ÜLKÜ Ü. BATES

TWO OTTOMAN DOCUMENTS ON ARCHITECTS IN EGYPT

The significance of two archival documents in Istanbul concerning architects who worked in Egypt in the late sixteenth century[1] lies in three areas. First, both documents mention the name of Sinan, the greatest architect of the Ottomans, and add to our information about the office of head architect, or *ser miʿmārān-i hāssa*, which was then occupied by him. Second, both deal with provincial architecture and thus add to our information about the relationship between Istanbul and peripheral areas.[2] Third, the documents help clarify the role of the architect, a very elusive component in Ottoman architecture.[3] We tend to ignore the creative role architects played when we discuss Ottoman buildings, except perhaps when we deal with those built by Sinan and his few students. This neglect is largely due to the meagerness of information in the sources concerning artists and architects. Biographical references to architects and critical descriptions of their buildings are very rare in Ottoman historiography.[4] If the documents described here are representative of others yet to be revealed, then archival material may still yield more of the kind of information we need. At the very least, we might discover how architects were hired, what their education was, and how they were organized.

A thorough understanding and interpretation of Ottoman architecture requires a careful investigation of the interrelationship between the architectural endeavors undertaken in the various provinces, such as Egypt, and those undertaken in Istanbul and its environs. Clearly the study of the architecture of a province should do more than to document stylistic, structural, or typological peculiarities that set it apart from the architecture of the capital and other regions of the empire. Such a major tradition as Ottoman architecture is can only be defined in terms of its variations, permutations, and the extent of its influence over a large area and a span of time. As with Roman architecture, Ottoman architecture has to be seen in conjunction with the imperial system from which it takes its name and whose fortunes it reflects. Egypt, quite clearly, is a case in point.

The diversity of styles that appeared in Egypt in the years between 1520 and 1620 reflects the complexity of the factors that affected building activities in a region that had a rich architectural past but had subsequently been reduced to provincial status. This complexity included the effects of the radical administrative and economic changes Egypt underwent after it was conquered by the Ottomans in 1517. Given the centralized administrative system of the Ottoman empire, we might expect the architectural models of the capital simply to be replicated in the provinces, but this was not always the case. Although between 1520 and 1580 the Ottoman governors of Egypt had mosques built in Cairo that would have been appropriate for any neighborhood of Istanbul, they also commissioned structures that emulated Mamluk architecture so closely that they could have been undertaken by a Mamluk amir.

Generally, we might assume that the presence and continuity of a local, as opposed to a central imperial, architectural tradition largely depended on the prominence and strength of regional power and authority. In Egypt, many of the Mamluk institutions were continued under Ottoman rule, thus signaling this province's special administrative status and its higher degree of independence within its boundaries. The Ottoman governor (he was called *beylerbeyi* until the early seventeenth century; later *vali* became the more common term) in Cairo presided over a court or council (*divan*) that paralleled the one in Istanbul, although of course subjugated to it.[5] The governor usually remained in the Cairo post for a brief period, two years being the normal stay. The post was a highly prestigious position: the governor held the rank of *vezir* with four plumes, and more often than not his governorship would be followed by an appointment to the council of the imperial city.

On the other hand, if the tenure of the governor was short and if he was largely unsuccessful in forming alliances with the local elite, few grandiose architectural undertakings could be expected from him. As a province, Egypt was not as fully integrated into the imperial system as the Syrian provinces were.[6] The land of Egypt was not granted in fiefs, but was farmed out, usually to the mamluk amirs who as tax farmers (*multazim*) eventually became landlords.[7]

Many of the patrons of architecture in Egypt seem to have felt a less than total commitment to the promotion and continuity of imperial Ottoman symbols. In 1535 Husrev Pasha, then governor of Egypt, had built a *sabīl-kuttāb* in Cairo that was modeled after the Mamluk type. But later, as governor of Aleppo province, he commissioned Sinan or one of his immediate underlings to build his mosque, madrasa, and other dependencies, and they are unmistakably Ottoman.[8] The variance in style between two foundations by the same patron can be attributed in large degree to the different administrative policies in effect in the provinces in which they were built.

