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THE RISE OF ISLAMIC ARCHAEOLOGY

Islamic archaeology emerged as an independent field of inquiry about one hundred years ago.¹ It developed relatively late compared with other branches of archaeology, but has since gained considerable momentum. At the outset, the excavation of Islamic sites was characterized by a desire to recover artifacts, especially as that ensured funding and sponsorship for projects. In the twentieth century, however, the discipline of Islamic archaeology has become more rigorous, and the late-nineteenth-century emphasis on recovering artifacts has been superseded by an outlook based on a more comprehensive examination of the material remains of the past. While undergoing this methodological change in the twentieth century, Islamic archaeology also responded to a variety of local conditions unique to it alone. The purpose of this essay is to highlight some of the issues and values that have guided the direction of the relatively young discipline.

Islamic archaeology as it emerged in the late nineteenth and early twentieth centuries was based upon two strands of inquiry. The first of these was an interest in the historical significance of art. In the eighteenth century, Joachim Winckelmann had indicated in the context of the classical world that there was a link between art and an assumed way of life, an idea that gave a new poignancy to recovering the remains of the past. By the early nineteenth century G.W.F. Hegel's attempt to systematize a universal history for all the "fine" arts provided the basis on which the history of art emerged as a distinct discipline. The other strand of inquiry was the development of Orientalist studies from the late eighteenth century.² These two strands of inquiry did not come together until the late nineteenth century, however; before then, the study of the art and archaeology of Islamic lands failed to attract significant critical interest.

One of the principal reasons for this delay can be found in Hegel's portrayal of the historical evolution of art, in which Asia was relegated — following the ideas of Winckelmann — to a significance only in pre-Greek times, with ancient Persia credited with the first historical consciousness. In Hegel's opinion Islam merited little attention, although it did frustrate his historical

chronology by coming after Christianity. This outlook was modified somewhat around the mid-nineteenth century when there emerged, under the influence of Auguste Comte, a secular understanding of the rise and development of Islamic civilization. Comte applied the notion of progressive evolution directly to history, so that the historical role of Islam was seen to belong to the "medieval" phase in the development of mankind. Much Orientalist scholarship in the second half of the nineteenth century was inspired by this vision. A secular approach to Islamic civilization can be found, for example, in the writings of Alfred von Kremer and Aloys Sprenger.³

Out of this theoretical background there arose in the early nineteenth century the belief that art and architecture embodied the spirit of past historical epochs and also reflected differences between races and cultures. However, historical knowledge of Islamic art and architecture was still rudimentary at that time. It was generally believed that in Arabia, where the Islamic faith originated, artistic traditions were negligible, but after three centuries of expansion, during which Hellenic, Persian, and other traditions intermingled, Islamic architecture emerged as a distinct style. The mosque of Ibn Tulun in Cairo, founded in 876, was considered by some commentators to be the earliest extant example of the Islamic style.

The uncritical application of evolutionary theories to the study of art and architecture, however, led to numerous shortcomings. The architectural historian James Fergusson, for example, believed that the style of architecture employed by Muslims was "a pointed arch style, without pillars or entablatures, and with a system of ornamentation peculiar to itself."⁴ While these requirements were fulfilled by the Aqsa Mosque in Jerusalem, he could not accept that the Dome of the Rock was other than a Christian monument taken over by Muslims, and he reached the erroneous conclusion that it was the Church of the Holy Sepulchre built by Emperor Constantine (r. 306–37). Fergusson's mistake lay in his assumption that the architectural style of a monument was an accurate guide to the state of civilization and even the race of its builders.⁵

Many commentators, influenced by the idea of historical evolution, assumed that there was a Christian input throughout the entire tradition of Islamic art and architecture. A.C.T.E. Prisse d'Avennes, the author of *L'art arabe* (1877), pointed out that the architect of the mosque of Ibn Tulun was a Copt.⁶ Max Herz, the director of the Museum of Arab Art in Cairo, argued that a Byzantine architect was responsible for the Mamluk mosque of Sultan Hasan.⁷ However, this historical outlook also had a positive aspect in the late nineteenth and early twentieth centuries, as French, German, and Austrian scholars made inquiries into Islamic art and architecture without neglecting pre-Islamic, Coptic, Byzantine, and Armenian traditions.⁸

The emphasis of Middle Eastern archaeology throughout the nineteenth century was on retrieving ancient works of art to fill national and private collections in Europe. The excavations revealed the antiquity of man and brought to light unknown civilizations. This discovery of ancient civilizations greatly overshadowed curiosity in Islamic history, which was concerned with a way of life and system of beliefs that continued in existence over a large area of the world. In this respect, the development of Islamic archaeology had more in common with the archaeology of medieval and later Europe than with that of ancient times.

During the nineteenth century, however, numerous Islamic sites were identified. Such travelers as Robert Ker Porter, Charles Texier, Eugène Flandin and Pascal Coste, and Xavier Hommaire de Hell pointed out sites in their travel accounts and provided a range of information. The fact that many of these travelers participated in diplomatic missions or were sponsored by their governments was an early indication of how archaeology and political considerations became interrelated in the Middle East. A number of nineteenth-century archaeologists in the Middle East even pursued diplomatic careers. Austen Henry Layard, for example, who excavated at Nimrud and Nineveh, became the British under-secretary of state for foreign affairs (1852, 1861–66) and served as ambassador in Madrid (1869–77) and Istanbul (1877–80). This link between archaeology and political administration continued in the twentieth century. Gertrude Bell's activities in Iraq provide a particularly notable example.

Archaeological exploration was, of course, concomitant with colonial expansion. The French occupation of Algeria in 1830 and the Russian advances in Central Asia in the late nineteenth century brought archaeological inquiries in their wake. Following the Indian uprising in

1857–58, and the transfer of power from the East India Company to the Crown, the Archaeological Survey of India was established (1862), and under Viceroy and Governor-General George Curzon (r. 1898–1905) the legislature passed the Ancient Monuments Preservation Act (1904), which ensured the upkeep of monuments and protected against the traffic in antiquities.⁹ Elsewhere, archaeological exploration was encouraged by the formation of requisite organizations. Biblical archaeology in Palestine was promoted by the founding of such organizations as the Palestine Exploration Fund, the American Palestine Exploration Society, and the Deutsche Palästina-Vereins. In 1882, the year of the British occupation of Egypt, the Egyptian Exploration Fund was founded, and about the same time the French Mission Archéologique was established in Cairo. In 1894 William Flinders Petrie founded his own Egyptian Research Account, renamed in 1906 the British School of Archaeology in Egypt. Similar organizations and institutions were also set up in Egypt by the Swiss, Germans, and Austrians.

