88 Velvet with palmettes and flowers
Height 104cm, width 91.5cm
Victoria and Albert Museum, London, no. 733-1892
Persia, Safavid period, 17th century

The decoration of this velvet consists of palmettes and flowers enclosed by floral sprays on a deep red ground. It is a composition that became popular among rug weavers of the 16th and 17th centuries and is characteristic of one type of the so-called vase carpets.

Published: London (1931)

89 Silk coat with birds, trees and flowers
Height 132cm, width 100cm
Victoria and Albert Museum, London, no. 2578-1878
Persia, Qajar period, 19th century

This luxurious coat has a delicate repeating design of birds and peacocks in a background of trees, flowers and flying insects. The colours are silver, orange and blue on a mustard ground. Note the exaggerated length of the sleeves which is a characteristic of the fashion of the courtly style of the period and was also depicted in miniature paintings. The red border may be a later addition.

Published: London (1931, no. 4015)

90 Silk envelope with flowers
Height 82cm, width 14cm
State Archives, Stockholm, no. 214
Persia, Safavid period, late 17th century

This envelope was brought to Sweden in 1682 by Ludwig Fabelius, an ambassador of the Swedish king, and contained a letter from the Shah of Persia. The design of rows of flowers in different colours is a fine example of the floral patterns that became increasingly popular in 17th and 18th century Persia. The gold ground was evidently polished with a hard implement to give an added brilliance.

Published: Geijer (1951, no. 37, pl. 17)

91 Silk banner with inscriptions
Height 360 cm, width 203 cm
Victoria and Albert Museum, London, no. 77/88-1878
Persia, Qajar period, 19th century

This banner is triangular with a triple border of inscriptions. The outer and inner borders, written on a white ground, repeat verses from the Koran, Sura LXVII, 51-2. The central border, in white writing, is a repeating series of larger cartouches, two of which have Koranic verses in Arabic. In between are smaller cartouches with invocations to God. The banner was intended for use at religious ceremonies. The central emblem of the lion and sun has its origins in astrology and became the national emblem of Persia under the reign of Muhammad Shah (1834-48). The lion usually bears a sword, symbolising the sword of Allah, the first Shi'a imam. The absence of a sword suggests a date earlier in the century. The design is in blue, red and gold. The border is woven separately.

Unpublished

Published: London (1950, no. 2)

92 Embroidered cover with a stylised dragon design
Height 132 cm, width 111.5 cm
Victoria and Albert Museum, London, no. 74-1909
Caucasus, 18th century

The bold design of this cover is a highly stylised version of that found on the so-called dragon rugs of the Caucasus (compare no. 70). The cover is embroidered in silk in darned and double running stitches in red, blue, green, yellow, orange and ivory on a black ground. The base is canvas.

Published: London (1950, no. 2)
93 Silk hanging with flowers in a niche
Height 212cm, width 97cm
Staatliche Museen Preussischer Kulturbesitz, Museum für Indische Kunst, Berlin, no. 2. 364
India, Mughal period, early 17th century
Here a graceful flower with several blooms is set within a niche on a rich red ground. The spandrels are decorated with a floral arabesque and there is a border of a continuous floral scroll.
Published: Berlin-Dahlem (1972), pl. 25

94 Velvet border with floral design
Length 298cm, width 51cm
Victoria and Albert Museum, London, no. 320-1908
India, Mughal period, 17th century
This sumptuous cut velvet is composed of two pieces, stitched as borders, sewn together. The floral design is common to both Mughal India and Safavid Persia and consists of orange blooms outlined in red, alternating with yellow blooms outlined in pale blue, with rich green leaves. Here, the more naturalistic rendering of the flowers suggests an Indian attribution.
Unpublished

95 Velvet hanging with floral trellis pattern
Height 307cm, width 247cm
Private Collection, England
India, Mughal period, 17th century
This large and elegant hanging, with its deep red field and sage green border, has a delicate trellis pattern formed by leafy tendrils in which rosettes and flowers may be discerned. This composition is common in Mughal carpets of the same period. The border has a waving scroll of leaves and flowers which is repeated in a simplified form in the guard stripes.
Unpublished