The availability of well-established local architectural forms to serve as models for new structures undoubtedly accounts for much of the diversity in styles in Ottoman Cairo. Cairo in the early sixteenth century boasted many more imperial monuments than did Istanbul. The sheer number of buildings from the Islamic period in Cairo might well have overwhelmed the Ottoman patrons. Influences from Istanbul and local traditions vied with each other, as patrons selected one style or another for their buildings. The popularity of architectural styles in Ottoman Cairo fluctuated with the taste and political ambitions of the patrons.

Whether or not continuity in local traditions of architecture is maintained in the face of political changes depends a great deal on who the architects were. Were the architects and master craftsmen local people, or were they outsiders who were partly trained and worked in Egypt? How were they organized and what were their links to the associations of architects and craftsmen in Istanbul? In the centralized state characteristic of the Ottoman empire, particularly in the classical age, from about 1450 to 1600,[9] the choice, training, appointment, and organization of architects was closely controlled from the office of imperial chief architect (*ser miʿmārān-i hāssa*) at the court in Istanbul. The chief architect had under his immediate command the second architect-in-chief (*miʿmār-i sānī*), the supervisor of waterworks, the agha of Istanbul, chief of lime products (*kireççibaşı*), the director of the magazines, the head secretary of the magazines, and finally the head of repair work (*taʿmīrāt*). The chief architect was also the head of the organization of imperial architects (*cemāʿat-i miʿmārān-i hāssa*). This organization consisted of court architects, the steward (*katkhudā*), the scribe (*kātib*), the minaret builder (*mināreci*), the marble carver (*mermerci*), mason (*traşçı*), plasterer (*sıvacı*), and finally the painter/decorator (*nakkaş*).[10] The organization occupied a workshop (*kār-khāna*) situated in the Vefa quarter of Istanbul.[11] The counterpart of the chief architect in the supervision of building activities was the prefect of the city (*şehr-emīni*), who was responsible for the financial aspects of construction.[12]

Our knowledge of the organization of architects, as well as of individual architects, is limited. Sinan, whose life spanned almost a century, was the most prolific and famous of Ottoman architects, and the Ottoman historians are comparatively informative about him. Yet our knowledge even of his career and life does not extend beyond a sketchy biography.[13] Sinan's involvement in major imperial undertakings such as the Süleymaniye is well documented,[14] but the extent of his contribution to the buildings sponsored by lower-ranking patrons is not known.[15] It is documented that architects used to prepare drawings and models of their projected buildings for their patrons, but very few of these have come to light.[16] We also have no critical writings on architecture by Ottoman historians or travelers.[17] If our familiarity with the chief architect of the imperial court is so meager, it would appear that there is little hope to learn much about the architects of Ottoman Cairo, a provincial capital.[18]

In the absence of biographical references or critical observations by Ottoman historians about Cairo's architects, I turned to the Register Books of the Imperial Court (*Divān-i Humāyūn Muhimme Defterleri*), partly preserved in the Prime Minister's Archives (Başbakanlık Arşivi) in Istanbul. I expected to find decrees (*hukm-ī şerif*) issued from the court of the Ottoman sultans to their representatives in Egypt concerning building activities under their jurisdiction. I was fortunate. There are indeed a large number of such documents in the Istanbul archives. Many of them pertain to structures in the holy cities of Mecca and Medina, the care and maintenance of which were entrusted to the Ottoman governor of Egypt and his court.[19]

Two of these decrees directly concern the activities of architects in Egypt, and give some sense of what might

be learned from archival sources if interpreted in the light of what we already know about Ottoman bureaucratic practices. They are dated 992 (1584) and 993 (1585) and therefore are from the reign of Murad III. In addition to providing information on the status of certain architects in Ottoman Egypt, they are significant for having been initiated by the imperial chief architect himself. Sinan, at the time over ninety years old and very famous, had built his last monumental mosque, the Selimiye mosque complex in Edirne; his present master, Sultan Murad, unlike his predecessors Süleyman the Magnificent and Selim II, was not interested in architecture. The mosque in Manisa, begun while he was still governor of that province, is of rather modest dimensions. As sultan, his major contribution to Ottoman art lies in the realm of manuscripts; he was a connoisseur of miniature painting.[20]

The decrees concern architects, but they do not link them with buildings known to us. They do, however, yield information on the position of architects in Egypt toward the end of the sixteenth century. I have rendered the text in an English that is as close to the original meaning as possible, but have not included the usual panegyrics or repetitions which are used to emphasize the importance of a command. The documents are, of course, open to other readings and interpretations.