Although Islamic levels were encountered throughout the nineteenth century in excavations at pre-Islamic sites,¹⁰ they were frequently disregarded. Nevertheless, the recovery of ancient artifacts led to a greater awareness of an indigenous heritage in many regions. With the growth of nationalist sentiments, antiquities policies were introduced and museums founded. In Egypt an antiquities policy evolved under Auguste Mariette from 1858, primarily for the protection of pharaonic remains, but in 1881 the Committee for the Conservation of Monuments of Arab Art was founded and three years later the Museum of Arab Art opened in the mosque of al-Hakim in Cairo. In the Ottoman Empire an antiquities regulation that placed all archaeological excavations under the control of the Ministry of Education was put into effect in 1884 by Osman Hamdi, the director of the Archaeological Museum in Istanbul. Osman Hamdi also organized his own excavations, discovering in 1887 the Sidon sarcophagi.¹¹

Following on from the secular interpretation of the rise and development of Islamic civilization that grew out of the thought of Auguste Comte, there emerged in the late nineteenth century an interest in the evolution of religions, especially as the comparative method indicated that Christianity had a natural rather than a divine origin. Eugène Goblet d'Alviella in *La migration des symboles* (1891), for example, showed how religious symbols migrated from one culture to another, and that each religion preserved in its practices and symbols sur-

vivals of earlier religions. In addition, the social basis of religious beliefs and values was explored in William Robertson Smith's *Lectures on the Religion of the Semites* (1889; main ed. 1894), a comparative history of the Semitic religions in which the relationship between social organization, ritual, and belief was analyzed. By the 1890's, therefore, Western scholars were examining Islam as a defineable cultural and religious entity. It was at this juncture that the study of Islamic art and architecture gained momentum. The general comments expressed by travelers, historians, and philosophers began to be superseded by the opinions of specialists, some of whom would devote their entire career to studying the subject.

The new outlook was also marked by a change in terminology. The title of the first general exhibition devoted to Islamic art in Paris, for example, the Exposition d'Art Musulman of 1893, was controversial: collectors had expected the use of such terms as *art arabe* and *art persan*, which were in keeping with a classification of art based on races and nations, not *art musulman*.¹² The handbooks of Islamic art and architecture that were being published for the first time also showed this change in terminology. Albert Gayet's *L'art arabe* (1893) and *L'art persan* (1895) were superseded by Gaston Migeon and Henri Saladin's *Manuel d'art musulman* (1907). Henceforth, the study of Islamic art and architecture entailed the study of a culture and a religion, rather than the constituent races.

Inquiries into Islamic art and architecture broadened, and attention was increasingly directed to the early centuries of Islam, the period in which scholars could trace the formation and development of Islamic culture and discover its essence. Two scholars in particular were notable for their contributions to the field. Beginning in 1886, the epigrapher Max van Berchem studied architectural inscriptions in the Middle East and discovered that they provided a range of information, including details about construction, dates, and symbolic meanings.¹³ A pioneer role was also played by Friedrich Sarre, who was pointed in the direction of Islamic archaeology when Karl Humann (who was excavating Pergamon) advised him to study the monuments of medieval Anatolia. In 1895 Sarre organized a journey through Phrygia, Lycaonia, and Pisidia and in the following years he traveled in Asia Minor and Iran to discover architectural monuments and archaeological sites. He also examined the Islamic levels in the German excavations at Baalbek and Miletus.¹⁴

Important developments in Islamic studies also took

place among Russian scholars. Russian advances into Central Asia in the second half of the nineteenth century opened up new areas for exploration. In 1864 Russian forces captured the cities of Turkestan and Chirchik and, in 1866, Tashkent was annexed. In the war against Bukhara, Amir Muzzafar al-Din was forced to cede Samarqand and accept a Russian protectorate. By 1873 Khiva had also been conquered. Following in the wake of these military gains, Russian scientific expeditions were launched. Indeed, it was at Samarqand in 1885 that one of the first excavations at an Islamic site occurred.¹⁵

Among the first Islamic sites to be officially excavated by European archaeologists was the Qal'at of the Bani Hammad in Algeria, the Hammadid capital in the eleventh and twelfth centuries. Begun by Paul Blanchet in 1898, the excavation was continued in 1908 under General Léon de Beylié.¹⁶ Besides being conducted at a seminal moment, this excavation was notable for its political implications. Algeria, which had been declared in the French Constitution of 1848 an integral part of France, was a pivotal region in French imperial expansion. In 1881 the French empire in North Africa was enlarged when Tunisia was occupied and declared a protectorate. From 1889 the French launched a drive into the western Sudan, and in 1906 began the penetration of Morocco. The significance of the excavation of the Qal'at of the Bani Hammad, the Berber center "qui a joué le rôle de capitale de l'Afrique du Nord pendant tout le onzième siècle de notre ère,"¹⁷ was that it encouraged the creation of an independent identity for French North Africa that countered the claims of the Ottoman sultan as caliph of Islam as well as the sentiments of pan-Arabism. This interest in the "Berber capital" also reflected the French policy of separation between the Berber and Arab populations, which was practiced in Algeria and later in Morocco. Political motives may also have been at work when the ruins of Madinat al-Zahra in Spain, the residence of the Umayyad caliphs of Córdoba, were excavated by Ricardo Velásquez Bosco around 1910.¹⁸ A reawakening of the memory of al-Andalus had important ramifications at the time when Spain had political ambitions in Morocco. The French and Spanish protectorates in Morocco were established in 1912.

More significant for the development of Islamic archaeology, however, was the German involvement in the affairs of the Ottoman Empire prior to World War I. With the founding of the Deutsche Orient-Gesellschaft in 1898, which received considerable state support, German archaeologists were able to carry out a significant

number of excavations in Palestine and Mesopotamia. Between 1899 and 1914, for example, the sites of Babylon and Ashur were excavated by Robert Koldewey and Walter Andrae. Political and archaeological considerations became linked when archaeological privileges were extended to cover lands acquired for the Istanbul–Baghdad railway project,¹⁹ especially as Ashur lay on the route of this line.