96 Silk sash with a floral border
Length 322 cm, width 51 cm
Victoria and Albert Museum, London, no. 377-1907
India, Mughal period, 17th century
This is a particularly fine example of a floral sash frequently depicted in Indian miniature paintings. Similar work was also done in Persia (compare no. 97) and the flow of Persian craftsmen to India, and Indians to Persia, further confused the problems of attribution. This silk has a wide border with a pattern of flowering shrubs in orange, outlined in red, together with green leaves, surrounded by narrow bands of undulating foliage and flowers. The field is red with a pattern of lesories.
Unpublished

97 Silk sash with a floral border
Length 472 cm, width 61 cm
Victoria and Albert Museum, London, no. 2. 39-1903
India or Persia, Mughal or Safavid period, 18th century
On the back of this sash is the seal of Ahmad Khan, the first Nizam of Hyderabad, and the date 1159 (1746 AD). The wide border contains five trees bearing flowers and fruits in green, blue, yellow and ivory and is surrounded by a narrow band of floral scroll. The field consists of alternating stripes, one containing gold flowers on a tan ground, the other an undulating design of flowers and leaves. Such sashes were worn around the waist with the wide bordered ends hanging down. A vogue for sashes of a similar design also existed among the nobility of Poland in the 18th century.
Unpublished
98 Rug with birds among trees
Length 135cm, width 156cm
Osterreichisches Museum für angewandte Kunst, Vienna, no. 0252
India, Mughal period, about 1600

This is one of the finest examples of the free pictorial composition, avoiding symmetry and repetition, which is a characteristic feature of Mughal rug design. The landscape of trees and shrubs is animated by a pair of cranes, a cock and hen with chicks, a peacock and a peahen, turtle doves, hoopoes, parrots and other birds. The border and guard stripes include plant ornaments, lion masks, leopards and birds. Dimand compares this rug with the paintings of Mian Mir and suggests that he may have been its designer. Comparisons have also been made with Indian and Persian lacquered bookbindings. The warp is of white cotton on two levels and there are three shoots of pale red cotton wool each row of knots. The knots are of the Persian type, about 15 per square cm, in wool of thirteen colours.
Published: Rugi (1962, pl. 1); Sear and Treweek (1976, pp. 34–5); Dimand (1973), p. 124.

99 Animal carpet
Length 403 cm, width 191.2 cm
National Gallery of Art, Washington no. C.258, Widener Collection, 1943
previously in the collection of the Duke of Rutland, Belvoir Castle
India, Mughal period, about 1625

Throughout the 16th and 17th century Persian influence was paramount in Mughal textiles, modified by European influence from the early 17th century onwards. Agra and Lahore were the chief centres of carpet manufacture. Carpet design in the reign of Jahangir (1605–28) resembles contemporary Persian products but there are some important differences. While some traditional mythical beasts appear, such as the winged kylins and dragons, like that which has caught the unfortunate deer in the centre of this carpet, Chinese influence is in general much less marked. Both animals and men are much larger and more lifelike, so that they dominate the design. The open rich red ground and strong colouring are typical of Mughal carpets and show the figures clearly. The elephants, crocodiles and rhinoceroses may be compared with similar animals in late 16th century Indian miniatures. While the border of cartouches looks superficially Persian, the palmettes have turned into birds alternating with animal masks. The carpet is woven with a cotton warp and wool and has a woolen pile, about 36 knots per square cm.
Published: Dilley (1959, pl. 35); Dimand (1973, pp. 119–20).
prayer rug with a large
flowering plant
Length 124.3cm, width 90cm
(fragment)
Physica-Harmonica Collection,
Lagom
India, Mughal period, second quarter
17th century
This fragment of carpet, so finely
knotted that it looks more like a woven
velvet, displays the skill of Indian
workshops under the reign of Shah
Jahangir (1628–58). The exquisite
depiction of the flowers and the rich,
fresh colouring are typical of Indian
textiles of the period. Through Persia,
India borrowed many Chinese
motifs, seen here in the formalised
wavy lines and clouds or rooks at the foot
of the rug and the small clouds
scudding away from the large central
plant. Their stylisation harmonises
surprisingly well with the more
natural presentation of the plants.
Beauteous has suggested that the width
of the bands or ornament at top and
toboom and the patching of the centre
with pieces of identical make and
similar design indicate that this
prayer rug was one of many in a souk
or multiple-arch rug. The rug
contains 174 knots of the Persian type
per square cm, in silky wool of more
than fifteen shades on a silk warp of
variegated colours. There are three
passes of red silk weft after each row
of knots.
Published: Migone (1903, pl. 81);
Boutell (1972, pp. 67–72, pl. IX).