Document one: Registration book, vol. 50, p. 22, no. 93; dated 28 Rabᶜal-āhir, 992 (9 May 1584).

"To the governor of Egypt [Mısır Beylerbeyisine]. . . .[21]

"Sinan Agha, the chief architect [*miᶜmār-başı*] at my Threshold of Felicity [*miᶜmārlarin başı*], has sent us a letter regarding Mehmed, a faithful servant who holds the post of agha of the Circassians.[22] Mehmed Agha, being an expert in the science of geometry [*ᶜilm-i hendese*] and capable of rendering service in the affairs, I have commanded you to grant him a *sancak*. . . ."

One significant point in this particular decree is that the architect in question held a high military rank. A second point, no less significant, is the reference to the qualifications this architect is described as having. Architects and other craftsmen in construction work seem to have been trained on the job, working their way up through the ranks. There are documented cases of sons being trained by their fathers in the profession.[23] Not all architects or master-builders were members of the imperial architects' association, but the best among them would have been recruited to the royal corps whenever vacancies occurred.[24] Membership was accorded through a complicated process. One of the most valued qualifications an architect could have was proficiency in *ᶜilm-i hendese*, or the science of geometry. The word *hendese* means more than geometry: it encompasses the science of "correct estimation of measurements and successful arrangement of lines and forms in space" in the Euclidean sense of the term.[25] Although skill in this kind of geometry was highly prized, this and the other document do not refer to the architect as *muhendis*, derived from *hendese*, but as *miᶜmār* or "builder."

It is not surprising to find Mehmed Agha at the head of a military corps in Egypt. Sinan himself was recruited as *yeniçeri*, or janissary, in the 1510's, during the reign of Selim I (1512-20) and perfected his knowledge of *hendese* as he rose through the ranks. It seems that *miᶜmār* was a relatively high rank to which a master trained in numerous crafts related to construction could aspire. A master carpenter or mason could eventually be promoted to the rank of architect; the organization of architects included not only architects but other artisans. Still, there must have been some ranking among the various levels. The highest rank must have been that of the agha on whom was bestowed one horse plume (*tūg*). Sinan's rank was also agha. The rank of *sancak beg* was also marked with a single plume. Therefore Mehmed Agha had already reached the highest possible rank, and having been given the *sancak* did not add another plume to his turban.

The corps of imperial architects was considered to be outside the court (*bīrūn*). Included among its members were non-Muslims. For example, in Istanbul in 1582 nine out of seventeen imperial architects were non-Muslims.[26] The office of chief architect kept registers of names of members belonging to building crafts in the organization of architects in the provinces, so that during military campaigns or the erection of imperial structures they could be summoned and pressed into service.[27] Ömer Lütfü Barkan, in his monumental work on the expense register books of the Süleymaniye mosque, records names which show a diversity in the ethnic backgrounds of the builders (*bennāᵓ*), as well as in their provinces of origin.[28] Craftsmen who were not members of these official associations, however, were not permitted to work on state buildings. It seems that the organization of architects, both at the imperial center and in the provinces, was regarded as part of a centralized administration directly under state control and as a component of the military system.

A decree (*hukm*) in the Istanbul archives from the council of Selim II to the governor of Egypt, dated 4

Ramadan 975 (3 March 1568), advises him that a certain Yahya of Arab origin (*evlād-ı ʿArāb'dan*) of the Müteferrika corps (a locally created unit) of Egypt should be appointed as architect because he is expertly skilled in the science of building (*binā' ʿilm'inde mahāretli olmāgin*).[29] Another decree in the same archives, from the year 993 (1585), issued from the council of Murad III to the council of Egypt, appoints a certain carpenter (*durūdger*) of the Çāvūşān corps (another local unit) to be miʿmār.[30] It seems that any member of a military corps with a master's rank or above and belonging at the same time to the organization of architects could be elevated to the post of architect, provided he was expert in the *ʿilm-i hendese* that was relevant to the *ʿilm-i binā'*.