In the early years of the twentieth century Islamic remains in Mesopotamia were explored by individuals and institutions of several nationalities. The French were active at several sites,²⁰ and Ernst Herzfeld and Friedrich Sarre made an important journey down the Euphrates and up the Tigris.²¹ Conrad Preusser, who was a member of the German Babylon expedition, photographed and made plans of Islamic shrines and churches, and Oskar Reuther examined the ruins of Ukhaidir.²² Voyages of exploration were also undertaken by the Czech geographer Alois Musil, who made a topographical study of the Middle Euphrates,²³ and by Gertrude Bell.²⁴

One site that Herzfeld and Sarre visited on their journey in 1907–8 was the Abbasid capital of Samarra, and in 1911 a German expedition headed by Herzfeld began to excavate the site, continuing at intervals until 1914. This excavation, the most important at an Islamic site prior to World War I, set an example of what could be achieved for many years to come. Herzfeld's career as an archaeologist began in 1903 when he participated in the Ashur excavation under the Deutsche Orient-Gesellschaft. Equipped with an architectural degree from Charlottenburg which enabled him to visualize buildings and understand their construction, and a doctoral thesis on the early Achaemenid palace at Pasargadae (University of Berlin, 1907), he put his training to good use, involving himself at the outset with Islamic as well as pre-Islamic archaeology.²⁵ Herzfeld first met Sarre in 1905, and when they undertook their journey of 1907–8, traveling from Istanbul to the Persian Gulf via Aleppo and Baghdad, they looked for an Islamic site suitable for excavation. The choice of Samarra was later described by Herzfeld as being Sarre's. The ruins of Samarra had been known to European scholars since the mid-nineteenth century, and in the summer of 1910 the first soundings were made by the French architect Henri Viollet, whose investigations were limited to the Dar al-Khilafa, the caliph's palace, where he opened a number of trenches. The following year Herzfeld and Sarre commenced their work, with significant results. During World War I the finds from Samarra remained in Iraq

packed in wooden cases, but after the British occupation they were removed to England.²⁶

In Iran archaeological inquiry was dominated from the 1880's to 1931 by the French, who had purchased the exclusive rights of excavation. From 1884 to 1886 the ruins of Biblical Susa, the Elamite capital, were explored by Marcel Dieulafoy with the backing of the French government and the sanction of Nasir al-Din Shah (r. 1848–96). Dieulafoy began to excavate in early 1885, but returned to France during the summer because the firmans allowing excavation had been withdrawn. After the intervention of Dr. Tholozan, the Shah's physician in Tehran who acted as an intermediary, work was resumed in late 1885, with the excavations concluded the following year. In 1891 Susa was visited by Jacques de Morgan who persuaded the French government about the importance of the site. The archaeological concessions offered by Iran to the French in 1885 were renewed in 1895; at the same time the French Legation gave the Shah 10,000 tumans and presented the Sadr-i A'zam with a piece of tapestry. Mortimer Durand, the British minister in Tehran, sent a dispatch with the news to Lord Salisbury on 12 February 1896, with the comment that "the formal sale of such exclusive rights in perpetuity seems unfortunate in the interests of antiquarian knowledge."²⁷ In 1897 the D el egation Scientifique Fran aise en Perse was created by the French government, and under the leadership of de Morgan was taken to Susa. In 1900 Muzaffar al-Din Shah (r. 1896–1907) signed a treaty while visiting Paris to the effect that all artifacts recovered at Susa could be sent to France, provided that compensation was made for gold and silver objects. De Morgan's work at the site continued, and in 1908 his assistant Roland de Mecquenem took over as director of the project. Aside from an interruption of fieldwork during World War I, de Mecquenem continued at the site until 1939.²⁸

In the search for portable antiquities that could easily be carried to museums, archaeologists were encouraged to excavate as large an area as possible with the funds available. This approach to work characterized the excavations at Susa under de Morgan and de Mecquenem. Details of the horizontal and vertical relationships among objects were lost, and the chronological ordering of materials became dependent on typologies that were barely supported by stratigraphy. The emphasis on objects of museum quality also dictated that only intact or virtually intact pieces were recorded. A great number of sherds and fragments of other artifacts in fact went unrecovered. Yet despite this approach, de Morgan, a

mining engineer by training, was one of the first archaeologists in the Middle East to argue that an expedition should have wider interests than discovering human remains, architecture and artifacts; archaeologists, he suggested, should also investigate geology, climate, geography, plants, and animals.²⁹ A similar interest in the natural environment was to inspire Raphael Pumpelly and Hubert Schmidt who excavated the prehistoric site of Anau in Russian Turkestan in the early twentieth century.³⁰

The new sponsorship of Islamic archaeology was not unrelated to the contemporary aesthetic and commercial re-evaluation of Islamic art in the West. The burgeoning trade in Islamic artifacts and the rise in the number of clandestine excavations spurred the development of archaeological inquiries. The first wave of pottery unearthed at Raqqa, for example, came to light in 1896.³¹ As Gertrude Bell pointed out after visiting Raqqa in 1909:

The whole of the two areas of ruin are strewn with potsherds of the Mohammadan period, and over the greater part of the walled city the ground is honeycombed with irregular holes and trenches, the excavations of peasants in search of the now celebrated Rakka ware. A few years ago their labours were rewarded by a large find of unbroken pieces, many of which made their way through the hands of Aleppo dealers to Europe, and though such a stroke of good fortune is rare, perfect specimens are occasionally unearthed, and I saw a considerable number, together with one or two fragments of exquisite glass embossed with gold, during the two days I spent at Rakka. In some instances the original factories and kilns have been brought to light. . . .³²

Another site known to yield items was Fustat, founded in Egypt in 642 as the seat of a military garrison for Arab troops. It also became the domain of treasure hunters. From the standpoint of Islamic archaeology, the site was more fortunate than those in which the Islamic levels stood in the way of pre-Islamic remains. However, Fustat's proximity to the capital and its suburb, old Cairo, meant that after the abandonment of most of the quarters of Fustat in the late eleventh century the site served as a source for building materials, as well as a large dump, a location for industry, and a space for squatters. Beginning in the nineteenth century, Fustat was also a source of agricultural fertilizer. Among those who went to Fustat to search for Islamic remains was the scholar and dealer F.R. Martin, who excavated and removed several thousand fragments in the winter of 1896.³³ The treasure hunters, builders, and fertilizer contractors, whose activities were often combined, did

much damage to the remains of the medieval city and disturbed the stratigraphy. Their activities did, however, encourage an official excavation. In 1912 work at the site was commenced by the Museum of Arab Art. ^cAli Bahgat, who directed the enterprise with little funding, organized the fertilizer diggers and put them under the supervision of guards. Through their industry an important portion of the town was unearthed and a number of soundings were made. During the period of excavation, which ended around 1924, thousands of objects, some of considerable value, were recovered for the Museum of Arab Art, although no stratigraphy or location for any of the major finds was reported, a failure recognized by other archaeologists at the time. In subsequent decades some smaller excavations were undertaken in various parts of the site, but few were published, and it was not until 1964 that a new large-scale scientific excavation began.³⁴

In the early years of the twentieth century Islamic items were also sought in Iran at such sites as Rayy, Sultabad, and Veramin.³⁵ Émile Vignier, the brother of the Parisian dealer Charles Vignier, undertook commercial digging in Iran from 1910 to 1914.³⁶ Some sites such as Rayy, Sirjan, and Sava were ruined almost beyond recovery by clandestine excavations. At Rayy, silks dating to the tenth and eleventh centuries were removed from graves in the 1920's.³⁷ In 1926 excavations were also carried out at Gurgan by the governor, General Zahedi, who recovered pottery, metalwork, and glass.³⁸ These activities and others indicated the need for organized archaeological expeditions to be sent quickly into the field.

