

The Game of Kings

Cover



A Muslim and a Christian ponder a chess problem in a portrayal that reflects the game's deep intercultural roots—one of 98 illustrations in the 13th-century *Book of Games of King Alfonso X*, a Spanish patron of Arab learning. Biblioteca Monasterio del Escorial / Index / Bridgeman Art Library.

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Back Cover



Viewed from a virtual 200 meters above north-central Saudi Arabia, the remains of stone walls trace a "barbed arrow" shape generically known to archeologists as a "kite"—probably a hunting trap. Kites may testify to a much greener climate and a substantial human population in prehistoric Arabia. Image courtesy of Google Earth.

Saudi Aramco, the oil company born as an international enterprise more than seventy-five years ago, distributes *Saudi Aramco World* to increase cross-cultural understanding. The magazine's goal is to broaden knowledge of the cultures, history and geography of the Arab and Muslim worlds and their connections with the West. *Saudi Aramco World* is distributed without charge, upon request, to a limited number of interested readers.

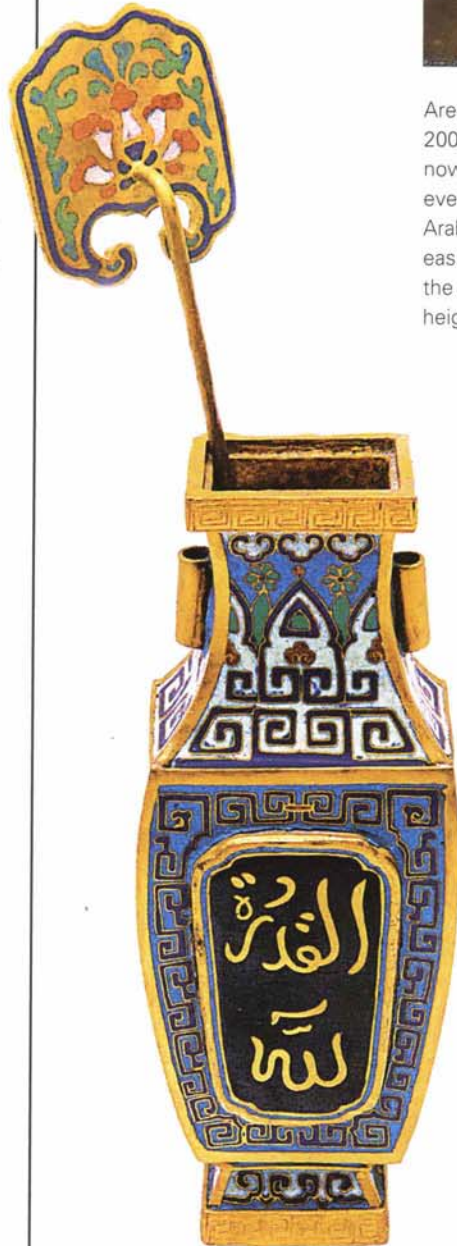


Desktop Archeology

Written by
David L. Kennedy
Research by
Abdullah Al-Saeed
and David L. Kennedy



Areas of high-resolution satellite imagery, online since 2008 through Google Earth (www.earth.google.com), now help archeologists research hundreds—there may eventually be thousands—of prehistoric sites in Saudi Arabia. Not only are walls and similar structures often far easier to see from overhead than from ground level, but the ability to "fly" above the landscape at any virtual height vastly simplifies large-area surveys.



10 From Middle East to Middle Kingdom

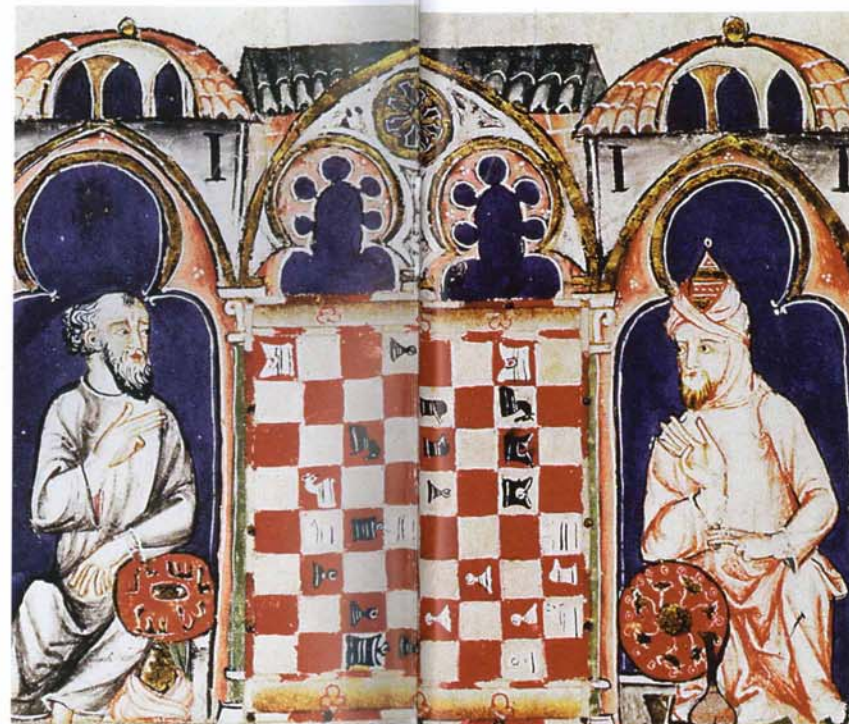
Written by Lucien de Guise
Photographs courtesy of the Islamic Arts Museum Malaysia

Until recently, works of Chinese-Islamic art have gathered more dust than admiration. To lovers of Chinese art, they were not fully Chinese; to lovers of Islamic art, their forms were often too exotic. Now, a Chinese calligrapher of Arabic is helping revitalize the rich cultural fusions that first peaked some five centuries ago.

18 The Game of Kings

Written by Stewart Gordon

Chess probably originated in Persia or Central Asia before the seventh century and spread to India, China, the Middle East, North Africa and Europe, becoming so acculturated that the ability to play was simply part of being a civilized person. Across the miles and the centuries, the game changed, but its fascination and the mental training it offered did not.



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Reinventing the Miniature Painting

Written by
Louis Werner
Photographed by
Kevin Bubriski

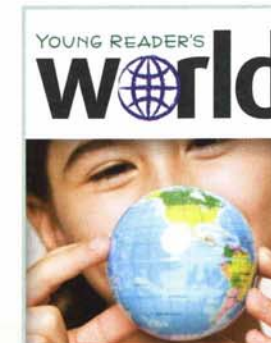
Seated cross-legged, squirrel-tail brushes in hand, students of miniature painting at Pakistan's National College of Arts might resemble their Mughal-era predecessors, but they are not just following a centuries-old tradition: They are "conversing" with it across generational lines in a fusion of refinement and experimentation.

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"Devil's Dung": The World's Smelliest Spice

Written by Chip Rossetti Photographed by Michael Nelson

Its Persian-Latin name means "stinking gum," and asafoetida is arguably the world's most repulsive spice—until cooking brings on the aromatic, savory transformation that secured its popularity from ancient Rome to the modern Middle East and especially India, where it's on every spice shelf—inviting cognoscenti and daring newcomers.



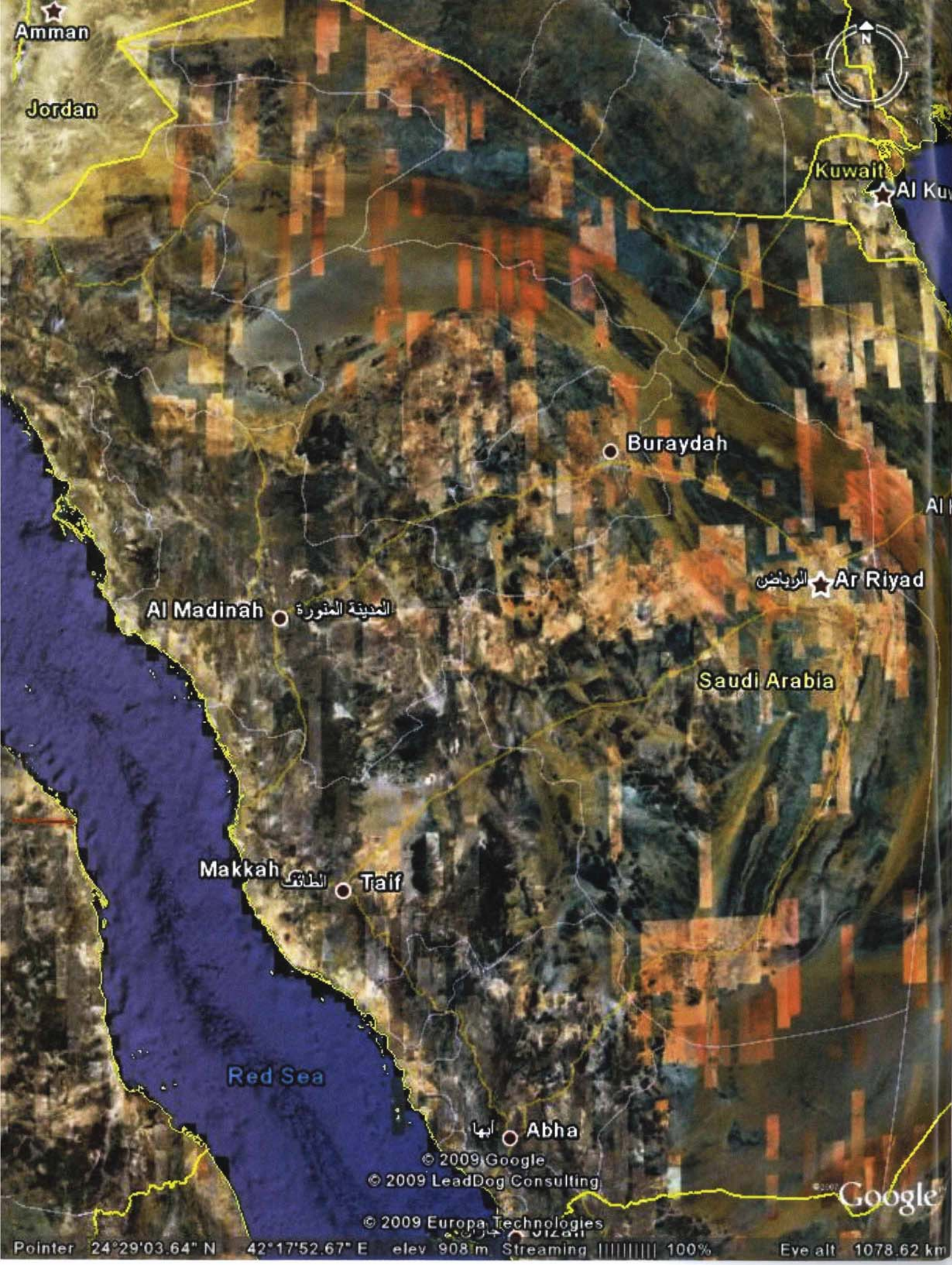
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Click the "Young Reader's World" icon for the first installments of stories for readers 8 to 14, produced for *Saudi Aramco World* by Rosalie F. Baker and Charles F. Baker, editors of the popular kids' magazines *Calliope* and *dig*. Each Young Reader's World story is an abridged version of a previously published *Saudi Aramco World* article, with its own discussion guide and activities.

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Desktop Archeology

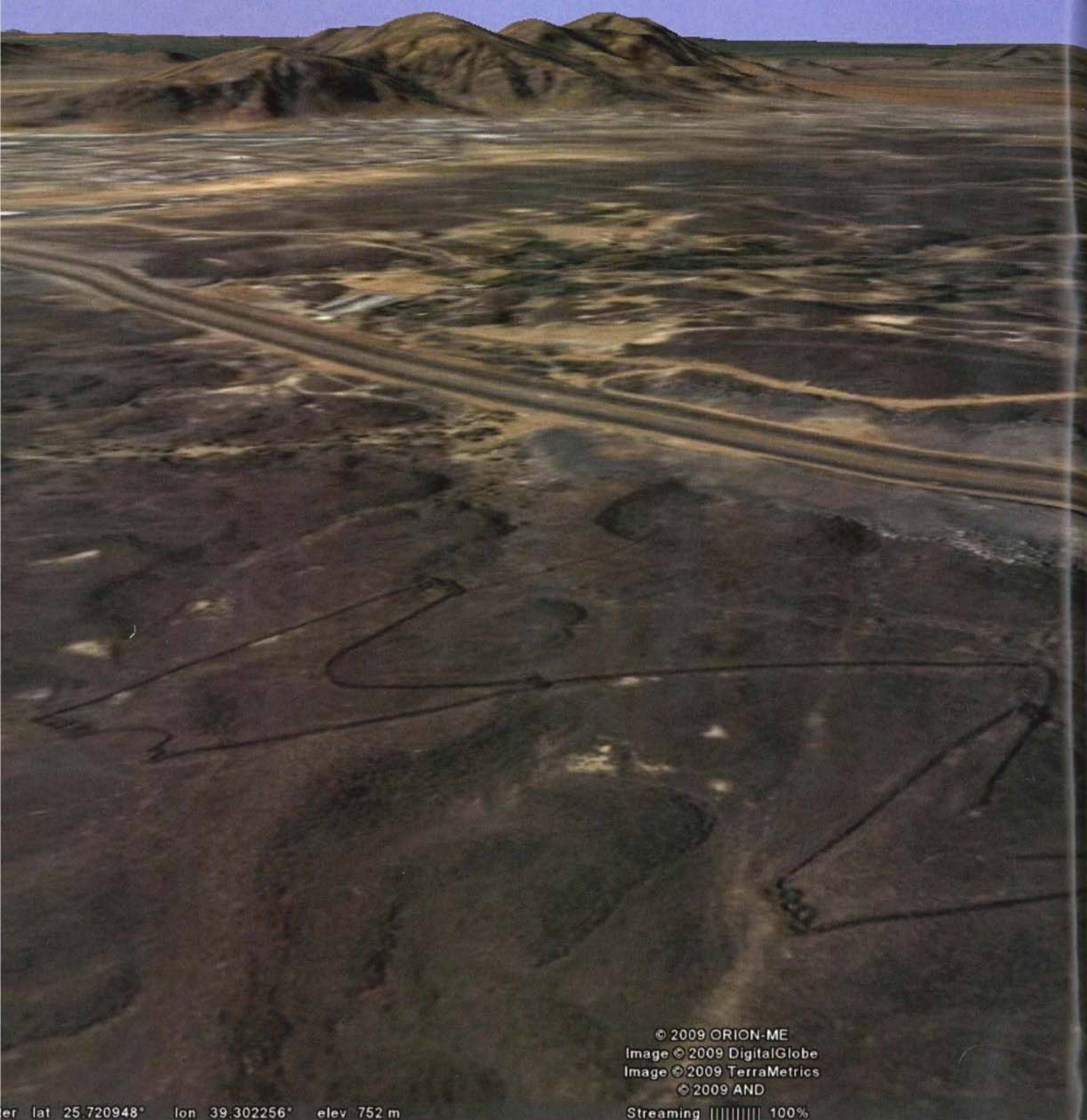
WRITTEN BY DAVID L. KENNEDY RESEARCH BY ABDULLAH AL-SAEED AND DAVID L. KENNEDY PHOTOGRAPHS © GOOGLE EARTH

For nearly a century, archeologists have routinely used aerial photographs as a key tool for discoveries and investigations. In western Europe, the discovery through aerial reconnaissance of tens of thousands of previously unknown sites has transformed the way the past is interpreted and explained. In discussions of archeology, aerial views are often far more informative than ground photographs because the aerial views show the whole site within its geographical and environmental context, and they often show patterns too subtle or confusing to be recognizable on the ground.

In the Middle East as a whole, there is a growing awareness of the value of this technique, particularly given the volume and complexity of remains and the need to balance preservation with rapid industrial development. Jordan has instituted and supports a program of aerial archeology, to which I have contributed. Recently, however, archeologists have begun to use the satellite imagery publicly available since the launch in 2005 of Google Earth, particularly since its gradual incorporation, beginning in 2007, of high-resolution images. As a result, over some Arab countries—Jordan, Syria and Lebanon particularly—the resolution of available images is now generally high enough to conduct reliable, general archeological surveys. Thanks also to the strong archive of historical aerial photographs from these regions, many dating from World War I to 1948, the new information can often be compared to the more distant past.



Top: Google Earth's ability to tilt the viewing angle provides oblique views like those from an aircraft. The dark lines are the remains of stone walls barely visible on the ground (above). Animals may have been driven into this "barbed arrow" structure; the rounded "hides" at the points may have given cover to hunters. Opposite: Amid the patchwork of Google Earth's satellite imagery, 15 to 20 percent of the Arabian Peninsula is covered at resolutions high enough to show archeological structures.



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 Streaming [|||||] 100%

er lat 25.720948° lon 39.302256° elev 752 m



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Eye alt 930 m

The density of about one "kite" per three square kilometers is the greatest known in the Middle East.



Left: In the 1920's, RAF pilots flying the Cairo-Baghdad airmail route across the Jordan panhandle thought the structures they saw looked like kites. The name stuck. Above and opposite: In the Harrat Khaybar region of Saudi Arabia, however, "kites" take on entirely different shapes—most notably the "square pocket" and "barbed arrow"—and the low walls of many of them show ruler-straight lines, raising new questions for archeologists.

Both Saudi and international archeologists have long recognized that among the countries in the Middle East, Saudi Arabia remains one of the most tantalizing. Though it is more than one-fifth the size of the US and almost nine times the area of the UK, only a handful of major Saudi sites were well known until the 1970's and 1980's, when ground surveys began to identify smaller sites. Quite recently, a major breakthrough came with the recognition that the Shuwaymas site south of Hayil, Saudi Arabia—which is not even mentioned in the 1998 edition of the *Cambridge Illustrated History of Prehistoric Art*—is the home of one of the four best collections of ancient rock art in the world. At a stroke, the art and the people who created it in such abundance opened the possibility of further investigations of what Saudi Deputy Minister for Antiquities and Museums Saad Abdul Aziz al-Rashid observed were "numerous ancient stone kites, mounds, tails and enclosures in the area."

Now, some of these low walls of stone—many long known to archeologists inside Saudi Arabia—are newly visible from any computer in the world. The high-resolution image swaths reveal stunningly well-preserved evidence of widespread human activity in the distant past: www.alsahra.org, the Web site of amateur archeologist Abdullah Al-Saeed, MD, and his *fariq al-sahra* ("Desert Team"), is a good place to start.

Roughly 80 percent of the Google Earth imagery of central Saudi Arabia remains inadequately detailed for even rudimentary surveys. However, among the high-resolution windows are those that cover parts of the Harrat Khaybar, an area of about 13,000 square kilometers (5000 sq mi) centered about 100 kilometers (60 mi) northeast of Madinah. (A *harrat* is a lava flow and the associated lava boulders beyond it; a series of *harrats* runs down western Saudi Arabia.)

Another high-resolution window opens on the Harrat Harrah, which runs from north of Al-Jawf to straddle the Jordanian panhandle and reach north into Syria. In Jordan, the Harrat Harrah has been extensively explored for decades through the Aerial Archeology in Jordan project. Its findings offer a key to at least some of what Al-Saeed and his colleagues have called attention to on their Web site and in the Harrat Khaybar.