The primary duties of the architect were to explore building sites, estimate costs, prepare designs, and supervise construction. The architect and other craftsmen in the association were responsible for the building and repairing of bridges, forts, and roads and, in addition, for the routine maintenance of military structures and the construction of religious and civic buildings commissioned by the imperial and provincial courts. They were also on occasion employed privately to work for influential local patrons of architecture. In contrast, a craftsman who was privately employed was not permitted to work on official buildings.

The chief architect, as indicated earlier, whether attached to the imperial court in Istanbul or under the regulation of the court of Egypt, had under his control, in addition to the organization of architects, the supervisor of waterworks (*su yolları nāzırı*), whose duties included their construction and maintenance. This must have been a very important civic official, for he ranked immediately below the ultimate chief architect,[31] and many of the decrees sent to Egypt from the imperial court concerned the maintenance of water operations in Mecca and Medina. As the Ottoman governor was the official administrator of the holy cities, the chief architect in Egypt was also responsible for all sorts of construction and repair jobs there, including the maintenance of waqf properties founded in them by the Mamluk rulers.[32]

Another instructive aspect of the decree concerning Mehmed Agha is the evidence it provides of the centralization of a wide-ranging bureaucracy. The architects in the provinces, as well as those of the capital, were under the direct authority of the *ser* or *miʿmār bāşı*, but they were also under the supervision of the *bāş miʿmār*, who happened to be Sinan in this case. In this document, the office of the chief architect interceded on behalf of an architect. Accordingly, the sultan, as the highest official in the empire, sent a command to his representative in Cairo where Mehmed Agha was located. This hierarchical system organizing imperial architects was replicated in all Ottoman provinces.[33]

The document also indicates the high rank and salary that could be had by an architect of distinction. As a member of the military corps, architect Mehmed had already attained the title of agha, and it was recommended that he also be given the title of *sancak beyi*. In Ottoman Egypt the title *sancak* was equivalent to the Mamluk *amīr liwā*. The granting of the title would not have brought the recipient land or a post as governor, as was ordinarily the case in most of the Ottoman empire, but he was entitled to an annual salary (*sālyāne*).[34] The appointment of Mehmed Agha to the rank of *beg* with an unspecified annual stipend is particularly interesting in the light of an earlier edict from the court in Istanbul to the governor in Egypt, which advised him that the vacant *sancak beyliks* should not be filled. There was already a surplus of them, and the salaries cost the state treasury dearly.[35] It is apparent that the action in favor of the petition of the chief architect Sinan on behalf of Mehmed Agha overrode the earlier decree.

Finally we learn from the decree that a man well skilled in the *ʿilm-i hendese* was entitled to be employed by the state (*devlet*). This phrase demonstrates that the foremost patron of architecture in the Ottoman empire was the state itself.

The second document I shall consider here was sent a year later from the imperial court of Murad III to the chief judicial officer, or qadi, of Egypt. In this decree the degree of decentralization is made more explicit. This time, another government representative, the qadi, is held responsible for the architects. The decree responded to a request made by Sinan, the chief architect of Sultan Murad.

Document two: Registration book, vol. 50, p. 306, no. 779; dated 17 Ramadan 993 (12 September 1585).

"To the qadi of Egypt...

"Sinan, the chief of architects at my Threshhold of Felicity, has sent me a letter in which he states that Mahmud, son of Mehmed, who is entitled to a daily wage of twelve akçe and who holds the rank of *çāvūş* in the aforementioned protectorate, is an architect [*miʿmār*] and is a worthy master [*ehīl ustā*] and has been serving as architect in Egypt. However, several unworthy persons have taken to building houses for many people; these [builders], who are ignorant in the science

of building [*ʿilm-i binā'*], have caused much damage and injustice to Muslims. Furthermore, these unskilled builders have not heeded the rebukes of the aforementioned Mahmud Çavuş. Therefore I command you to recognize Mahmud Çavuş as the official architect and forbid the employment of unskilled persons. Upon the receipt of this decree, be diligent in this matter; forbid the activities of the unskilled workers who have no possession of the knowledge of construction matters. You should refrain from allowing these men to infringe the rights of and do injustice to Muslims through their buildings, and warn those who do the contrary."

