconography and of style.

They date variously from the first quarter of the 16th century to the mid 18th century, and were, therefore, produced over a two-hundred year period. Undoubtedly, the most interesting fact about these manuscripts is that they date back to the 16th century.

The 16th century manuscript is in the Topkapî Sarayî Hazinesi Library (H. 4086. It is in Arabic. The brown-flapped binding is original. The title page is an illuminated double page, with medallions containing the title of the book, the name of the author and a dedicatory inscription to Sultan Suleyman I. The illumination is executed in blue, pale green and gilt. The colophon contains the date 1520/21 (927 H) as the date of compilation and states that it was inscribed in Cairo. This manuscript was executed in the year of Suleyman's accession.

The manuscript contains 512 miniatures of various dimensions. They are stylistically homogenous and are unique. The illustrations feature subjects in open landscape expressed in some detail, both in spatial and functional terms.

Hills and mountains are characteristically clearly outlined in white, while the topographical features are picked out in a number of colours, particularly mauve, ochre, blue, brick red and dark pink. The dark blue of the sky in these illustrations contrasts strongly with the topography by virtue of its marked outlines. However, the contours and brushwork are somewhat stunted, tending towards a decorative effect which is enhanced by skies filled with large gilt round points for stars and Chinese clouds.

As it has been mentioned, the colour palette and compositions of these illustrations are extremely varied
and unusual. Blue tones in particular tend towards turquoise rather than lapis, and there is much variety in tone. The variety of tones may be related to the nature of the local pigments used to produce these miniatures, while the colors and compositions of the renowned miniature schools of the period, namely the Ottoman and Iranian schools, are otherwise immediately evident.

The brushwork in these miniatures is of high quality and painstaking. But despite the care taken by the artist, it lacks animation, tending to be decorative in character.

The figures and costumes, particularly the turbans, are reminiscent of late Jalairid and early Timurid painting, a similarity reinforced by the clusters of flowers scattered across the ground in landscape illustrations. Similar style can be already observed in a Jalairid astrological treatise in the Keir Collection in England and in the Oriental Institute in Sarajevo.

Some relationship may be felt with the Turkmen schools of the 13th century in the illustrations of trees and plants, while the decorative quality is reminiscent of Safavid Shiraz manuscripts of the same period, although the brushwork and iconial style of these illustrations are quite different. On the whole, however, despite these various peripheral influences, the illustrations of this work are original in style.

Now we turn to a Turkish copy of this work in the Topkapi Sarayi Museum, Ismail Pasha H. 400, with miniatures in similar style and iconography. The decorated two-page frontispiece bears an inscription stating that the translation was accomplished for Haji Ismail Pasha, Governor of Egypt, Damascus and Baghdad, by Huseyn b. Mustafa. It was begun in June, 1697, in Cairo and completed at the beginning of April, 1698. The work was entitled Mir'at al-'Arab al-Mashhad wa Khashi Gharib al-Ma'ujudat (Mirror of the Wonders of Creation and Discovery of the Oddities of Existence), inscribed by Molla Taha b. Mehmed. The copy was completed at the end of July, 1699, in Baghdad. This manuscript is larger than the original illustrated copy of this work. It contains 525 miniatures on 324 folios.

The miniatures are notably similar to those of the 16th century Cairo manuscript executed for Suleyman I, particularly in their iconography. Stylistically they are much more related to the 17th century versions, but are much finer in quality. In none of al-Qazwini's manu-

scripts seen to date are the constellations and stars shown in full detail. The stars are set out in carefully arranged clusters of large gold points outlined in red over the dark blue and purplish tones of the sky.

The hills and mountains in this copy are executed in pale tones, such as light blue and pink or beige. Being in pastel shades, these features are not notably outlined in white as in the manuscript of the Suleyman period.

The illustrations are apparently copies of those executed for the Suleyman manuscript in Cairo. Undoubtedly the 16th century manuscript was in the hands of those preparing the later copy.

There is no record concerning the acquisition of the Suleyman manuscript by the Topkapi Hazine. However, the seal of Selim I can be identified on this manuscript, which indicates that it had been acquired during the 16th century. This raises the question as to how it could have acted as a prototype for the other manuscript, namely that executed in Cairo and Baghdad.