prayer carpet with three
mihrabs
Length 131cm, width 260cm
Private collection, England
India, Mughal period, early 18th
century
Large numbers of prayer rugs with a
single mihrab or prayer niche for
individual worship have survived. Of
the souk, multiple prayer rugs for
family use or for the furnishing of
mosques, far fewer now exist. Some
of the pieces made for mosques must
have assumed alarming proportions to
judge from an inventory of 1674
taken from the Yeni Valide Mosque,
Istanbul, recording carpets
containing up to as many as 132
mihrabs. See Erdmann (1938, p.
197). This present rug contains only
three arches designed as part of a
continuous arcade. It may have
formed part of a set of carpets; other
examples with three mihrabs and
seven mihrabs of the same design
survive in private collections. See
Ehss (1969, fig. 27). Each mihrab
contains one large flowering plant, as
in the earlier Indian prayer rug no.
100, but the weave is coarser, the
plants are more formalised and the
thick columns and continuous sill,
curiously like the water-courses in
Persian Garden carpets, are less
graceful. The carpet contains 15
knots of the Persian type per square
cm in woolen pile of six colours.
Warp and weft, in three shoots, are of
cotton.
Published: Washington (1974, no. XXV).

Rock Crystal and Jade
Precious stones were as highly esteemed in the Islamic as in the ancient
world. Apart from their more obvious use as personal adornments,
they were also invested with magical and even medicinal properties
and were valued as talismans or amulets. Much of the lore surrounding
precious stones was a classical heritage. So too was the technique of
their carving and engraving. Judging from the large number of
surviving gem stones with engraved inscriptions and intended for seal
ring or pendant, the gem cutter’s art was in great demand from the
early centuries of Islam.
Many of these early amulets and gem seals are of rock crystal. This
material which in the terminology of the mineralogist is quartz, can be
found in sufficiently large pieces for fashioning into vessels and
objects. When polished, its limpid transparency was superior to glass
which in other respects it so much resembles. To carve it required
infinite patience and skill. While we cannot be sure of the precise
techniques employed, we may assume that the general shape was
obtained by chipping and sawing. For the finer details the bow drill
was used. The French jewellers, Tavernier and Chardin, describe the
gem cutter’s craft in Isfahan in the 17th century. The bow drill was
used with a mixture of emery and lacquer applied to the wheel. The
same technique had no doubt been employed from early times not
only by the hardstone carvers but also by the glass cutters; and it is no
coincidence that the carving of hardstones and of glass flourished
together at one and the same period and often in the same region.
One of the earliest mentions of rock crystal objects by Muslim
writers is a lamp which was supported in the mihrab of the Companions
of the Prophet in the Great Mosque of Damascus. A Bedouin
describes how its brilliance stone in the darkness of the sanctuary. The
gift of the Caliph al-Walid, it was brought by stealth to Baghdad at the
order of Harun al Rashid’s son Amin, himself a connoisseur of rock
crystal. The origin of this lamp is, of course, a matter of speculation;
it could have been a cherished relic of the ancient world or have found
its way from the Byzantine lands. Although there is no evidence for
rock crystal carving in Syria during the Umayyad period, we know
that in Persia this material was used for seals and jewellery under the
Sassanid kings. We have fine examples of gemstones including rock
crystal and cameos carved in intaglio or relief as well as large beads and
pendants probably intended for pendants of various kinds. The most
famous Sasanian rock crystal carving is a large roundel carved in relief with the emperor Khusraw I (532–78 AD) enthroned and attended by his courtiers. This is set in the centre of a large gold dish which was once in the Treasury of Saint Denis and now in the Bibliothèque Nationale, Paris. Set in concentric rows above this central roundel are small circular medallions of green, red and colourless transparent glass moulded in the form of rosettes. It seems likely that these rock crystal carvings were produced in Mesopotamia since it is generally believed that the superb cut glass vessels were also made in some centre of that region which formed part of the Sasanian empire. The Khusraw roundel would be evidence enough for the existence of an established tradition of rock crystal carving in the Persian empire which there is no reason to think that was interrupted by the Arab conquest in the 7th century. The small goblet (no. 102) which was found at Qasrin was almost certainly made somewhere in eastern Persia. The most likely centre would have been Nishapur which in the early Islamic centuries was producing superb relief cut glass vessels (nos. 122, 126–9, 131–2) among them goblets of just this form. Furthermore, details of the palmettes on the rock crystal goblet resemble those found in frescoed fragments recovered in the course of excavations in that city.