The relentlessly repetitious tone of the imperial decree draws our attention to the warning issued to the qadi of Egypt: protect the rights of Muslims who hire craftsmen for their buildings. One wonders whether the decree was prompted by the aggravated private citizens of Cairo, or by the architect Mahmud who felt he did not have enough clients. Whatever the original reason for the decree, it elucidates several issues concerning architects in late-sixteenth-century Egypt.

The imperial chief architect in Istanbul was again in the position of regulating and arbitrating in construction matters throughout the empire. This time he intervened in the plight of the "private sector" and concerned himself with the career of a not-too-high-ranking architect in the province of Egypt. He communicated the details of the case to the sultan, who responded accordingly. The decree sent to the judicial officer indicates that it was his office that considered the affairs of the "Muslim population" and the craftsmen who worked for them, even though the latter group may have been of the military class. What is more unusual is that members of the military corps worked for private citizens. The craftsmen who were at the same time "men of the sword" were not in the exclusive service of the state. It is not unreasonable to surmise that the competition among "architects" was quite fierce.

The wages paid to architects, including the chief architect, fluctuated according to the financial situation of the Ottoman state. To supplement the salary of the chief architect, *arpalık* (*lit.* land producing barley) from the crown lands was deeded to his office.[36] Whenever an architect in the service of the empire or one of its provinces requested permission to work for private employers, the permit had to be given by the chief architect, and the office of the qadi controlled the hiring of the architects.[37] The judicial officer was also responsible for enforcing building codes, such as restrictions placed on the height of buildings or on the width of the projecting bay windows (*şāh-nişīn*).[38] The officer controlled civic buildings, including public toilets, and whenever he found buildings in need of repair, he informed the corps of architects.[39]

From the decree we can gather information about the financial situation of the architect Mahmud Çavuş in Egypt. Since the daily wage of twelve akçe paid to him was very modest for the time, it is likely that he was permitted to work for private patrons in order to supplement his income.[40] As indicated by the expense books of the construction of the Süleymaniye Mosque complex for the years 962 to 965 (1554 to 1557), a trained worker such as a master mason was paid twelve akçe daily.[41] During the construction of the Süleymaniye, the workers of the apprentice (*acemioğlan*) group were paid less; a skilled worker received about eight akçe and an apprentice between one and three akçe. Undoubtedly, they lived in barracks while working on the sultan's mosque. Considering the high rate of inflation that occurred toward the end of the century, it is not surprising that Mahmud Çavuş of Cairo needed to supplement his daily wage.

The architectural scene in the late sixteenth century in Egypt appears with greater clarity in the light of these two documents, especially with regard to the social and administrative position of the architects.[42] The information gleaned from the decrees allows the following conclusions:

1. The architects and craftsmen working in Egypt in the late sixteenth century came from diverse ethnic groups, and those who were of the elite *hāssa*, or imperial group, held military ranks and belonged to various corps. A few might have belonged to the Yeniceri trained in Istanbul, but the majority served in the locally created corps of the Çerākis (Circassians), the Müteferrika, and the Çāvūşan, all of whom were trained in Egypt.

2. Many of the architects and craftsmen located in the provinces and specializing in various aspects of construction were registered in the office of the imperial chief architect in Istanbul. When required, additional architects and skilled workers could be summoned to the capital, or even moved from one province to another, to work on official commissions and the waqf foundations of former royalty, including the Mamluks.[43] It seems that appointments to or promotions within the organization of architects were made through the intervention of the chief architect's office. The final decision was made in the imperial court of Istanbul whence originated the ultimate commands for

the master craftsmen in Cairo. The centralization of the government offices and of those operations controlled by them conforms well with what we know about the bureaucratic structure of the Ottoman empire.

3. The officers to whom the decrees were issued were the governor, the qadi, and the treasurer (*defterdār*). It is noteworthy that the qadi, a man of the pen and member of the ulema, would be asked to oversee matters pertaining to architects, who belonged to the military corps, and to architecture. Presumably, the qadi would have acted to protect the rights of the members of the organization of architects as well as those of the patron.