There are two possibilities: either another 16th century version of this work (similar to the Cairo Ms.) of which we are not yet aware, was in existence, or the Suleyman manuscript was removed from the palace in the 17th century and was in the hands of one of the governors of Damascus, Baghdad or Cairo. It is not yet possible to verify either of these suppositions.

The question as to why the translation was begun in Cairo and completed in Baghdad may be related to the political status of Ismail Pasha, for whom the illustrated manuscript in Topkapi Sarayi was executed, and who ordered the translation. Ismail Pasha held various posts in the Ottoman administration: governor of Damascus (1692-93), governor of Egypt (1694-95), and finally in September, 1697 he was appointed governor of Baghdad. This was followed in May, 1699 by the governorship of Van. In early 1701 he fled to Iran and died in November, 1703 in Isfahan. These dates and posts pose some light on the problem of the provenance of the translated versions. The translator clearly accompanied him to Baghdad and, immediately after the completion of the manuscript, the Pasha was appointed governor of Van.

A second illustrated copy of this translation is in the Staatsbibliothek in Berlin. It contains 467 illustrations. The work was copied by Yusuf el-Milevi and completed in 1703. The prove-
nance of the manuscript is not known, although it is thought to have been prepared in the same region. The illustrations of this manuscript are unlike either the original translated copy or the Suleyman manuscript, which acted as prototype. Only figures and shapes are shown in the illustrations, without any hint of a background.

As in the figures of Cassiopae and Perseus, only the constellations are shown without any of the stars seen in other versions. In effect, the Berlin copy is quite different from the other manuscripts mentioned and considerably less sophisticated.

Now we turn to the copies of this manuscript in Arabic which bear iconographical and stylistic characteristics similar to the Suleyman manuscript and the Ismail Pasha manuscript. One of the Arabic copies which dates back to the 17th century is in the National Museum in Cracow, Poland. Another Arabic copy can be found in the Gotha Forschungsbibliothek, Germany. And finally, I would like to mention a fourth Arabic copy, dating back to the 18th century, auctioned at Christie's in London in 1985.

In all, over 2,000 miniatures from five copies of the work in question corroborate the existence of a uniform stylistic and iconographic approach from the beginning of the 16th century to the mid 18th century. These miniatures constitute a small but important group within the body of Ottoman painting and reflect the aesthetic of the important Ottoman urban centres of Cairo, Baghdad and Damascus.
Aesthetics and Islamic Art

Abridged from a lecture by Dr. Petra Martín al-Awdhî

Aesthetics is a branch of philosophy speculating about art and beauty, from the old Greek word asthēnēmat, meaning “I perceive through senses,” disthēsis thus meaning sensation. The foundation of aesthetics in philosophy and the essential concept of art were laid by the Greek philosophers. Ancient Greek thinkers did not apply the word tēchnē, art, to the various genders of poetry, music, mime and dance. The word tēchnē, from which our concept technology derives, was then applied to all arts that used materials and instruments and were thus manual activities, considered servile rather than noble. With Plato and Aristotle tēchnē was liberated from the concept of servile art and associated with epistēmē, science.

A first step in unifying the theory of beauty and the one of art was taken by Plotinus for whom arts contain beauty, and above all are not imitation of sensible things but origin from the ideal forms, as he stated in his Enneads (v 8, 1). He anticipated themes of later western aesthetics of Romanticism and Idealism.

The medieval artist was more preoccupied in his art about symbolism than aesthetics and beauty, as Saint Augustine noted. This symbolism had to indicate the spiritual realm in multiple forms. The medieval artist accepted that symbols must be beautiful but did not consider beauty as the aim of his art. Many art historians still do not value the profound significance of this medieval symbolism and consider concealed symbols as mere decorations.

Symbols are also today hidden in advertising, in words, signs, religious parables, icons, ciphers, art works, poetry, myths, and in all allusions to something beyond the mere external form. For example: the wedding ring, the cross, the national flag, a traffic light, a red rose, to state only few ones. Thus, symbolism has a profound significance for the subconscious rather than for the conscious mind. As said, the symbol alludes to something beyond its own being and penetrates the depth of personality. Men who are conscious of this and use symbols have the responsibility to choose authentic and valid symbols within the patrimony which history provides.

