

THE GALLERIES OF ISLAMIC ART

After a long period of time, the Museum will open newly installed galleries presenting the arts of the Islamic world. This new installation is, however, only the beginning of a larger project that involves nothing less than the complete rearrangement of the Islamic collection. The present arrangement cannot be anything but a temporary solution, showing as many important, relatively small-scale objects as will fit into the new rooms. The objects, which are arranged historically, are not divided by material but grouped together according to their date and country of origin. Thus an attempt is made to demonstrate the development of the whole of Islamic art in a given period. It is hoped that with this new form of presentation it will be possible to offer to the Museum's visitors a clearer picture of the art of a culture not widely enough known and not generally appreciated today.

The exhibition includes objects from the earliest period of Islam to the seventeenth century; pottery, glass, metalwork, ivory carvings, woodwork, and miniature paintings will illustrate the major periods of Islamic art both in the East (Iraq, Iran, Afghanistan, Central Asia, and India), and the West (Turkey, Syria, Palestine-Jordan, Egypt, North Africa, Spain, and Sicily). Fortunately it will be possible to show at least a few rugs of smaller scale and one monumental object, the tile mosaic prayer niche, or *mihrab* (Frontispiece), from a madrasah in Isfahan of 1354. It will not be before the completion of the rebuilding of the extreme north wing of the Museum that we will be able to show the major part of the collection, which will then include a large rug gallery and galleries devoted to the art of Ottoman Turkey and of Mughal India.

ERNST J. GRUBE Associate Curator in Charge of Islamic Art

FRONTISPIECE: Faïence mosaic mihrab (prayer niche) from the madrasah Imami, 1354, Isfahan, Iran. Height 11 feet 3 inches. Harris Brisbane Dick Fund, 39.20

ON THE COVER: Details of two ceramic bowls and a cut-glass bottle, all Persian

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Medieval Islamic Glass

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It is only in recent decades that the importance and extent of the glassmaking industry in early Islamic times has come to be appreciated. However, there is still a great deal of uncertainty and conjecture about glass production in the Near East from the time of the dissolution of the Roman Empire through the early centuries of Islam. After the fourth century A.D. there appears to have been a distinct decline in quality and quantity in the industry throughout what had been the Roman world, with the possible exception of Syria, a country where the first Arab invasions began shortly after the death of Muhammad in 632. It may be here that Roman techniques and traditions became known to Islamic glassmakers.

Egypt, with a history of glassmaking dating back to the early New Kingdom (1555-1090 B.C.), shared in both the general decline and the resurgence of the industry more than a century after the advent of Islam there in 641.

Mesopotamia, which had been part of the extensive empire of the Persian Sasanian dynasty (A.D. 226-641), also fell before the Arabs to whom the door was then open to the whole Iranian plateau. Excavations in Mesopotamia (now Iraq) have brought to light material of high quality from late Sasanian times, and literary evidence as well as excavations at Samarra (a city north of Baghdad that was built, occupied, and deserted in the course of the ninth century) and elsewhere suggest a thriving glass industry there throughout the first centuries of Islamic rule. In Persia, the large amount of glass found of both Sasanian and early Islamic date, as well, again, as the added confirmation of

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excavated material, such as that found at Nishapur, a city in the province of Khurasan, implies the existence of an industry analagous to that of Iraq.

In the beginning the Arab conquerors, having no artistic heritage of their own, capitalized on that of the subjects within their new empire. However, before long the all-pervasive spirit of Islam caused the emergence of a new culture and engendered creative impulses resulting in manufactured products, such as glass, of great artistic merit.

There seems, during the first part of the Abbasid caliphate (that is, from the mideighth to the mid-eleventh centuries) to have been an empire-wide glass industry. There was probably as much movement of artisans within the empire as there was flow of products, which no doubt contributed to a certain universality of style. This makes it extremely difficult to distinguish with certainty between the glass of one area and another. In addition, as very little early Islamic glass is signed or dated, dating has generally had to be based on stylistic comparisons alone.

Providing the most reliable evidence available concerning glass production are the finds from the scientific excavations of early Islamic sites, of which, unfortunately, there have been very few, the two most important being Samarra, where digging was interrupted by the First World War, and Nishapur, in turn interrupted by the Second.

Even in excavations, without the presence of wasters (pieces damaged in the process of manufacture and discarded) or of kiln sites, there is no proof that a piece was made where it was found. For example, much early Islamic glass has been attributed to Gurgan, a city northeast of Tehran near the Caspian Sea, or to Nishapur, because the quality found at these places would seem to indicate important centers of the industry. However, many of these attributions are mere speculation. This lack of reliable evidence, and the fact that stylistic comparisons can be taken only so far, leads to the conclusion that greater knowledge of the early Islamic glass industry is dependent on further controlled excavations.

Because of the lack of archaeological evidence, the techniques employed by Islamic glassmakers for the forming and decoration of glass vessels have had to be surmised. A knowledge gained by a study of the vessels themselves may be implemented by a study of the methods used in hand-manufactured glass today since they are probably, fundamentally, not very different from those of the past. There is not space here to more than touch on some of the more common methods of manufacture that have been used in the glass pieces illustrated.

In early Islamic times, glassblowing by means of a hollow-shafted blow rod, when the glass had been heated to a controlled degree of viscosity, was the most usual method of forming a vessel, since it was the most versatile. The glass could either be blown into various forms or shaped after being blown. When the glass was still in a malleable state it might be decorated by tooling, whereby, with the skillful use of simple implements, it might be pulled, pinched, or otherwise manipulated to achieve surface decoration or even freestanding forms. While still viscous, separate glass parts might be added, such as a foot or handle, or pieces applied as decoration, such as medallions or trailed threads, either within the glass body or on its surface. Glass vessels could also be formed by



- Bowl, probably Syrian, VII-VIII century. Height, with vase, 5½ inches. Fletcher Fund 64.131
- 2. Animalistic vase, Syrian, about VII-VIII century. Height 45% inches. Bequest of Mary Anna Palmer Draper, 15.43.233



blowing into a mold, as well as by various other methods of molding.

The surfaces of both blown and molded vessels could be further decorated, when the glass had hardened, by cutting. This was a decorative technique with a long tradition in the Near East, and used with great skill and imagination by early Islamic artists, with whom it was extremely popular. There were two principal methods, both depending on the use of the wheel. In one the design was cut into the surface of the glass with a line rounded in cross-section, producing what is called "hollow" cutting, or a line with an angular cross-section, producing "beveled" cutting; in the other, a much more difficult and time-consuming process, the background was cut away leaving the design in relief. (This is the technique of the small but famous group known as Hedwig glass, first known in Europe by the examples brought back by the Crusaders. There are, unfortunately, no examples of it in this country.) Relief-cut glass in technique and often in decoration is akin to rock-crystal carving, and like it, reached its greatest development and popula rity from the ninth to the eleventh centuries.

The Museum has recently acquired a few

pieces of glass that in technique and decoration are characteristic of one of the most interesting and, probably, most productive periods in Islamic glassmaking, the eighth to twelfth centuries. The earliest example (Figure 1) is a delightfully playful little ensemble composed of a bowl of wine-taster proportions, on a slightly raised foot with a convex curve in the center. The added rim has been pulled out to form triangular platforms on which rest four applied ducklike birds. To the rim between two of the birds has been attached a small vase with a bulbous body and flaring neck. The bowl and vase are of clear yellowish glass and the four birds of green, but all are now covered with a dark silvery-gray buff-flecked patina, with the birds showing signs of green iridescence.

