its size (68 by 50 meters). Twelve piers divide the interior into twenty domed bays of equal size, arranged in a four-by-five grid. The main entrance lies in the middle of the north façade, opposite the mihrab. The second bay along the axis from portal to mihrab is a vestibule court: it is two steps lower than the rest of the mosque, paved with marble, and has an open oculus over the pool. Like the zaviye-type mosque, this type of hypostyle mosque with multi-domed bays is mainly associated with the Ottomans (another example is the Eski Camii at Edirne, 1402–14) but is known in other principalities as well. The earliest example is the Yüvi Minare Mosque in Antalya (1173), built by the Hamids on the foundations of a Byzantine church, and others were constructed in eastern Anatolia by the Aqquyunlu and the Qaraquyunlu.

Despite the increasing importance of the Ottomans and the imposition of their style of architecture, some principalities maintained their independence and continued distinctive local styles of building. The fine stone carving and rich revetment typical of Menteşid buildings, such as the Mosque of Firuz Beg at Milas [177], is found again at the mosque at Balat (ancient Miletos). It was built in 1404 by Bays Beg, the Menteşid ruler who reestablished the emirate when Bayezid I was captured by Timur. Like the early Ottoman Mosque of Haci Özbek [175], it is a traditional Anatolian type of small mosque, with a square base, octagonal zone of transition, and hemispheric dome, but is almost twice as large (interior diameter 14 meters) and has a minaret in the north-west corner. The traditional portico has been replaced by an entrance block. It projects slightly from the façade and contains a large pointed arch which itself encloses three smaller arches [179]. The central one is the door; those on the side are windows with marble balustrades. All three arches are decorated with bi-colored jogged voussoirs, used a decade earlier on the mosque at Milas, and are surmounted by relieving arches with a flat-topped profile.

Although the interior is a single unified space like that found in many small Saljuq mosques, two tiers of windows on each side provide generous illumination. The south wall is dominated by the magnificent mihrab, a large marble panel (7.35 by 3.2 meters). The mosque once formed part of a larger complex, with a tomb to the north and madrasa rooms at the sides arranged around a courtyard with arcades, but little of this remains.

The impact of the emerging Ottoman style on local building traditions outside the Ottoman domains can be seen in the Aq (White) madrasa at Niğde, built by the Karahanid ruler Ali Beg in 1409. After the Ottomans, the Karahanids were the most powerful and longest-lasting of the Turkoman emirates. They considered themselves the rightful successors of the Saljuqs, the last major power in central Anatolia, and their architecture reflected their political claim by adhering to the canons of Saljuq style. The Aq madrasa follows the plan formulated in the Saljuq period and used for the early-fourteenth-century hospital at Amasya: an open court with two iwans flanked by rooms on two stories. Its fine masonry construction and elaborate carved decoration are typical of other buildings erected by the Karahanids, such as the Haremiye (Khatriyiya) madrasa at Karaman (1382). The façade [180], however, is remarkable, not only for its high,
tomb, which was placed unusually on a higher level than the mosque. Begun in 1412, the mosque is of the typical zaviye type, and its plan [181] follows that of Beyazid’s mosque in the same city, but there is no porch, although arch springs visible on the façade indicate that one was planned. On either side of the central domed fountain court are raised iwans covered with ribbed domes; beyond it and four steps higher is a smaller domed iwan (diameter ca. 11 meters) which serves as the prayer hall. Smaller domed rooms for devishes were inserted on either side of the main iwan. The entrance itself has been elaborated with two stories of rooms: passages on either side of the vestibule lead to vaulted chambers and stairs ascend to a royal balcony (Turk. hindar mahfil) overlooking the central hall. Laviishly panned with cuerda seca tiles, it has a gilded ceiling and a pierced tile balustrade. The elaboration of the space reserved for the sultan is unprecedented in Ottoman architecture, although the idea is another reworking of the maqsura like that of Beyşehir. The spectacular tile decoration [182] includes a dado of hexagonal monochrome tiles with stencilled gold patterns and an elaborate mihrab (height 10 meters) with a molded frame and pyramidal maqarnas hood executed in a combination of tile mosaic and cuerda seca, the latter a cheaper alternative to the former.