Medieval art was a medium to induce man to the spiritual vision and on the way to God, whose essence was considered the cause of beauty in all things. Medieval man was more impressed by the significance which illuminated the art forms than by the forms themselves.

No specific speculations on the concept of art and beauty have been found. But we have many comments about aesthetic values and art appreciation, about perspectivism, music, and painting. Although we do not have treatises on the aesthetics of architecture, for example, as those by Vitruvius and Alberti in the West, we must not think that mosques and religious buildings lacked symbolism.

Under the Caliph al-Ma'mun, (813-33 A.D.), the accumulation and translation of Greek scientific and philosophical books became a well-organized activity. He established the Institute of Science, Bayt al-Hikma, in Baghdad which became a center of translation into Arabic. Among the most active translators were the Nestorian Christian Hunayn ibn Ishaq (his Latin name was Johannis), his son Ishaq and the distinguished mathematician and astrologer Thabit ibn Qurra of Harran. The interest in theoretical and abstract questions can be considered a continuation of the Alexandrian school activities in Antioch and Harran as well as Judishapur with the Arabic language as its vehicle. Respectful of their Greek mentors, the Arab scholars were not slavish followers of their Greek predecessors but regarded them as fallible human beings subject to criticism and correction. The influence exerted by the translated Greek writings was felt particularly in those branches of learning defined as foreign sciences in contrast to the native sciences, which included Qur'anic exegesis, jurisprudence, theology, grammar, lexicography, rhetoric and literature. The foreign sciences comprised philosophy, geometry, astrology, music, medicine, magic and alchemy. The Muslim scholars did not blindly reproduce everything they received from the Greeks; they expanded, changed, improved and shed new light on every subject.

During the 10th century the transmission of Aristotle's work, the Poetics, was completed. Every aspect of Aristotle's treatises, except his politics, had been translated. Ibn al-Nadim gives us the names of the translators and commentators in his Fihrist, a 10th century bibliography. The most important commentator on Poetics was certainly al-Farabi, who tried to deduce the general purpose of art from the word "logic", which, according to him, derived from the word "speech", or logos, in Greek.

Ibn Sina (Avicenna), owes much of his commentary to al-Farabi, and both write about the analogy of the imitation in poetry with that in painting. Thus, Ibn Sina defined the primary goal of Arabic poetry as pleasure, as opposed to the dramatic nature of Greek poetry.

We have many comments regarding the art of music. Of al-Kindi's thirteen treatises, only six have been transmitted to us. He commented on the ethical, cosmological and therapeutic effects of music; he and the Greeks included music in the quadrivium, the four mathematic and propedeutic sciences that prepare the student for higher studies of philosophy and the knowledge of the wonders of creation. He considered music as a creator of harmony between the soul and the universe.

The Rasâ'îl of al-Khwarîmî as-Sâfâî, Brethren of Purity, the most complex and wide Arab encyclopedia, with 52 tracts,
held that music is stated in terms of the relation of form to matter; the meaning resides in the music as the form of its matter, and the soul of the listener serves as matter to the expressive form of the music. Even the famous al-Ghazzali deals with music in his *Revival of Religious Sciences*.

Ibn Sina, Avicenna, speculates in his work *al-Qanun fi't-tibb* (Canon of Medicine) about the relationship between music and medicine which recurs in Arabic and European texts till the 19th century. But the culmination of music theory and speculation is in al-Kindi’s writings on poetry, logic, ethics, politics, mathematics and philosophy. He was called the second teacher, Aristotle being the first. His *Ilsha al-ilm* (Classification of the Sciences), which enumerates all known sciences and defines their nature and object became known in medieval Europe through Latin translations. His chapters on music influenced late medieval European musical theory, and his *Kitab al-musiqi al-kabir* (The Grand Book of Music), exerted a remarkable influence on subsequent Arabic music theory.

Ibn Bajjah speculated about the proportion between celestial and earthly music. Ibn Arabi wrote about *sama’* in its cosmological form, which according to him, God created as a consequence of His speech, and it is through His creation that we may listen to Him and His Word.