A group of objects of various animalistic forms shaped by tooling, carrying little vases



3. Cup, possibly Syrian, about VII-VIII century. Diameter 3¹⁵/6 inches. Corning Museum of Glass, Ray Winfield Smith Collection, 55.1.14

or containers on their back encaged by applied thread decoration, have been associated with Syria, where a pre-Islamic tradition of tooled and applied decoration existed. Not only are the birds on our bowl related to this group, as can be seen from the illustration (Figure 2), but on some examples the little vase on the back closely resembles that fastened to the rim of the bowl. It is very difficult to assign a precise date to this group. It seems to hover on the borderline between pre-Islamic and Islamic and was probably made during both periods.

There is a little cup (Figure 3) formerly in the Ray Winfield Smith Collection and now in the Corning Museum of Glass, which has an added rim with four triangular projections similar to that on our bowl. Although decorated with applied thread, it is composed, as is our piece, of glass of two colors. It was acquired in Lebanon and is considered Islamic, possibly Syrian, about seventh to eighth century A.D. We might venture a like date for our piece, which was also acquired in Lebanon, and is probably Syrian.

Another recent acquisition is a small mosque lamp (Figure 6) of yellowish glass with a flared neck and squat, rounded body. Inside has been attached a cylindrical tube, presumably for the wick, and outside, a round foot ring. Around the body six handles have been applied. Each has the form of a flat-sided loop, folded over at the top in a triangular pattern and broadening at the base to a flattened teardrop shape. It was by these handles that the lamp was suspended by chains from an apparatus attached to the ceiling of the mosque. This small lamp, undecorated but of pleasing proportions, belongs to a group of early lamps that were made seemingly throughout the Islamic world. The differences between them are mainly in the shape or decoration of their handles, the number of which remains constant.

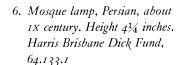
Another lamp (Figure 5), almost identical to ours in form and handle shape and only slightly smaller, appeared in an exhibition in 1963 in Braunschweig, Germany, entitled 2000 Jahre Persisches Glas, and it was labeled as coming from Nishapur and being of the eighth to ninth century. Since nothing excavated by the Metropolitan Museum at Nishapur has been considered to be earlier than the ninth century, an earlier date than that will not be ventured for our mosque lamp. That this shape survived for a considerable period can be seen from a glazed pottery mosque lamp of about the twelfth century that was excavated at Nishapur and is now in the Tehran Museum (Figure 4).

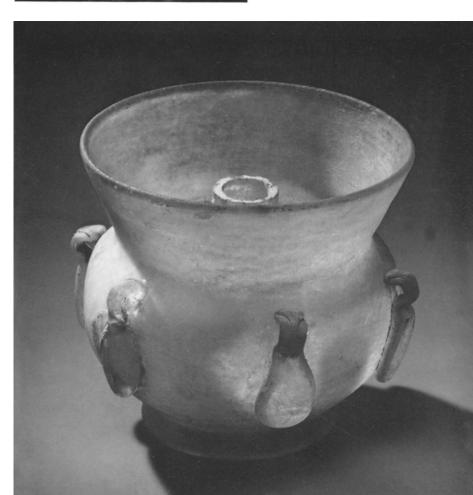
Two very fine Persian cut-glass bottles, related in technique and certain aspects of decoration, but in overall design quite distinct, give an indication of the glasscutters' reper-



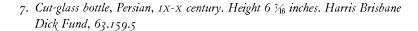


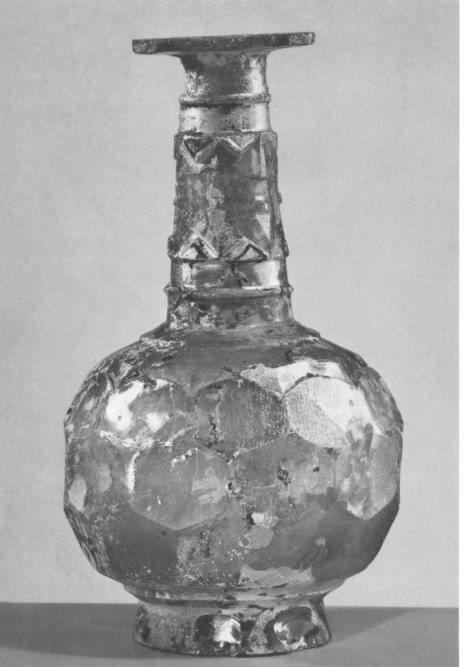
- 4. Glazed pottery mosque lamp, Persian, from Nishapur, about XIII century. Tehran Museum
- 5. Mosque lamp, Persian, said to be from Nishapur, VIII-IX century. Height 3½ inches. Braunschweig Museum





8 (right). Cut-glass cup, Sasanian, VII-VIII century. Height 3½ inches. Rogers Fund, 59.34







tory. The bottle in Figure 7 is composed of a clear colorless glass with a slightly yellowish tinge, but is now completely covered by multicolored iridescence - actually a case of a vice being turned into a virtue since the iridescence, a result of the process of decay, gives the bottle an extremely pleasing appearance. The decoration consists entirely of geometrical designs. The enormous difficulty of cutting a pattern into a surface of the hardness of glass lends itself to this treatment, and in any case, it was a type of design in which the Islamic artist excelled. The principal decoration consists of three rows of flat-surfaced disks, ten to a row, placed so close that they become, in effect, hexagons. Above the top row and stepped back, ten arced facets have been cut, making a kind of echo of the disk pattern as well as solving with subtlety the problem of transition from body to neck. The cylindrical neck tapers slightly to reach a wide flat rim with a straight-sided, hexagonal outer edge. The center section of the neck is cut into six vertical panels with a squat triangle at top and bottom of each. The panels are separated by tall slender triangles with beveled sides and outer surfaces slanting in from top and bottom, separated, where they meet in the middle, by a bevel-sided rectangle (this is not visible in the illustration).

The practice of decorating glass by cutting disks was inherited by Islamic artisans directly from their Sasanian predecessors, who, in their turn, had learned it from the Parthians (250 B.C.—A.D. 226). The idea was ultimately derived from Roman glass. The disk was often

concave, which necessitated a vessel with thick walls (Figure 8), or it might be raised and sometimes given a projection, or umbilic, in its center. Both methods of decoration continued into Islamic times and it is often difficult to separate late Sasanian from early Islamic examples.

Other bottles with a honeycomb pattern on a round body generally have designs on their necks quite different from those on our piece. Some have long cylindrical necks, others short and somewhat flared ones, in either case without a lip at the mouth of the bottle. The designs on the necks vary from combinations of rectangles with ovals and disks to beveled triangles on the order of, but not exactly like, those on the neck of our bottle. The number of disks on the bodies vary, and they are found in either an overlapping or a separated position. A vessel in this group often resembles another in one particular feature of its design. They have been assigned dates that range from the eighth to the tenth century and provenances that include the cities of Gurgan in the north of Persia, Nishapur in the east, and Saveh, southwest of Tehran.

The form and decoration of the neck of the Museum's bottle relates it in general to another group that has tapered necks with faceted decoration and wide flat rims. The majority of these flasks, however, do not have a spherical body but are straight-sided, with a flat base and wide, gently sloping shoulder. The neck decoration usually consists of a combination of geometrical figures such as rectangles, trapezoids, and the like (closer to the bottle in Figure 9 than to the one under discussion), occasionally of simple hatching. Furthermore, the rims are invariably round rather than hexagonal.

Only a highly developed industry could have turned out vessels so successfully designed and skillfully executed as the fairly large number that have been found with the same basic design elements. As well as the reputed geographical extent of the finds of

 Cut-glass bottle, Persian, 1X-X century. Height 9¹/₈ inches. Harris Brisbane Dick Fund, 63.157.2







this type of glass, the many variations within a general vocabulary would certainly also suggest a wide range of production rather than one limited to a few major centers. The Museum's bottle, for instance, does not seem close enough to any of the others that I have studied to have been made, for certain, in the same workshop. The ones that have been assigned an early date still have Sasanian affiliations in their design, and the later ones seem to have a smooth, somewhat streamlined appearance. Our bottle fits somewhere in the middle, that is, the ninth to tenth century. However, the dating is mainly surmise.