The Jordanian aerial surveys date back to the 1920's, when the British Royal Air Force opened an airmail route



from Egypt to India. The route ran across the northern Harrat Harrah, where the pilots were struck by the numbers and variety of archeological remains visible in that rugged, thinly populated landscape. Bedouin told them the structures and walls they saw were "the works of the 'Old Men.'"

Now, Al-Saeed and his colleagues have posted on their Web site more "works of the Old Men" located

Elsewhere, from North Africa to the Arabian Peninsula, Iran and Central Asia, there have been no traditions of aerial archeology, and the satellite photomaps on Google Earth remain an uneven patchwork of large areas insufficiently detailed for archeological searches. There are, however, smaller but growing numbers of "windows" of high-quality imagery among the patches.

Named for their shapes, "keyhole" and "pendant" outlines appear by the thousands and were probably tombs.



Viewed from the ground, rough walls of piled stones outline a "keyhole" tomb.

600 kilometers (372 mi) south of the Jordanian panhandle and about 200 kilometers (125 mi) north of Madinah. The most striking are the so-called "kites," the remnants of long stone walls most likely built by groups of hunters to trap game; the walls outline the shape of a child's kite. But the kites are huge: The "body" is a wall enclosing a corral-like space often 100 or more meters (328') across. The "tails," two or more walls running out from the head, are typically each a few hundred meters long, but they can be as long as two or three kilometers (1.2–1.8 mi). On the ground, however, kites are almost impossible to find, because the walls, built of basalt boulders, are only about a meter (3') wide and their surviving height is seldom over half a meter, making them nearly invisible on a landscape already thickly strewn with the same rock.

From above, however, they stand out clearly, and their entire shape can be seen, as well as the wider patterns of

neighboring kites and other structures. Hundreds of these kites—and there may ultimately be thousands—are already widely recorded as far north as Syria. Elsewhere in the world, they are known as far away as Uzbekistan and Scandinavia.

Alerted by Al-Saeed, I undertook a systematic search of this Google window north of Madinah and found 239 kites in the western part of an area of 1200 square kilometers (463 sq mi). The density, about one per three square kilometers (1.16 sq mi), exceeds that in most of Jordan. As in Jordan, the Saudi kites appear in great chains running broadly north-south, the tails splaying out and sometimes linked to a neighboring kite on either side. In almost every case, the wide "mouths" represented by the kite tails open to the west or southwest—leading to speculation that this might reflect the grazing or migration patterns of the game that was hunted.

The novelty of the kites in the Harrat Khaybar region, however, is that, with

few exceptions, they appear in two shapes not found elsewhere: "barbed arrows" and "square pockets." In addition, unlike the gentle, almost freehand curves that characterize the lines of most previously known kites, many of the Khaybar kites are precisely drawn, with ruler-straight lines that often meet at acute angles.

Why did the Harrat Khaybar kite builders feel the need to build such straight and angular walls? An elementary concept of precise geometric forms was clearly familiar to the designers. Indeed, it was apparently not enough for the builders to broadly define an enclosure, tails and contiguous circular enclosures—possibly hides for hunters—but it was also important to carry that through into careful design on the ground at the building stage.

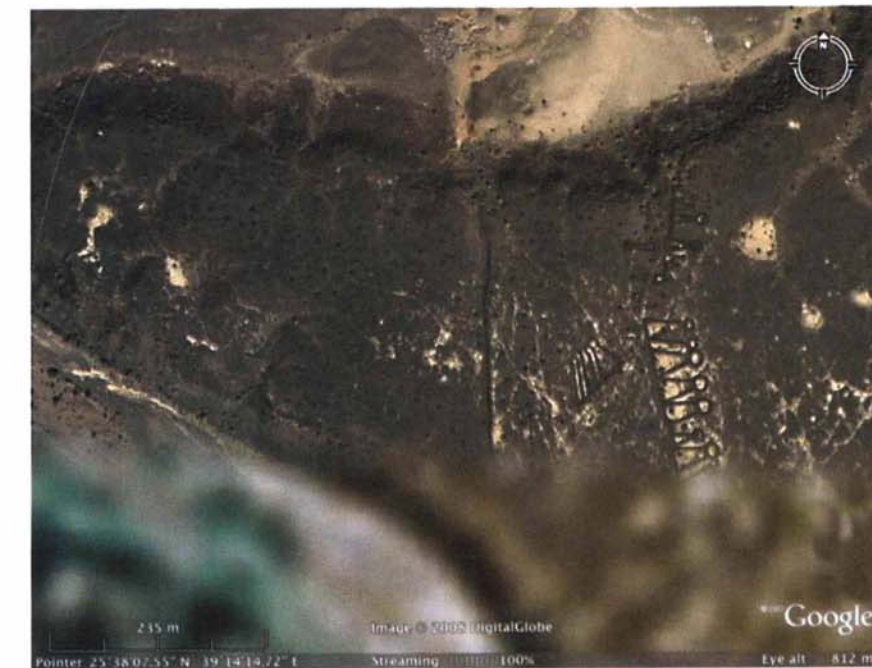
The square-pocket kite uses a line hidden at the end of each pocket. Again this design is, so far, unique to the Harrat Khaybar area.

Although this is the greatest concentration of kites in any of the newly open windows in Google Earth, there are others: Some 100 kilometers east of Harrat Khaybar, in the vicinity of Al-Hayit, Al-Saeed had found more kites. My systematic search, however, identified only 10 kites in a window of about 360 square kilometers (140 sq mi). Here, most were relatively simple. Is this disappointing? Not really—the number, variety and forms used in different regions will help answer many questions: Why were they built? When were they built? By whom?

As for the purpose of the kites, the archeological consensus has long been that they were animal traps, and that the stone walls we see may have supported wooden fence posts or piles of brush. Gazelle and, to a lesser extent, oryx and onager could be driven into the widely spaced walls at the mouth of the kite and herded through the gradually narrowing space into the "head," where more hunters awaited them for killing or capture. At Harrat Khaybar, it appears the builders may have used the "barbs" as sub-traps, or traps-within-the-trap. Although there have been dissenting scholars arguing for the use of kites as enclosures for livestock husbandry, that explanation is not convincing to most. Nonetheless, there are no definitive answers, only hypotheses.

Two other structures known in Jordan were also found again in the new Saudi Arabian windows. First are the "wheels" that have been encountered widely: in Jordan, they are often located close to kites. They come in a variety of forms, most simply a near-perfect circle of 20 to 50 meters (65–165') diameter in which six or more spokes create wedge-shaped chambers around a central hub. Others have a succession of small cairns running round the outside of the rim. In the windows visible over Saudi Arabia, these wheels are rare; they are usually smaller than the Jordanian ones, and they often consist of just four spokes. Their purpose may be funerary, but that is no more than a conjecture.

As these four images (opposite and right), three from the Al-Hayit region, show, keyhole and pendant shapes vary in size from a few meters to dozens of meters, and they are often found arranged along "avenues" that are invisible to builders of modern highways. Lower right: A row of keyholes at the edge of a Google Earth high-resolution "window" in the Khaybar region is clearly discernible—but not in the bottom, low-resolution part of the image.



UPPER: ABDULLAH AL-SAEED



Top and opposite, top: Called "gates" by archeologists, these rectangular shapes appear to be unique to Saudi Arabia, and their purpose remains obscure. Above: This rare "wheel" structure in Saudi Arabia is simpler than the more numerous "wheels" in Jordan (opposite, lower).

Already these isolated areas of high-resolution satellite imagery have expanded our knowledge of ancient human activity in the Arabian Peninsula.

Second, and more abundantly, are two types of what also appear to be burial structures, which collectively must represent sustained activity over a long period of time. First there are "pendant tombs"—circular burial enclosures at the end of a line of small cairns. These have turned up in both the Harrat Khaybar and Al-Hayit areas. In a few instances, they have a second enclosure at the other end ("double pendant tombs"). They often turn up in large groups, forming what appear to be entire cemeteries, or parts of them, and they are to be counted in the hundreds, perhaps even in the thousands.

Now we come to the "keyhole tombs" and the "gates," both novelties of the Harrat Khaybar, structures that are striking because of their unexpected, unique forms and their astonishing numbers. The keyhole tombs usually consist of a circular enclosure at the head of stone walls that form an isosceles triangle. There are numerous variations in size and in the relationships of circles and courtyards: In a few places the two are completely separated, and in others the triangle has been elongated so much it begins to look similar to the general form of some pendant tombs. Al-Saeed and the Desert Team visited a number of these structures, and their ground photographs confirm that the walls are built of dry-laid masonry, but set out carefully and often still standing a meter or more high.

I have yet to count the various tombs in the Khaybar and Al-Hayit areas, but they appear to number well into the thousands. In some places they form necropolises, with the tombs arranged on either side of avenues: Around Al-Hayit, I counted 13 such avenues with an aggregate length of about 24 kilometers (15 mi). Extrapolating from a count of a randomly selected section, I estimate there are about 1000 tombs on these avenues. To that we should add as many more tombs scattered in between, plus an unknown number already overbuilt by modern development. All around these are even larger numbers of small circular tumuli, which may be the remains of individual burials. In all, we are looking at one of the most extraordinary prehistoric funerary landscapes on the planet—and that's still not all.

Also visible in the Harrat Khaybar window, mainly in the same area as kites but also further east, are hundreds of sites which can best be described as looking like simple gates laid flat: a "post" at either end with two (but occasionally three to five) "rails" in between. They can vary a great deal in size, from five or 10 meters long (16–32') to a hundred meters (320') or more. The key element is surely the posts, which appear to be dense heaps of boulders, and which may again be burial places. My own count yielded 95 such gates, but only a future detailed survey, including ground visits, will fully catalogue them.

As to who built them and when, Jordanian fieldwork has concluded that kites and at least some of the associated structures date back to around the fifth millennium BC, to a time characterized by a wetter, lush environment with far more vegetation, perennial water and the kind of abundant wildlife so richly depicted in the rock art. Whether that is also true, even broadly, of the Khaybar kites is too soon to tell, for their more sophisticated forms and rather sharper appearance may imply less decay and thus a younger age.



As for the cemeteries, many of the keyhole and gate types are entirely new forms, but the pendants have parallels in Jordan, where a recent discovery of a necropolis from between the late Neolithic and the early Bronze ages, with hundreds of tombs and ritual structures dating back an estimated 9000 years, includes pendant tombs like those in Saudi Arabia.

Already these isolated areas of publicly available high-resolution

satellite imagery have expanded our knowledge and understanding of ancient human activity in the west-central Arabian Peninsula. Alongside the astonishing thousands of rock art records further north (and worth searching for near the new kites, too, since kites and rock art are often found together in Jordan), the archeology, and indeed the cultural heritage, of Saudi Arabia continues



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He has taken part in aerial archeology in the Middle East for some 25 years.



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passionate about the geography, history and culture of Saudi Arabia.

to emerge as both astonishing and impressive.

As Google Earth gradually pieces in further high-resolution imagery, this "archeological explosion" will create immense opportunities for studying—and challenges for surveying, presenting and preserving—the sites in Saudi Arabia and, for that matter, all around our ever more visible world.

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Desert Team: www.alsahra.org

David L. Kennedy and Abdullah Al-Saeed extend their thanks to the members of the Desert Team: Ahmed Al-Damigh, Ziyad Al-Saeed, Saad Suliman.

Written by Lucien de Guise

Photographs courtesy of the Islamic Arts Museum Malaysia

From Middle East

to Middle Kingdom

Chinese-Islamic decorated implements for the burning of incense often included a covered burner, a box to hold unburned incense, a vase and a spatula. Such a set would occasionally also include a pair of metal chopsticks for handling burning incense.



Chinese art has fascinated the outside world, especially the Islamic world, for more than a millennium.

In contrast, the appreciation of Chinese-Islamic works has been negligible. For collectors of traditional Chinese art, these works are not Chinese enough; for Islamic-art collectors, they seem too alien to be considered truly Islamic. Today, however, a world audience is awakening to one exceptional Chinese-Islamic art form—calligraphy.

The popularity of this calligraphy, called *sini* (“Chinese”) in Arabic, may have to do with the fact that it is extraordinarily vibrant, and that it has survived into the 21st century as a living medium. Indeed, contemporary Chinese calligraphers have acquired an international following, none more so than Hajji Noor Deen Mi Guangjiang.

Hajji Noor Deen, whose title means he has made the pilgrimage to Makkah, preserves the same techniques that have been used since paper was invented around 2000 years ago. With compositions that acknowledge the past, this neatly bearded 45-year-old has almost single-handedly brought contemporary Chinese-Islamic art to the world. In 2006, he was among the calligraphers featured at the British Museum’s *Word into Art* exhibition—called the most important exhibition of modern Islamic calligraphy.

Appearing in a show subtitled “Artists of the Modern Middle East” was quite an accomplishment for an individual who was born and lives in China.

“Arabic calligraphy in Chinese style is the crystal of collected wisdom from countless ancestors. It is the Chinese Muslim’s resplendent treasure

house,” says Hajji Noor Deen. And, he might well have added, there are many more treasures of this “collected wisdom” waiting to be recognized.

Appreciating the scope of Chinese Muslim art is difficult, partly because there were few accounts or depictions of Muslim life in



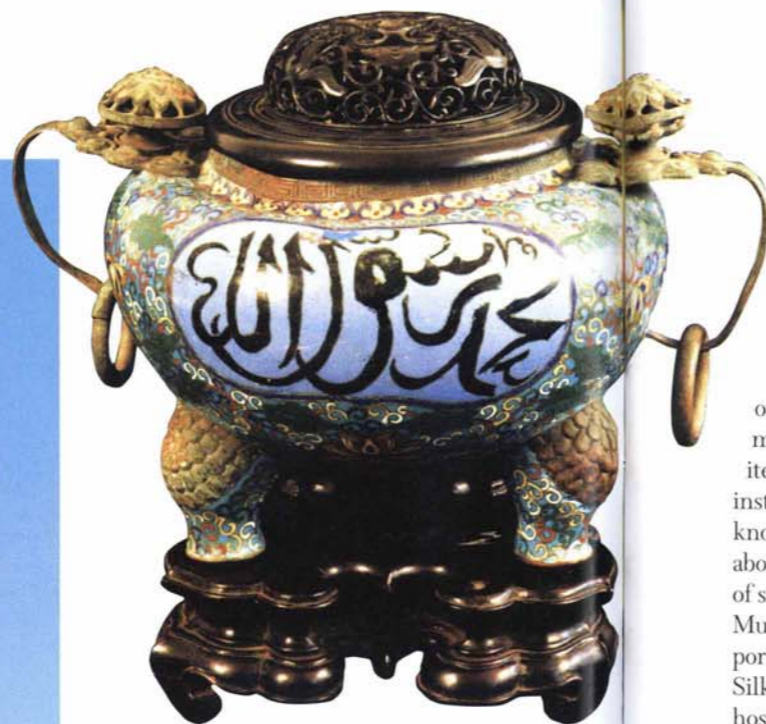
Above: Arabic calligraphy is shaped into the popular Chinese character for “longevity.” Above right: Verses from the Qur’an are shown in the form of a *mihrab*, or prayer niche. Right: “Arabic calligraphy in Chinese style is the crystal of collected wisdom from countless ancestors,” says Hajji Noor Deen Mi Guangjiang, shown here at work in his studio.



China until the 19th century, when Christian missionaries arrived in relatively large numbers. Photographs by American sociologist Sidney Gamble and the Rev. Claude L. Pickens, made in the 1920s and 1930s, provide more insights than the usually descriptive Ibn Battuta did. The great 14th-century traveler from Tangiers had remarkably little to say about the months he claims to have spent with Muslim hosts in China, and his account gives no impression of having seen any Islamic artworks, although he was impressed by the figural art of the non-Muslims there.

Ibn Battuta's journey to China took place toward the end of the Yuan Dynasty (1271–1368). When he arrived, the Muslims who had settled in this Mongol-ruled empire were commercially successful and treated with more respect than the native Han Chinese, perhaps because the Mongols viewed the Muslims as outsiders like themselves. They recruited Muslims to fill government positions and even to manage state-run

Toward the end of the 14th century, there was an esthetic awakening as Muslims in China began integrating Islamic concepts with Chinese artifacts.



Left: This 18th-century cloisonné incense burner features the *shahadah*, or statement of faith, in Arabic, in two cartouches on opposite sides.

and abstaining from pork are probably apocryphal, his reign was a prosperous time for Muslims in China and a productive time for art, with the imperial kilns producing quantities of Islamic ceramics.

Contact between the Middle Kingdom and Muslims in the Middle East had existed for centuries before Ibn Battuta's journey to China. As early as 651, only 19 years after the death of the Prophet Muhammad, a mission led by his maternal uncle is thought to have visited an emperor of the Tang Dynasty. The traditional instruction of the Prophet, encouraging believers to "seek knowledge even as far as China," suggests that this was about the most distant place that anyone could go in search of self-improvement. Distance was no impediment to the Muslim traders, who formed communities in the major sea-ports of Guangzhou (Canton) and Quanzhou, and later in Silk Roads oasis cities in the northwest. Despite occasional hostility, sometimes extending to massacres, the influence of Muslim settlers increased in coastal cities and throughout the empire.

The importance of Muslims in China between the seventh and the 14th centuries is not reflected in their artistic legacy, however. Rather than developing new art forms, they reused styles and imported easily transported objects from their original homelands, thus preserving their distinction from the Han. Apart from mosques and tombstones, in fact, there are almost no local artifacts from before the Ming Dynasty to show the existence of a sizeable Muslim population.

Then, toward the end of the 14th century, there was an esthetic awakening: Muslims began integrating Islamic concepts with Chinese artifacts, creating a hybrid that was more Chinese than anything else but featured elements from Muslim lands. They developed a new style of Arabic script and adapted objects used for traditional Taoist, Buddhist or Confucian practices to Islamic purposes. Veneration of God, rather than ancestors, began to be expressed in ways that have remained much the same until the 20th century.

The explanation for this flowering of a new culture lies in the way that many Muslims in China

During the 17th and 18th centuries, porcelain rosewater sprinklers were a popular export item from China to Islamic lands. Opposite: The Zhengde emperor, who ruled from 1505 to 1521, was married to a Muslim, and is believed by some to have converted to Islam. Many ceramic objects from this time, like this incense-burner part, carry his regnal mark.

porcelain plants, writes Gauvin A. Bailey in *Tamerlane's Tableware* (1996, Mazda). These were Chinese-speaking Muslims—mostly descended from Arab and Persian merchants and soldiers, often intermarrying with the Han Chinese but preserving a separate identity—and Uighurs, a Turkic people living in the country's northwest who had embraced Islam.

A fundamental change for China's Muslim communities came during the succeeding Ming Dynasty (1368–1644). The Hongwu emperor, who reigned from 1368 to 1398, stripped them of their political and other advantages as the native Ming consolidated power. To reduce the Muslims' importance further, he ordered them to marry Han Chinese and adopt Han customs, but since most of the offspring of these unions became Muslims, not Taoists, the community expanded rather than contracted.

The fortunes of Muslims in China had rebounded generally by the time of the Zhengde emperor (1505–1521). Much folklore surrounds this unpopular ruler, who was married to a Muslim and is believed by some to have converted to Islam. Although the tales of his dressing in Arab clothes

began to see themselves during the Ming era. During the Yuan Dynasty, they were part of an honored and distinct ethnic group known as *semu* and—at least officially—kept apart from the indigenous Chinese. Now they were no longer strangers in this land, and their increasing numbers were matched by a growing measure of Han Chinese blood. After Ming rulers replaced the Yuan, the *semu* became Hui: mostly Han Chinese by language and ethnicity, but Muslim by religion. Under the Ming, there was no longer any benefit to being an outsider. The Arab and Persian decorative arts that had previously been symbols of *semu* identity—reflected mainly in manuscripts and utilitarian ceramic and metalwork items like bowls and candlesticks—became increasingly irrelevant.