Inscriptions provide much information about the building and its construction. The inscription over the portal states that the sultan funded the project and ordered construction, which was finished in Dhu'l-Hijja 822 (December 1420–January 1421). Above the niches flanking the portal is the signature of Haji Iwad b. Akhi Bayazid, who “designed the building, oversaw its construction, and fixed its proportions.” An inscription above the loggia states that ‘Ali b. Iyas ‘Ali finished the decoration at the end of Ramadan 827 (late August 1424), some four and a half years later. On each of the lateral walls of the loggia is the signature of Muhammad Mehmed the Crazy. On the colonnette to the right of the mihrab is another signature, “work of the masters of Tabriz,” complemented on the left by a couplet by the Persian poet Sa’di about tyranny and injustice.

This ambitious programme of tile decoration is a first in Ottoman architecture and marks the reappearance of a feature last seen over a century earlier in the mosque at Beyşehir. It can be explained, in part, as a result of the Timurid invasion. ‘Ali b. Iyas ‘Ali, better known as Naqşah ‘Ali (‘Ali the Designer), had been carted off to Samarkand and must have been inspired by Timurid buildings there, which were extensively decorated with tile. Indeed, the peculiar combination of tile mosaic and cuerda seca tiles is characteristic of late-fourteenth-century buildings in Samarkand. Local Anatolian potters would have been unable to produce either type of tile, since the techniques were otherwise unknown in the region, and foreign workers must have been brought in. The simplest explanation is that the
"masters of Tabriz" brought cuerda seca to Bursa. Haji 'Iwad, the vizier responsible for the project, is said to have imported craftsmen from western Iran. Cuerda seca, however, was unknown in western Iran at this point, although it was used in the east. This has led several scholars to suggest that the "masters of Tabriz" may have come from Central Asia. An artist bearing the epithet "from Tabriz" signed the cuerda seca panels at Timur's palace at Shahr-i Sabz, the Aquasary (45), and "Tabrizi" may have come to mean master tile-maker much as the epithet "Shirazi" had come to mean master builder (see Chapter 4).

Mehmed's tomb in the Yeşil complex shows many of the same decorative innovations as the mosque, although its octagonal form can be traced back to Saljuq examples (186). While the tiles on the exterior are modern replacements, those on the interior, particularly the mihrab and the cenotaph, are of the same kind as those in the mosque. This is no surprise, since the same Haji 'Iwad supervised the work, and the wooden doors are signed by yet another craftsman with the epithet "Tabrizi," Ali b. Haji Ahmad. (187)

Mehmed's successor, Murad II (r. 1421–44 and 1446–51), continued the family tradition of building a funerary complex in Bursa (1444–6). His mosque is similar in spatial organization to that of his father, but the two main domes are of equal size (diameter 10.6 meters) and heights. Although the qibla dome is six steps higher than the central domed court, the side iwans are on the same level and form one continuous longitudinal space. Murad II's constructions in the capital Edirne were more innovative. In 1435 he ordered a conven for Mevlevi dervishes outside the city; later in his reign the building was converted into a mosque. It has a simple T-plan but is notable for its tile decoration, including a gigantic mihrab and a dado of 479 hexagonal tiles. The mihrab is mainly done in cuerda seca, and the designs are so similar to the work in Bursa by the "Masters of Tabriz" that they must have been responsible for the work at Edirne as well. The molded prisms of the muqarnas hood and the hexagonal tiles, however, are done in a new technique of underglaze blue-and-white on an alkaline frieze body. The tiles exhibit a variety of chinoiserie motifs, their first appearance under the Ottomans. They are similar to other blue-and-white tiles produced at the same time in Syria and Egypt by artists bearing the epithet "Tabrizi." (188)

Murad II's major commission, however, was another congregational mosque for Edirne. Begun in 1417 and finished a decade later, it is usually known as the Üç Şerefeli ("Three Balconies") Mosque after the three galleries for minarets on its south-western minaret, the tallest (67.65 meters) in Ottoman architecture until that time. The mosque is a monumental, nearly square building (66.50 by 64.50 meters) comprising an arcaded court with minarets at its four corners and an oblong prayer hall (183). The prayer hall is dominated by a huge dome (24.10 meters in diameter) which covers over one-half the interior space. It is supported on the north and south by the exterior walls and on the east and west by massive hexagonal piers. The four corners of the prayer hall are covered with domes, and the small triangular spaces between the corner units and the central dome are covered with tripartite vaults decorated with muqarnas and supporting tiny domes in their centers. The exterior (184) is a cascade of domes descending from the central dome to those over the court arcades. The arched buttresses around the drum of the central dome are the first in Ottoman architecture.