Cut-glass designs were by no means limited

to the abstract. On both relief-cut and incised glass, and on rock-crystal vessels, animals and birds formed a not inconsiderable part of the repertory. The incised bottle in Figure 9 is of deep blue glass (now covered with a silverybuff patina). The decoration on the neck of trapezoidal, rectangular, square, and triangular facets relates it to the group of flasks mentioned earlier, as well as to a group of bottles of similar long neck and bulbous body shape. The design on the body is formed by two pairs of confronted long-tailed birds, created by both beveled and hollow cutting. The conventions of the collar, the hatching on the neck, the scrolled wing, and the object dangling from the bills of one pair of the birds are all inherited from the Sasanian era. The latter two decorative motifs, especially, became extremely popular in Islamic times and were further developed and applied in a diversity of treatments.

As a glance at its ceramic art will testify, birds as decorative motifs were extremely popular throughout the world of Islam. This must in part be attributed to the aesthetic possibilities of birds as a design element, but also because they encompassed an auspicious symbolism, such as the sun, victory, good fortune, etc. To trace the sources of this symbolism in Muslim tradition would be an extremely complicated task, as it seems to go far back in antiquity in Near Eastern countries. More recently, it was drawn not only from both Arab and Jewish folklore, but in Persia from Zoroastrian sources (Zoroastrianism being the religion that preceded Islam), which in turn drew on an earlier tradition. The complex significance of bird symbolism that was reached is attested by an illustrated manuscript that

the Museum has recently acquired: Farid aldin Attar's mystical allegorical poem entitled Mantiq-al-Tayr, or Language of the Birds. In it the birds (standing for Sufi pilgrims, a mystical Muslim sect) search for the Simurgh (a fabulous bird in Persian mythology resembling a phoenix, and here standing for God). Of course, the glasscutter who was responsible for the simple pair of birds on this bottle would have had no idea of such complexities, but probably was well aware of a certain propitious significance.

Freely drawn scrolls, formed in the same way as the wings, occupy the space between the backs of the birds, with little crosshatched lozenges occasionally filling the inadvertent gaps. Around the shoulder of the bottle is a scrolled band of leaves, each with two parallel lines across its center. The scroll has been an important motif in many cultures, and is especially so in the Muslim world, where, after all, the arabesque was invented. The leaf-scroll on the shoulder is not an arabesque, but is typi-



cally used in a way in which a natural form becomes an abstract pattern. The scrolls on the body are quite different: one cannot separate the scroll from the background, both being formed by the same beveled line. This type of cutting can form a completely abstract pattern, as in Figure 11, or it can make an inorganic form seem to sprout like a living vine (Figure 10), as the scrolls between the pairs of birds seem to do.

The Museum's bottle is remarkably close to one now in the Corning Museum of Glass (Figure 12). This is also blue, and has similar although not identical neck facets, a band of leaf-scrolls on the shoulder, and two pairs of confronted birds on the body. Only the eyes, which are round rather than tear-shaped, and the fleur-de-lis separating the birds constitute a major difference. A third bottle, formerly owned by a dealer in Frankfurt am Main, but whose present whereabouts is unknown to me, while of the same shape and general design, differs even more in detail from our bottle. This would seem corroborative evidence that the Islamic glasscutters did not slavishly copy some master model but were artists enough to improvise within a basic pattern.

The bottle in the Corning Museum has been mentioned as having been found at Gurgan. Gurgan finds are of either the ninth to tenth or twelfth to thirteenth centuries. The earlier date has now been generally accepted for the Corning Museum's bottle. Although the place of the find does not constitute proof of manufacture there, the Corning and the Metropolitan bottles are undoubtedly from the same workshop and are so skillful in design and execution that they must have come from an important center of the glass industry somewhere in Persia, since this shape seems not to have been found elsewhere.

A vessel quite unrelated to the two preceding ones is an elegant and delicate ewer of clear green glass (Figure 13). Its mouth is shaped like an eyecup with a spout; the handle is applied to the cupped mouth and mid-body by folds of glass, and a fold in the handle provides a thumb rest. The body is decorated with a wavy zigzag trailed around it and applied threads in the form of rings.

12. Cut-glass bottle, Persian, 1X-X
century. Height 9¼ inches.
Corning Museum of Glass,
Ray Winfield Smith Collection,
55.1.134





13. Ewer, Persian, first half of the XI century. Height, to top of handle tab, 5¾ inches. Rogers Fund, 62.172

Prototypes for this ewer date back to the end of the Sasanian and beginning of the Islamic era, and have been found in the excavations at Susa, a city north of the Persian Gulf, and also, reputedly, in northern Iran. Ewers of a slightly later date, probably, that is, from the ninth to tenth centuries, have been found at scattered sites in the Near East. The general tendency was toward a deepening of the cup of the mouth, and, to a lesser extent, toward a more conical, less pear-shaped body.

What is of particular interest about our thread-decorated ewer is its close relationship to a ewer (Figure 14) that was excavated by the Metropolitan Museum at Nishapur and is now in the Archaeological Museum in Tehran. This ewer has been assigned a date in the first half of the eleventh century. The applied decoration of the Tehran ewer is more elaborate than that on ours, but in all other respects they are extremely similar. But in spite of this relationship, one cannot be sure that both were made in Nishapur. Charles K. Wilkinson, Curator Emeritus of Near Eastern Art, who excavated the piece now in Tehran, believes that it may, in fact, have been imported to Nishapur, since nothing else like it was found there. If this is the case, the place of manufacture of these two beautiful examples of Islamic glass remains but one of the many mysteries waiting to be solved about the glass industry of medieval Islam.

A type not yet discussed, but very popular with Islamic glassmakers, is mold-blown glass. As the name suggests, molten glass was blown into a mold in which a pattern had been carved or stamped. Generally, balanced, restrained patterns give the most felicitous results in this technique. After the glass had been removed from the mold, the glassmaker often reworked it by further blowing and by manipulation, and in this way was able to achieve considerable

14. Ewer, Persian, first half of the XI century. Height, to top of handle tab, 65% inches. Tehran Museum

variety and avoid a stereotyped appearance.

The design on the bottle in Figure 15 exemplifies a pattern most suited to the technique. The bottle itself is an unusual but pleasing shade of soft brown with a yellowish tinge. It has a long undecorated neck flaring slightly at the rim, and is decorated on the shoulder and on the upper part of the body. The rounded body has been elongated to slope gently to a high, hollow, flared foot. The body of the bottle, below the shoulder, is encircled by a band of geometric figures made up of spirals that form a heart shape, their curling ends flanking a circle and dot centered within the heart form. A stem rising from the point of the heart splits into two opposed spiraling branches, each of which in turn connects with a branching vertical divider separating one geometric figure from the next. On close inspection it can be seen that the figures are not exactly the same distance apart and that part of an extra geometric figure, of which the upper spiral shows most clearly, has been placed in what is supposed to be a space between each whole figure. Both of these idiosyncrasies would lead one to suppose that the figures had been made in the mold by means of a stamp and that the artisan did not bother to correct his slight miscalculation in the space needed for repeats of his pattern. He probably counted on the partial blurring of line in molded glass to minimize the discrepancy, as indeed it does, and the overall effect is a pleasing repeated pattern of geometric forms with softened contours.

The pattern on the shoulder is made by raised knobs of indistinct lozenge shape, each cluster separated by a vertical ridge interrupted by a lozenge at its center. At one point the pattern is somewhat damaged and the knobs and ridges rather indistinct and covered with iridescence; eight clusters can be counted.