Mesopotamia was an important centre of the glass-cutting industry during the Abbasid period and the great polymath al-Biruni (973–1048) tells us in his important book on mineralogy that Basra was a centre of rock crystal carving. It has been suggested that the beautiful rock crystal lamp now in the State Hermitage Museum, Leningrad, may be a product of a Mesopotamian centre, possibly Basra (no. 109).

We are on firmer ground when we come to the rock crystal carvings produced in Egypt. We have the eye witness account of the industry by a Persian traveler who visited Cairo between 1246 and 1250 and three pieces bearing historical inscriptions, two in the name of Fatimid caliphs and a third in the name of a high-ranking official in the service of the Fatimid administration. These provide dates ranging from 975 to 1036. Some one hundred and seventy rock crystals survive from the medieval Islamic world. By far the greater part are of Egyptian origin. Although the finest fall within the sixty-year period provided by the three datable examples, the industry must already have been established as early as the second half of the 9th century when the Abbasid governor of Egypt, Ahmad ibn Tufân, cast aside his allegiance to the Caliph and proclaimed himself a sovereign ruler. Of Turkish origin he had grown up in the Caliph’s court and it is hardly surprising that he should have introduced to Egypt the artistic styles current in the Abbasid capital. Just as the stucco decoration in the great mosque he built in Cairo betrays its dependence on the so-called Samarra style, so too do those few rock crystal carvings which can be attributed to Tulunid Egypt. It is possible, too, that both rock crystal and glass cutting were introduced by craftsmen brought to Egypt from Mesopotamia, and even continued into the Fatimid period.

Some of the earliest Egyptian rock crystal objects were decorated in the so-called ‘bevelled’ style in which the outlines of the design elements are indicated by a slanting or bevelled cut. This style was also adopted in carved stucco and woodwork both in Mesopotamia and Egypt. By the beginning of the 11th century the craftsmen were attempting to carve their designs in relief. In the early attempts, the relief cutting is often rough and lacking in precision (nos. 109–4) and it was not until the close of the century that technical mastery was achieved (nos. 109–12). In the finest pieces, the ground is cut back from the relief elements to a depth of as much as 2 mm.

The middle years of the 11th century were troubled by incessant political strife. In 1062 Turkish and Arab mercenaries plundered the Caliph’s palaces and among the loot which was dispersed were rare rock crystal vessels. The historical Maqrizi has included in his work graphic accounts by eye witnesses of these loot ed treasures among which were rock crystal vessels. Judging by the great surviving rock crystal ewers such as those in Florence, in the Treasury of San Marco, Venice, and in the Victoria and Albert Museum, London, these accounts cannot be mere hyperbole.

There is a surprisingly wide range of form and function in these Egyptian rock crystal carvings. Commonest are those vessels used as containers. The small bottles or flasks were intended probably for scent or ointments (nos. 104, 106, 111). Kohl (mascara) was an important part of women’s cosmetics, and the inscription on another bottle tells us that it was destined for a woman (no. 107). The two small vessels carved in the form of a lion (no. 103) and a fish (no. 104) may also have been receptacles for scent or kohl. Other vessels intended as containers perhaps for rose water or wine were derived from contemporary glass shapes. The ewer of which the handle is missing (no. 112) is a variant of the pear-shaped ewer which seems to have been an invention of the Persian glass-makers (no. 132). The globe shaped crystal (no. 105) was probably the head of a ceremonial mace, and may be compared to the bronze mace head from Persia (no. 186). It has also been suggested that this crystal was the terminal of a sceptre but there seems to be no evidence that this emblem formed a part of the Islamic regalia.

Of particular interest are the four chessmen (no. 108). The game of chess originated in India and according to tradition was introduced into Persia in the 6th century AD. Examples of chess pieces from the Islamic world are of ivory, glass and rock crystal. These are abstract in form, and when the game reached Europe, probably via Spain or Sicily in the 11th century, the earliest European pieces follow the Islamic
prototypes. Of the fifteen pieces surviving from this particular set, some are without decoration. In order to distinguish the two opposing sides, some were decorated, others were left plain.