Official excavations of Islamic sites in the Iranian world, however, began appreciably later than in western Islam. From the 1920's archaeological excavations were directed at Sasanian sites, such as the German-American expedition to Ctesiphon (1928-32), the French expedition to Bishapur (1935-41), and the American missions to Qasr-i Abu Nasr (1932-35) and Istakhr (1935-37). When Arthur Upham Pope promoted Iranian art in the 1930's as director of the American Institute for Iranian Art and Archaeology, there was also an important American mission at Persepolis, led by Herzfeld (1931-35) and Erich F. Schmidt (1935-39). Islamic items, meanwhile, were recovered in the 1930's in excavations at Rayy and Nishapur. The excavations carried out at Rayy under Schmidt from 1934 to 1936 were sponsored by the Museum of Fine Arts in Boston and the Mrs. William Boyce Thompson Foundation of the University Museum in Philadelphia.³⁹ The site of Nishapur, chosen by Walter Hauser, Joseph M. Upton, and Charles K. Wilkinson

of the Iranian Expedition of the Metropolitan Museum of Art, was excavated from 1935 to 1940, with a final session in 1947.⁴⁰

The choice of both of these sites was determined by an awareness that they had been flourishing centers for the arts and that fine pieces could be obtained for American museums. However, the excavations also provided an opportunity to remedy several decades of confusion caused by clandestine digging. The term "Nishapur" ware, for example, which had been adopted by collectors and museums, was in reality no more than a label of convenience for dealers handling a wide range of pottery, the exact origin of which remained secret or uncertain.

Aerial photography was gradually introduced for the exploration of Islamic sites. This branch of photography developed during World War I when British, French, and German forces began photographing the terrain of the Middle East for the purpose of military observation. It was soon realized that aerial photographs revealed aspects of the terrain, such as the outlines of ancient roads and buildings, that could not be seen by the observer on the ground. In the Islamic sphere, the value of aerial photographs was quickly recognized by K.A.C. Creswell.⁴¹ In order to examine the site of Raqqa, for example, he had photographs made by the French 39th Regiment of Aviation, 7th Squadron.⁴² Between 1935 and 1937 Schmidt, accompanied by his wife, made numerous flights over Iran taking aerial photographs for archaeological purposes. Their principal aim was to explore parts of the country that were archaeologically unknown and document important sites. Seated in a Waco cabin biplane with an F.I.K. 25 camera, they took their photographs in the first two hours after sunrise, when features on the ground stood out in relief. Among their photographs, those of the mosque at Sava and the plain of Rayy show landscapes riddled with holes made by treasure hunters.⁴³

The dismemberment of the Ottoman Empire and the emergence of the Arab provinces as separate states in the twentieth century led to a change in the conduct of foreign archaeological expeditions. **Antiquities laws were passed, departments of antiquities created** (at first under foreign directors), and **national museums founded**. These measures gave greater protection to archaeological sites and regulated the conduct of excavations. But as a consequence there was a change of attitude in the Western world concerning the purpose and sponsorship of archaeological excavations in Islamic lands. Increasingly museums were replaced by national schools or institutes

as the main sponsors of research. Particularly noteworthy in this respect was the involvement of the Oriental Institute in Chicago, which reflected the growing prestige of American scholars in Oriental studies.

In Palestine under a British mandate, a Department of Antiquities was established in 1920, headed by John Garstang. Three years later a Department of Antiquities opened in Amman, which facilitated exploration and excavation in Transjordan. In Syria under a French mandate, meanwhile, a Service des Antiquités was created. Although the emphasis on Biblical archaeology continued in these regions, once such departments had been established they also served the advancement of Islamic archaeology. The other significant factor was the presence of such scholars as Jean Sauvaget at the Institut Français at Damascus, Robert Hamilton in Palestine, and Creswell in Cairo, who in 1933 set up the Islamic section of the Institute of Archaeology at Cairo University. This combination of factors led to important excavations taking place in the 1930's at Khirbat al-Mafjar (1934-48)⁴⁴ and Qasr al-Hayr West (1936-38),⁴⁵ continuing after independence with work at Qasr al-Hayr East (1964-72).⁴⁶

In Turkey an antiquities law was passed in 1924 to protect archaeological remains and sites. From the 1930's to 1955 Albert Gabriel directed the Institut Français d'Archéologie in Istanbul and studied the Islamic monuments of medieval Anatolia, Iraq, and Iran.⁴⁷ After World War II, Seton Lloyd and David Storm Rice recorded some of the major Seljuq monuments in Turkey. They surveyed the ruins of the fortress at Alanya⁴⁸ and studied Seljuq remains in the vicinity. Both Lloyd and Rice also excavated at Harran in southeastern Anatolia: a preliminary survey in 1951 was followed by two expeditions in 1956 and 1959 when Rice elucidated the structural history of the Great Mosque.⁴⁹

The preservation of antiquities in Iraq became a matter of importance after a British-Indian army occupied Baghdad in 1917. Gertrude Bell, as Oriental Secretary to Sir Percy Cox, assumed responsibility for creating a Department of Antiquities, and legislation was drawn up for the purpose. Both the newly formed department directed by Bell and a small museum that she founded were temporarily accommodated in a single room in the Serai. Her antiquities law stipulated that foreign expeditions were not permitted to operate in the country unless constituted on prescribed lines, and unless they included such experts as an epigrapher, architect, and photographer. Such a party would be required to obtain an excavating permit for a site, the exact limits of which were previously determined. The site could then be

excavated only in keeping with up-to-date methods. Although all antiquities were in the first place the property of the state, at the end of a season's work a representative collection of objects would be assigned to the excavator in recompense for the work and expense. The remainder would be added to the national collection.⁵⁰