The relief of each horizontal row of knobs becomes lower until the uppermost row merges into a smooth surface toward the base of the neck, caused, no doubt, by the pulling out of the surface in the blowing of the neck. Between the body proper and the shoulder there is a groove with a central ridge marking the join of the two separate molds that were undoubtedly used for the top and bottom halves of the bottle. Mold-blown glass with this type of pattern seems to have been fairly widespread in Persia in the eleventh to twelfth centuries.

Another recent addition to the Museum's collection is a mold-blown bottle of quite different appearance exemplifying the versatility possible with this technique (Figure 16). It is of clear glass with a slightly yellowish tinge, which is covered with a silvery-buff patina. It has a long, slightly tapering neck, terminating in an out-turned round flat rim. Around the neck has been applied a spiral of contrasting dark green glass, now partially broken off or covered with the same buff patina. The globular body has been divided into twelve pronounced flutes, decorated alternately with a vertical row of round knobs and a row of oblique flutes. In the deep hollow between each of the twelve large flutes is a narrow vertical ridge. On one side of the bottle there is, in place of a row of knobs, a vertical ridge, and opposite it on the other side a much thicker ridge. It is here that the two molded halves were joined, more successfully on one side than on the other. The line of the join continues down to a groove in the rather low, flaring foot.

This bottle has reached that stage of simplified elegance of design that to describe it is necessarily to do it an injustice. It was probably made in the twelfth century in Persia, at a time when Seljuk artisans in all fields seem to have been at the very height of their powers.



15. Mold-blown bottle, Persian, XI-XII century. Height 101/16 inches. Rogers Fund, 64.240

16. Mold-blown bottle, Persian, XII century. Height 10½ inches. Purchase, Joseph Pulitzer Bequest, 64.255



REFERENCES

- Wilfred Buckley, *The Art of Glass*, Oxford—New York, 1939.
- Kurt Erdmann, "Neuerworbener Gläser der Islamischen Abteilung," *Berliner Museen*, XI (1961), no. 2.
- Kurt Erdmann, 2000 Jahre Persisches Glas, Ausstellung im Städtischen Museum Braunschweig, Braunschweig, 1963.
- Richard Ettinghausen, "The Bevelled Style in the Post Samarra Period," *Archaeologica Orientalia in Memoriam Ernst Herzfeld*, Locust Valley, N. Y., 1952.
- R. Ghirshman, Mémoires de la Mission Archéologique en Iran, Mission de Susiane Rapparts Préliminaires, I, Paris, 1952.
- Glass from the Ancient World: the Ray Winfield Smith Collection, A Special Exhibition, Corning Museum of Glass, Corning, N. Y., 1957.
- Walter Hauser and Charles K. Wilkinson, "The Museum's Excavations at Nishapur," *The Metropolitan Museum of Art Bulletin*, XXXVII (1942).
- Carl Johan Lamm, *Das Glas von Samarra*, Berlin, 1928.
- Carl Johan Lamm, Glass from Iran in the National Museum, Stockholm, Stockholm—London, 1935.
- Carl Johan Lamm, Mittelalterliche Gläser und Steinschnittarbeiten aus dem Nahen Osten, 2 vols., Berlin, 1929-1930.
- Prudence Oliver, "Islamic Relief Cut Glass: A Suggested Chronology," in *Journal of Glass Studies*, III (1961).
- Arthur Upham Pope, A Survey of Persian Art from Prehistoric Times to the Present, VI, London—New York, 1939.
- Frederic Schuler, "Ancient Glassmaking Techniques, The Molding Process" and "Ancient Glassmaking Techniques, The Blowing Process," in *Archeology*, XII, no. 1 (Spring 1959) and no. 2 (Summer 1959).
- Stiftung zur Förderung der Hamburgischen Kunstsammlungen, Erwerbungen, Museum für Kunst and Gewerbe, Hamburg, 1962.

The Art of Islamic Pottery

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he Metropolitan Museum of Art possesses one of the few truly comprehensive collections of Islamic pottery, but, as in any collection that aims at full representation of a particular art form, there are inevitable gaps. It has fortunately been possible, in the last two years or so, to fill at least some of these gaps, and also to add a number of exceptional pieces in areas already represented. These recent acquisitions cover so wide a range that a survey of them constitutes a brief history of the most important schools of Islamic pottery, from its origins through the main span of its development.

Pottery attained the status of an art in the Muslim world only after contact with the stoneware and porcelain of China, at the end of the eighth century, when these seem to have been imported in quantity for the first time to the Abbasid court at Baghdad. This city, founded by the second Abbasid caliph, al-Mansur, in 762, and Samarra, the soldiers' city built by al-Mutasim in 836 about fifty miles to the north, became the centers of Islamic culture in the ninth century, and here the first schools of ceramic making were established. The earliest products of the Baghdad kilns are obvious attempts to imitate Chinese T'ang porcelains, but soon the Muslim potters developed a taste of their own, and, although always inspired by Chinese examples, began to produce molded and multicolored wares of great beauty and originality.

One of the main problems of the Iraqi potters was that they did not have the necessary ingredients for making true porcelain – as they did not have the clay called kaolin. This is a deficiency that all Near Eastern countries share. A large part of the history of Islamic pottery making is therefore taken up by the struggle against this deficiency, and by efforts to develop a ceramic body that would at least come close to the admired products of the Chinese kilns.

The Baghdad and Samarra potters used ordinary potter's clay, which they covered with a lead-fluxed glaze, a material so liquid in firing as to make underglaze painting impossible, for the colors blur or run together. True alkaline glazes, made from powdered sand and quartz crystal, and fluxed with potash or soda would not run in the firing and so made underglaze painting possible; they would not, however, stick to ordinary potters' clay, which made the production of a new artificial body necessary, made of quartz and glassy matter very similar to that of the actual glaze. Although known in Egypt at all times, these "secrets" of the potters' art did not reach the rest of the Muslim world before the twelfth century. With such technical limitations the early Iraqi potters had





Cobalt-painted bowl, Iraqi, 1X-X century.
 Diameter 7¾ inches. Rogers Fund,
 63.16.2

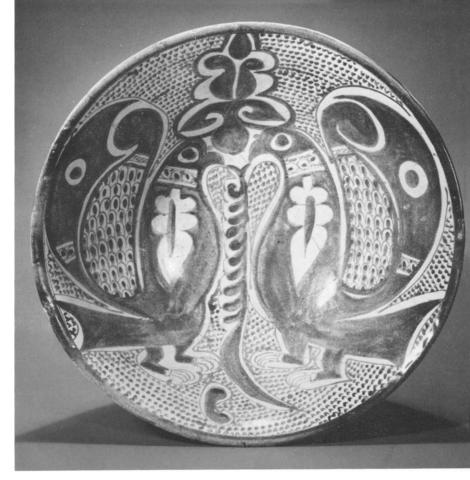
the formidable task of providing ceramics that would look like and would be to a degree as durable as Chinese porcelains. To please the caliph and his court, they invented a variety of shapes, colored glazes, and decorative schemes. Realizing, for example, that it was impossible to match the special surface quality of white T'ang porcelain merely by using a lead glaze over a white slip, they devised a modified form of lead glaze, mixed with tin oxide, the suspended particles of which rendered it white and opaque in firing. This new glaze, applied in a heavy coating to a highly purified yellow clay body, eventually came very close to the effect of T'ang wares, and many pieces of plain white tin-glazed bowls and small plates have been found in Samarra and elsewhere in Iraq. But it seems that the Muslim potters were not satisfied for long with such unadorned pottery, and a second color was soon added, a magnificent deep cobalt blue. In sparingly applied, small-scale patterns, the surface of usually small, shallow bowls was decorated with a few quick brushstrokes, contrasting in a particularly appealing way with the dull, grayish white of the glaze. These pieces are very rare. Among the recent acquisitions of the Museum are two specimens of a type decorated, not with the customary floral or abstract linear patterns, but with writing. The beauty of the written word attracted Muslim artists of all periods, and in no other culture was writing as a form of art developed to such a degree. One of the two pieces (Figure 1) is decorated with only a single line of three words, running horizontally from the right of the center to the left rim, giving the artist's name - Sahil. The asymmetry of this inscription is not really Islamic but rather Far Eastern in spirit, and may well have been inspired by a Chinese model. The second bowl (Figure 2) is more in the usual taste of Islamic art, its

2. Cobalt-painted bowl, Iraqi, 1X-X century. Diameter 8 inches. Harris Brisbane Dick Fund, 63.159.4 balanced design consisting of two words in the center, one set exactly beneath the other, plus a series of quickly painted half circles running around the edge. This is one of the finest pieces of its kind, both because of its perfect condition and the superior quality of its design.