4. Qualified master builders within the military ranks, according to the decrees preserved in the Ottoman archives, relied on the protection of the imperial chief architect. However, advancement through the ranks to the position of agha or *sancak beyi* was a real possibility for architects. Recommendations for advancement seem to have been initiated by the chief architect in Istanbul.

In both decrees the salaries of the architects are mentioned. The salaries and the manner in which the wages were paid to the masters varied according to their military rank. They were permitted to take supplemental jobs in the private sector, whereas a self-employed master builder was restricted to private jobs, and even then employing members of the organization of architects was to some extent forced upon private citizens by government officials.

Tantalizing questions arise from even the preliminary and cursory analysis offered here concerning the relationship of the provincial architecture to that of Istanbul, the imperial seat of the Ottomans. Did the office of the chief architect in Istanbul prepare the designs and plans for the structures to be erected elsewhere in the empire, given that the organization of the royal architects was highly centralized, rigid, and controlled by a number of court-appointed officials? In other words, was the architectural image to be projected in the provinces prepared in Istanbul and then implemented through various agents? If that was the case, to what degree was the image successfully projected? What were the circumstances that influenced the variations in architectural styles and types in Ottoman provinces? What conditions or issues in the administrative organization determined the degree of stylistic independence in the architecture of a province?

These questions and others might be answered, at least in part, through systematic research carried out in the Ottoman archives of Istanbul, Ankara, Cairo, and elsewhere. In addition to the decrees preserved in the *Muhimme Defterleri*, designs (*resm*) for several buildings have been preserved in the Topkapi Palace archives. The Ottomans kept meticulous register books of the surveys (*keşf*) of building sites, of expenditures (*masraf*) for building activities, of the titles and land surveys (*ṭāpū*), and, of course, of the deeds of pious foundations,[44] all documents that await the attention of the art historian. The art historian can greatly benefit from the cooperation with the archivist and the historian in solving the puzzles of Islamic architecture in the Ottoman lands.*

Hunter College
The City University of New York

NOTES

* The research on which this paper is based was generously supported by grants from the American Research Center in Egypt, the Research Foundation of the City University of New York, and the Aga Khan Program for Islamic Architecture. I am indebted to Halil Inalcik, Esin Atil, and Daniel Bates, who read the paper and offered helpful criticism and suggestions.

1. The documents are decrees (*hukm-i şerif*), copies of which are preserved in the *Muhimme Defterleri* [Register books of important papers] of the Ottoman court, and are located at the Prime Minister's Archives in Istanbul. The first of the two has been published in modern Turkish transliteration (Ahmet Refik, *Mimar Sinan* [Istanbul, 1931], p. 53). I would like to acknowledge my debt to the General Director of Archives of Turkey for allowing me to work in the archives, and to Dr. Hüsamettin Aksu for his assistance in reading both documents.
2. The best work to date on Ottoman architecture in Europe, outside the boundaries of modern Turkey, is Ekrem Hakki Ayverdi et al., *Avrupaʿda Osmanlı Mimari Eserleri*: vol. 1, *Romanya ve Macaristan* (Istanbul, 1977); vol. 2-3, *Yugoslavya* (Istanbul, 1981); vol. 4, *Bulgaristan, Yunanistan Arnavudluk* (Istanbul, 1982).
3. In recent years several studies examining the role of the Ottoman architect have appeared in Turkey. One of them (Metin Sözen, ed., *Türk Mimarisinin Gelişimi ve Mimar Sinan* [Istanbul: 1975]) is a collection of papers on the influence of Sinan on Turkish architecture.
4. Two works on Sinan, *Tezkiretʾul-Ebniye* and *Tezkiretʾul-Bunyan*, a brief biography and a list of his structures, were written by Mustafa Saʾi Çelebi, probably shortly after Sinan's death; they have been the source for all later biographies. A complete bibliography on Sinan and his works is M. Sözen, *Türk Mimarisinin* (1975). Another Ottoman writing on architecture is by Caʾfer Çelebi, *Risale-i Miʿmariye* (Treatise on architecture), a seventeenth-century work on the architect of the mosque of Ahmed I in Istanbul. It has been partly published by Tahsin Öz, *Mimar Mehmed Ağa ve Risale-i Miʿmariye* (Istanbul: 1965).
5. Stanford J. Shaw, *The Financial and Administrative Organization and Development of Ottoman Egypt, 1517-1798* (Princeton, N.J., 1958).