The decoration of the Egyptian rock crystal carvings and of those from Persia and Mesopotamia is principally foliate deriving from the palmette and its variants and is closely related to the contemporary decorative repertory of the other arts. In no. 107, however, the relief decoration is restricted to a band of Kufic. Stylised birds are introduced into the decoration of the flat bottle (no. 110). The most ambitious decorative composition is that of the beautiful ewer from the church of Milhaut (no. 112). The heraldic arrangement of birds or animals flanking a 'tree of life' is characteristic of the finest of the Fatimid rock crystal carvings.

The rock crystal carvings of Fatimid Egypt were eagerly sought after. The ampulla in the form of a fish (no. 104) found its way to Samarkand probably not long after it was made. Many reached the Church treasures in the West, some as early as the 10th century (no. 112). The chessmen (no. 108) were, according to tradition, donated to a Church by a Count of Catalonia. This is by no means the only example of such a gift. There are similar pieces in Uppsala Cathedral; and two wills preserved in Spain record the legacy of chess sets. These were probably given to the Church in order to be re-used for the encrustation of reliquaries and bindings since rock crystal was a rare commodity, highly esteemed.

According to the early Islamic writers, the raw crystal was drawn variously from Kashmir and the western foot-hills of the Pamirs, Badakhshan, Ceylon, the mountainous regions of Armenia and Western Persia. The Laccadive and Maldives Islands are also mentioned. But the best and purest rock crystal was imported from east Africa which was most likely the source used by the crystal carvers of Egypt.

The industry in Egypt was evidently short-lived. A rock crystal carved in the form of a crescent and inscribed with the name of the Fatimid Caliph al Zahir (1021–36) already betrays signs of poor workmanship. The dispersal of the palace treasures no doubt dealt the death blow to the craft for despite later allusions in the literature to crystal carvings, none has survived. It is a curious fact, of which there is no ready explanation, that the industry seems to have disappeared until it re-emerged in India under Mughal patronage in the 17th century.

In Persia, however, the artistic possibilities of another hardstone were to be exploited in the 15th century. This was jade or in mineralogical terminology, nephrite. The Muslims inherited no tradition of jade carving from the ancient world and in the early Islamic centuries jade seems to have been unknown. Again it is al-Biruni who provides us with the most reliable information about jade. According to him, the Turks of the steppes invested jade with magical properties. It was an amulet which served as a powerful protection against attack by robbers. It could ward off thunder and lightning; and the tribal magicians used it to produce rain. He mentions, too, that the Turks carved it into ornaments for belts and saddles.
Preserved in the Topkapi Palace Museum, Istanbul, is a handled jug of dark green jade similar in form, though considerably larger, to the jug. This magnificent vessel is encrusted with gold inlays of floral scrolls and a dedicatory inscription to the founder of the Safavid house of Persia Shah Isma'il (1501–53). It was almost certainly among the Persian royal treasure captured by the victorious Turks after the battle of Chaldiran in 1514. Perhaps it was this very vessel which prompted the Ottoman Sultan to establish a jade-carving workshop in his capital. Under Sulayman the Magnificent (1520–66) this workshop was producing small jade plaques inlaid with gold and encrusted with jewels and destined for the embellishment of bow cases and quivers. The surface of jade vessels carved in Turkey was also treated in this way such as the lobed dish (no. 115). Here the carved ornament is restricted to the leaf design carved in intaglio on the inside. The exterior is inlaid with gold and encrusted with rubies, emeralds and sapphires.

Turkish taste, however, was not wholly confined to jade carvings embellished in this sumptuous manner. The little lobed cup (no. 116) appeals to quite different aesthetic canons, depending on its organic form based on a gourd and its foliage. In this case the inspiration was clearly Chinese since the forms of the gourd and other fruits were often exploited by the jade carvers of China though the treatment of the handle and the small rosette carved in the interior is Turkish.