This law remained in force for a dozen years. By the 1930's, however, the presence in Iraq of a foreign director of antiquities and the division of antiquities with foreign missions were causing animosity.⁵¹ When Sati al-Husri was appointed Director of Antiquities in 1932 at the time of Iraqi independence, he revised Bell's antiquities law to the disadvantage of foreign archaeologists. The change in attitude towards foreign expeditions in Iraq had an immediate impact: Leonard Woolley, for example, left Ur, where he had worked since 1922. The new outlook at the Iraqi Department of Antiquities also led to Iraqi funds being directed towards Islamic archaeology, particularly the restoration of Islamic monuments in Baghdad and the creation of an Islamic museum. The ruins of the old Abbasid palace in the Serai were restored, as were other buildings dating from Abbasid times. Creswell was asked by the Iraqi Department of Antiquities to indicate two Islamic sites that would repay excavation, and he suggested the Umayyad capital at Wasit and the seventh-century city of Kufa.⁵² By the late 1930's, two large excavations by the Iraqi government were in progress: at Samarra, where private mansions were excavated and a large amount of stucco ornament accumulated,⁵³ and at Wasit, where the mosque with its adjacent *dār al-imāra* was excavated. For this work newly trained Iraqi archaeologists such as Fuad Safar were employed.⁵⁴ Kufa, meanwhile, where a few traces of the early buildings were visible, was declared an archaeological site in 1938 and excavations begun. Sati al-Husri remained in charge of the Iraqi Department of Antiquities until 1941. During World War II foreign archaeological involvement in Iraq was further curtailed and despite the resumption of excavations by foreign expeditions after the war, the initiative was no longer theirs. In future the most productive sites were allocated by the authorities to Iraqi archaeologists.⁵⁵

In Iran an antiquities law was passed in 1930 and, shortly after, the French monopoly came to an end. In accordance with the antiquities law half of the material recovered at the Rayy and Nishapur excavations was given to the Iranian government. During the 1930's archaeology in Iran remained relatively archaic in its methods and theory. Under the patronage of Reza Shah Pahlevi (r. 1926–41), however, André Godard became director-

general of the Department of Antiquities and founded the National Archaeological Museum (Iran Bastan).⁵⁶ He also initiated the documentation of both pre-Islamic and Islamic monuments and remains in Iran. As we have seen, the only real rivals of the French at this time were the Americans.

After World War II there was a considerable growth in archaeological inquiry in Iran. More fieldwork was carried out there in the twenty years between 1958 and 1978 than had been undertaken in the previous seventy years. The French mission returned to Susa under the direction of Roman Ghirshman (1946–67), followed by Jean Perrot (1967–90). The American presence in Iran remained strong and, after 1958, there were expeditions from Great Britain, Japan, Italy, West Germany, Denmark, Belgium, Canada, and Austria; the German Archaeological Institute and the British Institute of Persian Studies were founded in 1960 and 1961 respectively. By 1960 the Iranian archaeological service was staffed entirely by Iranians. A program in archaeology was begun at the University of Tehran and in the early 1970's the Iranian Center for Archaeological Research was founded.⁵⁷ The importance of archaeology for understanding long-distance maritime trade and the nature of medieval Iranian society was demonstrated by excavations at Siraf on the Gulf coast between 1966 and 1973,⁵⁸ and then continued by Iranian archaeologists. Between 1970 and 1977, M.Y. Kiani excavated at the Islamic city of Gurgan.⁵⁹ New intellectual priorities and the increasing costs of excavation in the 1970's, however, were reflected by an increase of surveys, although eastern Iran still remained comparatively neglected. Scholars also worked on unpublished material produced in the earlier excavations at Nishapur, Rayy, and Istakhr.⁶⁰

Since the early twentieth century the geographical scope of Islamic archaeology has also been steadily enlarged with the inclusion of areas hitherto regarded as peripheral. In sub-Saharan Africa the historical importance of written Arabic sources may have led to a bias in favor of sites that had Islamic communities. Thus, the powerful empires that existed in the Sudanese belt during the Middle Ages — ancient Ghana, the Mali empire, and the Songai empire — began to attract attention. The capital of ancient Ghana, for example, thought to have been at Kumbi Saleh in southern Mauritania, was partially excavated.⁶¹ Islamic sites along the East African coast were also excavated, by James Kirkman, Neville Chittick, and others.⁶² Here a medieval Arab colonial culture was encountered, with Persian, Bantu, Somali and Indian elements. The excavations in

East Africa, like that at Siraf in Iran, also indicated the nature of trade across the Indian Ocean.

A general lament at the unwillingness of Middle Eastern archaeology to adopt scientific methods has often been voiced during the twentieth century. Comments have also been made about poorly trained archaeologists and the snare of using cheap local labor with little supervision. Mortimer Wheeler fired a number of salvos in this direction,⁶³ although his own attitude towards the Islamic levels during his excavation at Balkh in the 1930's left much to be desired.⁶⁴ Perhaps the greatest shortcoming of Islamic archaeology has been its unsatisfactory record of publication. A further area of failure, but one usually outside the control of archaeologists, has been the lack of archaeological involvement in restoration projects.⁶⁵ There has also been a tendency for governments and other commentators to use archaeology for the purpose of bolstering national identities.

Although archaeology originally derived its significance through the historical disciplines, in recent times the study of history has become more dependent on archaeology. A symptom of this change was the emergence of *Annales* history, with its call for interdisciplinary scholarship. Both historians and archaeologists were encouraged to relate data on material culture to new areas of historical inquiry. An early example of interdisciplinary work in Islamic archaeology was the survey conducted by R.M. Adams in 1957–58 into the changing pattern of land use on the Diyala plains in Iraq over six millennia.⁶⁶ Among historians, Maurice Lombard in the 1970's used data from Islamic archaeology when writing about coinage and trade in metals and textiles in the Arab world and Europe prior to the twelfth century.⁶⁷ The history of medieval Khurasan has also been reexamined in the light of archaeological discoveries.⁶⁸ A further interdisciplinary approach has emerged from linking anthropology with archaeology.⁶⁹ But most important of all is the freedom that Islamic archaeology has recently gained over the strictures once imposed by political history. It is now recognized that the emphasis on excavating sites of significance for political history may give neither a clear understanding of local or subject communities nor of the workings of a domestic economy. There has also developed an awareness that the use of precise historical dates to define archaeological periods can be misleading.⁷⁰ Increasingly, then, the Islamic archaeologist has found the freedom to create new historical contexts.