6. The differences in administrative organizations between the various provinces of the Ottoman empire are discussed by I. Metin Kunt, *Sancaktan Eyalete, 1550-1650 Arasında Osmanlı Ümerası ve il İdaresi* (Istanbul: Boğaziçi Universitesi Yayınları, 1978); English version, *The Sultan's Servants: The Transformation of Provincial Government, 1550-1650* (New York: Columbia University Press, 1983).
7. P. M. Holt, *Egypt and the Fertile Crescent, 1516-1922: A Political History* (Ithaca and London: Cornell University Press, 1966), p. 52.
8. The completion date on the mosque and madrasa, known as al-Khosrawiyya, in Aleppo, is 1545-46; the complex was probably built by a student of Sinan. Hüsrev Pasha was governor of Aleppo between 1534 and 1535, before he was sent to Egypt.
9. I am using the term "classical age" as it pertains to the history of Ottoman architecture.
10. Şerafettin Turan, "Osmanlı Teşkilatında Hassa Mimarları," *Tarih Araştirmalari Dergisi* 1, no. 1 (1963): 159.
11. Evliya Çelebi, *Seyâhâtnâme* 1 (Istanbul, 1314/1896): p. 511.
12. Turan, "Hassa Mimarlari," p. 159.
13. See above n. 4, and Doğan Kuban, "Sinan," in *Macmillan's Encyclopedia of Architects*, 4 (New York, 1982).
14. Ömer Lütfi Barkan, *Süleymaniye Cami ve İmareti İnşaatı*, 2 vols. (Ankara, 1972-79). See also J. Michael Rogers, "The State and the Arts in Ottoman Turkey: Part 1, The Stones of Süleymaniye," *International Journal of Middle East Studies* 14, no. 1 (Feb. 1982), and "Part 2, The Furniture and Decoration of Suleymaniye," ibid., no. 3 (Aug. 1982).
15. Several of these buildings have been published by Aptullah Kuran, "Zal Mahmud Paşa Külliyesi," *Boğaziçi Universitesi Dergisi*, vol. 1 (Istanbul, 1973); "Haseki Külliyesi," ibid., vol. 2 (1974); "Tophane' de Kılıç Ali Paşa Külliyesi," ibid., vol. 4 (1978).
16. A decree (*hukm*) dated 16 Shaban 975 (15 February 1568) from Selim II to Sinan, the chief architect, reads in part, "... resmin edub göndermişsin, ol resmin makbul-u şerifim olmagin..." (... you have sent a drawing, that drawing being acceptable to me...), in *Muhimme Defteri*, vol. 7, p. 308, no. 878, at the Prime Minister's Archives. This is in reference to the projected mosque of Selim, to be built at Edirne by Sinan. Cengiz Orhonlu proposed that the word in architectural usage *resim* means a plan or design, *tasvir* a three-dimensional model. See, C. Orhonlu, "Şehir Mimarlari," in *Journal of Ottoman Studies* 2 (Istanbul, 1981): 12. The drawings at the Topkapi Palace Museum in Istanbul have been published by Behçet Unsal, "Topkapı Sarayı Arşivinde Bulunan Mimari Planlar Üzerine," in *Güzel Sanatlar Akademisi Dergisi*, vol. 1 (Istanbul, 1963).
17. The descriptions of buildings by the seventeenth-century Ottoman traveler Evliya Çelebi vary from whimsical to accurate, and are of great importance; see *Seyâhâtnâme*, vols. 1-10 (Istanbul, 1314/1939).
18. *Encyclopaedia of Islam*, 2d ed., s.v. "Al-Ḳāhira," by J. Michael Rogers, has a bibliography on the city.
19. My preliminary study on these decrees, "Ottoman Documents concerning Building Activities in Mecca and Medina," is forthcoming in *Proceedings of the Symposium on the Common Themes of Islamic Art* (Istanbul).