103 Glass of rock crystal
Height 8.7cm
British Museum, London, no. 1954-30-131, found at Qajar, Persia, 16th–17th century

Rock crystal carvings from Islamic Persia are exceedingly rare. That there was a tradition of carving in this material is proved by the roundel inserted into the centre of the famous silver dish attributed to the Sasanian emperor Khosrow I (531–79) in the Musée National des Antiquités, Paris, as well as beads and pendants of the Sasanian period which have come to light in recent years. The form of the goblet with flanged rim and collar at the base of the bowl occurs in the relief carved glass of east Persia of the 9th and 10th centuries. While the style of relief carving is similar to that of the rock crystals of Fatimid Egypt, the decoration is rather more stiffly disposed. The curious split leaf terminals with bored holes at the tip bear a striking resemblance to those in a wall painting at the Tepe Madrasa in Nishapur. See Hauser and Wilmshurst (1941, p. 104, fig. 28).

Published: Ghirshman (1954, pl. 486).

104 Flask of rock crystal
Length 10cm
State Hermitage Museum, Leningrad no. CA-3993, found at Samarkand, formerly J. Krauss Collection, Egypt, 10th–11th century

Carved in the form of a fish with cylindrical boring from head up to tail. Part of the head is missing. This is one of twelve rock crystal flasks carved in the form of a fish.

Published: Pugachenkova and Rempe (1965, fig. 315).
105 Mace-head of rock crystal carved in relief
Height (maximum) 6.6 cm, diameter (maximum) 3.5 cm
Museum of Islamic Art, Cairo, no. 15426, formerly Harari Collection
Egypt, Fatimid period, 10th century

Flattened globular crystal with a cylindrical hole, 3 cm in diameter, in the centre. Its surround is chipped on both sides suggesting that it may have been mounted by a metal mount. The two inscriptions, separated by a chevron band of foliate ornament, are in a very highly stylised Kufic:
I'haddasa 'Ala bila hamma, 'Prosperity and blessing to its owner.'
Muhammad ibn 'Ali bila hamma, 'Muhammad and 'Ali, both of them.'

Published: Cairo (1969, no. 25)

106 Bottle of rock crystal
Height 10 cm
Private Collection, France
Egypt, Fatimid period, late 10th-early 11th century

Each of the broad faces is carved in relief with half-palmate leaves disposed symmetrically on a vertical stem. The lower part of the body is broken and missing.

Published: Lamm (1930, pl. 73, no. 2); Kühnel (1965, p. 109, fig. 108)

107 Bottle of carved rock crystal
Height 16 cm, diameter 3-3.5 cm
Museum of Islamic Art, Cairo, no. 15426, formerly Harari Collection
Egypt, Fatimid period, 10th century

The body is decorated in relief with a Kufic inscription:
Baraka bila hamma, 'Blessing upon its female owner.'
A further word, unread, may simply be filling. This bottle was probably intended for masaroum (mashouda). It has a slightly flaring neck, cylindrical body and originally a plaited foot, which has been broken off. The shafts of some of the Kufic letters have wheel-cut double strokes across them, recalling the inscription on the cameo-cut glass bowl, see no 128. This type of vessel was also made in glass.

Published: Cairo (1969, no. 24)

108 and 109 Four chasmen of rock crystal
Height of c about 8 cm
Private Collection, France
Egypt, Fatimid period, late 10th-early 11th century

These four pieces are from fifteen surviving chasmen which, according to tradition, were given to the parish church of Ager, a village near Urgel in Catalonia, to a bishop (Ar.: al-farab; Fr.: Piers, chab), c knight (Ar.: faras, horse), and d Queen (Ar.: nasir; minister).

Published: Murray (1912, p. 244); Lamm (1930, taf. 27, taf. 16, fig. 15); Camin-Amar (1936, p. 404, figs. 8-15)

110 Lamp of rock crystal
Length 10 cm
State Hermitage Museum, Saint Petersburg, no. E15739
Egypt, Fatimid period, late 10th-early 11th century

The form of the lamp which is boat-shaped with a projecting handle appears to be unique. Lamm has proposed an attribution to Mesopotamia, second half of the 9th century, citing the ornate scroll, current at Samarra, as a parallel to the scroll on the lamp. The border of ‘pearly’ is not found in any other rock crystal attributed to Egypt.

Published: Migeon (1937, ii, p. 112, fig. 181); Lamm (1930, taf. 68, no. 2)
111 Jar of rock crystal
Height 10.2 cm
Private Collection, England
Egyp, Fatimid period, late 10th-
early 11th century
The body is carved in relief with three panels containing a
palette flanked by half-palmettes and paired half-palmettes which
issue from the top of the complete palette. Three lug separote
the panels, each with an inverted
arcade below.
Published: Blundhagen (1955, p. 196, pl. 2); Sotheby (8th December 1970, lot 64
with plate).