The well-known statesman, jurist, historian and philosopher Ibn Khaldun, in his *Muqaddimah*, wrote extensively about poetry and the art of writing, and defined crafts, thus arts, as *malak*, in the Aristotelian sense of *techne*. The numerous other thinkers and commentators on music include the Persians Hafiz, Rumi and Sa’di.

Why is there no concrete and specific Islamic theory on art and beauty? We must examine the world vision of the civilisation, its metaphysics, spirituality and building social element.

Islamic philosophy and metaphysics remained unchanged for centuries, always deeply linked to the sacred. Its civilization did not experience the rebellion against religion and metaphysics as happened in the Occident at the end of the Middle Ages, which caused the detachment of Occidental Man from the immutable and celestial archetype. God had given the true Muslim the signs, Ayat, the divine word to follow in the Qur’ān. The true believer could not imitate or exceed this revelation. Thus, the final aim and reference for the Muslim scientists, theologians, philosophers and artists was this archetype of knowledge and guide to the metaphysical sciences, morality and law. Whatever philosophers and thinkers wrote and speculated was finally integrated into their religion as an argument for their faith.

The submission of the artists to the Qur’ānic word was the supreme quality of this art that became the expression of a binding theory of life. Islamic art was linked to the Qur’ān, not in its form but in its truth. In its formal essence, Islamic art is linked to the idea of *Tawhid*, the oneness of God. Thus, Islamic art does not imitate the outer form of nature but reflects its principles; its patterns and forms are all related to this spiritual and intellectual principle.

In all medieval arts, Islamic or Christian, we never have the idealization of a fact but the incarnation of an idea. The Qur’ān speaks of God as the great Musawwar, the Fashioner; al-Ghazzali elaborates on this in his commentary on the "Ninety-nine Beautiful Names of God". The human artist works like the great Musawwar, but uses only available material while the divine Musawwar produces everything from the infinitely possible and the non-existing. As Rumi says in his *Mathnavi* (IV, 3000): "The divine Artist is conceived as Architect, as Painter, Writer, Potter, Embroiderer. None of His forms are without sense or useless. Every meaning implies another one above it, as the rungs of a stair."

And Sa’di: "From my hand not a single form, Sura, has come of which the Great Master in Heaven hasn’t drawn the model, naqsh."

Divine art was considered first of all the manifestation of the divine unity in the beauty and regularity of the cosmos, which also means order. Unity is reflected in order and equilibrium; beauty contains all those aspects.

Muslim artists were often also mathematicians, physicians, poets and philosophers. Omar Khayyam, known as a poet in the West, was also a famous mathematician and astronomer. Islamic painters, miniaturists, architects were often anonymous because the individual was considered only the instrument which the ego utilizes to express itself. Their art always included a technique, and science which is transmitted through art and implies wisdom, *ilmun*, linking rational data with the universal principle. Use and beauty were two inseparable aspects of this traditional art. The artist was guided by his tradition, sometimes he did not know the profound meaning of its symbols which were used as simple media. One could object that the medieval Islamic artist lacked freedom of thought and the self-expression of the modern artist. The artist anyhow acted freely because he did not blindly copy an external model, he expressed himself even obeying a criterion that remained unchanged for centuries. There was no distinction between sacred and profane. All human activities had something religious: religion was the binding social element. These artists were more than simple artisans, because their activity was bound to the principles of a more profound order.

Our modern art often seems aiming at pleasure in aesthetic effects. This art is evoked by the artist’s emotions and aims to evoke others’ emotions. Often it is an art of sensationalism. Modern man has been educated to think the emotion of beauty with his heart and mind, to describe it with external qualities at the cost of a deeper meaning. Art speaks to the subconscious of man and it is the function of the intellect to give a more or less intricate version. The emotional and sentimental self enjoys the aesthetic surfaces of the natural and the man-made objects to which it is akin. The intellectual or spiritual self enjoys their order and finds nourishment in what is akin.

Studying art from the art historian’s point of view is insufficient, appreciating works of art only for the pleasure of the eyes or ears is a shallow sensation. If Aesthetics is this, it would only be a discussion about taste. Speaking of art exclusively in terms of sensation is doing violence to its spiritual subject. Says also Ibn Sina: "All forms of the material realm originate from the intellect."