20. The number of artists registered at the court studio reached its highest point during the reign of Murad III; see Esin Atil, "The Arts of the Book," in *Turkish Art*, ed. E. Atil (Washington, D.C., and New York: Smithsonian Institution and Harry Abrams, 1980), p. 234.
21. The governor of Egypt at the time was Ibrahim Pasha, who had sailed to Egypt in Rebi'ul-evvel 991 (April 1583) and remained there for sixteen months. Upon his return to Istanbul, he married the eldest daughter of Murad III, Ayşe Sultan, and in 1004 (1595) he became the grand vizier. Mehmed Süreyya, *Sicill-i Osmani*, 1 (Istanbul, 1308/1890): 97.
22. The *ocak* or corps of the Çerkesler or the Çerakis was a unit peculiar to Egypt, consisting most probably of the Circassian mamluks (Holt, *Egypt and the Fertile Crescent*, p. 44).
23. Ahmet Refik (Altinay), *Türk Mimarları, Hazine-i Evrak Vesikalarina Göre*, 2d ed. (Istanbul, 1977), p. 57.
24. Turan, "Hassa Mimarlari," p. 170.
25. Orhonlu, "Şehir Mimarlari," p. 22.
26. Turan, "Hassa Mimarlari," p. 160.
27. Ibid., pp. 170-71.
28. Barkan, *Süleymaniye Cami*, passim.
29. *Muhimme Defteri*, vol. 7, p. 341, no. 980.
30. Ibid., vol. 60, p. 10, no. 20, dated 1 Sevval 993 (26 September 1585).
31. One of Sinan's pupils, the architect Da'ud Agha, was the *su yollari nâzırı* with the rank of *çavuş*; after the death of Sinan, Da'ud was promoted to agha and became the chief architect. Mehmed Erdogan, "Mimar Davud Ağa'nin Hayatı ve Eserleri," in *Istanbul Universitesi Türkiyat Enstitusü Turkiyat Mecmuası*, vol. 12 (Istanbul, 1955): 179-204.
32. A decree issued from the court of Süleyman to the Beylerbeyi Ali Pasha, governor of Egypt, concerns the repairs to be carried out on the waqf property in the Hijaz; *Muhimme Defteri* 6, p. 277, no. 586, dated 3 Cumaza'l-evvel 972 (7 December 1564).
33. Orhonlu, "Şehir Mimarlari," passim.
34. Holt, *Egypt and the Fertile Crescent*, pp. 71-73.
35. *Muhimme Defteri*, vol. 52, p. 65, no. 148, dated 23 Ramazan 991 (10 October 1583).
36. Turan, "Hassa Mimarları," p. 163.
37. Ibid., p. 171.
38. According to a decree (*Muhimme Defteri*, vol. 44, p. 108, no. 295, dated 996 [1587]) the sharif of Mecca was asked to see to the demolition of a number of bay windows on a certain street because the shopkeepers of the street had complained.
39. In another case, the chief qadi of Mecca was instructed to supervise the repairs of toilets built by Mamluk sultans Qaytbay and al-Ghuri near the Masjid al-Haram; *Muhimme Defteri*, vol. 67, p. 133, line 356, dated 999 (1590).
40. Turan, "Hassa Mimarlari," pp. 174-75. *Çavuş* was an intermediary rank in the *ulüfeli acemioğlân* unit of the janissary; they were paid daily wages (*ulufe*), hence the title. The *acemioğlan* (lit. "inexperienced youth") were not educated at the exclusive court school (*enderûn*), but by the members of the Ottoman military elite. See Ismail Hakki Uzunçarşili, *Osmanli Teşkilatinda Kapukulu Ocakları* 1 (Ankara, 1943): 5-141.
41. Barkan, *Süleymaniye Cami* 1:113-18.
42. For a brief but insightful essay, see John A. Williams, "The Monuments of Ottoman Cairo," in *Colloque International sur l'Histoire du Caire* (Cairo, 1969), pp. 453-65.
43. For example, men were brought from elsewhere to work on construction projects in the Hijaz; they came mainly from Egypt and, when additional men were needed, from Syria.
44. Turan, "Hassa Mimarları," pp. 167-68.