At the same time, the split between Muslim groupings in eastern and western China became more decisive. Regions with a heavy Central Asian influence, such as Xinjiang in the northwest, had been closely allied to the Mongol ruling class. The Turkic-speaking Muslims there had less in common with the Ming rulers than the Chinese-speaking Hui of eastern and central China. The latter grew closer to the imperial court and became influential patrons of the new art forms that developed during the Ming Dynasty. The art of the Turkic-speaking Muslims has retained a Central Asian feel to it. The uniqueness of Chinese-Islamic art is a Hui accomplishment.

Two main categories of Chinese art might be considered "Islamic"—wares made for Muslims outside China and those made for Chinese Muslims—and both reached their zenith during the Ming period. The highest-volume wares were intended for export to consumers in various parts of the Islamic world—mainly ceramics, China's main export even before the Ming Dynasty. Although this trade was stopped at various times by imperial command, international demand for Chinese porcelain continued strong in markets as diverse as Sweden and East Africa.

Muslims in India, Iran and the Ottoman Empire were avid consumers, sometimes going as far as having their names enameled on dishes and other ceramic commissions.

Wares made for Muslim patrons had to satisfy a variety of local requirements. For Middle Eastern destinations, where eating from a communal dish was de rigeur, Chinese kilns churned out extra-large sizes, more than 50 centimeters (20") across. Examples of these dishes, only a few of which survive in the Middle East, are in the Topkapı Palace Museum in Istanbul. Decorative styles also varied. The Ottoman court, for example, had a passion for celadon, a porcelain known for its distinctive gray-green glaze. This was replaced in the 15th century by underglaze blue-and-white motifs such as bunches of grapes, later copied extensively by Ottoman ceramists.

On the other side of the Islamic world, Southeast Asia imported large



dishes with religious inscriptions, as well as many small bowls decorated with “magic squares” and Arabic numerals. These consist of a grid usually composed of 16 small squares, each with a number (or sometimes a letter) inside. They were almost certainly meant for divination purposes, but exactly how they were used remains a mystery.

Rosewater sprinklers were among the most popular Chinese ceramics in the Islamic world. They looked like small flower vases with an elongated neck closed with a perforated silver top, and were usually made in underglaze blue-and-white or multicolored enamels. They rarely featured inscriptions or any other overtly Islamic decoration; rather, flowers were the most typical motif—appropriate for dispensers of rosewater. As with most of China’s ceramic exports to Muslim markets, figural imagery was rare. When they reached their destinations, such wares had a profound effect on ceramicists in different parts of the world. Ceramics specialist Oliver Watson, head curator of the new Museum of Islamic Art in Qatar, writes that Chinese ceramics have been “the most important and consistent influence on Islamic pottery.”

Ceramics created for Muslims in China conformed to “Chinese taste” and had considerably less impact. This reflects the historical division between items made to imperial requirements, which became the model of decorum for the entire population, and those made for consumers outside the Middle Kingdom. Tastes changed often at the imperial court, ranging from the monochrome austerity favored by the Song Dynasty (960–1279) to the experimental flamboyance of the Qing (1644–1912). Imperial taste dictated the esthetics of the empire not only because of the rulers’ semi-divine status, but also because of the sheer quantity of items produced at their kilns. Regardless of what the prevailing fashion might have been at court, it was rarely the same as what foreigners required.

The Chinese-Islamic ceramics of the highest quality were produced in the Ming Dynasty, almost all in the 16th-century reign of the Zhengde emperor.

Chinese-Islamic ceramics of imperial quality invariably date to the Ming Dynasty, almost all from the reign of the Zhengde emperor. Hui influence at court enabled Muslims to commission porcelain of such superiority that huge prices are still paid for it today by collectors of imperial ceramics who are not deterred from their pursuit of pure Chinese heritage by the presence of Arabic or Persian inscriptions. These items are considered to be the pinnacle of Ming creativity. Decorative motifs include distinctive meandering arabesques of Islamic inspiration that appear on Zhengde porcelain of all types. They have the intense cobalt blue and the rich, tactile glaze that have made this dynasty’s ceramics the most collectible of all Chinese ceramics. The blue itself was mainly derived from Iranian cobalt that Chinese potters called *hui-qing*, or “Muslim blue.”

Islamic inscriptions on Ming porcelain are usually found on objects designed for the scholar’s table, such as brush rests, ink stones and water droppers. During the Ming Dynasty, a man’s highest calling was to be a person of scholarly or literary achievement, and this aspiration was reflected in the ceramics that were favored by prominent Chinese Muslims. They wanted to show their scholarly credentials in a conventional Han way by using the right implements, while making their religious affiliation clear by having some Islamic content. The same thing applied to jars, dishes and incense burners. These preserve traditional Chinese shapes with the addition of Arabic writing that might proclaim “God be praised for all His blessings” or “He who gets close to a perfume seller acquires a share of his scent.” Occasionally, the content is more personal: “O God! Protect Hui Ma Yun [from] the anger of the wicked,” reads the inscription on a jar in the Islamic Arts Museum Malaysia in Kuala Lumpur—the only institution in the world to dedicate an entire gallery to Chinese-Islamic art.

Sometimes the words are in Persian, serving less of a religious purpose than as a reminder of the Hui owner’s descent from Iranian soldiers or traders. These inscriptions might consist of elaborate Persian proverbs or, as in the case of a brush rest in the Percival David Collection in London, simply the Persian word for “pen rest.” Despite the existence of some Chinese ceramics with Persian inscriptions in such places as Ardebil, Iran, the majority of these wares were used by Chinese Muslims.

The Islamic content of inscribed ceramics does not always eclipse the traditional

This Ming Dynasty brush rest, produced in the southern province of Jiangxi, bears an Arabic inscription, but its shape refers to the “Five Great Mountains” of Taoism.

BRITISH MUSEUM / ART RESOURCE



In the majority of Qur’an copies from China, the text’s 30 sections are divided into separate volumes bound in leather or cloth. One volume could thus be read each day during the holy month of Ramadan. Below: A pen box from the 15th century is one of the few Ming Dynasty export items that was also widely used in China.

Taoist connotations that come with them. There are, for example, brush rests of a common type that features five stylized mountain peaks—an allusion to the “Five Great Mountains” of Taoism—but with Arabic or Persian inscriptions.

While Taoism and Buddhism are incompatible with Islam, Confucianism, the principal philosophy of China, is not. It has been linked to Islamic belief by Muslim scholars such as Wang Daiyu and Liu Zhi since the 17th century. The connection may seem strained, but the central message of a “Lord” (God) and a “Chief Servant” (the Prophet Muhammad) was comprehensible to Confucian adherents. Wang Daiyu explained the values of Islam in a typically Confucian manner: “If the country is not governed, it is because the family is not regulated. If the family is not regulated, it is because the body is not cultivated...” and so on until he shows how achieving personal perfection is the goal.

The Confucian elite’s preoccupation with the written word and with being “cultivated” worked well with the Hui. The Islamic world and traditional Chinese culture place calligraphy at the top of the art hierarchy. Not even a revolutionary as staunch as Mao Zedong could resist the lure of “reactionary” scholarly pursuits. His calligraphic works are among the least publicized but most respected of 20th-century China.

The importance of calligraphy to Chinese-Islamic art is central: It is the only real difference between the creative output of Chinese Muslims and the rest of the population. Without its written

inscriptions, porcelain made for the Hui would look like any Han ceramic. The same applies to the other major expressions of Hui esthetics: bronzes, cloisonné enamel and glass.

Glassware with Islamic inscriptions is less common than bronze or cloisonné work. It is mainly from the Qing Dynasty, not the Ming, and shares the same shapes and colors as the glass made at the imperial workshops in Beijing, but with the addition of Islamic invocations. Its purpose was to hold flowers, which in Taoist or Buddhist tradition can have ritual significance. For the Hui, they were simply vases.

Muslims do not use ancestral altars, which remain to this day the focal point of most Chinese traditional religious practice. Partly integrated into Han life, the Hui developed a modified system that would seem entirely out of place in other Muslim homes around the world. Rather than venerating ancestors at an altar, the Hui practice was to revere the Qur’an, which was placed on a table. Like Taoists, they burned large amounts of incense, but instead of being a process of communication with the spirit world, the intention was to cleanse and purify.

This activity did not have the same central role for the Hui as it does for ancestor worshipers, but the vessels they used for burning



incense were based on those of the Tao. The traditional Chinese garniture comprised an incense burner flanked by two candlesticks and flower vases, while Muslims got by with an incense burner, an incense holder and a flower vase that might hold a spatula for stirring coal or ashes. There was also a decorative distinction: The Muslims' censers were cast with appropriate Islamic inscriptions, usually in Arabic.

These brass or bronze vessels still exist in large numbers. There must once have been a massive quantity for so many to have survived the Cultural Revolution of the 1960s, when Muslims were persecuted for their beliefs and mosques were torn down. A large number of metal objects were also lost during the "Great Leap Forward" immediately before the Cultural Revolution, when they were collected

This jar is notable both for its red underglaze decoration—blue was far more common—and for its four Arabic inscriptions, one of which contains a grammatical error. Although it carries the Zhengde emperor's mark, it was probably made later, during the Qing Dynasty.

Inscriptions are often the *bismillah* ("In the name of God, the Merciful, the Compassionate") or the *shahadah* ("There is no god but God, and Muhammad is the Messenger of God.")



as scrap and melted down as part of the communist state's backyard industrialization plan.

The extant incense burners are imposing in their solidity. Many bear reign marks of Ming emperors, just as porcelain objects do. As with ceramics, the marks are not necessarily accurate indicators of the era when the objects were made: During the Qing Dynasty, Muslims' relations with their Manchu overlords were often poor; they became increasingly nostalgic for the golden age of the Ming and marked their ceramics correspondingly. The same reign marks can also be found on incense burners made of cloisonné, a technique closely associated with the Ming imperial court. Most of the censers that exist today are from the Qing era. While the bronzes with their bold Islamic inscriptions look stately in their monochromatic way, the cloisonné vessels are sometimes a little jarring. The delicate color scheme of blue with accents of red and yellow is not always improved by the presence of white or black cartouches on which Islamic inscriptions stand out vividly. Whether added to brass, bronze or cloisonné, the inscriptions usually incorporate blessings, the *bismillah* ("In the name of God, the Merciful, the Compassionate") or the *shahadah* ("There is no god but God. Muhammad is the Messenger of God").

Chinese Muslims also commissioned ceramic censers. Their shapes were usually based on metal prototypes, but the style of calligraphy they feature highlights an essential Chinese contribution to Islamic art. The Arabic and Persian writing on imperial wares of the Ming Dynasty is remarkable more for its presence than its esthetic properties; it tends to have been executed by artisans who, though competent, were uncertain of its meaning. On later ceramics, however, the calligraphy often exhibits an extraordinary vigor, unseen on ceramics from the Islamic heartlands, mainly because the calligraphers were not trying to create the angular look of a pen stroke. The Chinese calligraphic brush technique produces a result quite different from the reed pen used elsewhere in the Islamic world. It has a dynamism that is similar to dance and a spontaneity that is more energetic than the measured precision of the pen.

The ceramics and bronzes that use this fluid style of writing show that the Hui contribution was not simply about adding pious inscriptions to distinguish their wares from those next door. The words truly come alive. This new *sini* script was used in everything from miniature copies



Left: Brass incense burners, such as this one from the 18th century, were lost by the thousands to the Cultural Revolution and the "Great Leap Forward." Right: Three incense burners show, top, the deep cobalt blue that is typical of Ming ceramics; center, a stylized mark of the Zhengde emperor in the lighter blue of the Qing Dynasty and, lower, a 19th-century design using green enamel and highly stylized *sini* script.

of the Qur'an to enormous wall paintings in mosques. In copies of the Qur'an this comes closer to the *muhaqqaq* style that inspired it, but there are innovations that make it unique. Manuscripts, though written with a wood or bamboo pen, retain the look of brush strokes. The horizontal tails of letters, so distinctive to all Arabic writing, are even more extended in *sini*. There is also a certain disregard for the conventionally approved connections between letters.

In addition to the style of writing, the decoration of Hui Qur'an copies shows innovation in an Islamic context. Traditional Chinese motifs such as cloud bands and peonies proliferate. Colophons giving the place, date and scribe who copied the Qur'an are much rarer than in the Middle East. The oldest known Chinese Qur'an with a colophon dates from the Ming Dynasty. It was copied in 1401 at the Great Mosque of Khanbaliq, the Mongol name for Beijing. The scribe used a format that has been popular in China, and almost nowhere else, for more than 600 years.

Chinese copies of the Qur'an are generally bound into 30 volumes, one for each of the conventional divisions of the text. During Ramadan, Muslims everywhere read one of these sections (*juz'*) each day. In China, the preference was for community readings with the local imam. Carrying a single, slim volume would have made this easier, especially since Chinese copies are highly legible: Multiple volumes require only three or five lines of text for each page. Complete, 30-volume sets from the past are hard to find, and they tend to look more like an encyclopedia than a copy of the Qur'an.

The most eye-catching Chinese contribution to this art is found on scrolls and buildings. It was in larger formats that *sini* script came into its own. The most prominent decorative feature of Hui mosque interiors has for centuries been huge inscriptions on the walls. Usually near the *mihrab*, the niche indicating the direction of Makkah, the *shahadah* is the most ubiquitous expression of the written word and its power.

With scrolls, the format is identical to mainstream Chinese calligraphy, right down to the finishing touch of red artists' seals. The main difference lies in the use of Arabic words rather than Chinese characters, although in many cases a Chinese translation is included. Sometimes, the Islamic invocation was written in such a way that the Arabic words actually take on the shape of a Chinese character: "longevity" has been a consistently popular choice.

Another Hui speciality is the use of calligrams, or turning words into images, a practice in the Islamic world since at least the 15th century. The concept was readily adopted in China, where Muslim calligraphers were able to use the scroll format to create images on a large scale. Unlike those in Iran, India and the Ottoman Empire, the calligrams of China avoid figural imagery. Words are instead wrought into such shapes as flower vases and the mighty two-bladed sword

known as *Zulfiqar*. Dishes with peaches were also much admired, presumably owing a debt to the Taoist use of the peach as a symbol of longevity.

In the past, scrolls were displayed extensively in mosques and private homes, but once again the Cultural Revolution stifled a centuries-old tradition. Yet this calligraphy today shows signs of being the hardest part of the Chinese-Islamic art heritage. The art form has been reinvigorated by artists like Hajji Noor Deen Mi Guangjiang, while Islamic bronzes, glass, ceramics and the like remain practically invisible. By opening a window on one rich genre of Chinese Muslim art, perhaps Hajji Noor Deen will inspire the world to enjoy the full tableau. ☉



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The Game of Kings

Written by Stewart Gordon



In 1509, Diego Lopez, commander of the first Portuguese expedition to Malacca, in the East Indies, was playing chess when a Javan from the mainland came aboard. The Javan immediately recognized the game and the two men discussed the form of the pieces used in the chess played there. They no doubt communicated through interpreters, but the fact that men whose homes were separated by a third of the circumference of the Earth could find they had chess in common is remarkable—and so is the fact that they could have found other players familiar with the game at any stopping point in Asia, the Middle East or Europe.

What was this game that crossed boundaries of language, religion, culture, geography, ethnicity and class, and was woven deeply into the fabric of the greater Asian and wider world? The rules and moves of the various chess pieces are, after all, so simple that any schoolchild can learn them.

Above: Seated before the shah, the Persian advisor Buzurgmihr (to right of chessboard) demonstrates his mastery of the game to a downcast challenger, an envoy from the court of India. The match was recorded in the *Shahnamah* (*Book of Kings*) by the 11th-century Persian poet Abu'l-Qasim Firdawsi, and this illustration appeared in a 14th-century edition. Left: "A Board Game" is an illustration from a 16th-century Firdawsi *Shahnamah*.

The youngster also quickly learns that simply knowing how a knight or a queen moves does not lead to winning. Rather, the game involves escapes, feints and sacrifices. There is a give and take of possibilities, and scope for creativity and unexpected, brilliant moves. Every move results in a different pattern of possibilities for the next moves, and the patterns signal advantage, challenge or danger. There is no recovery by chance—no helpful roll of the dice or spin of the wheel, no lucky draw of the cards.

In essence, chess is warfare, as much psychology as strategy. To win, one must understand the mentality of the opponent, hinted at in each new move. One must so thoroughly master the adversary's weaknesses—an overzealous offence? guarding rather than attacking? a passion for sweeping one end?—that one can anticipate them and

courtly pursuits of hunting and riding, the hero was also a skilled chess player.

Chess, however, was not invented in Persia. All early Persian references to chess use the term *chatrang*, from the Sanskrit *chaturanga* ("in four parts"), which describes the four components of an early Indian army: infantry, cavalry, elephants and chariots. The use of a Sanskrit-derived word for chess in an early Persian romance suggests an Indian origin for the game and not local invention, although supporting evidence is murky.

use them. Chess is a game of information, false and true, derived from what the opponent "should" do, based on his own past play or that of others, and on what the opponent actually does. Chess has no bloodshed, but the exhilaration of psychological warfare—taking no prisoners in a complete victory—is its attraction.

Archeological evidence suggests that chess has ancient roots in Persia and Central Asia. Excavations at the seventh-century site of Afrasiab, the oldest part of today's Samarkand, Uzbekistan, have turned up seven small, carved figures that closely resemble later Persian descriptions of chess pieces, including a king, *fazin* ("counselor"), elephant, horse, chariot and pawn. The earliest literary reference to chess is in a Persian romance of the same period, about 600, the *Karnamak-i Artaxshir-i Papagan* (*Deeds of Artaxshir, Son of Papagan*).

Early Sanskrit literature mostly refers not to chess, but to board games that used dice. Most are long forgotten, though at least one—the chase game of pachisi, trademarked as Parcheesi—is still played.

The only convincing early Indian mention of chess is in a romance attributed to the sixth century, thus slightly earlier than the first Persian and Central Asian evidence. The poet Subandhu used a chess image to describe the monsoon season:

The time of the rains played its game with frogs for chessmen which, yellow and green in color ... leapt up on the black field squares.

A story of the seventh-century Persian king Nushirvan (recorded by Firdawsi in the 11th-century *Shahnamah*, or *Book of Kings*) also supports an Indian origin of chess. An envoy came from India, the story says, "with elephants, parasols, and cavalry" and a chessboard, chessmen and a challenge: If Nushirvan's courtiers could figure out the basic rules of the game, then unknown in Persia, the Indian king would gladly pay tribute to the Persian monarch. If they failed, however, Nushirvan would pay tribute to the Indian king. Nobles and priests labored without success for a week. Finally, after a day and a night of struggle, Nushirvan's vizier deciphered and described the game:

The sage has invented a battlefield, in the midst of which the king takes up

Left to right: A chess piece of marbled glass dates from Fatimid Egypt and was made between the 10th and 12th centuries. An ivory pawn from a ninth- or 10th-century Arab set. An elephant from 12th-century Italy recalls the game's Indian origins.