The mosque's integral fountain court and monumental dome are new features in Ottoman religious architecture. (189) The congregational mosque built in Edirne at the beginning of the fifteenth century, now known as the Edirne Mosque (Old Mosque), is, like the Ulugh Cami in Bursa, a hypostyle building of equal domed bays, in this case nine units of approximately thirteen meters each. The inspiration for the integral fountain court and monumental dome must lie elsewhere. Although the mosque at Selçuk (172) has a court, a more likely source for both features is the Saruhanid congregational mosque in Manisa (173), a town which Murad II knew well and to which he would retire in late 1444. The copy surpasses the model in size, scale, and sophistication, and it charts a new course for Ottoman architecture. The architect wanted to create a monumental exterior, but was not always able to achieve his goal. The cascade of domes is interrupted by the tiny domes nestled in the lee of the main dome and by the uneven height of the domes over the court arcade. The elevation of the court arcade is also awkward, for the arches at the corners spring from different levels. The interior is dark. The Üç Şerefeli Mosque stands at the crossroads of Ottoman architecture: it is the culmination of spatial experiments in Beylik and early Ottoman architecture, and many of its novel features, such as its splendid portal, would be continued in later Ottoman architecture on a grander scale and in a more coherent fashion after the conquest of Constantinople.

The tile decoration that remains at the Üç Şerefeli Mosque is the culmination of the "Masters of Tabriz" style begun at Bursa. The lanette panels above the windows of the court are painted underglaze with the sultan's name against a foliate ground (185). The earlier blue-and-white has been abandoned in favor of a palette of dark blue, light blue, purple, and white, outlined in black (verging on dark purple). After Edirne, the "Masters of Tabriz" workshop is thought to have executed only two more commissions. The decoration for the mosque of Mehmed Fatih in Istanbul (1465–70), where yellow was added to the palette, and the tomb of Cem Sultan in Bursa (1470), both of significantly lower quality. Active for fifty-five years, the workshop was probably centered in Iznik, as a rare fragment from a vessel in the same technique and style was discovered there. At the end
of the fifteenth century Iznik would become the center of production for the superb fine wares produced for the Ottoman court (see Chapter 16), and one might easily imagine that it was a continuation of the “Masters of Tabriz” workshop. But the significant technical differences between the “Masters of Tabriz” ceramics, which have a alkaline-frit body and a polychrome palette, and later Iznik wares, which have a lead-frit body and were initially decorated in blue and white, indicate that the two traditions were quite distinct.15

THE ARTS

Whereas architecture under the Byzliks is varied and shows a lively interplay between traditional and innovative elements, the portable arts produced then, with the exception of those directly related to architecture, seem to have been less important. This phenomenon was not unique to Anatolia during the period, but the political fragmentation that defines this period seems to have limited the patronage of the luxury arts, such as manuscripts and fine metal-works. The ceramic arts clearly demonstrate that more attention was paid to architectural commissions than to objects. Foreign craftsmen were brought to create magnificent ensembles and no expense was spared to produce wares within the new techniques of underglaze painting and cuerda seca, but these craftsmen rarely made vessels, and the typical ceramics produced under the Byzliks are unpretentious earthenwares. The most widespread type is known as “Millet ware,” since quantities of it were excavated at Balas, the site of ancient Millet.23 Subsequent excavations have shown that Iznik was the major site of production.24 Produced over the course of the fourteenth century, these wares were made of a coarse red clay with a white slip and painted in blue or green with black outlines and touches of purple under a clear lead glaze. The typical convex bowl or deep dish has a radiating design decorated with spirals.25 These humble provincial wares provide no hint, in either technique or decoration, of the splendid ceramics that Iznik would begin to produce later in the century. Wooden fittings for architecture were particularly important in Anatolia, due no doubt to the rich resources of timber available there, and of elaborately decorated examples produced under the Byzliks survive. Earlier work had been executed in the tongue-and-groove technique in which octagonal, star-shaped, and lozenged panels carved with arabesque decoration were joined without pins or glue in grooved frames. Widely dispersed throughout the Islamic world by the twelfth century, this technique (Turkic: kündekari) continued in the Iznik period, when the carving became finer, more intricate, and shallower, and boss-like rosettes were added to the repertoire. Since it was too time-consuming, however, it was often replaced by the cheaper technique, “false kündekari,” in which large boards were carved with strapwork networks containing octagonal, stellate, and lozenge-shaped panels. Although mounted in frames, the boards eventually warped and split because they were less able than true kündekari work to adjust to changing humidity by expanding and contracting. Doors and windows were often decorated in Kubachi kündekari, but elaborate decorative examples are minbars, such as the one made for the Arslanhan Mosque in Ankara in 688/1289-90 [186].26 Today, introduced in the fourteenth century, also became more popular in the fifteenth century. The panels from the doors to the Haiji Bey Mosque in Ankara, for example, are laid with ivory.27