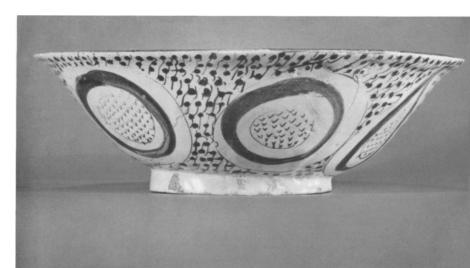
Most important of all the innovations of the Iraqi potters was the invention of an entirely new technique that revolutionized pottery decoration in the Near East: luster painting. Even though its origins are not entirely clear, and although Egypt is sometimes credited with having produced the earliest examples, in painting on glass, there is no doubt that luster was first employed on a large scale for ceramic decoration in Baghdad and Samarra.

The pigment for luster painting is made by compounding sulfur in various forms with silver or copper oxide. This compound is mixed with red or yellow ocher, with a mild acid such as vinegar or wine lees used as a medium. and is applied to a ceramic surface that has already been glazed and fired. In a second, light firing, with little air and much smoke, the pigment is fixed to the glaze. The ocher then rubs off, and the oxides adhere, producing upon the surface of the glaze a brilliant metallic stain, ranging in color from greenish yellow to reddish brown. Both the hue and the degree of brilliance vary according to the ingredients of the pigment and the thickness of application. Different oxide combinations produce different tones, and the thinner and more transparent the luster film, the greater the range of color effects and reflections that can be achieved. This rich and subtle technique was for many centuries one of the most important features of Islamic pottery decoration.

The makers of the earliest luster pieces used more complex patterns than those on the cobalt-painted wares, and they explored fully the potential for multicolor effects that the new technique offered. A little later, probably toward the end of the tenth century, the potters abandoned the more difficult, if more expressive, polychrome effects for a simpler, overall tone of greenish yellow or golden brown, but at the same time, in compensation, introducing a great variety of figural patterns. All early luster pieces are rare, espe-



3, 4. Luster-painted bowl, Iraqi, x century. Diameter 12 inches. Fletcher Fund, 64.134







cially those that are well preserved, for luster fades easily when the glaze comes into contact with soil acids and begins to corrode. We are therefore very fortunate to have a tenth century bowl (Figure 3) that is not only unusual in size and quality of design, but is also in perfect condition. The symmetrical pattern consists of two large peacocks facing each other, very much in the fashion of a heraldic emblem. The outside is painted with a simple pattern of circles and lines (Figure 4) typical of all Iraqi luster ware.

The technique of luster painting seems to have been a jealously guarded secret that for many years was the exclusive possession of the potters of Iraq. In the eastern Persian province of Khurasan, for example, where, in the ninth and tenth centuries, the city of Nishapur became an important cultural center and produced a wide variety of interesting pottery types, luster painting seems to have been unknown. Pottery imported from Iraq, however, seems to have incited the admiration and envy of Nishapur potters to such a degree that serious attempts were made to imitate it. The results are technically of a quite different nature, and fall far behind the originals in effect, but their bold, decorative designs have a distinctive quality of their own that makes them most attractive. A large bowl (Figure 5) - the largest of its kind yet found - is a perfectly preserved and especially beautiful example of the type. The highly stylized floral and animal motifs, combined in an overall geometrical pattern, are executed with a reddish brown pigment upon a yellow slip. The whole is covered with a shining, translucent glaze, with the evident intent of reproducing both the color and brilliance of true luster. The result is highly effective and original, even though dependent upon Iraqi models - a dependence that can be most clearly seen on the outside of the bowl (Figure 6), where the typical Iraqi design of large circles filled with parallel lines painted in quick brushstrokes is used (compare Figure 4).

As this bowl from Nishapur demonstrates, the Khurasan potters had found a secret of their own; namely, how to paint beneath a fluid lead glaze without the danger of having

OPPOSITE:

5, 6. Slip-painted bowl (imitation luster), Persian (Nishapur), x-XI century. Diameter 13½ inches. Harris Brisbane Dick Fund, 63.159.1



7. Slip-painted bowl, Persian (Khurasan), x century. Diameter 7½ inches. Rogers Fund, 62.170.1



8. Luster-painted bowl, Egyptian (Cairo), XI century. Diameter 7 inches. Rogers Fund, 63.16.3

9. Detail of a carved wooden panel, Iraqi (Samarra), 1x century. State Museums, Berlin-Dahlem



the design destroyed in firing. This technique of underglaze painting appears to have been first developed in the great center of Central Asian culture, Samarkand, which at the time was under the rule of the same local princes, the Samanids, that ruled in Nishapur; it was probably introduced into Nishapur in the tenth century. Special pigments were developed, combining metal oxides, for the colors, with an earth medium that had a similar composition to the clay slip and so formed a bond strong enough not to be dissolved by the liquid glaze. This "slip painting," as it has been aptly called, carried pottery decoration to new heights in the Muslim East about two centuries before the introduction of alkaline glazes and an artificial ceramic body. Another small bowl from Khurasan (Figure 7) demonstrates in a particularly successful way the possibilities for polychrome painting on pottery in this technique. The essentially abstract design is executed in aubergine, ocher, and brownish red upon a yellow background, and vellow dots are applied here and there to enrich the simple pattern. The yellow, red, and ocher, obviously well mixed with a clay-slip paste, have stayed in place under the glaze, but the aubergine, which perhaps could not be mixed with so much earthen matter without diluting the color, has blurred or run in

many areas. With the decline of Abbasid power during the tenth century, a great many artists, and among them many potters, seem to have left Iraq in search of more profitable and secure employment. The newly established and resplendent court of the independent Fatimid dynasty in Cairo apparently attracted most of them, and it was here that the tradition of luster painting was continued. A small bowl (Figure 8) decorated with a beautifully designed palmette tree, surrounded by a band of inscription, shows the earliest stage of luster painting in Cairo. The way the leaves are drawn, one growing from another in a fashion anticipating one of the most characteristic forms of later Islamic ornament, the arabesque, recalls the designs of Samarra wood carvings of the late ninth century (Figure 9), and their continuation in wood and plaster carvings of the Tulunid and early Fatimid periods. Since a number of these carvings can be dated rather precisely, the attribution of this bowl to the beginning of the tenth century is relatively secure.

Even though the actual potting is less accomplished, the shapes simpler and less well designed, Fatimid luster wares have one great advantage over those made in Iraq: they were often decorated by truly great painters. Some of these artists may well have been Iraqis, trained in the Samarra tradition, but most of them were undoubtedly Egyptians, trained in the late classical style that survived in Egypt for many a century after the Arab conquest. That many of their works are signed is testimony to the appreciation and social standing the painters seem to have enjoyed. Among the many artists known, two stand out: Muslim and S'ad. Until recently neither was represented in our collection, but we now have received a beautiful bowl by Muslim (Figure 11). It is decorated with the powerfully drawn figure of an eagle, almost heraldic in its simplicity. The signature of the artist appears beneath the eagle's right claw, and also on the center of the back of the bowl (Figure 10). Muslim seems to have remained close to Mesopotamian traditions, and the familiar circle and dash pattern on the outside of this bowl make the origin of the style and technique quite clear.