TOP: METROPOLITAN MUSEUM OF ART / ART RESOURCE (DETAIL); LOWER: BRITISH LIBRARY / BRIDGEMAN ART LIBRARY (DETAIL)
LEFT: FREER GALLERY, SMITHSONIAN INSTITUTION / BRIDGEMAN ART LIBRARY; CENTER: RÉUNION DES MUSÉES NATIONAUX / ART RESOURCE; RIGHT: ERICH LESSING / BIBLIOTHÈQUE NATIONALE, PARIS / ART RESOURCE (DETAIL)

his station. To the left and right of him the army is disposed, the foot-soldiers occupying the rank in front. At the king's side stands his sagacious counselor, advising him on the strategy to be carried out during the battle. In the two directions the elephants are posted with their faces turned toward the conflict. Beyond them are stationed the war-horses, on which are mounted two resourceful riders, and fighting alongside them to the left and right are turrets ready for the fray.

It's said that Caliph Harun al-Rashid carried on a chess match by correspondence with the Byzantine emperor Nicephorus.

Arab writers on chess acknowledge that the game spread west from Persia, probably soon after the Islamic conquest in the mid-seventh century. The Arabic term for the game was and is *shatranj*, a standard linguistic shift from the Persian *chattrang*, and all the names of the chess pieces (with the exception of the horse) are Arabic versions of their Persian names. As it spread, however, the game did not always find itself welcome. The Eastern Church at Constantinople condemned chess as a form of gambling in 680, and al-Hakim, the Fatimid ruler of Egypt, banned it in 1005 and ordered all chess sets burned.

The eastward movement of chess, into China and Southeast Asia, has even

less documentation than its movement west. The initial reference to chess in China comes in the *Yu Kuai Lu (Book of Marvels)* dating to about AD 800. It recounts the story, set in 762, of a man "who dreamt of a battle in which the moves of the forces: horses, commanders, waggons and armoured men, resembled those in Chinese chess," writes Richard Eales in *Chess: The History of a Game*. "He

and food were officially welcomed at court. There were more than 200 trade or religious missions between India and China between about 650 and 850. Sugarcane and the technology to make it a cash crop moved from India to China, and papermaking know-how moved along the Silk Roads to the Middle East. Commercial mango cultivation migrated from India to Java. It would be

surprising if a game as intriguing as chess, already played in India and Central Asia for a century or more, had not also moved along the caravan routes to China or the sea routes to Southeast Asia. From this early period until today, chess has been popular in Malaysia,

Burma, China and portions of the Southeast Asian archipelago.

After about 700, chess spread rapidly from court to court and city to city within a broad

awoke to find a set of chessmen buried in a nearby well."

Regardless of that tale's veracity, there is overwhelming evidence for strong trade and cultural ties between India and China, along the Silk Roads and the southern maritime routes through Southeast Asia. This is, after all, the period of the Tang Dynasty, during which foreign ideas, costumes



Although the arrangement of these pieces would be familiar to a modern player, their names, and the moves each is allowed to make, have had many variations since this ceramic set from 12th-century Nishapur, Iraq was last played. The kings measure 55 millimeters high.

swath of territory running from Egypt through the rest of North Africa to Spain. H.J.R. Murray's magisterial *A History of Chess*, first published in 1913, brought together many of the early references to chess and chess play. For example, Said bin al-Musayyib (died 710) of Madinah played in public and declared chess permissible provided there was no gambling on the outcome. Muhammad bin Sirin (died 728) was one of the first chess masters to play blindfolded. Three granddaughters of another blindfold player, Hisham bin Urwa (died 765), were all chess players. Chess allusions appeared in poetry: Al-Faradaq (died about 728) wrote, "I keep you from your inheritance and from the royal crown so that, hindered by my arm, you remain a pawn among pawns." Such an allusion worked only if the courtly audience knew that a pawn, by advancing to the farthest row on the board, could be converted to a more powerful piece.

Baghdad, founded in 750 as the Abbasid dynastic capital, soon ranked with Delhi, Beijing and Constantinople among the largest, wealthiest and most sophisticated cities in the world. Its bazaars, libraries and banquets were the stuff of legend in Europe. The caliph and his nobles supported all manner of learning and innovation, including the translation of Greek texts on science, mathematics, geography, astronomy, agriculture and medicine. Religious commentary flourished. The caliphs regularly brought the most learned men in the Middle East, Central Asia, Egypt and India to Baghdad—and chess was part of this intellectual flowering. Chess masters from Persia and Central Asia came to the court to find patronage and to challenge the best players in the Islamic world.

Several early caliphs were avid players themselves. It's said that the caliph Harun al-Rashid carried on a chess match by correspondence with the Byzantine emperor Nicephorus around 800, but that the two parted ways—and even waged real war—after the emperor accused Harun of making his predecessor a pawn to the caliph's rook. Harun's successor, his son al-Amin (died 813), figures in an apocryphal chess tale: At a critical point in the siege of Baghdad by forces



This illustration from a Persian treatise on chess, possibly dating from the 14th century, is notable for its expressive faces that hint at the "different kinds of pleasantries and jests" Mas'udi recorded as customary among players at that time in Baghdad.

became standard for anyone studying chess. These were known as *mansubat*. One problem, by al-Suli, remained unsolved for more than a thousand years.

At the Baghdad court, chess was not the sober, largely silent affair that it is today. Players were expected to maintain a witty, erudite banter with each other and with spectators. "Chess players employ different kinds of pleasantries and jests designed to astound," wrote the great 14th-century historian al-Mas'udi. "Many maintain that these incite people to play, and add to the flow of resource and accurate deliberation... They are just as much part of the apparatus of the player as the song and improvised verse of the warrior." Many verses describing this custom have been composed:

*Hotter than the glow of charcoal
glows the player's timely jest.
Think how many a weaker player it
has helped against the best.*

Court poets continued to develop chess imagery. Several noticed that the Persian word for the "castle" piece (*rukhs*) was the same as the Arabic word for "check" and played on its double meaning. Even a few common jibes using chess imagery have been preserved: Around the court, for example, a short man was referred to as a "pawn."

In the 10th and 11th centuries, chess spread northward to Russia and Scandinavia from the Middle East with the Norse Volga River trade. The oldest extent chess set in Europe, unearthed by archeologists, is from Scandinavia. Slightly later, chess moved into Italy, at that time a scene of much contact and conflict among Muslims, Byzantines and Norman invaders. Several striking chess pieces dating to the 11th century have turned up in Italy and Germany's Rhine Valley.

As chess settled into new locales, the overall rules remained much the same, but the shapes of the pieces varied. Among nomads of Central Asia, for example, the camel sometimes replaced the elephant. Among Tibetans, the lion replaced the king and the tiger replaced the vizier, although the moves of

loyal to his half-brother al-Ma'mun, al-Amin received a message during a game of chess. Baghdad's capture was imminent, the messenger said, advising him that this was not the time to play chess, but to look to the city's defenses. Al-Amin told the messenger to be patient; he was only a few moves from checkmating his opponent. It is not known how the chess game ended, but al-Amin was captured and paid for his concentration with his life.

The names and some of the writings of the handful of chess masters (*aliyat*) of the Abbasid court have come down to us. The first was al-Adli, who received all challengers and dominated chess at court in the 850s. He was defeated by a player named al-Razi, a generation younger, who dominated chess at court for several decades.

The two most famous Abbasid chess masters, al-Lajlaj and al-Suli, appeared in the 10th century. Both are known from extensive extracts of their writings in two manuscripts of a book entitled *Book of Chess: Extracts From the Works of al-Adli, al-Suli and Others*, compiled in the mid-12th century. These early books often included opening sets of moves—with such names as Pharaoh's Stone, the Torrent, the Slave's Banner—and standard, but often maddeningly difficult, "problems." Typically, a problem set out an array of pieces on the board and challenged the reader to win in a set number of moves. Over the following few centuries, a set of 77 problems

The Alfonso X "Book of Games"

Alfonso X (1221–1284), king of Castile, León and Galicia, was the greatest Christian patron of translations of Arabic learning in the Middle Ages. The son of Ferdinand III of Castile and Elisabeth of Hohenstaufen, he laid claim to the title of Holy Roman Emperor.

Even as a young man, he showed great interest in scholarship and surrounded himself with Christians, Jews and Muslims who could carry out the translations he required—most of them into Castilian rather than the Latin more common in court use. He came to be known as *el Sabio* ("the Learned"). Few of his translations survive intact, but we know that Alfonso was interested in the sciences, magic, alchemy, astronomy, guides to governance and law. He also wrote several works of poetry and prose, both much influenced by Arabic sources and styles.

His *Book of Games* is an extraordinary document, covering both chess and a variety of other board games of the 13th century. The manuscript, consisting of 98 lavishly illustrated vellum pages, is in the Escorial Library near Madrid, having arrived there sometime in the 16th century. It consists of an introduction, a series of chess problems and discussion of other board games. The original language was Castilian; scholars have produced a German translation, but, as yet, there is no published version in English. However, John G. White, patron of the chess collection at the Cleveland Public Library, commissioned an English translation from one "R.A.A." of St. Louis in 1927 that exists in typescript. The translator complained to White that it was not the Spanish of today but of "an epoch long since vanished," with words archaic and

obsolete, further grouching that "the grammar is often faulty, the punctuation miserable and confusing."

Internal evidence from the *Book of Games* suggests that chess in 13th-century Spain was in transition from the game played in the Middle East and North Africa to what it would become in Europe. The rook seems to have shifted to a chariot form, perhaps because of the word *roca*, already in use in Spanish for "chariot." The bishop was still called *el filfil*, from the Persian *fil* for

and yet others showing play between Muslims and Christians, as well as by Jews, women and tradesmen. Throughout, the boards are checkered, a usage not always found in Arabic play at the time.

Because the currently available edition of the manuscript (in Spanish) is quite costly, the best place to see additional illustrations and problems from the *Book of Games* is the Web site of a current-day chess enthusiast: <http://games.ren.geekcentral.com>.



Este es otro uiego repartido en que ha ueyn e tres partes que an a ser en tres vias asi como estan en la figura del enablamiento. e an se de jugar desta guisa

con el rey blanco en la quarta casa del caballo puero. e encaun el rey puero en la quarta casa de so alfil. e el quarto uiego dar la raque con el alfil blanco en la otra casa del rey bla

On this page from the 1282 *Libro de los Juegos (Book of Games)*, or *Libro de acedrex, dados e tablas (Book of Chess, Dice and Boards)*, Alfonso X discusses a chess problem with two turbaned players.

"elephant." Flanking the king was *el alferaza* (from the Persian *al-farzin*, "counselor"), not yet the queen of later European play. The pieces were expected to be more representative than Islamic custom allowed: The king, for example, is described as "seated on a throne." The move known as "castling" had not yet been invented. The illustrations of the *Book of Games* are similarly mixed, some showing various sorts of Muslim players, identifiable by their dress; others set in various medieval European courtly contexts;

each were the same as in the old Indian game. In Europe, the queen replaced the vizier in one of several shifts to more mobile and powerful pieces that sped up the game. At about the same time, the bishop replaced the elephant and acquired its characteristic diagonal move. (It has been suggested that the shape of the Middle Eastern elephant piece, with high curved points, suggested a bishop's miter to European players.)

In the Middle Ages in Europe, chess was played more widely than at any time before or since. Among the upper classes, the game was a kind of mania; any cultured man or woman was expected to know the rules. Kings and nobles played in their gardens, tradesmen in their businesses. Women played each other and played men. Monks and prelates of the church played. Chess entered the artwork of the period in mosaic floors, stained-glass windows and illuminated manuscripts. Nothing illustrates the variety of settings and players better than the remarkable Alfonso X manuscript of 1283, *The Book of Games*, whose illustrations each show a board with two players in settings where they might work out the problem posed.

By the early 15th century, chess was everywhere in Europe and Asia. In Russia, it flourished in spite of religious and civil condemnations as "Hellenic devilry." In Central Asia, the great 14th-century empire-builder Timur (Tamerlane) was an avid player. A century later, Babur, a descendant of Timur, conquered northern India and founded the Mughal Empire. Many of his nobles were avid chess players, and in his memoirs, Babur characterized one of his nobles as "so madly fond of chess that that if he met two players, he would hold one by the skirt while he finished his game with the other, as if to say, 'Don't go!'" In his new capital city of Fatehpur Sikri, Babur's grandson Akbar built a life-sized chessboard in a courtyard and—using dancing girls and courtiers as pieces—played from the apartments above.

The Persian term, *shah*, for the king chess piece drifted into various languages as the name of the game itself: the Italian *scacchi*, the Dutch *schaakspiel*, the German *Schachspiel*, the Serbian *shkak*, the Icelandic *skaktafl* and the Old French *éches*, from which comes the English *chess*. Chess showed up in letters, poems, government documents and books; chess sets appeared in wills.

In our time, the true heritage of a game that has always transcended boundaries is

The John G. White Collection at the Cleveland Public Library

The White Collection in the Cleveland Public Library is the largest library in the world dedicated to chess. Its holdings include more than 35,000 books—more than 50 printed before 1500—several thousand periodicals, about 2000 newspaper columns, manuscripts on the history of chess, chess manuals, records of games and competitions, and biographies of players. The collection has material on every peripheral aspect of chess, including literary, philosophical, religious, historical and scientific works that refer to chess.

Printed materials include rare editions and annotated copies of books from the libraries of chess players or collectors. Manuscripts include originals and translations of works in Persian, Sanskrit, Arabic, Latin and several Slavic languages. The library holds more than 2000 chess pieces from various historical periods and locations.

White was a wealthy collector who was deeply involved in the development of the Cleveland Public Library system. He was a patron of Harold Murray, whose *A History of Chess* (1913) is still the most comprehensive history of the game. At his death in 1928, White donated his entire collection to the Cleveland Public Library and gave the remainder of his estate as an endowment to build a luxurious research room and maintain and expand the collection in perpetuity.

Other large and important public collections on chess are in the Royal Library at The Hague in the Netherlands; the M. V. Anderson Collection at the State Library of Victoria in Australia; the Cook and Spackmann collections at Princeton University; and the Willing Collection at the Free Library in Philadelphia.



Above: One of the few complete early European chess sets is that known as the "Lewis Chessmen," probably made in Trondheim, Norway between 1150 and 1200 from walrus ivory and whales' teeth. It was in Europe that the figure of the queen was introduced into the game.

Left: Ivory pieces from 12th-century southern Italy show the rook as a charioteer in a quadriga, the knight as a mounted warrior in chain mail, the king in his castle and the pawn as a foot-soldier with his shield.

visible on the Internet. At any hour of the day or night, one can play against hundreds of waiting opponents, none of whom will know their rival's name, religion, age, gender, occupation or location on the globe. Nevertheless, the thrill of the battle, the struggle to

understand the opponent's psychology, to penetrate the feints and ruses, remains as vibrant and satisfying as it was when traders and soldiers first carried the game far and wide from its birthplace in India or South Asia some 14 centuries ago. ♁



Stewart Gordon is a senior research scholar at the University of Michigan's Center for South Asian Studies. His 2008 book, *When Asia Was the World* (Da Capo), looked at family, trade and intellectual networks across Asia between AD 500 and 1500. His forthcoming book, *Routes* (University of California Press), considers societies and travelers along the great trade routes.

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Chess: *The History of a Game.*
Richard Eales. 2002, Hardinge Simpole,
978-0-9513757-3-0, \$35 pb.



Reinventing the Miniature Painting

Written by Louis Werner

Photographed by Kevin Subriski

Rudyard Kipling's novel *Kim* famously begins with the boy hero seated astride a cannon in front of the Lahore Museum, called in Urdu the *Aja'ib Gehr*, or "Wonder House," marveling at all that was inside. Today, another kind of Wonder House is just next door to the museum, in the Miniature Painting Department of Pakistan's National College of Arts (NCA).

Here, in a two-year intensive program that is a kind of modern *karkhana*, or Mughal painting workshop, students learn meticulous techniques, including ultrafine figure drawing and brushwork, tea staining of page borders and burnishing of paper surfaces—as well as how to work with such centuries-old materials as brushes made of squirrel-tail hair; handmade, multi-layered paper called *washi*; and mussel-shell paint pots. Later, they give their imagination free rein to create new possibilities and new meanings for this highly disciplined tradition, in the context of a contemporary art world where few rules still seem to apply.

In recent years, contemporary Pakistani miniature painting has caught the eye of the international art crowd. There are frequent group and solo shows in London, New York, Paris, New Delhi, Hong Kong and Japan. Shahzia Sikander, a miniaturist and 1993 NCA graduate, won a MacArthur Foundation Fellowship (the so-called "genius award") in 2006, as well as her government's National Medal of Honor. In the same year, a landmark exhibition of miniatures painted collaboratively by six artists, initiated by NCA teacher Imran Qureshi, had a well-reviewed run at the Aldrich Contemporary Art Museum in Ridgefield, Connecticut. In September, the Asia Society in New York will open a major show of contemporary Pakistani art that will include works by several of the country's top neo-miniaturists.

It was, in fact, Rudyard Kipling's father, Lockwood, who in 1875 founded what is now the NCA, then called the Mayo School of Art, with the intention of training a new generation of creative national artists who could draw on the collection of the Lahore Museum for inspiration. The NCA is now Pakistan's premier institution granting Bachelor of Fine Arts degrees, and annually some 20,000 applicants seek one of its 150 admission slots; of these, only a dozen or so are chosen for the miniature-painting major.

Qureshi explains that it takes a special sort of student to major in miniatures, as opposed to, say, studio painting or printmaking. First of all, miniature painters sit on the floor all day, holding their paper up close to their eyes, bracing their painting arm against the body. "The hand becomes the palette, shells the mixing bowls. The floor replaces the stool, and the lap becomes the easel," he says.

Using a fine brush that, in centuries past, would have been handmade from squirrel-tail hairs, a student of the miniature tradition begins by practicing the classical techniques.

Minute, repetitive brush strokes render delicate figures in a painstaking technique called *pardakht*, a kind of linear *pointillisme*. It's a far cry from the drips and splashes tossed about by the easel painters in the studio next door. Except for a faint bleeding of sound from students' iPods, silence reigns in the miniatures room.

Miniaturists choose their genre for reasons that derive from their personalities. Ayesha Durrani, a 2003 NCA graduate who now teaches first-year drawing, admits to being "a neat freak" who loves miniatures "because they are so civilized." Rubaba Haider, an ethnic Hazara (an Afghan minority of Persian descent) whose family now lives in Quetta, switched her interest from computer science to painting when she discovered people with "almond-shaped eyes like mine" in her grandfather's collection of Persian miniatures. The mental discipline required by *pardakht*, she says, is roughly equal to that demanded by computer programming.