The history of art has become a methodology of archaeology depending only on literature. But painting and sculpture do not depend on literature. We are no longer willing to meditate in front of works of art, to listen to their silence. The old mediative approach, so necessary for the soul’s growth, has been replaced by superficial, quick art appreciation. We live in a world with no time for art, nor for ourselves. It is instant art, in which journalistic predigested images dominate a world which strews rubbish in our subliminal world. This leads to atrophied imagination. We must approach the realm of art which has its own language, listen and see works of art which induce the mental images of the soul. This only was the aim of Islamic, Christian, Hebrew and Indian arts before.
Ancient Egypt and Africa

Common Roots

Abbreviated from a lecture by Prof. Hermann Jungraithmayr
This topic has historical and linguistic dimensions, but is ultimately oriented towards modern, political and ideological issues concerning the historical identity of the African intellectual world.

For various Orientalist disciplines the wider Asian-African framework is of great importance, such as in the field of Hamito-Semitic/Afro-Asiatic studies where more than 80% of the languages concerned are spoken in Africa, including Berber in N. Africa, some 150 Chadic languages in the Central Sudan, about 40-50 Cushitic (and Omotic) languages in East Africa and last but not least Ancient Egyptian/Arabic. On the other hand, only relatively few member languages of the linguistic stock constituting the Semitic branch - including Arabic, Hebrew and the ancient Akkadian language - are centered on the Asian side, specifically in the Near and Middle East. It goes without saying that comparative-historical research into this huge linguistic superfamily (phylum, stock) which comprises some great languages of the Ancient world can only be successfully undertaken if the few Near Eastern members of this linguistic stock, with their rich written documentation, are being compared with the numerous languages spoken in northern, central and eastern Africa, with their living vitality unrestrictedly by the bonds of a literary tradition.

In this context, the Ancient Egyptian language having been spoken and written during 3000 years in the Nile valley occupies an intermediate position between the African Hamito-Semitic languages on the one hand and the Semitic languages on the other. For the past 100 years a vigorous discussion has been carried on over the classification of this unique language which was the medium of communication and expression for more than three millennia of a people which created the perhaps most surprising cultural achievement of mankind, the Ancient Egyptian civilisation. The view shared by most Orientalists - Egyptologists and Semitists - is that Ancient Egyptian is certainly related to Semitic as well as to the North African Berber languages but possesses its own very specific features - among which the remarkable suffix conjugation system of the verb stands out - which mark it as a linguistic entity of its own.

Among the arguments of those Orientalists and Egyptologists who favour the basic Semitic character of the Egyptian language is the fact that it undoubtedly shares a certain amount of common vocabulary for instance with Semitic. On the other hand, the Egyptian language possesses a number of words which cannot be traced in Semitic languages.

This stock of words, among various other features, alien to the general structure and outfit of the Semitic languages, aroused the question about the ultimate origin of Egyptian. The history of this problematic issue is a long one and goes back to the 19th century. In 1928, Lilias Homburger, the French African philologist contended a genetic relationship between Ancient Egyptian and the Bantu languages spoken in south-central Africa. A few years later, in 1936, Gustav Lefebvre, in his publication Sur l'origine de la langue Egyptienne, expresses a similar basic opinion.

Since 1960, when most European colonies in Africa obtained their independence and became states in the modern sense, a great number of universities were founded all over the African continent. Along with political freedom African intellectuals also stressed the need for spiritual and historical self-determination. In the anglophone African countries a similar concept, that of the African Personality, went the round and strengthened the feeling of self-confidence and the search for black identity among African intellectuals. In the field of science, one name stands out among those who dedicated their lives to the propagation of an African consciousness in the pursuit of scholarship, namely Cheikh Anta Diop, the Senegalese nuclear physicist, anthropologist and Egyptologist. Diop had soon realised that in order to develop and promote a solid and proud consciousness of African identity it was
necessary to discover a historical dimension for the essentially illiterate communities of the continent. Of course, for this purpose, the Ancient Egyptian civilisation offered itself as an ideal asset in the attempt at reconstructing a common African history. How strongly politicised Diop’s approach to the enterprise of claiming Ancient Egypt for the pan-African cause is becomes obvious when we listen to one of his typical statements (Diop 1974: 44):