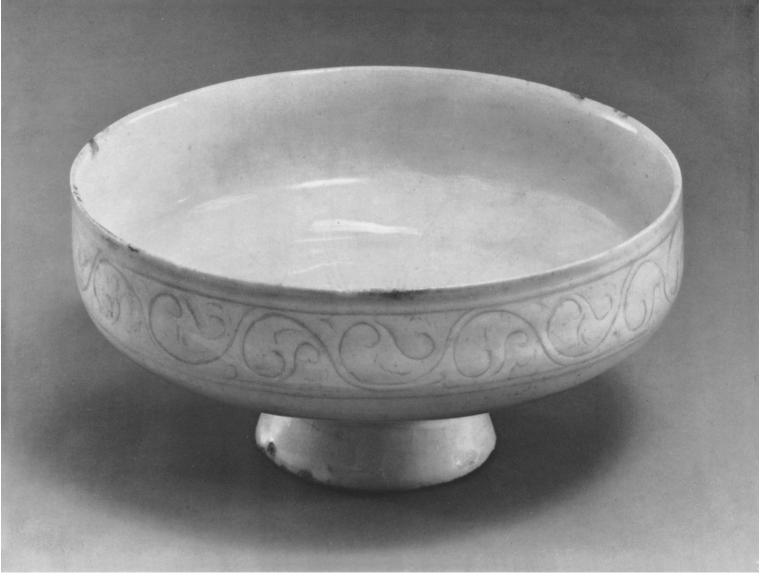
The twelfth century marks the turning point of pottery making in Persia. With the fall of the Fatimid dynasty in 1171, and probably even before that date, a new migration of potters took place, but this time from west to east. With these artists from Cairo the secrets of alkaline glazing, the manufacture of an artificial ceramic body, and luster painting were introduced into Persia. Pottery was then produced all over Persia in great quantities and of higher quality than any previously known in the Islamic world. Rayy, near Tehran, the capital of the Seljuk Turks who since the tenth century had dominated the politics and culture of Persia, and Kashan, another city ruled by the Seljuks, in central Iran about 150 miles to the south of Tehran, were the principal centers.



10. Detail of Figure 11, showing signature on bottom

11. Luster-painted bowl signed by Muslim, Egyptian (Cairo), early XI century. Diameter 10 inches. Gift of Mr. and Mrs. Charles K. Wilkinson, 63.178.1





12. Bowl with incised walls, Persian, XII century. Diameter 7¾ inches. Harris Brisbane Dick Fund, 63.159.2



13. Bowl with incised walls, Persian, XVII century. Diameter 7½ inches. Gift of W. R. Valentiner, 11.137.1

Because of the similarity of the new ceramic body to alkaline glazes, a fusion between body and glaze could be achieved that was without precedent in the Muslim East. This fusion made the use of a clay slip over the body before painting or glazing unnecessary, but allowed painting on the surface of the body itself. The new alkaline glazes achieved a brilliance and purity that seemed to match those of the still envied Chinese porcelains. The earliest products of the Seljuk workshops are once again greatly influenced by white-glazed T'ang and Sung wares. A bowl with steep sides (Figure 12) resting on a fairly high foot, covered with a brilliant white glaze over a finely potted, pure-white ceramic body, does in fact reach a technical perfection that seems to match that of Chinese porcelain. But, of course, there was no way of making the ceramic body translucent. To overcome this shortcoming, the potter incised his delicate design so deeply into the walls of the bowl that light would penetrate them, creating the illusion that the whole vessel was translucent. This device was used for centuries in Persian pottery, and reappeared in the sixteenth and seventeenth centuries (Figure 13).

The Seljuk potters were immensely productive. They created an almost infinite variety of shapes, patterns, and sizes, sometimes dependent upon Chinese models, but more often completely and imaginatively original. Among



14 (above), 15 (below, left). Bowl in bird shape, Persian, XII century. Height 3% inches. Harris Brisbane Dick Fund, 63.159.3

- 16. Fragmentary bowl, Persian, XII century. Height about 5 inches. Tehran Museum
- 17. Stucco head, Persian, XII-XIII century. Height 10 inches. Rogers Fund, 33.111









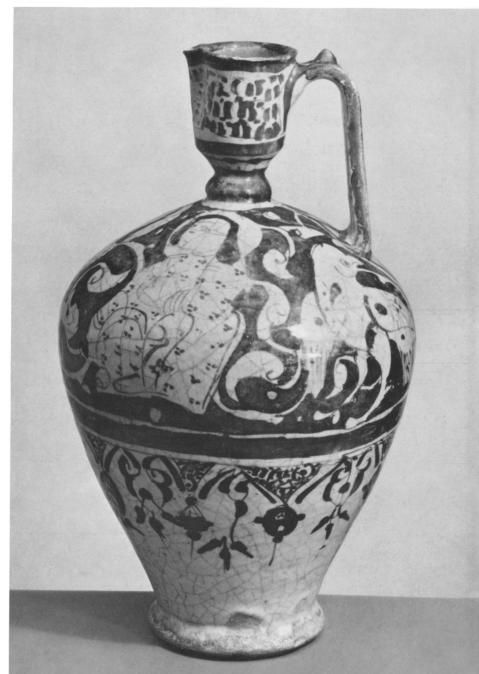
the many types made in the twelfth century, that with molded relief decoration seems to have been especially popular. This type was subject in turn to many variations, of which the Museum possesses a large and representative selection, but one recently discovered example is so unusual that it may well be the unique survivor of its kind. This small whiteglazed bowl (Figure 14) is in the shape of a bird with a human face. Its body is decorated with delicate reliefs: a frieze of animals running along the rim, and a medallion on each side containing a human figure. The slightly fluted foot follows the outline of the vessel as a whole-rounded in front and coming to a sharp point behind. The face (Figure 15) with its almond-shaped eyes, straight nose, high cheekbones, and minute mouth, is clearly of the Seljuk type, as encountered in the stucco sculpture (Figure 17) and painted pottery of the period. Its application to what appears to be the body of a bird recalls the mythological figure of the harpy, which can frequently be found in Islamic art and probably goes back to Central Asian sources. The same face, with a very similar crown and necklace, appears on a small fragmentary bowl (Figure 16) in Tehran; there it constitutes the sole element of decoration, repeated eight times, so that the bowl has a multilobed shape. There can be little doubt that both pieces belong to the same school, the location of which we do not know, but it may well have been Rayy.

Muslim potters of the twelfth and thirteenth centuries were not content, however, with molding the surfaces of vessels into animal shapes, but occasionally tried to make something closer to the real thing. The result of these efforts is an exceedingly scarce group of human and animal figurines in clay, most of them small in scale, and generally decorated in monochrome glaze. Many still at least pretend to be objects of utility - aquamaniles or vases; that is, they are usually hollow and have an opening at the top into which water can be poured. A few of these pieces, however, are solid: real pieces of small sculpture, a great rarity in Islamic art. Such a work is the handsome camel (Figure 18), only eight inches high, bearing on its hump an enclosed baldachin saddle of the type used by Muslim women. The piece, probably made in the second half of the twelfth century, is covered with a glaze that was originally turquoise blue but has turned an even more appealing silvery tone. Attribution of such objects to a particular workshop is very difficult, but they may have been made at Rayy, for the special delight of the nobles of the court.

It was probably in the same city (though substantial proof is lacking) that the art of luster painting was at this time introduced, and developed to new heights of perfection.