Aisha Abid, a 2008 graduate who admits to being something of a subversive at heart,

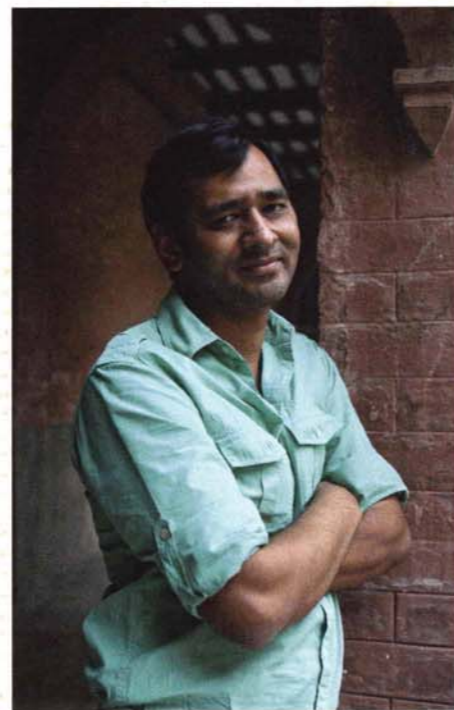
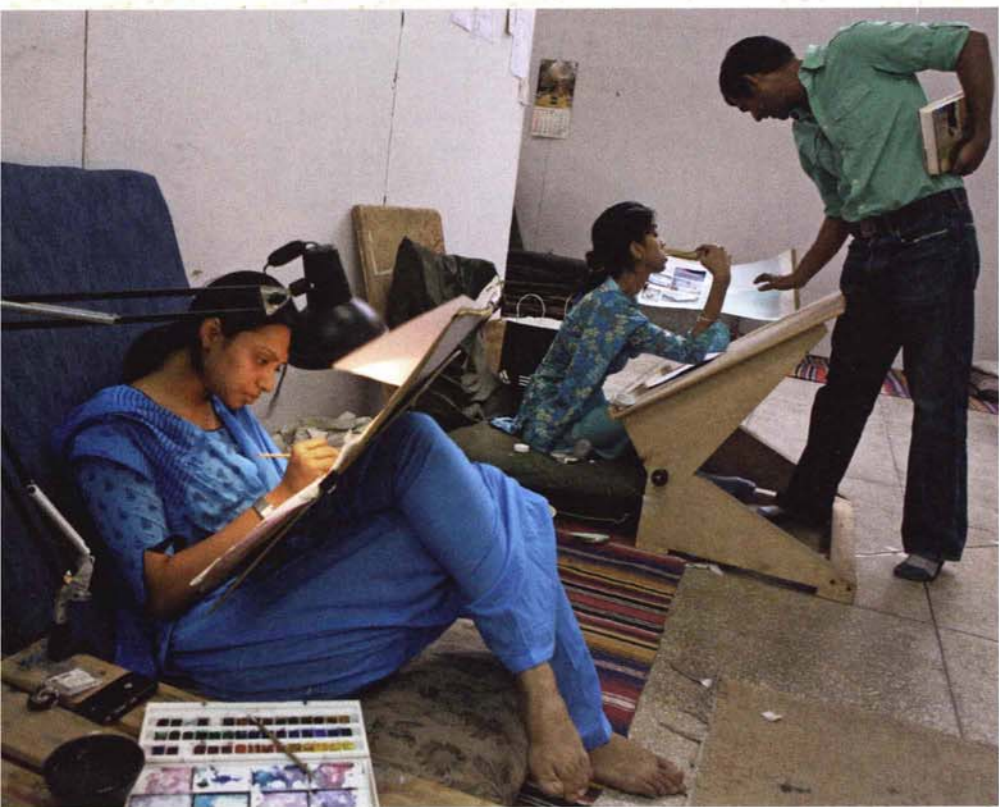
subverts the miniature-making process itself by building up her wasli paper to a couple of centimeters' thickness, covering it in imaginary writing, in homage to its former use for manuscript illustration, and then attacking the whole thing with a knife. "I've always wondered, ever since I was small,

"How did the old painters do it?" I was first intrigued by their technique. Yet I was also afraid of being restricted just to copying their art. It was only when I saw the NCA senior art show that my eyes opened—here was true personal expression within tight bounds."

Head of the fine arts department Bashir Ahmed, known to his students as "Bashir sahib," or simply *ustad* ("teacher"), is the last in a lineage of traditional miniature painters that began at the NCA in the 1940s with Shaikh Shujauallah, former court painter to the Maharajah of Amber in Rajasthan, and Hajji Mohammad Sharif, former court painter of the Punjabi princely state of Alwar Patiala.

Says Ahmed, "Here we must squeeze the eight years of the traditional apprenticeship into the last two years of a BFA. So we must

*Except for a faint
bleeding of sound
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Above: Instructor Imran Qureshi has exhibited his modern miniatures from Pakistan to the us. Left: Hira Mansoor works while Qureshi critiques another student. "Everything should have a meaning and a purpose," he says, "but not everything has the same degree of meaning." Opposite: Rearranging figures from old paintings and adding new ones teaches students elements of composition.

hurry—but not too much. I always ask my students to slow down the clock, to take four days to make what they think they can do in one. If they do it too quickly, I send them back to take more time. Students are free to use the techniques we give them over the first years to do what they want in the last. But I insist on a firm foundation."

Ahmed founded the miniature department in 1985 at the urging of Pakistan's leading modernist painter, Zahoor ul-Akhtaq, who, as a student at the Royal Academy of Arts in London in the 1960s, pioneered miniatures in a contemporary idiom. His homage to a well-known equestrian portrait of Emperor Shah Jahan's three sons by court painter Balchand redrew the human figures into silhouettes and crosshatched out all reference to the landscape, lending it an effect akin to a Jasper Johns flag painting—culturally iconic imagery rendered in a new style that implied instability, even chaotic change. Art historian Virginia Whiles, freelance curator and expert in contemporary Pakistani art, says this painting "played a pivotal role in the reinvention of the miniature" and seeded an effort to "localize modernism" in a Pakistani tradition.





"Painters must place themselves into the tradition without being smothered by it," says former NCA principal Salima Hashmi, "and still enjoy its delicious rigor."

miniature, and thought Khalid was doing a performance-art piece—acting out the role, Khalid says with an ironic smile, of an "oppressed maker of women's work." This all gets to what Whiles has called "miniature as attitude"—an attempt *not* to follow the tradition blindly, but rather to converse with it across generational lines.

As wildly creative as NCA miniaturists are invited to become by the time they graduate, their first full year of study is dedicated to the mastery of technique. Teachers Waseem Ahmed and Naheed Fakhruddin, both

NCA graduates themselves, oversee their 13 students' progress not only in *pardakht*, but also in *tappiai*, or background color application; *layee*, or flour-glue paper surfacing and burnishing; and *siah qalam*, or black-brush work. However, they add with relief, catching one's own squirrel in Lahore's Shalimar Garden for brush-making is no longer required, as it was in the early days.

Fakhruddin was Bashir's first student in miniatures, and she is happy still to think of herself as a strict traditionalist. "I learned a lot from him," she says, "just as an apprentice might learn from the master of a *karkhana*. I know when to be strict and when to be gentle with my students, when to take their brush in my own hand and when to simply tell them how to do it." Yet fellow teacher Waseem Ahmed adds an element of free play in his work. One of his pieces depicts the Hindu god Krishna as a denim-clad Bollywood star with a black-gowned Marilyn Monroe as his golden-haired *gopi*, or cowherd girl.

"We must squeeze the eight years of the traditional apprenticeship into the last two years of a BFA," observes Bashir Ahmed, who founded the miniature department in 1985. Opposite: "Page No. Eleven," by Aisha K. Hussein, collage and gouache on *wasli*.

In their studio, student Hafiz Salim is working from a photocopy of "Jahangir's Dream of Shah Abbas' Visit" by 17th-century Mughal court artist Abu al-Hasan Nadir uz-Zaman. His assignment is to rearrange the figures and insert others from secondary sources, the better to understand the elements of miniature composition: He adds a watching figure taken from the Windsor Castle copy of the *Padshahnamah*. (Unfortunately, the Lahore Museum's own miniature collection is frequently rotated off view, so NCA students, contrary to Lockwood Kipling's wishes, must often use photocopies from other museums as source material.)

Next to Hafiz, Hareem Sultanate is working on a modified copy of a Mughal piece, drawing the wide floral border freehand. "We rarely talk to the students next to us. It is too distracting when we work like this," she says. Indeed, students sitting closely side-by-side for two semesters, heads always down,

seem almost as though they were riding a bus on a year-long journey during which they're allowed to talk to their seatmate only during tea breaks.

Former NCA principal Salima Hashmi, now head of the visual arts department at Lahore's Beaconhouse National University,

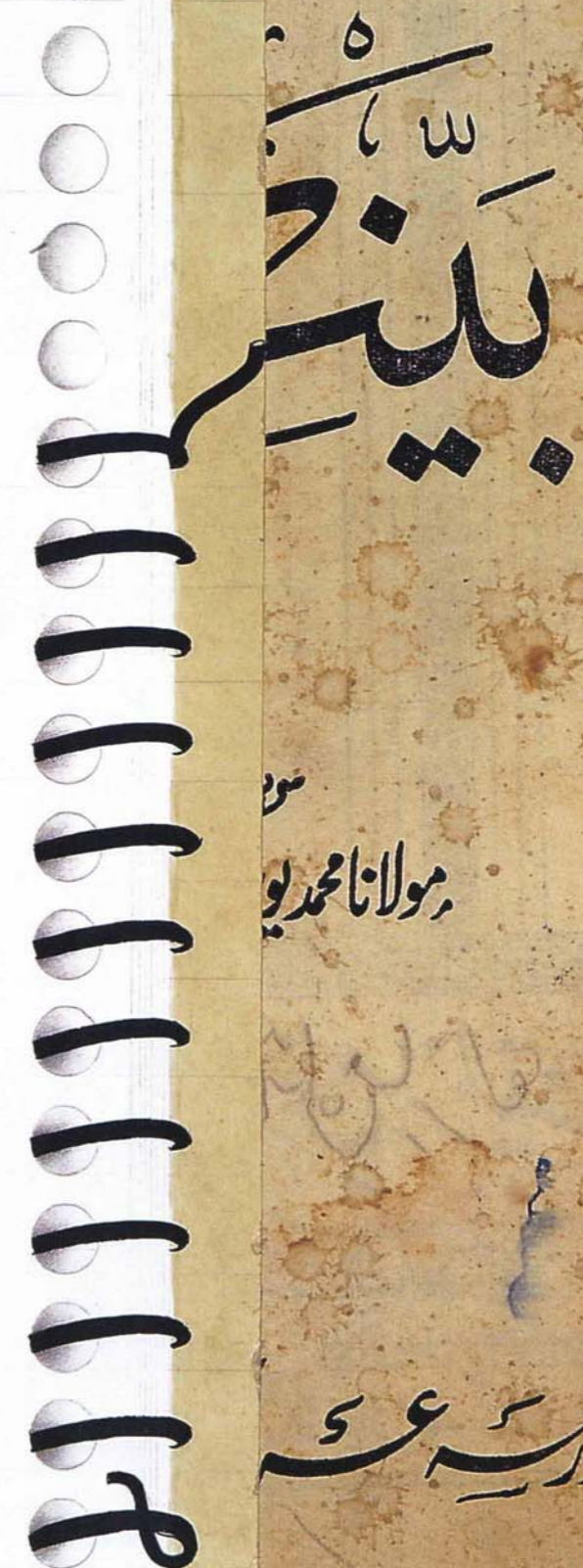
"Miniature as attitude" is an attempt not to follow the tradition blindly.



There is debate among contemporary miniature artists over what Whiles calls "the trap of the copy." As Shahzia Sikander said at her 2001 Asia Society show in New York, a time when she was working in a more traditional vein, "the entire notion of 'copying' needs to be clarified." Is it, she continued, "understanding the process, or is it understanding the lineage of the medium, or is it mere appropriation? Copying can also mean understanding history. One has to look at someone else's work very carefully before relating to it in a personal way, in the same sense as claiming a historical past."

In India today, in contrast to the approach at NCA, miniature painting is taught almost purely as a copyist art for the tourist trade. Only in Pakistan does one find radical innovators like Qureshi painting oversize "miniatures" directly onto the walls of museums, or works like Rubaba Haider's 2008 senior thesis, a piece she calls *mader-e-gul* ("My mother, the flower"): an installation of 35 paintings in small, round frames hung from the ceiling waist-high in a walk-through maze, each painting an image conjured from her own emotional responses to her mother's stomach surgery.

Or others like Aisha Khalid's split-screen video that shows, on one side, a Pakistani hand embroidering a rose and, on the other, a European hand pulling out its threads. The piece was inspired by Khalid's experience at the Royal Academy of Visual Art in Amsterdam, when a European student found her seated on the floor, bent over a





It takes a special sort of student to major in miniatures," says Qureshi. Below: Student Iram Khan at work on her latest project. Opposite: Part of her series "Hide and Seek."

Twenty-five-year-old Noor Ali from Karachi sits in his usual corner, its walls hung with architectural drawings, a portrait of David Hockney and interior design schemes from shelter magazines—all, he explains, *aide-memoires* for his work that deals with "idealized interior space." "I like the neatness and calmness of miniature, the close attachment to one's work," he says. "You stay still within your own art. It's complicated, really. The rendering of form itself is most inspiring." For further inspiration, Noor consults an Urdu-language dictionary of

Freudian psychoanalytic terms and reads Gaston Bachelard's classic text on how to experience the feeling of empty rooms, *The Poetics of Space*.

Final-year students, in both their crossover projects in other departments and in Qureshi's individual critiques, are asked to rethink much of what they have been taught. Hira Mansoor's "linked project" is salt-print photography, seeking common ground with miniaturism's rigorous technique; Hajra Saeed is making a video of a moving Rubik's Cube, its faces painted as miniatures. Another student is working on studies in geometry—an echo of miniatures' often complex architectural settings—by making prints on acrylic plates. The idea is to bring the awareness of other disciplines back to their final semester of intensive

thinks that contemporary miniatures are "defining a problematic identity" in Pakistan. "Painters must place themselves into the tradition without being smothered by it," she says, "and still enjoy its delicious rigor,

something I think is particular to South Asian arts." Yet she, like many miniaturists themselves, thinks that the international art market often wants to exoticize the new practitioners, and that its expectations can restrict a painter's development. "Buyers must connect to miniatures' now-fractured genre history.

Although they don't have to ask "What is it about?"—because, after all, miniature painting is still primarily figurative—many people continue to desire a fixed visual paradigm in this free-fall 21st century."

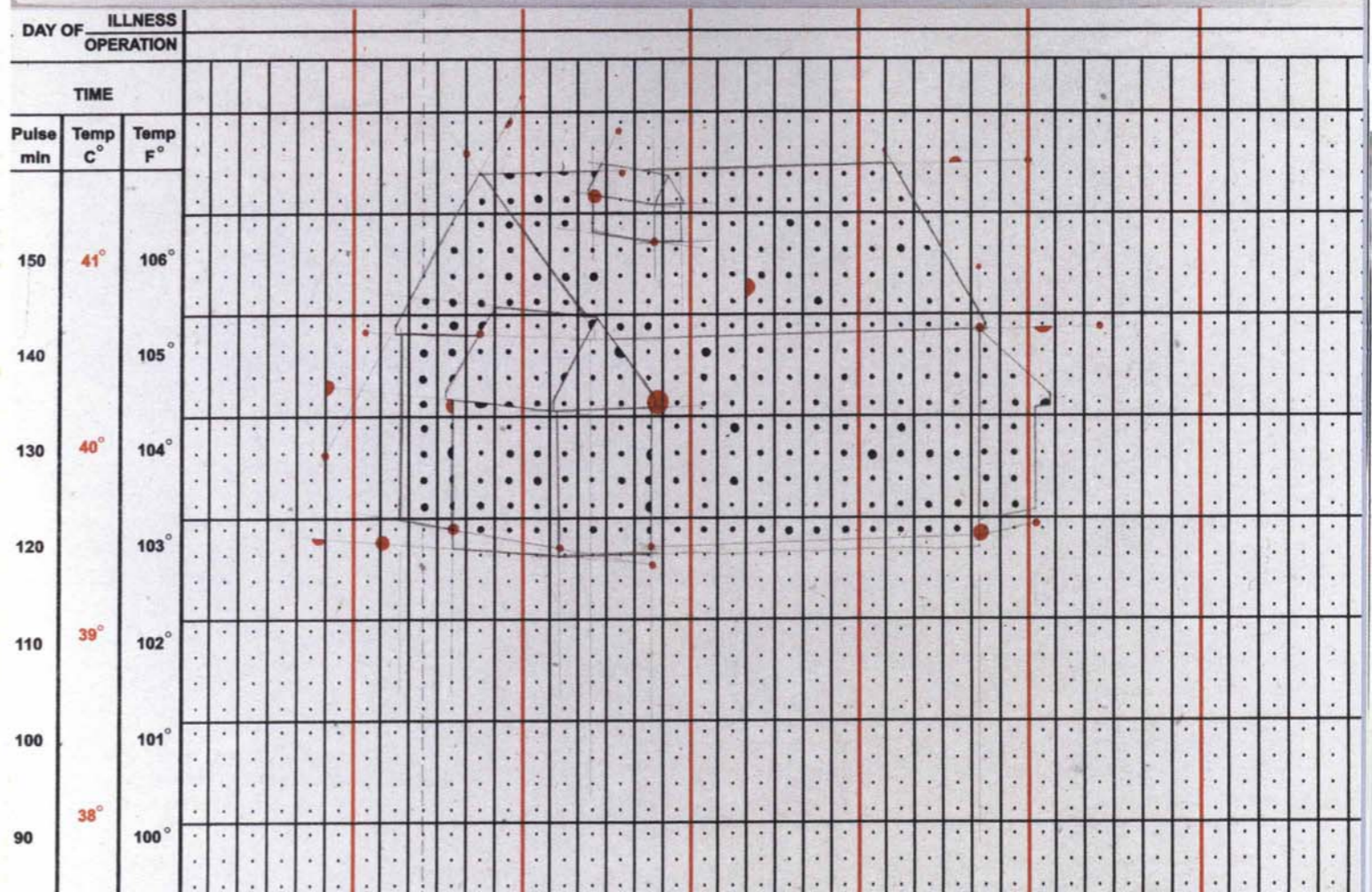
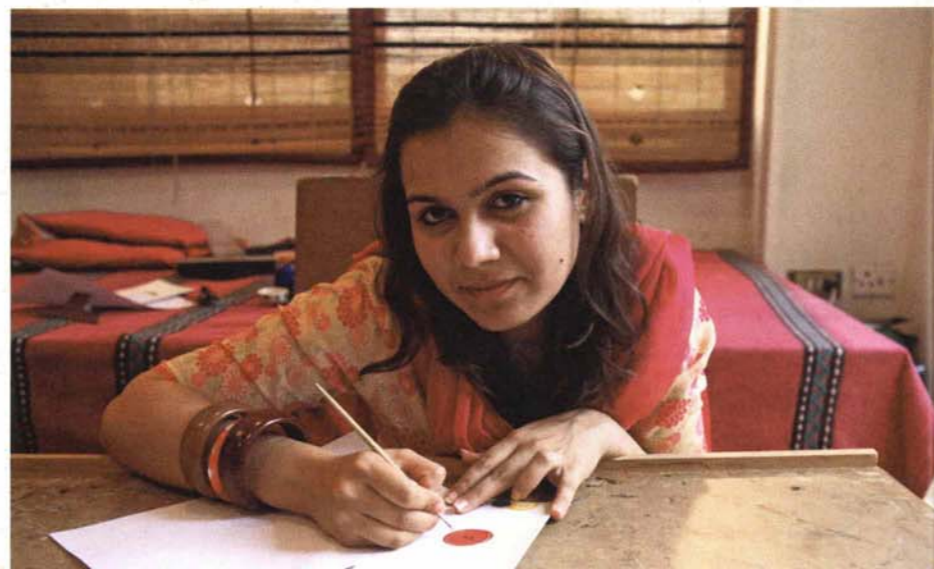
Hashmi in fact finds a considerable amount of personal freedom even in classical miniatures, in what she calls a "fusion of refinement and experimentation," as seen, for example, in workshop accidents and incompletely painted surfaces, unintentional collage effects, overpainted margins and even the occasional drop of perspiration that has fallen from the painter's forehead onto the paper and then been worked into the design. (This is less common than it used to

be, as the miniature studio is the only one at the NCA that is air-conditioned, precisely to avoid such accidents.)