The art of metalwork during this period is still largely unexplored and a matter of much speculation. It is likely that some metalwares of artistic merit were produced, as significant metal objects, such as gilded bronze lamps, had been produced under Saljuq patronage in Konya during the thirteenth century,28 but the only dated pieces from the period of the Izniks are a few metal objects identified with the early Ottomans. They are more important for historical than artistic reasons.29

Much the same situation pertains to illustrated manuscripts. Illustrated manuscripts had been produced under Saljuq patronage in the thirteenth century.30 Luxury books continued to be produced in Anatolia in the fourteenth century, for a section of a Koran manuscript can be attributed there.31 The forty folios contain the thirteenth section of the Koran, and the colophon states that it was copied in Rab"i' 1 734 (November 1333) by Husayn b. Hasan, known as Husam, the poor (al-hafiz), al-Mawlawi. The scribe's epigraph suggests that he was a member of the Melikli order of dervishes, who originated in Konya in the thirteenth century, and the manuscript probably remained in the family, for it later belonged to an "abi," or member of one of the brotherhoods that flourished there in the fourteenth century. Each folio has three lines of large black maydus script and chapter headings are done in gold thuluth. The opening lines of the section [187] are surrounded by contour panels and a red crossed-hatched ground decorated with four exuberant vine scrolls with large palmettes and sinuous arabesque leaves. The script and illumination resemble some of the Koran manuscripts produced for Ilkhanid patrons in Iran at the beginning of the fourteenth century [187]. By the 1340s these features were known to artists in provincial Anatolia. There may have been some demand for illustrated books under the Byzliks, but greater painters must have been scarce in early-fourteenth-century Anatolia, and it is likely from a copy of the Iskendarname of Ahmedcide done at Amasya in 1416.32 The manuscript contains twenty illustrations, but only three are contemporary with the text. They are simple in execution and composition, with three or four riders placed on blue or green grounds speckled with gold. The other seventeen illustrations have been cut from fourteenth-century Persian Nuzhat manuscripts and pasted into it. The manuscript was completed three years after the author's death, and it seems that no prototypes were available, so the painter was forced to cut out related images from other manuscripts. When he ran out of suitable material for pasting, he turned to his own limited talents. Literary sources mention that a court school of painting existed under Mured II and praise the skill of the artist Isahmad Sawadullah, a painter of Bursa, but none of his work has survived.33 The double frontispiece to a manuscript on music theory, the Aqaidet el-Alhis by "Abd el-Qadir el-Magribi, however, shows the high quality of contemporary work at Edirne.34 Painted in black, blue, and gold, with touches of orange, green, and white, the illuminated frontispieces show large central medallions decorated with delicate arabesques and floral sprays. Although details show that contemporary styles of Shiraz and Cairo were known to the artist, the composition and proportions are distinct, with oversize medallions and corner quadrants. The oval medallion on the left-hand page is inscribed with the dedication, which states that the manuscript was made in 1433 for the treasury of Mured II.

The most important development in the portable arts was the increased production of carpets. Scattered examples, such as the carpet unearthed at Paşazeh, indicate that the craft had been known in the Near East for millennia, but only from this period can a continuous tradition of carpet-making be traced to modern times. The few surviving carpet fragments are complemented by representations, primarily in contemporary Italian paintings, but also in Persian illustrated manuscripts. Two groups of carpets have been identified. The earlier group, known as “Konya carpets” because they were first discovered in 1933 in the "Ala al-Din Mosque at Konya, are relatively coarse, with 5.5 to 7.5 symmetrical knots per square centimeter.36 They show a relatively limited range of strong colors (medium and dark red, medium and dark blue, yellow, brown, and ivory). The typical layout consists of a central field with small, singular motifs arranged in staggered rows with a contrasting border of large pseudo-Kufic designs or stars. The size of the carpets (the largest measures 2.58 by 5.50 meters) suggests that their production was organized on a commercial scale rather than on the small scale of village or nomad weaving. Because they were found at the mosque at Konya, they were initially attributed to the patronage of the Saljuq sultans there, but at least one [188] has an asymmetrical motif derived from the double pattern on Chinese silks woven under the Yuan dynasty (1279-1368), and the group has been reattributed to the
first half of the fourteenth century. As these carpets are not depicted in Italian paintings and only a few fragments of them have been found outside Anatolia, they seem to have been made for local consumption.