OPPOSITE:

- 18. Camel, Persian, XII century. Height 8 inches. Fletcher Fund, 64.59
- 19. Luster-painted ewer, Persian (Rayy), XII-XIII century. Height 12 ½ inches. Harris Brisbane Dick Fund, 63.157.1







Three luster-painted pieces in the style associated with Rayy significantly enlarge our still much too small collection of this particularly beautiful and important type of Islamic pottery. The style in its most typical form is represented in two of these, a large ewer (Figure 19) and a small, fairly deep bowl (Figure 20). Figures and floral motifs are reserved in a deep brown luster ground, creating a contrast between the solid, unbroken background and the white designs. Individual details are defined with only a few strokes of drawing. More unusual is a large, shallow plate (Figure 21), glazed in cobalt blue on the outside, as are many Rayy luster pieces, but decorated on the inside with a figure of a young man, an inscription, and a scalloped border painted in brown on a white ground - the very reverse of the usual Rayy style. Only a few pieces of this type are known.

The most interesting aspect of these lusterpainted wares is their reflection of an otherwise almost entirely lost art: painting from the Seljuk period has come down to us only in a single illuminated manuscript and a few fragments of wall painting, but it must have been extensive, and there can be little doubt that many of the painters who decorated ceramics such as these were equally, if not primarily, employed in decorating the palaces of the Seljuk rulers and princes, and in illustrating their manuscripts. The seated figure of the small bowl especially suggests such painting, for he has obviously been taken out of context. His hand is raised in a gesture of speech, directed toward a companion who is not represented. The drawing of the figure is extremely accomplished; executed in an almost impressionistic manner with a few swift brushstrokes, it is in sharp contrast to the rather ponderous contour of the more decorative figure on the large plate.

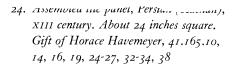
Rayy was totally destroyed and its inhabitants slaughtered by the conquering Mongols, who invaded Persia in the early thirteenth century, reaching the capital in 1220. By 1258 they captured Baghdad, and murdered the last Abbasid caliph, who was still at least nominally Leader of the Faithful. With this blow the Abbasid era came to an end. It took almost

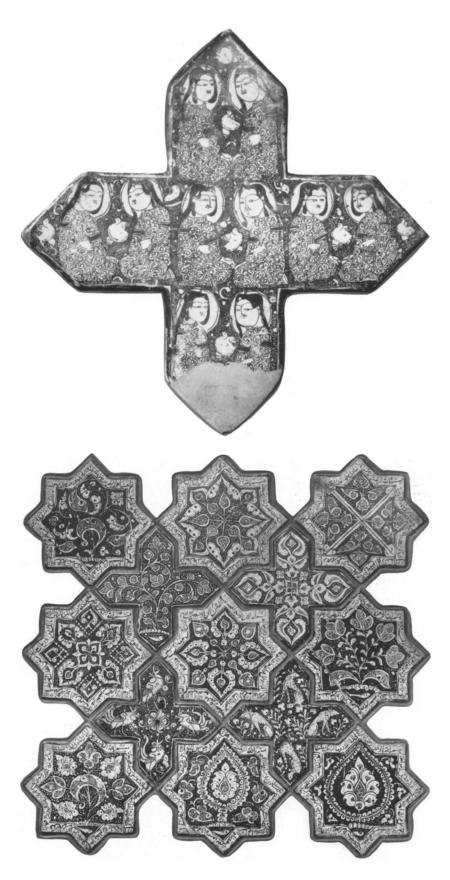
OPPOSITE:

- 20. (above). Luster-painted bowl, Persian (Rayy), XII-XIII century. Diameter 7 ½ inches. Purchase, Joseph Pulitzer Bequest, 63.158.1
- 21. (below). Luster-painted bowl, Persian (Rayy), XII-XIII century. Diameter 14¹/₄ inches. Fletcher Fund, 64.60.3
- 22 (right). Luster-painted tile, Persian (Kashan), XIII century. 12½ inches square. Fletcher Fund, 64.60.4



23. Head of a bodhisattva, supposedly from Cave I, Bazaklil, Chinese Turkestan, VIII century. 14½ x 12 inches. Fletcher Fund, 47.18.132





25. Bird designs from Kashan lusterware. From Ars Islamica, III, 1936

OPPOSITE:

- 26. (above). Luster-painted plate, Persian (Kashan), XIII century. Diameter 13% inches. Anonymous gift, 62.226
- 27. (below). Luster-painted plate, Persian (Kashan), dated A.D. 1211. The University Museum, Philadelphia
- 28. Luster-painted bowl, Persian (Kashan), dated A.D. 1210. Diameter 8 1/16 inches. Rogers Fund, 61.40









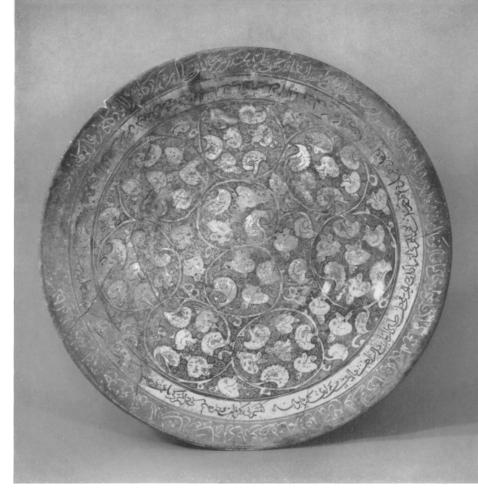
half a century before the devastated cities of Persia recovered and new cultural life sprang up. Rayy never did recover, and cotton fields stretch our today where once the great Seljuks ruled.

One exception seems to have been the other great pottery center of Persia, Kashan, which prospered under the Seljuks and seems to have survived the Mongol conquest remarkably well. Kashan was active in pottery making from the beginning of the twelfth century. Its best known and probably finest wares are those painted with luster, and the Museum has recently added a number of important luster-painted Kashan pieces to its already large collection.

Most unusual of these is a tile in the shape of a cross (Figure 22), decorated with rows of seated figures. Kashan became so famous for its ceramic tiles, with which it supplied the rest of Persia, that all tiles came to be called *kashis* or *kashanis*. Such cross-shaped tiles as this were combined with star-shaped tiles to cover large interior surfaces (Figure 24). Cross-shaped tiles, however, are usually small and decorated only with abstract floral motifs. Those with human figures are rare, and only a small fragment of one was previously in the collection.

The figures on this tile are not painted in reserve like the figures on the Rayy pieces, but rather form an integrated part of the overall decoration. Except for the faces and the haloes, no part of the design is left unembellished. Garments are covered with what looks like a fine scroll ornament but is in fact a series of interlocked half circles, ending in dots. The same pattern appears in the background, where it has been scratched into the luster ground with a sharp point –a typical Kashan technique. The effect created by this dense ornamentation is of a unified design, with hardly any of the strong contrasts between light and dark areas so characteristic of the Rayy style.

The facial types are, however, very similar to those on Rayy luster pottery, and both wares were made at more or less the same time for the same Seljuk rulers. A resemblance can also be found between the persons represented on this and other Kashan luster pieces and









29. Bowl painted in black and glazed in green, Persian (Kashan), XIII century. Diameter 85% inches. Rogers Fund, 63.16.1

30. Minai bowl, Persian, dated A.D. 1186. Diameter 8½ inches. Fletcher Fund, 64.178.1

figures in Central Asian wall paintings (Figure 23) dating back as early as the eighth century. Once again is demonstrated the extraordinary importance of Asian, and especially Central Asian traditions in the development of Eastern Islamic art.