Halfway through their final term, the students begin to show their creative sides.

Hajra Saeed, a 22-year-old from Lahore, is working on an interactive piece using the newspaper's puzzle page that has been transfer-printed onto wasli. She plans to write her own clues to solve the puzzle and then, instead of providing the solution in words, to give the answers in the form of miniaturist images.

Hajra Saeed is making a video of a moving Rubik's Cube, its faces painted as miniatures.





miniatures, which culminates in a senior thesis show.

In another corner, Qureshi is critiquing Sajjad Hussein's portrait of his sister, finely rendered in the pardakht manner. The image floats in an abstracted landscape of gaily colored arcs drawn as receding hills, which are stamped by his sister's own flower drawings. Qureshi asks Hussein to seek a more personal connection between figure and background. "Everything should have a meaning and a purpose, but not everything has the same degree of meaning," he says. "Sometimes, after you make a stroke without

thinking it through, you should return to it and give it a better reason for being there. Shape it again, with more meaning the second time round."

Qureshi is firm but gentle, his eye curious for all kinds of art. When visiting London, he says, he always goes to the Tate Modern, yet had his happiest moment at a private appointment at the Victoria and Albert Museum to view the 116 paintings in a precious illustrated manuscript of the *Akbarnama*, the life of the Mughal emperor

Akbar. "It was truly a marvel to hold them in my own hands—no frames, no mat boards. You see so much more." This appreciation for work of the late 16th century he carries equally to the work of his students.

Ahsan Jamal is a 2003 NCA graduate who has chosen to remain attached to the demanding idiom of small detail and fine technique. Not one for espousing "miniature as attitude," his is closer in spirit to what Salima Hashmi calls "the submissive nature" of the genre's technical demands. His

series of circular five-centimeter (2") paper discs, painted with psychologically astute micro-portraits of friends and disturbing tiny landscapes of distant horizons, was shown in New York at the Aicon Gallery in the summer of 2008.

For him, the studio is almost a sacred space—or a kitchen.

"I relate cooking to making my art," he says. "Eating fulfills whatever the body craves, as does my painting. I associate certain tastes with certain moods. If I take on a new student



apprentice, we start by cleaning the house together. If you see visual pollution, that is what you paint. I am learning the pardakht of my own life—to dance with less movement."

Rashid Rana's pixelated photomontages, some as large as 2 by 3 meters (7 x 10'), are as far from the scale of Ahsan's micro-miniatures as one can imagine, yet they too fit within the miniature tradition in their own way. Rana's "Red Carpet-1"—an overall image of a Persian carpet made up of tiny photographs of a Lahore slaughterhouse—sold at Sotheby's in May 2008 for \$624,000.

The NCA campus, top, is located next door to the Lahore Museum with its Miniature Painting Gallery. A plaque, above, commemorates the school's first teacher of miniature painting. Opposite: 2003 NCA graduate Ahsan Jamal's series of small, psychologically astute miniature portraits was shown in New York last summer.





Left: Mussel shells have long served as mixing bowls for miniature artists. Opposite: The mental discipline of miniature painting is comparable to that of computer programming, says Rubaba Haider, a former programming major. Her thesis project, "mader-e-gul" ("My mother, the flower"), installed 35 paintings in small, round frames that hung from the ceiling in a walk-through maze.

Tagore, which was controversial at the time for breaking with traditional materials and subject matter, and which also spawned many second-rate artists who merely wore the label without adding anything to it.

Meanwhile, new student Sardar Abdul Rahman Khan has big plans to add something new to the tradition of the movement/genre. Just beginning his one-month rotation in the miniature department, he is already certain that it will be his major. Afterward, he says, he wants to design video games. "I'm a big electronic-media guy," says Sardar, whose family is originally from Afghanistan. "I love playing around with Photoshop, and I'd love to bring miniature painting into video-character design. Some of the stuff out there now is quite poorly drawn. I could really make it better."

Video-game design may not be what ustad Bashir has in mind for the pardakht technique that he insists students must master before graduation, but Sardar's teacher Hasnat Mehmood is all in favor of experimenting with anything at hand. He teaches fine graphite-pencil drawing in miniature style, and tries above all to keep his students from developing a "copyist" mentality. He puts new students through autobiographical exercises,

asking them to draw a self-portrait beside a copied classic Mughal figure in an invented architectural setting. Somehow, one can imagine Sardar then taking the next step, animating the whole thing on his laptop computer. 🌐

An earlier photomontage, playfully entitled "I Love Miniatures," consisted of an image of the Emperor Jahangir, in a classic profile view, made up of tiny photographs of Lahore billboards.

"I like to hold conversations between the micro and macro aspects," he says. "In the big picture, I let them see what they want to see. In the pixels, I show them what I want them

to see. In Pakistan, we have the old always beside the new—a Mercedes and a donkey cart on the same road."

Rana holds that contemporary miniature is more a movement than a genre and feels that technique alone cannot take the movement forward. He likens this to the dilemma of the Bengal Revival movement at the turn of the 20th century, led by Rabindranath



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Miniature painting: N/D 87, J/A 97
Padshahnamah: N/D 97





Devil's Dung

The World's Smelliest Spice

WRITTEN BY CHIP ROSSETTI PHOTOGRAPHED BY MICHAEL NELSON

Foetorem caveat emptor! Raw asafoetida, here shown for sale in Cairo, is little changed in appearance or aroma since Persian traders exported the spice to ancient Rome.

I first heard the word *asafoetida* (ah-sa-FEH-ti-da) from my seventh-grade English teacher, who used it as a favorite “gotcha” word on spelling quizzes. With its funny *oe* spelling, a holdover from Latin, it routinely stumped me and my classmates. My teacher explained that asafoetida was an unusual spice, but left it at that. It was only many years later, when I was living in Egypt, that I came to know the spice itself—and I discovered that its spelling is hardly the most unusual thing about it.

While in Egypt, I became interested in the cuisine of ancient Greece and Rome. I found that more than a few surviving recipes, such as Squash Alexandria-Style and Parthian Chicken, called for a gum resin taken from a plant called silphium. Silphium grew only in the region of eastern Libya known as Cyrenaica, and “Cyrenian silphium” was widely popular in Greece and Rome from the sixth century BC to the first century of our era, when it was believed to have become extinct. After that, Roman cooks turned to asafoetida as a substitute, a sufficiently similar spice that Persian traders brought to Rome.

To find some asafoetida in Cairo, I headed to the well-known Harraz Herb Shop near bustling Bab al-Khalq square. The shop

resembled a medieval apothecary, with row upon row of seeds, powders and baskets of dried plants, and shelves filled with bottles of essential oils. I bought a fist-sized lump of brown-gray resin. Slightly sticky to the touch, it was as dense as a block of wood. Mostly, though, it was remarkable for its terrible, aggressive smell—a sulfurous blend of manure and overcooked cabbage, all with the nose-wrinkling pungency of a summer dumpster. The stench leached into everything nearby, too, which meant I had to double-wrap it and seal it in a plastic tub if I wanted to keep it in the kitchen.

Later, as cookbooks suggested, I unwrapped the lump, scraped off a pea-sized piece of resin and dropped it into olive oil to sauté.

The transformation was astonishing: When heated, the asafoetida disintegrated in the hot oil and gave off a rich, savory scent, reminiscent of sautéed onions. It bestowed a delicate base flavoring to the dishes I made. It quickly became obvious why something that had at first seemed so repulsive proved so popular, first in the ancient world and up to the present day in a number of countries—especially India, where it is used in everything from pickled dishes, chutneys and curries to vegetarian dishes and lentils (*dal*). In the West, asafoetida remains virtually unused, with one exception: It's an ingredient in Worcestershire sauce, which was based on a recipe from a British officer returned from colonial India.

The earliest mention of asafoetida in the historical record dates from the eighth century BC, when the plant was listed in an inventory of the gardens of Babylonian King Marduk-apla-iddina II. Not long after that, in Nineveh (near modern Mosul, Iraq), asafoetida was included in a catalogue of medicinal plants in the library of King Ashurbanipal.

From that beginning, the story of asafoetida reaches from ancient India and Persia to Rome, the Abbasid caliphate in Baghdad, medieval



Europe, India's Mughal Empire and modern Afghanistan and Iran. Its story is also closely entwined with that of its mysterious lost cousin, silphium.

The word *asafoetida* is a linguistic meeting of East and West: *aza* means "resin" or "mastic" in Persian and *foetida* means "stinking" in Latin. While "stinking resin" seems adequately descriptive, other languages use colorful adaptations of the notion of "devil's dung" for the spice: *şeytan tersi* in Turkish; *Teufelsdreck* in German; *dylvelsträck* in Swedish; *merde du diable* in French and *esterco-do-diabo* in Portuguese. In Afghanistan (where asafoetida grows widely today) and in India (its biggest modern consumer), its name is far simpler: *hing*, which derives from the Sanskrit *han*, meaning "kill"—likely another reference to its deadly uncooked smell.

Asafoetida is the exudate—technically a mixture of gum and resin—collected from the root of

Asafoetida is the brownish-gray gum resin collected from the root of *Ferula assafoetida*, a relative of the carrot and fennel plants.

Ferula assafoetida, a relative of the carrot and fennel plants. Today, the plant grows only from eastern Iran to western Afghanistan and in parts of Kashmir, and it has never been successfully cultivated. Generally, a plant must be at least four years old before it will yield, and is tapped in the spring. On finding a suitable plant, a harvester digs away the soil and makes an incision in the top of the thick, carrot-like root, which then exudes, for up to three months, as much as a kilogram (35 oz) of milky resin. The exudate hardens on exposure to air and gradually turns brown. Chemically, the gum resin's signature pungency is the scent of 2-butyl 1-propenyl disulfide and other disulfides, which break down when subjected to the heat of cooking. Its scent also contains the more pleasant diallyl sulfide, familiar from onions and garlic, which remains intact in cooking, giving asafoetida its distinct, leek-like flavor.

According to Mohammed Shah Rauf, a specialist in sustainable development in rural Afghanistan, much of the asafoetida collected in Afghanistan comes from Herat province near the border with Iran. In Herat, one of the largest asafoetida dealers is Mahmood, who goes only by his first name and who counts among his local customers the Indian consulate, which buys asafoetida from him in bulk. In total, he says his business is "around 2000 kilograms



Although culinary use has been rare in the West since Roman times, asafoetida has held a place in medicine from the eighth century BC in Mesopotamia to a four-volume pharmaceutical atlas, opposite, published in Germany in 1887. The label uses the older species name, *scorodosma*, instead of *assafoetida*. Above: Bulk asafoetida is bought and sold by spice wholesalers such as this one in Delhi. Above, left: Most asafoetida on grocery shelves is a powdered compound with added gum arabic, flours and turmeric.

LEFT: SANDHIA; RIGHT: MONEY SHARMA / DRINK INDIA / MAJORITYWORLD



L. MÜLLER AND C. F. SCHMIDT, PLATE 147 IN FRANZ EUGEN KÖHLER, MEDIZINALE PFLANZEN IN NATURGETREUEN ABBILDUNGEN MIT KURZ ERLÄUTERNDEN TEXTE: ATLAS ZUR PHARMACOPOEA GERMANICA... (GERA, 1887) / MISSOURI BOTANICAL GARDEN LIBRARY

[4400 lb] of asafoetida per year.” Although there are no reliable national statistics, Rauf estimates that Iran and Afghanistan together annually produce approximately 500 to 600 tons of asafoetida. Most is exported to India, since in Iran and Afghanistan it is used only medicinally.

East of Herat, the other major center for asafoetida is in central Afghanistan, in the hills around the provincial capital of Chaghcharan. From there, it is delivered to Kandahar, Afghanistan’s second largest city, and transhipped overland to Quetta in Pakistan and on to India. In Iran, asafoetida is collected in the region around the city of Mashhad and in the rocky highlands southeast of the Dasht-e-Kevir desert.

Chef Yumana Devi mentions in her cookbook *Lord Krishna’s Cuisine* (1987, Dutton) that in Delhi’s historic Red Fort area, a district of spice-milling shops, “a cloud of the heady asafoetida smell pervades several blocks.” There, the dried asafoetida resin is ground into a powder and mixed with gum arabic and flour, which both keep it from lumping and dilute its intensity. The resulting compound is sold commercially as *bandhani hing*, several varieties of which can be found in almost any spice market in India, and in North America and Europe on shelves at international groceries, where jars cost a few dollars.

Asafoetida’s popularity in India is not just a matter of taste. Many followers of Jainism avoid eating root vegetables, so they use asafoetida in lieu of onions and garlic. Additionally, some Hindus abstain from onions and garlic, too, particularly in the south, where asafoetida is especially popular. There are also health reasons: Among its medicinal properties, asafoetida is believed to help digestion and counteract flatulence—which is why it is often used with legumes such as chickpeas and lentils.

Health benefits have been attributed to asafoetida as far back as its culinary history reaches. In the early 11th century, the great physician Ibn Sina recommended it for treating indigestion. Much earlier, in the first century, in his authoritative work on botanical medicine, *De Materia Medica*, the Greek herbalist

Dioscorides recommended it almost as a cure-all: Not only was it good for goiters, baldness, toothache and lung diseases from pleurisy to bronchitis, but asafoetida could also bring on menstruation—a characteristic also attested by Pliny. It could be applied to scorpion bites, and (if one dared) could even “cast[s] off horseleeches that stick to the throat” when “gargled with vinegar.”

It is with Dioscorides that we also get the earliest hints of how closely related asafoetida was to my unobtainable Roman ingredient, Cyrenian silphium, because Dioscorides uses the word *silphium* interchangeably with *asafoetida*, as if they were varieties of the same plant:

Silphium grows in places around Syria, Armenia, Media [Persia] and Libya.... Though you taste ever so little of the Cyrenian, it causes dullness over your body, and is very gentle to smell, so that if you taste it your mouth breathes but a little of it. The Median and Syrian [varieties] are weaker in strength and they have a more poisonous smell.

His “silphium” from Syria, Armenia and Persia is almost surely *Ferula assafoetida*, which does not grow in Libya but which may, in those times, have grown in Syria and Armenia as well as Persia, where it still grows today.

Similarly, the Roman historian Arrian, who is the source of much of our information about Alexander the Great’s expedition to Asia in the late fourth century BC, recounts that in the Hindu Kush mountains of Afghanistan, Alexander’s army found “silphium”—again presumably the ancestor of *Ferula assafoetida*. It is interesting to know that, 200 years earlier, part of the population of the Cyrenian city of Barce had been deported by the Persians to Bactria—a territory that overlaps the borders of modern Afghanistan, Turkmenistan and eastern Iran—and to speculate that the involuntary migrants might have taken with them the seeds of such a nourishing and medically valuable plant as silphium. In any case, once Libyan silphium ceased to be available, asafoetida from Central Asia turned out to be a convenient substitute.

The most likely trade route for asafoetida in Roman times ran from Herat (Roman Aria) northwest to Mashhad (in today’s eastern Iran),

where it joined the Silk Roads to follow the southeastern shore of the Caspian Sea, across the Iranian plateau to Ctesiphon, near Baghdad, and then north along the Euphrates to Dura Europos in Syria’s eastern desert. From there, caravans traveled to the Mediterranean either by a northerly route to the port city of Antioch, or a southerly route, via Palmyra and Damascus, to Tyre. In the first centuries of our era, Rome’s new dependence on Asian asafoetida was part of a much greater Roman boom in imported spices. In the words of John Keay, author of *The Spice Route: A History*, “The spice trade in the early years of the Roman Empire probably exceeded anything seen in the West until the 15th century.”

The fact that Romans had access to Asian asafoetida at all highlights the transcendent economic importance of the spice trade, for the Parthian Empire, which controlled the regions where asafoetida grew, was hostile to Rome’s political ambitions in the East. Nonetheless, the Parthians refrained from disrupting the trade that was the source of their wealth.

With the arrival of Islam in the seventh century, the region where asafoetida grew came to be part of the Abbasid Empire’s Persian territories. Under the Abbasid caliphs, their capital, Baghdad, developed a cosmopolitan court culture. An emerging appreciation of *haute cuisine* led to a raft of Arabic cookbooks. Best known today is the encyclopedic *Kitab al-Tabikh* (*The Book of Recipes*), dating from the 10th century. Covering

everything from condiments to stews, yogurt-based dishes and sweets (along with a chapter on vegetarian entrees), the recipes make use of all parts of the asafoetida plant. The resin (*al-hilit*) and root (*al-mahrut*) are occasionally listed as ingredients, but it is the plant’s leaves (*al-anjudhan*) that seem to have been most popular in Abbasid cuisine: There is an entire chapter devoted to asafoetida-leaf stews (*anjudhaniyya*), such as the following:

Parthian Chicken (*Pullum Parthicum*)

Open the chicken from the back and arrange it in four sections. Grind pepper, lovage and a moderate amount of caraway seed: Pour fish sauce over them and mix with wine. Place the chicken in a Cumaean clay pot and pour the blended mixture over the chicken. Dissolve fresh silphium in warm water and pour on the chicken as you cook it. Season with ground pepper.

—*De Re Coquinaria (On Cookery)*,
attributed to Apicius

“Cut meat into thin slices and chop onion and fresh herbs. Put them in a pot and add to them olive oil of excellent quality. When the pot boils and the meat browns, add black pepper, cumin, caraway seeds and a little liquid fermented sauce. Add to the pot crushed asafoetida leaves, as much as needed. Break eggs on the meat and let it simmer for as long as it needs, God willing.”

Asafoetida also appears in kebabs marinated in the ground leaves, along with a vinegar-caraway-asafoetida-leaf dipping sauce, and in a recipe for dried salt fish.

By the mid-13th century, the Mongols had toppled the Abbasids. Their unified rule, the *pax Mongolica*, guaranteed the relative safety of traders along the Silk Roads. Although there is little evidence that medieval Europe-

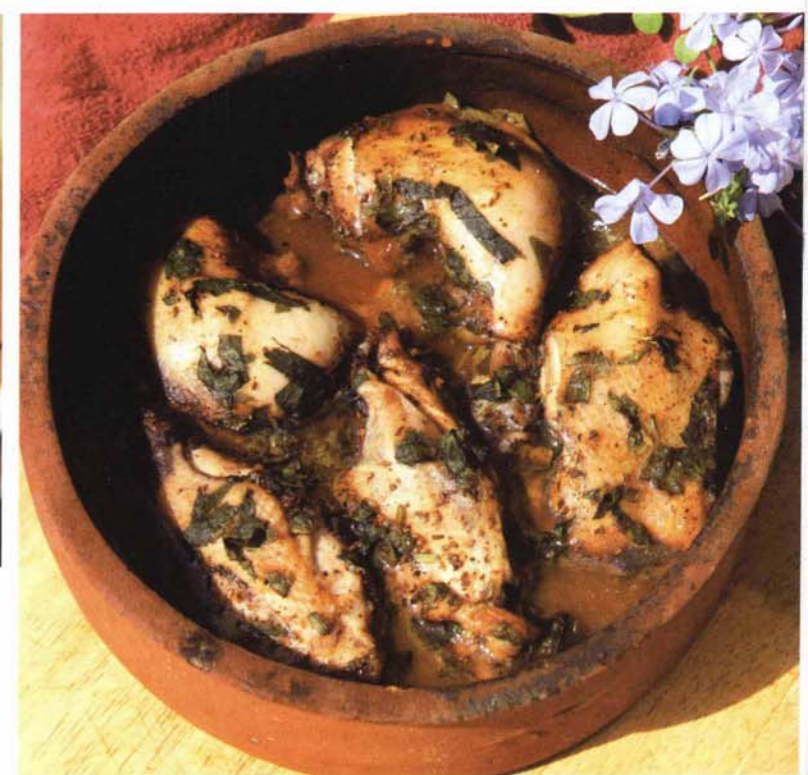
ans inherited the Roman use of asafoetida in cooking, it was certainly imported, via Venice, to apothecaries and druggists. It is probably at around this time that the modern word *asafoetida* was coined by Italian merchants.