“Because of this essential identity of genius, culture and race, today all Negroes can legitimately trace their culture to Ancient Egypt and build a modern culture on that foundation. A dynamic modern contact with Egyptian antiquity would enable Blacks to discover increasingly each day the intimate relationship between all Blacks of the Continent and Mother Nile Valley. By this dynamic contact, the Negro will be convinced that these temples, the forest of columns, these pyramids, these colossal, these bas-reliefs, mathematics, medicine and all the sciences are indeed the work of his ancestors and that he had a right and a duty to claim this heritage”.

C.A. Diop was fully aware of the dominant role that the two human features, race and language, play in the genesis and interpretation of a culture. Therefore, his principal objectives in establishing a seemingly sound foundation for his historical claim were to prove firstly, that the creators and bearers of the Ancient Egyptian culture were negroes and secondly, also consequently, that these black Egyptians spoke an African language.

The second issue is whether the language of the Ancient Egyptian civilisation belongs to the negro-African world. Before embarking on this problem, however, let me say a few words regarding the racial or anthropological issue. Diop has made great efforts towards proving, for instance by means of melanin tests in “Pigmentation des anciens Egyptiens: Test par la mélanine,” in Bulletin de l’Institut Fondamental d’Afrique noire, XXXV, B, No. 3, 1973: 514-531, that Egyptian mummies displayed a high degree of pigmentation. This is in complete contrast to the archaeological and biological findings made by numerous investigators in the field. For example, H. Junker wrote, nearly 80 years ago in “The first appearance of the negroes in history”, Journal of Egyptian Archaeology 7, 1921: 121-132 that “at the present time, we must confess that, except for sporadic cases of hybridism with Negroes, there is no appreciable Negro element in the Predynastic Egyptian”.

A. Froment, the French anthropologist, who has dedicated several studies to C.A. Diop’s work, makes special reference to the question of the hair quality found on the heads of the mummies and affirms that “on ne trouve jamais de cheveux crépus sur les momies Egyptiennes, ce qui exclut toute parenté avec les populations d’Afrique centrale et occidentale, l’ex-ception des Peuls nomades et des Tèda. Les cheveux des momies sont généralement lisses ou ondulés…” (Froment 1991:45). On another occasion Froment summarises the findings of recent anthropololgy and biological research (Froment 1992:79; “…on average, the Egyptian people is morphologically equivalent from Europe and Africa, some samples being very close to Europeans, others to Africans, as a consequence of a long process of mixing”.

With regard to the second linguistic question: did the Ancient Egyptians speak a negro-African language? C.A. Diop made an enormous effort toward supporting this pretentious claim. There are indeed quite a number of grammatical features and a considerable part of the vocabulary that the Pharaonic Egyptian language does not share with the Hamito-Semitic/Afro-Asiatic languages. Diop, after studying these specific, up to then unrelatable properties of Egyptian, ventured to propose a genetic relationship between Pharaonic Egyptian and negro-African languages. In his pro-grammatic book, Parenté génétique de l’Égyptien pharaonique et les langues negro-africaines, (Paris 1977), Diop lists over 3000 words taken from Egyptian and Wolof, his Senegalese mother-tongue, a Niger-Congo language of the West-Atlantic branch. The aim of this comprehensive comparative study was to prove a common origin of the two languages.

When going critically through the comparative sets in Diop’s work, at least two observations strike one’s mind:

1. the correspondence in meaning is rather confused: either too far fetched or manipulated;

2. In essence, Diop has collated words from Egyptian and Wolof which phonetically display sufficient similarity or quite often even identity. Examples of this sort provoke a fundamental methodological principle. It should not be forgotten that Egyptian is today an extinct language which was spoken approximately 5000 to 2000 years ago. On the other hand, Wolof is a modern West African language of which any earlier or ancient shape is totally unknown to us: since African languages have not been written in the past we have no means to know how they looked or rather how they were pronounced hundreds, let alone thousands of years ago. The great time gap between the two languages strongly argues against phonetic resemblance.
between two languages suggested to have originated from the same genetic source. It is worth noting that Diop himself stresses the point (op. cit. XVII) that “il n’est pas obligatoire que les formes finales correspondantes des langues comparées se ressemblent”. Another striking example illustrating the just mentioned methodological principle is the relationship within Indo-European between French quatre and English four. A layman could never detect their historically common origin and identity but the linguist can make it evident and obvious by quoting earlier historical stages of the two lexical items, i.e. Latin quattuor and Gothic fidwör.