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NOTES

1. One of the first organized excavations of an Islamic site occurred in 1885 at Samarqand: J.M. Rogers, "From Antiquarianism to Islamic Archaeology," *Quaderni dell'Istituto Italiano di Cultura per la R.A.E.*, n.s. 2 (1974): 51. In addition to Rogers' article, two other essays are invaluable for introducing some of the themes behind the study of Islamic archaeology: Richard Ettinghausen, "Islamic Art and Archaeology," in *Near Eastern Culture and Society*, ed. T. Cuyler Young (Princeton, N.J., 1951), pp. 17–47; Oleg Grabar, "Islamic Art and Archaeology," in *The Study of the Middle East: Research and Scholarship in the Humanities and the Social Sciences*, ed. L. Binder (New York, 1976), pp. 229–63.
2. In the late eighteenth century, the term "Orientalism," and *orientaliste* in France, had entered common usage. See Maxime Rodinson, "The Western Image and Western Studies of Islam," in *The Legacy of Islam*, ed. J. Schacht and C.E. Bosworth (Oxford, 1974).
3. See Albert Hourani, "Islam and the Philosophers of History," *Middle Eastern Studies* 3, no. 3 (1967); esp. pp. 246–48.
4. James Fergusson, *An Essay on the Ancient Topography of Jerusalem* (London, 1847), p. 110.
5. James Fergusson, *The Illustrated Handbook of Architecture* (London, 1855), 1: liii.
6. A.C.T.E. Prisse d'Avennes, *Arab Art*, trans. J.I. Erythraspis (London and Paris, 1983), p. 228.
7. Max Herz, *La mosquée du Sultan Hassan au Caire* (Cairo, 1899).
8. For the nature of Central European scholarship in the early twentieth century, see Robert Hillenbrand, "Creswell and Contemporary European Scholarship," *Muqarnas* 8 (1991): 23–35.
9. See N.P. Chakravarti, "The Story of Indian Archaeology," in *Archaeology in India*, Bureau of Education, India, Publication no. 66 (Delhi, 1950), pp. 1–15; Sourindranath Roy, "Indian Archaeology from Jones to Marshall 1784–1902," *Ancient India* 9 (1953): 4–28; A. Ghosh, "Fifty Years of the Archaeological Survey of India," *Ancient India* 9 (1953): 29–52; K. Rose, "Lord Curzon and the Preservation of Indian Monuments," *Apollo* 92 (1970): 144–45; Dilip K. Chakrabarti, *A History of Indian Archaeology from the Beginning to 1947* (Delhi, 1988).
10. Specimens of Islamic pottery were found, for example, in the excavation by J.T. Wood at Ephesus (1863–74). The French excavations at Susa and the German excavations at Baalbek and Miletus also recovered Islamic items.
11. Mehmet Önder, *The Museums in Turkey and Examples of the Masterpieces in the Museums*, trans. P.M. Butler (Ankara, 1977), p. 8; S.J. Shaw and E.K. Shaw, *History of the Ottoman Empire and Modern Turkey*, 2 vols. (Cambridge, 1976–77), 2: 111. For Osman Hamdi, the painter, museum director, and archaeologist, see Mustafa Cezar, *Sanatta Batıya açılış ve Osman Hamdi* (Istanbul, 1971); *Müzeci ve ressam Osman Hamdi Bey* (Istanbul, 1987).
12. Georges Marye, "L'exposition d'art musulman," *Gazette des Beaux-Arts* 10 (1893): 490.
13. Max van Berchem persuaded the French Academy to sponsor a series on Arabic inscriptions, the *Matériaux pour un Corpus Inscriptionum Arabicarum*, which was published from 1896 onwards. For Max van Berchem, see K.A.C. Creswell, "In Memoriam — Max van Berchem," *Journal of the Royal Asiatic Society* (1963): 117–18; Max van Berchem, *Opera Minora*, 2 vols. (Geneva, 1978).
14. For Friedrich Sarre, see J.H. Schmidt, ed., *Friedrich Sarre Schrif-*