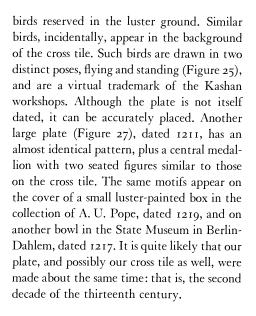
A particularly fine example of Kashan lusterware (Figure 28) is also one of the earliest known dated pieces. The shape is typical, with a low, straight, unglazed foot and steep, straight sides, and so is the decoration of the outside, consisting of a continuous row of large circular leaves, painted in luster on the white background of the glaze. The interior contains inscriptions from Persian poetry, either written in luster or scratched into a luster ground. One of these also contains an Islamic date that corresponds to A.D. 1210. Although

dated Kashan pieces are not rare (there are more than three hundred presently known), this is one of the earliest recorded. It belongs to a group of luster-painted bowls, all made about the same time in the same workshop, and all employing similar band ornaments and inscriptions. The most unusual details of the decoration are the encircling snakelike dragons, a motif well known in other forms of Seljuk art but rather rare in pottery painting. All the pieces of the group, however, display the motif, probably indicating that they were decorated by a single artist.

Another characteristic Kashan pattern is represented by a large luster-painted plate (Figure 26), of a type not previously in the collection. The decoration consists of scrollwork, with half-palmette leaves and small

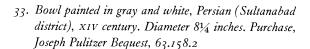


31. Minai bowl, Persian, dated A.D. 1187. Diameter 8½ inches. Fletcher Fund, 64.178.2





32. Detail of a miniature from Rashid ad-Din's History of the World, Persian (Tabriz), early XIV century. Number 1653, Topkapi Sarayi Library, Istanbul

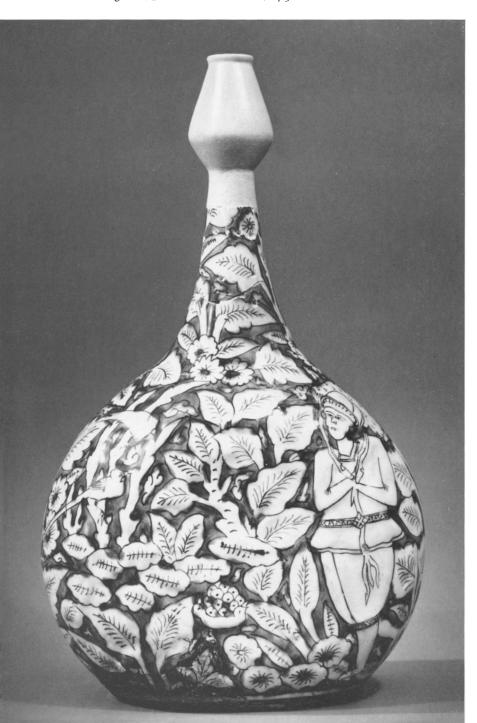




OPPOSITE:

34, 35. Bowl painted in blue and black, Persian (Meshhed), XVI-XVII century. Diameter 15¾ inches. Gift of Nasli Heeramaneck, 64.109

36. Bottle painted in blue and black, Persian (Meshhed), XVI-XVII century. Height 11½ inches. Fletcher Fund, 64.58



Such comparisons can also help identify pieces that are not decorated in luster. Although Kashan is particularly known for its luster ware, it produced a number of other types of pottery as well. The design on a small bowl painted in black under a green glaze (Figure 29) is of particular interest, as it provides further evidence that a large group of similar vessels came from the Kashan workshops. Reserved in the black background are four birds, which on close inspection reveal themselves as the same type that appear on Kashan luster ware. The very fact that they are represented in reserve, rather than painted on a light ground, is a further similarity with luster technique. When, finally, the shape and fine white ceramic body of the bowl are taken into consideration, there can be little doubt that it was made in Kashan, probably in the early part of the thirteenth century.

Kashan can with certainty be identified as the location of the workshop that produced two polychrome overglaze painted bowls of the so-called Minai type (Figures 30, 31). Minai ware, besides being one of the most beautiful forms of pottery made in the Islamic world, is extremely interesting for its reflection of wall painting and text illustration, of which, as stated before, little has survived from before the thirteenth century. Popular all through the twelfth and thirteenth centuries but probably out of fashion after 1300, it poses many problems of dating and attribution. The two bowls recently acquired have the distinction of being signed by an artist who added to his name the nisbah (indication of place of origin) al-Kashani. One of the bowls, which is dated 1186, bears the full signature of a painter called Abu Zayd. In the inscription of the second bowl, dated 1187, the name has been destroyed, but the nisbah al-Kashani remains intact, and it is likely, to judge from the style of decoration and the close date, that the piece is also the work of Abu Zayd. With this information these bowls are of supreme importance as documents for the identification of Minai ware from Kashan.

Toward the end of the thirteenth century pottery making in Persia declined, although the Kashan workshops continued their activ-





ity into the fourteenth. Later in the fourteenth century there was apparently a revival, for a new type of ware, not previously known and difficult to place and date exactly, came into existence. Since many pieces of this new type have been found in the vicinity of the modern town of Sultanabad, the pottery is usually referred to as Sultanabad ware, or, more correctly, Sultanabad-district ware. It is distinguished by its heavy potting and by the use of a thick, translucent glaze over designs that in some areas are slightly raised. This relief effect is due to the heavy application of white and gray pigments, especially in floral patterns; although some bowls are decorated with abstract linear patterns, the designs usually consist of foliage - blue and green as well as white or light gray-irregularly distributed over the entire surface. Against this background, or within medallions, animals or, more rarely, human figures appear. Although probably made in great quantities, well-decorated and well-preserved examples are rare. One such small bowl (Figure 33) is typical in shape and in its background design of small, orderly shrubs, but the figure in the center is highly unusual. It is a bird with a human head, wearing what looks like a feather cap resembling those worn by the Mongols (Figure 32). It is likely that this is a representation of a harpy, like that of the Seljuk bowl (Figure 14), but for this period and medium the subject is rather puzzling. Because of its fine state of preservation, high quality of design, and iconographic peculiarity, this piece makes an especially valuable addition to our small group of Sultanabad-district wares.

Our two final examples come from the Safavid period of the sixteenth and seventeenth centuries, when Persia was united and pacified under a native dynasty and enjoyed a period of great artistic activity in all fields. Paradoxically, Safavid pottery is rare even by comparison with some of the scarcer types of early pottery.

Our collection of Safavid pieces is in general small, and any addition is therefore of great

importance. The first of these acquisitions is a bottle (Figure 36) with a slightly molded white ground, its design a lively pattern of hunters amid elaborate foliage, painted in black and blue. The other is a large bowl (Figures 34, 35) with a magnificent floral design, also painted in black and cobalt blue on a white ground and covered with a brilliant translucent glaze. Both probably belong to the earlier part of the seventeenth century, when the cities of Kerman in the southeast and Meshhed in the northeast were the leading ceramic centers of Persia, and both follow the long tradition of blue and white pottery, which had a revival at this time.

Through his ingenuity and inventiveness, his originality and unmatched ability to create constantly new shapes, new techniques, new forms of decoration, the Muslim potter counts among the greatest craftsmen of this most earthy of arts. Just as he was frequently inspired by the pottery of other countries, notably China, he influenced with his work the forms of ceramic making elsewhere. The style of cobalt-blue decoration, for instance, was first developed in Persia and carried from there to the Far East. In fact, it appears that polychrome painted decoration, which was practiced in China only from the thirteenth century on, was initiated by Islamic potters. The impact of Muslim ceramics on the potteries of Europe, Italy and Spain in particular, is well known. Byzantine ceramics are directly derived from Syrian and Persian pottery of the earliest periods, and the potteries of Faenza, Padua, and Gubbio owe an undisputed debt to the art of the Muslim potter. Islamic pottery therefore occupies a central position in the history of ceramic making of modern times.

REFERENCES

The standard handbooks on Islamic ceramics are by Arthur Lane: Early Islamic Pottery: Mesopotamia, Egypt, and Persia, London, 1947; and Later Islamic Pottery: Persia, Syria, Egypt, Turkey, London, 1957.