Looks can be deceiving: To the uninitiated, the stench of uncooked asafoetida can be memorably revolting.



The best way to reconcile with its odor is to learn to cook with it: Sprinkle it lightly—not the whole spoonful!—into warm water, as in the recipe above, or add it to hot oil in a frying pan. Either way, the heat breaks down the disulfides that won it the “devil’s dung” name—and the culinary results have been popular for more than two millennia.



Silphium Rediscovered?

The disappearance of silphium, around the first century, from Cyrenaica, the promontory of eastern Libya that juts out into the Mediterranean, remains a botanical mystery. By all ancient accounts, the plant grew only there, in the hills and meadows rising from the coastal plain to Jabal al-Akhdar (Green Mountain). Behind the mountain, in 630 BC, Greek colonists founded Cyrene, the city-state that grew rich on its monopoly of silphium.

Silphium had long been known to the local Amazigh (Berber) peoples of the region, and carvings and pictographs uncovered in Knossos, on Crete, suggest it was also known to the Minoans, probably as a trade good, as early as the second millennium BC. From the Greek nature writer Theophrastus, we know that silphium gum was collected much the same way asafetida is collected today—by making incisions in the root or lower stalk and gathering the exuded gum.

Like the Greeks, the Romans too prized Cyrenian silphium, although it was clearly becoming a rare commodity. In an attempt to halt the decline, Rome had declared silphium an imperial monopoly, but by the end of the first century the science writer Pliny the Elder declared:

For these many years past, however, it has not been found in Cyrenaica, as the farmers of the revenue, who hold the lands there on lease, have a notion that it is more profitable to depasture flocks of sheep upon them. Within the memory of the

A few centuries later, the rise of the Mughal Empire in India opened another trade route to another market. Indian food historian S. N. Mahindru points out that, between 1628 and 1658, during Shah Jahan's rule, "the export trade attained great heights and was diversified. Turmeric, asafetida and other drugs were the new merchandise that accompanied the earlier exports of pepper, poppy-seed and saffron." In Agra and Delhi, court singers reportedly ate asafetida to improve their voices: They would wake before dawn, eat a spoonful of it with butter, and go down to the banks of the river to practice their art at sunrise.

At that same time, one of the most astute observers of asafetida's use in India was Garcia da Orta, physician to the Portuguese governor of Goa for 30 years. A diligent student of botanical medicine, da Orta studied with Indian physicians and yogis as well as with traders who

passed through Goa. In *Colloquies on the Simples and Drugs of India* (1563), called "the first scientific book on oriental spices published in the western world," da Orta says:

You must know that the thing most used throughout India, and in all parts of it, is that Assafetida, as well for medicine as in cookery. A great quantity is used, for every Gento [Hindu] who is able to get the means of buying it will buy it to flavor his food.... These [people] flavor the vegetables they eat with it, first rubbing the pan with it, and then using it as seasoning with everything they eat. All the other Gentios who can get it eat it, and laborers who, having nothing more to eat than bread and onions, can only eat it when they feel a great need for it.

Although da Orta was also honest enough to admit that asafetida had "the nastiest smell in the world for me," he was also wise enough



Behind the Jabal al-Akhtar (Green Mountain) rising from the coast of northeastern Libya, the Greeks founded Cyrene, where silphium was important enough to earn depiction on the city's coins. Although the plant resembles asafetida, "What was silphium?" remains a botanical mystery. Right: Arcesilas II, king of Cyrene from 560 to 550 BC, is shown watching the weighing and loading of silphium for export on a sixth-century BC Greek kylix, or drinking cup.

present generation, a single stalk is all that has ever been found there, and that was sent as a curiosity to the Emperor Nero.

One of our most important sources on Roman cuisine is a cookbook from the late Roman Empire titled *De Re Coquinaria* (*On Cookery*). Many of its recipes call for silphium as a base seasoning (see "Parthian Chicken," page 41), and it includes instructions on "How to make one

The Heart of Silphium

Romans craved silphium not only for its flavor. Historian John M. Riddle, author of *Eve's Herbs* (1997, Harvard), cites another reason: "anecdotal and medical evidence from classical antiquity tell us that the drug of choice for contraception was silphium." In an article with J. Worth Estes in *American Scientist*, Riddle argues that women in the ancient world regulated conception with drugs, and that this may even have been the most important use of silphium and the reason for its great value: "Silphium's sap may have been the ancient world's most effective antifertility drug." In recent laboratory experiments, their article claims, some asafetidas have inhibited conception in rodents.

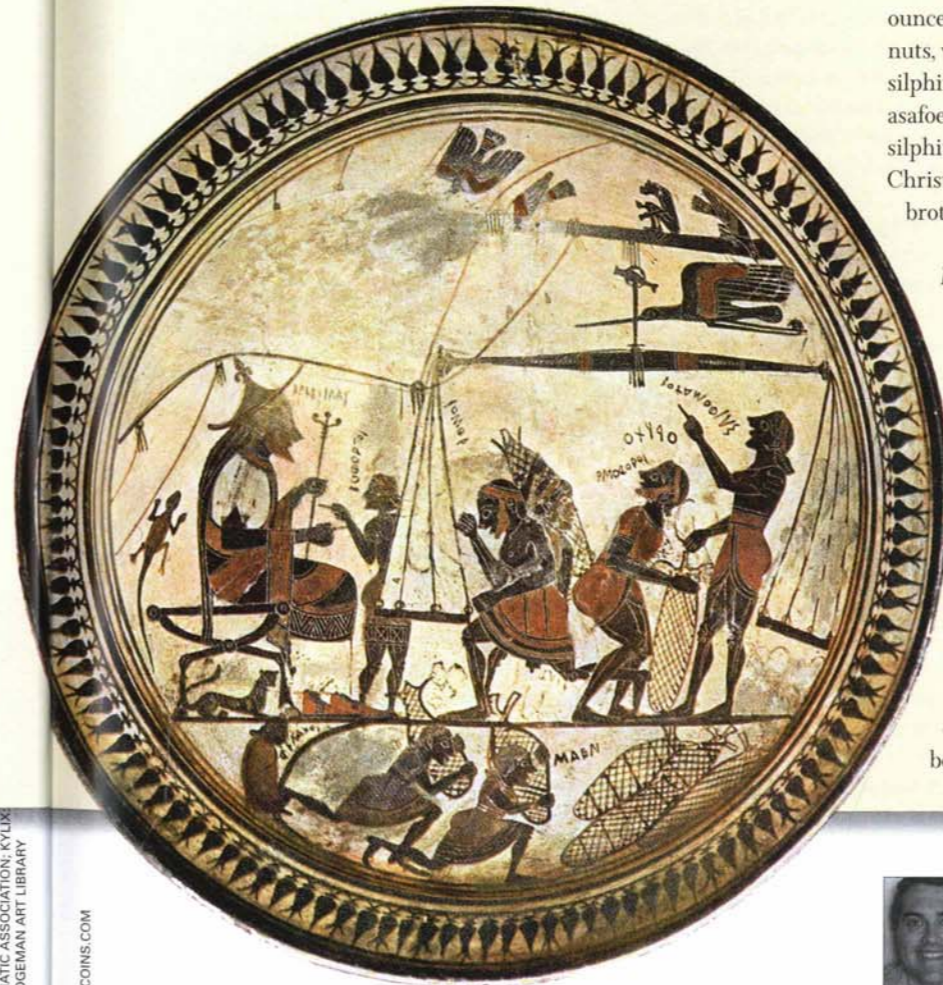
The shape of the silphium seeds, which we know only from their depiction on Cyrene's coins, reinforces this link to fertility: The seeds were distinctly heart-shaped—the same heart shape we see in modern western culture associated with romantic love, despite its lack of resemblance to the anatomical human heart. Thus, some researchers have speculated that this symbol of romance derives from the silphium seed.

This tetradrachm, dating from between 485 and 475 BC, shows Cyrene's eponym, the nymph Cyrene, gesturing toward a silphium plant; her other hand is in her lap. Behind her is silphium's heart-shaped seed.



ounce of silphium last indefinitely." (Store it in a closed jar with pine nuts, which absorb the flavor. Use and replenish the pine nuts, keep the silphium.) By then, Roman cooks must already have been using asafetida as a substitute. Yet there are tantalizing hints that Cyrenian silphium in fact survived. For example, there is a letter written by the Christian bishop of Cyrene in the fifth century in which he thanks his brother for the silphium cuttings sent from his garden.

Some scholars have proposed that *Ferula tingitana*, a relative of *Ferula asafetida* that grows wild across North Africa, the Levant and the Iberian Peninsula, is in fact silphium. (Cyrenian silphium is unrelated to the modern plant genus *Silphium*, which includes more than 400 species, mostly in North America.) However, in the early 1990s, Italian archeologist Antonio Manunta of the University of Rome found in Cyrenaica specimens of *Cachrys ferulacea*, which grows wild from Sardinia to Uzbekistan. Bedouin in Cyrenaica believed it to be the same as silphium, based on the images on Cyrenian coins, and they took Manunta to a valley with abundant *Cachrys ferulacea* in the exact areas where silphium once flourished. Additionally, the oil from the seeds has a pleasant smell, which matches Dioscorides' statement that Libyan silphium didn't have the strong odor of asafetida. But for Manunta, the strongest piece of evidence was the seed: Of all the seeds of plants hypothesized to be silphium's descendants, it's the only seed that is heart-shaped.



to observe, "The truth is that there is a good deal of habit in the matter of smells."

As for me, I still haven't gotten used to the odor of the raw resin, although the promise of its almost buttery scent when cooked keeps me coming back to it. I still keep it double-wrapped, inside a plastic tub, on the shelf. ☺



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Related articles from past issues can be found on our Web site, www.saudiaramcoworld.com. Click on "indexes," then on the cover of the issue indicated below.

Asafetida: S/O 06

Ibn Sina: M/J 97, M/J 077

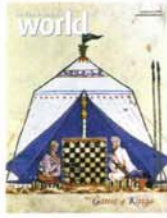
Dioscorides: M/J 0

Alexander in Bactria: M/J 94

Kitab al-Tabikh: J/A 06

Trade with Venice: M/A 08

Indian spice trade: J/A 05



FOR STUDENTS

We hope this two-page guide will help sharpen your reading skills and deepen your understanding of this issue's articles.

FOR TEACHERS

We encourage reproduction and adaptation of these ideas, freely and without further permission from *Saudi Aramco World*, by teachers at any level, whether working in a classroom or through home study.

—THE EDITORS

Julie Weiss is an education consultant based in Eliot, Maine. She holds a Ph.D. in American studies. Her company, Unlimited Horizons, develops social studies, media literacy, and English as a Second Language curricula, and produces textbook materials.

Teachers' Workshops: Teaching About Islam.

The Center for Muslim-Christian Understanding at Georgetown University is offering a new series of full- and half-day professional-development workshops for teachers from elementary through high school. Outreach centers, school districts, civic organizations and educational institutions may select from a variety of content modules correlated to national and state academic standards and curriculum frameworks for teaching about Islam and other world religions. These modules link to many broader subject areas such as math, literature and the arts; modules on Islamic Spain and Islam in the media are included. For further information or to schedule a workshop (25 participants minimum), visit www1.georgetown.edu/sfs/acmcu/about/educationaloutreach/, contact susand@cmcuworkshops.net, or call 703-442-0638.

CLASS ACTIVITIES

Have you ever wondered what it would be like to talk with someone who lived hundreds of years ago? Sure, it's imaginary. At least in a literal sense, we can't talk to people from the past. But in another sense—in the sense that we build the present on the basis of what's come before—we're always conversing with people who lived before us. Today's artists "converse" with past artists who developed the forms in which they work. The descendants of immigrants "converse" with their ancestors when they keep cultural traditions alive. And people who use technology can only imagine how those who did the same tasks they are doing, but without the advanced tools, would react if they could see what's possible now. This month's activities focus on the notion of conversing with the past, and give you a chance to imagine what those conversations with our predecessors would be like if they were actually to take place.

Theme: Conversing With the Past

How do modern artists connect to artistic traditions?

"Reinventing the Miniature Painting" looks at a centuries-old art form and how it is both changing and not changing in the modern world. The article describes a kind of conversation between today's artists and the long-ago painters who pioneered the form. It provides a look into how art evolves—through a process of respect, adaptation, "subversion" and transformation.

Read the article. Working in a group of four, discuss these questions:

- How is miniature painting different from other painting that is taught at NCA? (You can look at the photo on page 26 to see one difference.)
- Why do you think some students like the discipline that painting miniatures requires? Do you think you would like it? Why or why not?
- How does the rigor of miniature painting compare to other modern art forms?

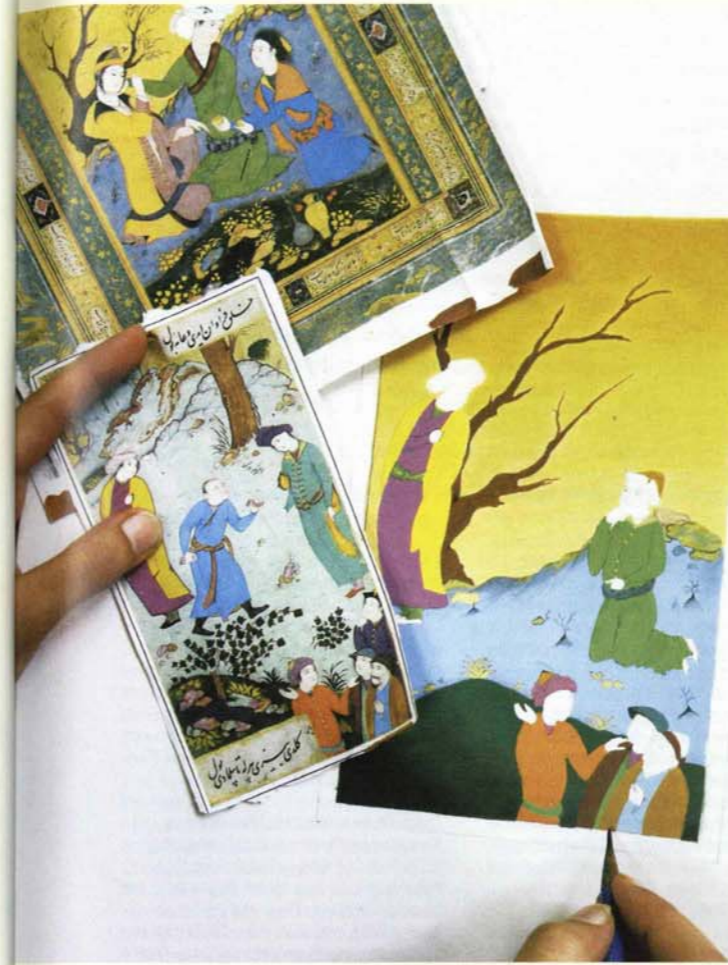
"Reinventing the Miniature Painting" describes how the young artists who are learning to make miniature paintings both draw on the tradition of their predecessors and also change it. Working with your group, have one person read aloud the second paragraph of the article. Think about the relationship the author describes in this paragraph: Students learn the discipline of miniature painting and then "later they give their imagination free rein to open new possibilities and new meanings for this highly disciplined tradition, in the context of a contemporary art world where few rules still seem to apply."

Discuss what this quotation means. What does "discipline" mean for an artist? What does it say about how today's students are using the training they get in traditional art forms? Make a few notes for yourself in response to this question: How do you think traditional miniature painters would react to the ways that today's students are using their training?

One way modern artists connect to the miniature-painting tradition is through "copying." In art classes, have you ever copied a famous painting? Why might a student do that? Based on the article, why do you think NCA students do it? Yet the article suggests that copying is more complicated than merely, well, copying. Painter Shahzia Sikander describes it this way: Is copying, she asks, "understanding process, or is it understanding the lineage of the medium, or is it mere appropriation?" What is another word for "appropriation"? Write Sikander's question in your own words, and in one sentence write your initial response to it. Then read on. Sikander goes on to say, "Copying can also mean understanding history. One has to look at someone else's work very carefully before relating to it in a personal way, in the same sense as claiming a historical past." What does she mean? Write her statement in your own words. Then, to think more deeply about the question Sikander poses, make a T chart with your group. Title the left-hand column "Copying is appropriation." Title the right-hand column "Copying is claiming a history." In each column, provide evidence or arguments that support that point of view. When you're done, look at your chart. Have you supported one point of view better than the other? How would you define "copying" now? Write your new definition.

Copying is just one way that modern artists relate to their artistic tradition. The relationship can be even more complicated, and "Reinventing the Miniature Painting" talks about another way that artists build on the old as they create the new. With your group, read the third paragraph on page 26, about Aisha Abid, who, the article reports, "subverts the miniature-making process itself." Find a definition of "subversive." Discuss with your group: What is Aisha Abid subverting? How is she subverting it, according to the article? Do you agree or disagree that Abid's work is subversive? Why? Go back to the notes you made earlier, and jot down some thoughts to answer the question: How do you think traditional miniature painters would react to Aisha Abid's work? Why do you think so?

Find the other examples in the article of how today's artists are creating "miniatures in a contemporary medium." List them, and



consider them in the context of what one art critic calls "miniature as attitude"—an attempt not to follow the tradition blindly, but rather to converse with it across generational lines.

Now that you've laid the foundation, try having that cross-generational conversation. Have two students in your group take the role of a miniature painter from long ago, while the other two take the role of one of the painters in the article. (The reason for having two people for each role is so that you can work together generating ideas and clarifying your thinking. The two students who represent each character should be "on the same page" with each other, not expressing two different perspectives.) How do you think the earlier painter would like some of the projects the article describes? What attitude do you think today's artists have toward the people who created their art form? Before you begin the conversation, work with your partner to think through the point of view of the character you're representing. Make notes of the key points you want to make. Then role-play a dialogue across generations. Afterward, debrief as a whole class, with different groups sharing the insights they gained from the role-playing.

What might Chinese Muslim artists from the late 14th century say to Chinese Muslim artists from the seventh century?

"From Middle East to Middle Kingdom" complicates the question of how artists build on artistic traditions by adding another element: historical context. The article identifies two main periods in the history of Chinese-Islamic art. Make a timeline that shows the two periods. Above the line identify the time periods. Below the line, identify the status that Chinese Muslims had during each time period. How did the group's status affect the art that they were producing in each time period?

Once again, think about a conversation that two artists might have with each other across the centuries. Divide into different groups of four so that you're working with different people than

you did before. Have two people take the role of a seventh-century artist while the other two take the role of a late-14th-century artist. In your conversation, each person must describe the artwork he or she produced, as well as discussing the status of Chinese Muslims in their time period. As in the previous exercise, think about how the earlier artist might think and feel about the art created later. And think about the attitudes that the later artist would have toward the predecessors. Role-play the conversation. Share insights in a class discussion. Then discuss the similarities and differences between the two situations you have role-played. What generalizations, if any, can you make about artists "conversing" with artists of the past?