Animal carpets are slightly later in date. Three examples survive: the Marby Carpet (189), found in the Swedish village of Marby in 1925, another found in a church in central Italy and now in Berlin, and a third acquired by the Metropolitan Museum of Art in New York in 1909. In contrast to the Konya carpets, animal carpets are relatively small (the Marby Carpet measures 1.45 by 1.09 meters; the Berlin carpet 1.72 by 0.90 meters; and the New York carpet 1.26 by 1.53 meters). They all show confronted and stylized animals set within octagons or squares, but differ in color: the Marby Carpet has red birds flanking a tree on an ivory ground, the Berlin piece has a blue dragon attacking a blue phoenix on a yellow ground, and the New York piece has blue dragons on a red ground. The sources of the designs are also different: the birds and tree is a motif long known in Central Asia, while the dragon and phoenix is a Chinese motif which was probably brought to the Near East by the Mongols. The pieces can be attributed to ca. 1400, as animal carpets appear in early-fifteenth century Italian paintings. The closest parallels are found in Domenico di Bartolo’s fresco The Wedding of the Foundlings, painted between 1440 and 1444 for an orphanage in Siena, and a Sieneese painting of The Marriage of the Virgin from the early fifteenth century. Animal carpets must have been made already in the fourteenth century, as they are depicted in the Great Mongol Shahnameh, made in Tabriz in 1355 (see Chapter 3). The illustration of Zalakht Entombed shows the king seated on a throne below which is spread an carpet with octagons enclosing stylized quadrupeds. Another illustration, King Faridun Mourning his Son Inay, shows the king seated on a carpet depicting a dragon within a rectangular field. While other carpets are depicted in contemporary manuscripts, these are the only two depictions of animal carpets in manuscripts from the early fourteenth century. Animal carpets must have been extremely rare at this time and reserved for royalty, as they are depicted under the royal figure. By the fifteenth century, however, there must have been many more of them and they must have had a much wider circulation, to judge from their appearances in Italian painting.

Other carpets and flat-weaves (Türk, ësim) may have been produced under the Beyliks, but their identification and dating are still a matter of lively debate. With the Ottoman unification of Anatolia and the conquest of Constantinople, the production of carpets must have increased dramatically, as did their export to Europe and their regular appearance in European painting. It is only in the later fifteenth century that the repeated depiction of Turkish carpets allows the definition of more types and the precise dating of surviving examples.

Muslims had founded trading settlements in Sind in the mouth of the Indus river as early as the eighth century, and excavations at such sites as Bandhore have revealed mosque-like structures, a type common in central Islamic lands in the ninth and tenth centuries. But a distinctive tradition of Indian Islamic architecture began to emerge only at the end of the eleventh century, when the Ghurid sultan of Khorasan, Muhammad b. Sam, conquered northern India, and his commander Qutb al-Din Aybak established his capital at Delhi in the plain to the west of the Yamuna (Jumna) river. Delhi remained the seat of several dynasties, collectively known as the Delhi sultanates, which ruled successively until the middle of the sixteenth century, and was often the capital of the Mogul emperors (see Chapter 18). The city quickly became an important center of Muslim learning and culture, as many intellectuals sought refuge there from the depredations of the Mogul conquerors. The Chishti and Shairwati Sufi orders were particularly active in India, where they won many converts to Islam among lower-caste Hindus, although at no time did more than a quarter of the population ever convert to Islam. Indigenous building techniques were adapted for the new architecture required by Muslims, particularly mosques and tombs. Unlike other areas of the Muslim world, which already had a large stock of congregational mosques, leading patrons to found such institutions as madrasas and khanaqahs, India was a clean slate and needed the entire range of Islamic institutions, virtually all of which were fundamentally different in spatial concept from most Hindu and Buddhist architecture. The principal type of religious building in India was the temple, the dwelling place of the god envisioned as an architectural facsimile of the world-mountain. This largely solid mass of masonry, with its carefully regulated proportions and exuberant details, might be embellished with porches, pillared halls, and gates set within a temenos, but it was never designed for congregational worship, as is the case in medieval Europe. The temple served as a sacred representation of the mosque. In regions where stone had been the primary material of construction, temple spolia, particularly columns from porches and enclosures, were used extensively. The indigenous tradition of trabeate stone architecture, in which posts and corbels support beams and slab roofs, was modified by the introduction of the arcuate system typical of Islamic brick architecture in Afghanistan, Iran, and western Central Asia. At first, the form of an arch was initiated with corbeling and trabeate hypostyle halls were concealed by arched screens, but soon architects learned techniques of constructing arches and vaults which allowed the creation of interior spaces, a necessity for congregational architecture.