- ten zum 22. Juni 1935 (Berlin, 1935); Ernst Herzfeld, Obituary, *Ars Islamica* 11–12 (1946): 210–12; Arthur Upham Pope, ed., *A Survey of Persian Art*, 14 vols. (London, 1964–67), 14: 0/i–ii.
15. See Rogers, "From Antiquarianism to Islamic Archaeology," pp. 50–55. For an overview of Islamic archaeology in Central Asia, see G.A. Pugachenkova and E.V. Rtveladze, "Archeology, 7," *Encyclopaedia Iranica*, vol. 2 (London and New York, 1987), pp. 322–26.
 16. See Paul Blanchet, "Rapport sur les travaux exécutés à la Kalaa des Beni Hammad," *Recueil des Notices et Mémoires de la Société Archéologique de Constantine* 32 (1898): 97–116; "Description des monuments de la Kalaa des Beni Hammad . . . avec notes de H. Saladin," *Nouvelles Archives des Missions Scientifiques* 17, no. 1 (1908); Léon M.E. de Beylié, *La Kalaa des Beni Hammad* (Paris, 1909); Georges Marçais, *Les poteries et faïences de la Qal'a des Beni Hammad (XIe siècle)* (Constantine, 1913).
 17. De Beylié, *La Kalaa des Beni Hammad*, p. 1.
 18. See Ricardo Velásquez Bosco, *Arte del Califato de Córdoba: Medina Azzahra y Alamiyya* (Madrid, 1912). For the growth of Islamic archaeology in Spain, see Margarita Díaz-Andreu, "Islamic Archaeology and the Origin of the Spanish Nation," in *Nationalism and Archaeology in Europe*, ed. M. Díaz-Andreu and T. Champion (London, 1996), pp. 68–89.
 19. Maybelle K. Chapman, *Great Britain and the Bagdad Railway 1888–1914* (Northampton, Mass., 1948), p. 43.
 20. See Louis Massignon, *Mission en Mésopotamie*, 2 vols. (Cairo, 1910–12). For the work of Léon de Beylié and Henri Viollet, see n. 26 below.
 21. See Friedrich Sarre and Ernst Herzfeld, *Archäologische Reise im Euphrat- und Tigris-Gebiet*, 4 vols. (Berlin, 1911–20).
 22. See Conrad Preusser, *Nordmesopotamische Baudenkmäler altchristlicher und islamischer Zeit* (Leipzig, 1911); Oskar Reuther, *Ocheïdir, nach Aufnahmen von Mitgliedern der Babylon-Expedition der Deutschen Orient-Gesellschaft* (Leipzig, 1912).
 23. See Alois Musil, *The Middle Euphrates: A Topographical Itinerary* (New York, 1927).
 24. See Gertrude L. Bell, *Amurath to Amurath* (London, 1911); *Palace and Mosque at Ukhaidir: A Study in Early Mohammodan Architecture* (Oxford, 1914).
 25. For Ernst Herzfeld, see George C. Miles, "The Writings of Ernst Herzfeld," *Ars Islamica* 7 (1940): 82–92 (with supplement in *Ars Islamica* 15–16 (1951): 266–67; Richard Ettinghausen, "Ernst Herzfeld 1879–1948," *Ars Islamica* 15–16 (1951): 261–66; *Archaeologica Orientalia in Memoriam Ernst Herzfeld*, ed. George C. Miles (Locust Valley, N.Y., 1952).
 26. Other remains from Samarra went to Istanbul. The reports of Herzfeld and Sarre's excavations were published as *Die Ausgrabungen von Samarra* (Berlin, Hamburg, 1923–48). See also Léon M.E. de Beylié: *Prome et Samara: Voyage archéologique en Birmanie et en Mésopotamie* (Paris, 1907); Henri Viollet, *Description du palais de Al-Moutasim, fils d'Haroun-al-Raschid à Samara* (Paris, 1909); *Fouilles à Samara en Mésopotamie: Un palais musulman du IXe siècle* (Paris, 1911).
 27. London, British Museum, Original Letters and Papers, 1896: copy of the despatch from Mortimer Durand to Lord Salisbury, dated Tehran, 12 February 1896.
 28. See P.O. Harper, J. Aruz, and F. Tallon, eds., *The Royal City of Susa: Ancient Near Eastern Treasures in the Louvre* (New York, 1992), pp. 16–22.
 29. T.C. Young, "Archeology, 1," *Encyclopaedia Iranica*, vol. 2 (London and New York, 1987), p. 286.
 30. Glyn Daniel, *A Short History of Archaeology* (London, 1981), p. 134. See Raphael Pumpelly, ed., *Explorations in Turkestan, Expedition of 1904. Prehistoric Civilizations of Anau: Origins, Growth and Influence of Environment*, 2 vols. (Washington, D.C., 1908).
 31. Dikran Khan Kelekian, *The Kelekian Collection of Persian and Analogous Potteries 1885–1910* (Paris, 1910), Preface.
 32. Gertrude L. Bell, *Amurath to Amurath*, 2nd ed. (London, 1924), pp. 59–60.
 33. Fredrik R. Martin, *The Persian Lustre Vase in the Imperial Hermitage at St. Petersburg and Some Fragments of Lustre Found near Cairo at Fostât* (Stockholm, 1899), pp. 4–5.
 34. Wladyslaw B. Kubiak, *Al-Fustat: Its Foundation and Early Urban Development* (Cairo, 1987), pp. 29–30; Donald M. Reid, "Cultural Imperialism and Nationalism: The Struggle to Define and Control the Cultural Heritage of Arab Art in Egypt," *International Journal of Middle East Studies* 24 (1992): 67 (and n. 50 for sources on 'Ali Bahgat). See also 'Ali Bahgat and Albert Gabriel, *Fouilles d'al-Foustât* (Paris, 1921); 'Ali Bahgat and F. Massoul, *La céramique musulmane de l'Égypte* (Cairo, 1930).
 35. Charles Vignier and Roger Fry, "The New Excavations at Rhages," *Burlington Magazine* 25 (1914): 211–18; Kelekian, *The Kelekian Collection of Persian and Analogous Potteries*, Preface.
 36. A.S. Melikian-Chirvani, "The Aesthetics of Islam," in *Treasures of Islam*, ed. Toby Falk (London, 1985), p. 20, n. 4.
 37. See Gaston Wiet, *Soieries persanes* (Cairo, 1948).
 38. M.Y. Kiani, *The Islamic City of Gurgan* (Berlin, 1984), p. 9.
 39. For Rayy, see the articles by Erich F. Schmidt in the *Bulletin of the University of Pennsylvania Museum* 5–6 (1935–36), and "Excavations at Rayy," *Ars Islamica* 2 (1935): 139–41; A.R. Hall, "The Persian Expedition 1934," *Bulletin of the Museum of Fine Arts, Boston* 33 (1935): 55–59.
 40. Reports of the excavations at Nishapur appeared in the *Bulletin of the Metropolitan Museum of Art* 31 (1936): 176–80; 32 (1937): 3–36; 33 (1938): 3–25; and 37 (1942): 83–104. After the death of Walter Hauser and a change in Joseph Upton's career, Charles Wilkinson was left responsible for the publication of the results of the excavation. This project commenced with Charles K. Wilkinson, *Nishapur: Pottery of the Early Islamic Period* (New York, [1973]), followed by James Allan, *Nishapur: Metalwork of the Early Islamic Period* (New York, 1982), and Charles K. Wilkinson, *Nishapur: Some Early Islamic Buildings and Their Decoration* (New York, 1986).
 41. For K.A.C. Creswell, see *Studies in Islamic Architecture in Honour of Professor K.A.C. Creswell* (Cairo, 1965); the obituary by Klaus Brisch in *Kunst des Orients* 9 (1973–74): 176–82; and by Robert W. Hamilton in *Proceedings of the British Academy* 60 (1974): 3–20, the latter reprinted in *Muqarnas* 8 (1991): 128–36 (issue entitled *K.A.C. Creswell and His Legacy*).
 42. K.A.C. Creswell, *A Short Account of Early Muslim Architecture* (Harmondsworth, 1958), p. 186.
 43. Erich F. Schmidt, *Flights over Ancient Cities of Iran* (Chicago, 1940), pp. 3–6 and plates 30, 34.
 44. See Robert W. Hamilton, *Khirbat al-Majfar: An Arabian Mansion in the Jordan Valley* (Oxford, 1959); *Walid and His Friends: An Umayyad Tragedy* (Oxford, 1988). A further aspect of Hamilton's archaeological investigations was his seminal study of a single monument, *The Structural History of the Aqsa Mosque: A Record of Archaeological Gleanings from the Repairs of 1938–1942* (Jerusalem, 1949).
 45. See Daniel Schlumberger, "Les fouilles de Qasr el-Hair el-