How might long-ago mapmakers respond to Google Earth?

Artists draw on a long tradition. So do mapmakers. "Desktop Archeology" suggests that satellite mapping—now available to everyone with a computer and an Internet connection—can reveal stories of the past that we cannot see from the ground, and that until now could be seen only through aerial photographs. But long ago, mapmakers did not

have the benefits of satellite—or even aircraft—technology. They had to make maps in other ways. To find out about their efforts to map the Arabian Peninsula, read "Mapping Arabia," from the January/February 2004 issue of *Saudi Aramco World* at www.saudiaramco.com/issue/200807/mapping.arabia.htm.

As a class, identify and list the different ways mapmakers gathered the information to create their maps, starting with Ptolemy and including Gastaldi, Speed, Niebuhr and Doughty. List them and their mapmaking methods. Discuss: For what purpose were the maps made? How accurate were the maps? What information did the maps provide that was not available before they were made?

Now read "Desktop Archeology." How does Google Earth facilitate archeological research? What information do the satellite images provide that wasn't available before? Before you think about what a Google Earth user and a long-ago mapmaker might say to each other, do this exercise with Google Earth. Find your neighborhood and the town or city you live in. Look around, check out the area. What can you see on Google Earth about where you live that you don't necessarily see in your day-to-day experience?

Despite the many benefits, there's a flip side to the view that Google Earth provides. What doesn't Google Earth show about your neighborhood that you know about because you live there? What does it miss that earlier maps or other kinds of maps catch? Write your observations about the benefits and drawbacks of satellite imagery in a journal entry.

Now think about a conversation between the mapmakers of centuries past and the map-users of Google Earth. Working with a small group again, assign two people one role and two people the other role. Think about what the two people would say to each other. How would Ptolemy react to Google Earth? How do you, as a Google Earth user, react to Ptolemy's maps? Role-play the conversation, and then share your insights with the class.

As a final activity, look back at the three articles you've read from this issue of *Saudi Aramco World* (plus the mapmaking article from 2004), and the conversations you've had across time. What have you learned about how the present and the past are connected? Write a one-page essay or journal entry using this writing prompt: I have come to believe that people today should view their predecessors _____.



flicker across the screen in dark allegories on the nature of historical consciousness and the passage of time. Sackler Gallery, Washington, D.C., July 18 through November 8.

A frame from Shahzia Sikander's "Pursuit Curve" (2004), a seven-minute digital animation with sound.

Moving Perspectives:

Shahzia Sikander / Sun Xun. Trained in Pakistan and in the US, Shahzia Sikander (born 1969, Lahore, Pakistan) deftly reinterprets miniature painting by isolating and abstracting formal compositional elements often found in this densely layered and intricate art form. The dynamism of her paintings is set in motion in her video works, where the repetition of abstract forms becomes a buzzing hive, calligraphy whirls in and out of view, and imaginary curves morph into vivid landscapes. (See article, page 24.) Similarly, Sun Xun (born 1980, Fuxin, China) creates hundreds of paintings and drawings by using old newspapers or entire blank walls. Filming his hand-drawn images, he transforms clocks, magicians, words, and insects into animated symbols that

CURRENT August

The Persian Sensation: The *Rubáiyát* of Omar Khayyám in the *West* marks the 150th anniversary of Edward FitzGerald's landmark translation of the poetry of the medieval Persian astronomer Omar Khayyám. FitzGerald's work became an unprecedentedly popular phenomenon in England and America: by the 1930's, the *Rubáiyát* was by some accounts the most published and translated text in English after Shakespeare and the Bible. The exhibition draws on the Center's expansive *Rubáiyát* collections, ranging from Persian manuscripts and miniature editions to parodies and playing cards, to reveal how the *Rubáiyát* phenomenon constructed an idealized Orient even as Omar Khayyám and his poems helped readers understand their own lives. Ransom Center, University of Texas, Austin, through August 2.

Sadegh Tirafkan: *Persepolis Part II.* Tirafkan was born in Iraq and forcibly repatriated to Iran by Saddam Hussein in 1971. Like other Iranian artists of his generation, his photographs and videos capture a society caught between the present and the past. Los Angeles County Museum of Art, through August 2.

A Decade of Dedication commemorates the 10th anniversary of the Islamic Arts Museum Malaysia and takes visitors behind the scenes to explore exhibitions, galleries and display concepts, as well as the activities of the conservation and education departments and the remarkable Scholar's Library. Islamic Arts Museum Malaysia, Kuala Lumpur, through August 9.

A Yemeni Community: *Photographs from the 1970's by Milton Rogovin.* When social documentary photographer Milton Rogovin visited Lackawanna, New York in 1977, it was a bustling steel town with a small but unique community of immigrants from Yemen. Devastating plant closings were a few years away, and daily life for Lackawanna's Yemenis was a combination of old-world traditions and contemporary American experiences. The exhibition resurrects that community and era with 30 photographs—never before exhibited together—that serve as a meditation on immigration history, cultural identity and the ways people adapt to a constantly changing world. Arab American National Museum, Dearborn, Michigan, through August 16.

Indian Highway displays works of contemporary Indian artists, architects, filmmakers, photographers and writers. Astrup Fearnley Museum of Modern Art, Oslo, through August 23.

Garden and Cosmos: *The Royal Paintings of Jodhpur* features 56 paintings from India that reveal a unique art tradition of the royal courts between the 17th and 19th centuries. During this period, the region of Jodhpur, in modern-day Rajasthan, produced a distinctive and inventive painting style. Paintings produced for the private enjoyment of the maharaja and his court brought traditional Rajasthani styles together with styles developed in the imperial court of the Mughals. The paintings range from miniatures to monumental artworks depicting the palaces, wives and families of the Jodhpur rulers. Later works depict epic narratives and demonstrate the devotion of Maharaja Man Singh to an esoteric yogic tradition. Jodhpur artists rose to the challenge of creating images for metaphysical concepts and

yoga narratives which had never previously been the focus of the region's court art. None of the paintings have been displayed before in Europe. British Museum, London, through August 23.

Galileo: *Images of the Universe From Antiquity to the Telescope* brings together artworks, atlases, illuminated manuscripts, paintings, drawings and sculptures to celebrate the 400th anniversary of the first use of the telescope. The exhibition starts with ancient Greece, underlines the importance of Arab astronomy, and includes the work of Copernicus, Galileo and Kepler. Palazzo Strozzi, Florence, Italy, through August 30.

Persian Visions: *Contemporary Photography From Iran* presents more than 60 images that provide a revealing view of Iranian life and experience. The 20 artists featured are among Iran's most celebrated and include Esmail Abbasi (references to Persian literature), Bahman Jalali, Shariyar Tavakoli (family histories), Mehran Mohajer, Shoukoufeh Alidousti (self-portraits and family photographs) and Ebrahim Kahdem-Bayatvin. Some have lived abroad and returned to view their homeland from a changed perspective. Anti-exotic and specific, these images make up the first survey of contemporary Iranian photography to be presented in the United States. Telfair Museum of Art, Savannah, Georgia, through August 31; Haggerty Museum of Art, Milwaukee, Wisconsin, October 15 through January 17.

Mirrors of Oriens juxtaposes more than 150 orientalist drawings, photographs and Autochromes from the 19th and 20th centuries with more than 60 photos and videos from the present day and invites viewers to consider the esthetic and psychological connections between them. In a time when visitors from the East are touring the West in large numbers, is "occidentalism" a likely phenomenon? Palais des Beaux-Arts de Lille, France, through August 31.

CURRENT September

Masterpieces of Islamic Calligraphy showcases the most important art of the Islamic world from Spain to South

Asia and beyond. The works, ranging in date from the eighth to the 19th century, include several richly illuminated Qur'anic manuscripts, as well as album pages in a variety of scripts, examples of inlaid metalwork, ceramic and textiles with calligraphic elements. Many scripts, from early kufic to the later refined *nasta'liq*, are shown in a range of media. Metropolitan Museum of Art, New York, through September 1.

Gaza Conversations: *Persistence, Resistance, Renewal* showcases the responses of three artists, Rajie Cook, Najat El-Khairy and Helen Zugaib, to the invasion of Gaza. They work in three distinct media, but each uses his or her art to converse with and about Gaza. Their work creates a connection between the viewer and the people of Gaza in their persistence and resistance, in hope of a renewal of the world's attention. Jerusalem Fund Gallery, Washington, D.C., through September 4.

The World of Islam in the Collection of the Aga Khan Museum exhibits more than 180 works of art in leather, stone, gold, bronze, ivory, glass, ceramic, textile, parchment and paper from the 14th centuries and the vast geographical span of the Islamic world. CaixaForum Madrid, through September 6.

Five Centuries of Indonesian Textiles: *Selections from the Mary Hunt Kahlenberg Collection* highlights Indonesia's rich and diverse textile traditions with more than 90 works dating from the early 15th through the 20th century, including extremely rare pieces radiocarbon dated to as early as 1403. The cultural origins and influences of the varied ethnic, linguistic and religious groups inhabiting the many islands of Indonesia show a dazzling array of abstract, figurative and geometric design motifs. Los Angeles County Museum of Art, through September 6.

The Triumph of Holiness and Beauty: *The Qur'ans of Daghestan* presents 28 priceless manuscripts from far southwestern Russia, where Islam began to spread in the seventh century and became predominant in the 13th. Though on the periphery of the world of

Islam, Daghestan developed a rich Islamic manuscript heritage, nourished by local copying of manuscripts received from all over the Islamic world and supplemented, from the 11th century onward, by an increasing proportion of works by Daghestani scholars. The very diverse manuscript collection of Daghestan's Institute of History, Archeology and Ethnography numbers more than 3000 items, but the earliest Qur'an manuscript in this exhibition is a fragment by an unknown calligrapher named Muhammad ibn Husein ibn Muhammad, completed on December 2nd, 1009. State Hermitage Museum, St. Petersburg, Russia, through September 6.

Light of the Sufis: *The Mystical Arts of Islam* features some 25 objects related to a mystical branch of Islam known as Sufism. Inspired by Sufi ideologies and the poetry of celebrated mystics such as al-Ghazzali and Jalal al-Din Rumi, artists from the medieval Islamic period to the present day have produced works ranging from ceramic and metal wares to illustrated manuscripts and photographs. The theme of light and enlightenment is emphasized throughout, both literally and in its spiritual sense. Highlights include an extraordinary Egyptian gilded and enameled glass lamp inscribed with the famous "Light Verse" (Ayat al-Nur) from the Qur'an. Brooklyn [New York] Museum of Art, through September 6.

The Islamic World from China to Europe focuses on the contacts between the Islamic world and the neighboring cultures of Europe and China, demonstrating that the *dar al-Islam* has never been isolated from world culture but, on the contrary, has always been a deeply integrated part of it. The exhibition displays more than 300 pieces in four sections. The first is devoted to the development of Islamic art from the revelation of Islam in the seventh century to the Mongol invasion in the 13th. The second continues well into the 16th century and emphasizes the influence of Chinese culture mediated by the Mongols. The third section displays art from the 16th through the 19th centuries, a period when Islamic culture was strongly affected by European traditions. The fourth deals with diplomatic and military contacts between Russia and the Islamic world and features a magnificent Bukharan tent—really a portable palace—never before displayed. State Hermitage Museum, St. Petersburg, Russia, through September 6.

Carvers and Collectors: *The Lasting Allure of Ancient Gems* features intaglios and cameos carved by master engravers in Mesopotamia and Egypt as well as Greece, Rome and Etruria. In antiquity, gems were engraved with the varied ethnic, linguistic and religious groups inhabiting the many islands of Indonesia show a dazzling array of abstract, figurative and geometric design motifs. Los Angeles County Museum of Art, through September 6.

carvers produced replicas and forgeries. Getty Villa, Los Angeles, through September 7.

Living Line: *Selected Indian Drawings from the Subhash Kapoor Gift* is a selection of 58 master drawings, principally from the 18th century and executed in black ink, sometimes enhanced with watercolor, typically on fine laminated papers. Such drawings were produced in the royal ateliers of the courts of Rajasthan and the Pahari hills of the Punjab and were generally retained within artist studios as reference works upon which finished paintings were based. They were also enjoyed as connoisseurs' objects in their own right, to be viewed by royal patrons in the privacy of their palaces. The exhibition signals the importance of the art of drawing in the later court arts of India. Metropolitan Museum of Art, New York, through September 7.

Genghis Khan features artifacts from the reign of the legendary leader, including a newly discovered mummy and tomb treasures. Genghis conquered an empire three times the size of Julius Caesar's or Alexander's, but also established national parks, a postal system and the concept of international law, and set the boundaries of some modern nations. His empire was the safest and most tolerant of lands. Approximately 200 artifacts are on display, including Mongolian costumes, head-dresses and instruments from the National Museum of Mongolian History; and imperial gold, metal ornaments, beads and a tombstone from Russia's State Hermitage Museum. Houston Museum of Natural Science, through September 7.

Perspectives: *Women, Art and Islam* features the work of five female artists whose primary commonality is their personal relationship to Islam. Their art—video, photography and installation—shows the influence of Islam on their work. Museum of Contemporary African Diasporan Arts, Brooklyn, New York, through September 13.

The Tsars and the East: *Gifts from Turkey and Iran in the Moscow Kremlin* features more than 60 objects, ranging in date from the late 16th to the late 17th century, that large embassies, diplomatic missions and trade delegations of Ottomans and Safavids presented to the tsars of imperial Russia. These lavish gifts and tributes include arms and armor and jeweled ceremonial vessels and regalia intended for the Russian court or the Orthodox church. Some of the finest pieces are equestrian: stirrups with pearls, golden brides with turquoises and rubies, and saddles covered with velvet and silk. The exhibition explores the reasons these extraordinary gifts were presented, their artistic and cultural impact, and the aesthetic styles and ceremonial etiquette they inspired that came to characterize the Russian court in the 17th century and beyond. Sackler Gallery, Washington, D.C., through September 13.

Daughters of India: *Photographs by Stephen P. Huyler* celebrates the strength, courage, resourcefulness and creativity of Indian "everywomen" from a wide variety of backgrounds. Artistic creativity plays an important part in the lives of many of them, as they express

themselves and address others through paintings, sculpture, embroidery and the creation of decorative elements in their households. For others, the full force of their creativity is brought to bear simply in overcoming the severe obstacles presented by poverty, caste prejudice and other hardships. Fowler Museum at UCLA, Los Angeles, through September 13.

The Beautiful Has Come: *Portrait Masterpieces from the Egyptian Museum of Berlin* presents three portrait busts from the workshop of a craftsman conventionally known as Tuthmosis, who worked in the mid-14th century BC in the new capital, Akhetaton, of the "heretical" monotheistic pharaoh Amenhotep IV. A much earlier portrait bust also on display makes clear the anomalous nature of the art and sculpture of Amenhotep's time. Catalog, State Hermitage Museum, St. Petersburg, Russia, through September 20.

Nagas: *Hidden Hill People of India* are divided into a number of tribes and sub-tribes that speak as many as 30 different languages and live in the low Himalayan hills of northeastern India and Myanmar. Photographer Pablo Bartholomew offers a visual anthropology of these former headhunters now faced with both tradition and transition, particularly the preservation of their traditional culture and their interaction with western religion and influence. Rubin Museum of Art, New York, through September 21.

Adventures With Hamza: *The Hamzanama. Research and Conservation* commemorates the end of a 10-year project to conserve 60 folios from a 16th-century Mughal manuscript purchased by the museum in 1873. The exhibition documents the individual steps of restoration and preservation and reveals new information about the illustrated manuscript's origins, use and alteration, which was revealed in conservation, adding to its importance as a touchstone of Mughal painting. The manuscript was commissioned by Emperor Akbar the Great and originally included 1400 folios, of which only 200 remain. The tales in it describe the adventures of Hamza ibn 'Abd al-Mutallib, the uncle of the Prophet Muhammad, as he travels the world spreading Islam and battling demons, sorcerers and spies. Museum für Angewandte Kunst, Vienna, through September 27.

From the Land of the Taj Mahal: *Paintings for India's Mughal Emperors in the Chester Beatty Library.* Among the most remarkable of Mughal paintings and calligraphies are those commissioned by the Emperors Jahangir (1605–1627) and Shah Jahan (1627–1658) for display in lavish imperial albums. A window into the worldviews of the emperors, these exquisite images depict the rulers, the imperial family in relaxed private settings, Sufi teachers and mystics, allies and courtiers, and natural-history subjects. Many folios are full-page paintings with superb figural borders; others are collages of European, Persian and Mughal works collected by the emperors. Produced by the atelier's leading artists, they reveal the conceptual and artistic sophistication of the arts of the book at their apex in the early 17th

century. The exhibition brings together 86 masterpieces—many not previously exhibited in the United States—from the renowned Dublin Collection. Catalog \$45. Denver [Colorado] Art Museum, through September 27.

Palestine c/o Venice, a collateral event of the Venice Biennale, presents seven artists working in Palestine and around the world who represent a microcosm of contemporary artistic production, responding to current social, cultural and political realities. The exhibition's title underscores the chronic impermanence that Palestinian artists must surmount by "creative resistance." Multimedia, video, animation, sound, photography and performance works by Taysir Batniji (1966, Gaza), Shadi HabibAllah (1977, Jerusalem), Sandi Hilal (1973, Beit Sahour) and Alessandro Petti (1973, Pescara, Italy), Emily Jacir (1970), Jawad Al Malhi (1969, Jerusalem) and Khalil Rabah (1961, Jerusalem) are included. Convento Ss. Cosma & Damiano, Venice, through September 30.

CURRENT October

Dance of Fire: *Iznik Tiles and Ceramics* is designed to give a comprehensive picture of this unique art form, tracing its development from the earliest examples, dating from the 15th century, to the last ones from the 17th century. The wide range of exhibits illustrates the outstanding creativity of the Iznik craftsmen, the extraordinary diversity of their decorative repertoire, their skilled use of color and their constant search for technical innovation. The juxtaposition of pieces made from the same clay, shaped by the same potter and sometimes fired in the same kiln is important from the point of view of both art history and the history of technological change in Ottoman pottery manufacture. Sadberk Hanım Museum, Büyükdere, Istanbul, through October 11.

Walls of Algiers: *Narratives of the City* examines a complex history through 19th- and 20th-century photographs, postcards, illustrated books and drawings. Legendary for its white walls cascading to the Mediterranean, Algiers served as an experimental site where intricate colonial strategies were rehearsed and tested, from the time of the French conquest in 1830 until independence in 1962. These policies changed the city, creating an urban duality that separated the "Arab" quarters (the Kasbah) from the new French settlements. The exhibition also features historical voices drawn from government and military reports, scholarly essays, travel accounts, novels and poems—records annotated by a range of critics, including architect Le Corbusier, philosopher Jean-Paul Sartre, filmmaker Gillo Pontecorvo, psychoanalyst Frantz Fanon and novelist Assia Djebar. Getty Center, Los Angeles, through October 18.

Tutankhamun: *The Golden King and the Great Pharaohs* is [another] extensive exhibition of more than 140 treasures from the tomb of the celebrated pharaoh and other sites. It includes his golden sandals, created specifically for the afterlife and found on his feet when his mummy was unwrapped; one of the gold canopic coffinettes, inlaid with jewels, that contained his mummified internal organs;