Of course, Indo-European and, for that matter also Semitic linguists are in a privileged position being able to make comparative references to older shapes of a word which have been preserved through written historical documents. In unwritten languages like those of subsaharan Africa the only compensation for the absence of historical documents consists in the reconstruction of earlier stages of the development of languages, i.e. proto-languages, by rigorously applying the rules of the comparative-historical method.

In concluding these critical remarks by which we have to reject the largely careless and unscientific proceeding it has to be made very clear that CA. Diop was able to propose over 3000 Egyptian-Wolof equalitarian sets only because he largely disregarded the methodological requirements as they have been outlined above and in fact fully accepted by international scholarly standards. Even when there is a genuine and well-established genetic relationship between two languages - for instance between a modern North African Berber language and an extinct classical Semitic language like Akkadian - the amount of recognizable common vocabulary may hardly exceed 100-200; after all, the forces of replacement, substitution and borrowing have an almost devastating effect towards decomposing the common heritage in the course of even a few millennia only.

CA. Diop’s main objective in comparing Wolof with Ancient Egyptian was to prove that the language spoken and written in the lower Nile Valley by the founders and bearers of the great Egyptian civilisation is not a member of the so-called Hamito-Semitic or Afro-Asiatic language stock - the existence of which he and his disciples totally reject as a biased invention of Western ideologically impregnated scholarship - but belongs to the realm of languages of Subsaharan Africa. If it somehow could be demonstrated that the Ancient Egyptian civilisation - with all its great cultural achievements: pyramids, monuments and literary traditions - was a creation of the Black Africans and that Ancient Egyptians actually spoke an African language and were therefore part of Black African culture, then that would be a unique historical opportunity to compensate for what has always been considered almost a disgrace, namely the total absence of literacy in traditional African civilisations. Thus, behind the scientific endeavours of CA. Diop and his disciples there is a definite ideological motivation to link the illiterate African societies with one of the outstanding high cultures and civilisations of the world.

In the meantime, CA. Diop died in 1965, though a number of devoted disciples have continued to do more comparative research work aiming at the same goal, each of them comparing his own individual mother tongue - mostly Bantu languages - with Egyptian. Thus, Gilbert Ngom writes on Duale and Egyptian, Oum Ndoli on Basaa and Egyptian, Absobacry Moussa Lam on Fula and Egyptian, and Theophile, Obenga mainly on Mboi and Egyptian. These young African linguists have all made serious efforts themselves in acquiring a good knowledge of the Ancient Egyptian language and in respecting more and more the principles of objective methods in modern comparative-historical linguistics - e.g. in their search for regular sound correspondences - yet they still lack the decisive insight that modern African languages can only be compared with Ancient Egyptian if earlier stages of their development are being reconstructed.

It is to be admitted, however, that some of these recent comparative studies represent a welcome challenge to the established comparative Hamito-Semitic/Egyptological linguistics. After all, the classifieric position of Ancient Egyptian is far from being definitively established. Sir A. Gardner, the great British Egyptologist, emphasizes the fact that the original population of Egypt may have been Africans and that therefore also their language could well have been of African origin. In his Grammar (1957) he opines: “Egyptian differs from all the Semitic tongues a good deal more than any one of them differs from any other, and at least until its relationship to the African languages is more closely defined, Egyptian must certainly be classified as standing outside the Semitic group. There are grounds for thinking that it is a language which, possibly owing to a fusion of races, had, like English as compared with the other Teutonic dialects, disintegrated and developed at an abnormally rapid pace”.