- Gharbi," *Syria* 20 (1939): 195-238, 324-73; "Deux fresques omeyyades," *Syria* 25 (1946-48): 86-102; *Qasr el-Hair el-Gharbi* (Paris, 1986).
46. See Oleg Grabar, Renata Holod, James Knustad, and William Trousdale, *City in the Desert: Qasr al-Hayr East*, 2 vols. (Cambridge, Mass., 1978).
47. For Albert Gabriel, see the obituary in *Académie des Inscriptions et Belles-Lettres: Comptes Rendus des Séances* (January 1973), pp. 1-2. See also Albert Gabriel, *Monuments turcs d'Anatolie*, 2 vols. (Paris, 1931-34); *Voyages archéologiques dans la Turquie orientale*, 2 vols. (Paris, 1940); *Une capitale turque: Brousse, Bursa*, 2 vols. (Paris, 1958).
48. See Seton Lloyd and David Storm Rice, *Alanya* (ʿAlāʾiyya) (London, 1958). For David Storm Rice, see J.B. Segal's obituary in *Bulletin of the School of Oriental and African Studies* 25 (1962): 666-71; and Ralph H. Pinder-Wilson's in the *Journal of the Royal Asiatic Society* (1963): 121-23.
49. Seton Lloyd, *The Interval: A Life in Near Eastern Archaeology* (Faringdon, Oxon, 1986), pp. 145-47.
50. Seton Lloyd, *Foundations in the Dust: A Story of Mesopotamian Exploration* (London, 1947), pp. 205-6.
51. See C. Leonard Woolley, "Antiquities Law, Iraq," *Antiquity* 9 (1935): 84-88.
52. Creswell, *A Short Account of Early Muslim Architecture*, p. 41.
53. See *Excavations at Samarra 1936-1939*, pt. I: *Architecture and Mural Decoration*, Government of Iraq, Department of Antiquities (Baghdad, 1940).
54. See Fuad Safar, *Wasit: The Sixth Season's Excavations* (Cairo, 1945). Safar was a graduate of the Oriental Institute in Chicago.
55. Lloyd, *The Interval*, pp. 75-76, 176. See also David Oates and Joan Oates, "The Near East: A Personal View," in *Antiquity and Man: Essays in Honour of Glyn Daniel*, ed. John D. Evans, Barry Cunliffe and Colin Renfrew (London, 1981), pp. 30-31.
56. For André Godard, see Henri Massé's obituary, *Journal Asiatique* 252 (1965): 415-17.
57. Young, "Archeology, 1," p. 284. For an overview of Islamic archaeology in Iran, see Robert Hillenbrand, "Archeology, 6," *Encyclopaedia Iranica*, vol. 2 (London and New York, 1987), pp. 317-22.
58. Excavation reports from Siraf were published by David Whitehouse in *Iran* 6-12 (1968-74). See also idem, "Islamic Glazed Pottery in Iraq and the Persian Gulf," *Annali: AION* 39 (1979): 45-61; *Siraf III: The Congregational Mosque and Other Mosques from the Ninth to the Twelfth Centuries* (London, 1980); N.M. Lowick, *Siraf XV: The Coins and Monumental Inscriptions* (London, 1985); E.J. Keall and R.B. Mason, "The ʿAbbasid Glazed Wares of Siraf and the Basra Connection: Petrographic Analysis," *Iran* 29 (1991): 51-66.
59. See M.Y. Kiani, *The Islamic City of Gurgan* (Berlin, 1984).
60. See E.J. Keall, "The Topography and Architecture of Medieval Rayy," in *Akten des VII. Internationalen Kongresses für Iranische Kunst und Archäologie* [1976] (Berlin, 1979), pp. 537-44; Donald Whitcomb, "The City of Istakhr and the Marvdasht Plain," *ibid.*, pp. 363-70; for Nishapur, see n. 40 above.
61. E.g. see P. Thomassey and R. Mauny, "Campagne de fouilles à Koumbi Saleh," *Bulletin de l'Institut Français d'Afrique Noire* (1951): 438-62; "Campagne de fouilles à Koumbi Saleh (Ghana?)," *ibid.*, (1956): 117-40.
62. E.g. see James Kirkman, *The Arab City of Gedi: Excavations at the Great Mosque* (Oxford, 1954); Neville Chittick, "An Archaeological Reconnaissance of the Southern Somali Coast," *Azania* 4 (1969): 115-30; *Kilwa: An Islamic Trading City on the East African Coast*, 2 vols. (Nairobi, 1974); "An Archaeological Reconnaissance in the Horn: The British-Somali Expedition, 1975," *Azania* 11 (1976): 117-33; *Manda: Excavations at an Island Port on the Kenya Coast* (Nairobi, 1984).
63. "They have generally gone East as class-room or museum orientalists, with the bare knowledge of an ancient language or of more-or-less classified exhibits and *disjecta* but without practical experience of the field-problem. And, once there, they are generally lost. An excavator may work for years on a remote Asiatic site without being able to discuss his methods and results *on the spot* with competent critics. In the second place, Eastern excavation has in the past tended to attract relatively liberal endowment, either through the natural lure of a Biblical context, or of association with famous and impressive civilizations, or of the general 'romance' of the Orient, or even of the East as a winter-tourist objective to wealthy Western benefactors. This liberal endowment, coupled with the relatively cheap cost of native labour, has encouraged wholesale mass-excavation, rewarded by extensive building-plans and ample finds which gratify the patron but are far beyond the capacity of anything approaching exact record." Mortimer Wheeler also commented on the nature of the sites: "... the common use of mud-brick for building and the impact of extreme weather-conditions have often (though not always) combined to deepen the strata of an Eastern site, so that their over-all depth may be at least five times as great as on a closely interleaved British site. It is understandable that these deep strata encourage proportionately drastic methods of excavation which tend to outpace supervision. A ruined mud-brick building will dissolve into several feet of almost uniform deposit; desert winds will cover it with a thick mantle of undifferentiated sand; torrential rains will transfer material in bulk and may artificially intermix and level it" (Mortimer Wheeler, *Archaeology from the Earth* [Harmondsworth, 1964], pp. 35-36).
64. Rogers, "From Antiquarianism to Islamic Archaeology," pp. 61-63.
65. Grabar, "Islamic Art and Archaeology," p. 238. For restoration projects with a more successful outcome for scholarship, see Robert W. Hamilton, *The Structural History of the Aqsa Mosque* (Jerusalem, 1949); G. Zander, *Travaux de restauration de monuments historiques en Iran: Rapports et études préliminaires* (Rome, 1968); E. Galdieri, *Işfahān: Masġid-i Ğumʿa*, 2 vols. (Rome, 1972-74).
66. See Robert M. Adams, *Land Behind Baghdad: A History of Settlement on the Diyala Plains* (Chicago and London, 1965).
67. Maurice Lombard, *Études d'économie médiévale*, 3 vols. (1971-78): see Andrew Sherratt, "What Can Archaeologists Learn from Annalists?," in *Archaeology, Annales, and Ethnohistory*, ed. A. Bernard Knapp (Cambridge, 1992), p. 138.
68. E.g., see Richard W. Bulliet, "Pottery Styles and Social Status in Medieval Khurasan," in *Archaeology, Annales, and Ethnohistory*, ed. A. Bernard Knapp (Cambridge, 1992), pp. 75-82.
69. E.g., see Charles L. Redman, "Archeology in a Medieval City of Islam," *Middle East Studies Association Bulletin* 14, no. 2 (1980): 1-22.
70. This issue, for example, affects Islamic archaeology in Jordan: see Donald Whitcomb, "Reassessing the Archaeology of Jordan of the Abbasid Period," *Studies in the History and Archaeology of Jordan* 4 (Amman, 1992): 385-90.