In short, it is very likely that Africans had their share in the creation and development of the Ancient Egyptian civilisation and languages; the view according to which we are dealing with “une langue africaine semi-tisée” (Lefebvre 2 1955) however, certainly goes too far. At any rate, the speakers of the Egyptian language, that is, the builders of the pyramids and the scribes of the Hieroglyphic inscriptions, were not negroes in the generally accepted sense of this term.

In this respect it is probably indicative of CA. Diop’s basic philosophy and ideological bias when we observe how he goes about in interpreting the Egyptian name for “Egypt” itself, kmnb (Coptic kemnë).

After all, the issue “Black or White Egypt and Africa” is not restricted to the African continent and its intellectuals. Millions of Black Americans are highly concerned about their African past and roots. It would certainly immensely strengthen their self-consciousness if their early ancestors could be proven to have been among the founders of the Ancient Egyptian civilisation. Similarly, another publication has excited the American Black population recently, namely Martin Bernal’s two volume Black Athena, The Afro-Asiatic Roots of Classical Civilisation, (New Brunswick 1987, 1991), where the politicalist Bernal tries to demonstrate that Ancient Greek culture is based on Egyptian civilisation which - this is also Bernal’s belief - was of Negro origin. Thus, Athens, the Greek goddess of wisdom, is interpreted as having been originally black, imported from Egypt. Pharaohic Egypt then would have not only been a land inhabited by black Africans but also the land and early civilisation from which the Greek and subsequent European cultures originated. A fantastic dream - yet still lacking solid and sound objective foundations. Future scientific research will have to falsify or verify it.
Like the Ottoman Empire itself, Abdul Hamid II faced both East and West, dedicated as he was to asserting his authority as hereditary Caliph of the Muslims and the leader of an increasingly westernized state. Thus, while advocating for a Muslim revival, he also valued Western education and personally appreciated Italian music and Parisian clothes. Abdul Hamid II's great palace city of Yildiz, which covers several hills overlooking the Bosphorus and has recently been opened to the public, is as important for an appreciation of the twilight years of the Ottoman Empire as Topkapi Palace is for an understanding of its apogee.

Using slides and eyewitness accounts, we shall describe such pavilions as the Small Between (Kaduk Mabeyn) where the Sultan and his wives lived; the Hamidiye mosque, built in a hybrid style best called Ottoman Gothic; the Sultan's porcelain factory where pashas painted flowers on China; and the sumptuous art nouveau chalet kiosk built for the reception of his ally Kaiser Wilhelm II in 1889 and 1898.

For Yildiz Palace is not simply a window on a monarch and his way of life. It also shows the Sultan's political vision and the great power he still exerted both in the European state system and within his own Empire. Consisting of separate pavilions in a garden rather than one uniform building, Yildiz is the last great Islamic palace. The most important ceremonies there were Muslim, such as the Sultan’s weekly Selamlik at the Hamidiye mosque or the departure of the pilgrim Caravan to Mecca every year. Yildiz became home to many great Muslim thinkers such as Jamal al-Din al-Afghani and the Sultan used Islam as a threat to the Western Empires and a weapon to increase his own prestige.

Yildiz also became the home of the Sultan’s Arab servants such as bodyguards, secretaries (including Sheikh As’ad al-Shukeiri, a father of the Palestinian leader), some of the Sherifs from Mecca, and Sheikh Abdul Huda, the Sultan’s principal propagandist in the Arab World. It was in Yildiz that the Hejaz railway was planned to take pilgrims and the Sultan’s soldiers to Mecca itself.

The sultan’s autocracy, however, was less popular with Turks than with Arabs. Between July 1908 and April 1909 the young Turks destroyed the Sultan’s power base and sent him into exile. However, Yildiz remained a palace. It was there, in May 1919, that Mustafa Kemal had an interview with Abdul Hamid’s younger brother, the last Sultan Mehmet VI, before leaving to start the Turkish War of Independence in Anatolia. Yildiz is now a series of museums, including one with examples of the ornate furniture that the Sultan made in his leisure moments. The pavilion from which European ambassadors once watched the weekly Selamlik is now an Islamic Cultural Centre, thereby ensuring that, as in the days of Abdul Hamid, Arab costumes are again seen in the courtyards of Yildiz.