112 Ewer of rock crystal
Height without mounts 8 cm
Treasury of the Church of Milagro,
(cated historical monument),
until 1796 in the Treasury of the
Abbey of Grandmont, Haute Vienne,
where it is listed in the inventory of
1666
Egypt, Fatimid period, early 11th century
Handle broken and missing. Carved in relief on main field are two eagles
wings outstretched standing on
reversed palmettes. Scroll around
neck.
Published: Lamm (1956, af. 65, no. 6); Peirs (1971, no. 271, and illustration).

113 Cup, oval in shape, of dark green jade (nephrite)
Width 15.6 cm
British Museum, London,
no. 1961 2–13 1
Persia or Transoxiana, 15th century
In the middle of one of the longer
sides is a loop handle carved in
form of a dragon’s head with a
curving neck. The foot-rim is carved
in the form of a figure of eight. The
type can be traced to a metal cup with
loop handle used by the Mongols, the
handle being intended for attachment
to a belt or saddle.
Published: Sotheby (31st January 1961,
lot no. 187); Pinder-Wilson (1962, p. 296, pl. XXVI).

114 Tankard of cloudy white jade
(nephrite)
Height 14.5 cm
Fundação Calouste Gulbenkian,
Lisbon, no. 328
Transoxiana (Samarkand),
Timurid period, 1417–49
Handle carved separately in the form
of a dragon. The shape of this vessel,
unique in jade, is derived from a
bronze original since there is a series
of tankards with S-shaped handles in
the form of a dragon ranging in date
from 1248 to 1513. Arabic
inscription carved in relief in thuluth
script around neck: al-Sultân al-qâm muqattâ
al-dirâj al-din Ulugh Beg Gurgân khalâl mukhâna wa
majâzânu
The Sultân, the most mighty
saviour of the world and of
religion, Ulugh Beg Gurgân—may
his reign and power endure for
ever!
Persian-Arabic inscription engraved
on upper edge of rim in talig script.
Alâdu akhrâr pâshâh-i bâhî
hâshâr pâshâh-i sâ’dât-
gâwâr risâl-i râmîl-e bâhî
mubâhâ Abû al muqaffâr Nûr al-dîn
Jânhûngîr Pâshâh-i bâhî A’âhrar
Pâshâh Gûrân sana 8 jûli
mubâhâ sana 1022 hârij
"God is great. The Emperor of the
Seven Countries, the Emperor
dispensing justice learned in the
mysteries, both true and allegorical,
Abû) Muqaffâr Nûr al-dîn the
Emperor Jahânghîr son of the
Emperor Akhrar Gûrân. [In] the
eighth regnal year corresponding
to the year 1022 H [1613 AD]." Engraved below handle in
thuluth script:
1956 dibâh qirât shîr bâhî,
1056 [1646 AD] Lord of the
Second Conjunction 20 [1st
regnal year].
Jade was highly esteemed by Ulugh
Beg for whom this beautiful vessel
was made. He was the grandson of
Timur and an exponent as well as a
patron of the exact sciences. He
adopted the title Gurgân, "son-in-
law", signifying his connexion with the
illustrious house of Chinghiz Khan,
in 1447 and reigned over the
empire founded by his grand-father
from 1447 until his death in 1449.
The tankard came into the possession
of the Moghul Emperor Jahânghîr in
1553 and then of his son the Emperor
Shâh Jahân, who styled himself
Lord of the Second (Avicennian)
Conjunction, his ancestor Timur
having adopted the title "Lord of the
(Avicennian) Conjunction".
Published: Lisbon (1963, no. 28 and
illustration); Grebe (1966, fig. 73).
Glass

The glass industry was already flourishing in Egypt and Syria, Persia and Mesopotamia when these lands were conquered by the Arabs in the course of the 7th century; and there is no reason to suppose that it was interrupted by these events. The glass houses supplied the new political masters with their wares, adjusting as need arose to the taste and requirements of these new patrons. The disruption of the age-old political barrier between Egypt and Syria on the one hand, and Persia and Mesopotamia on the other, meant an increased commercial intercourse between these lands. This led to the fruitful exchange of artistic ideas and often to the migration of artists and craftsmen from one region to another. Thus a popular glass form in Persia is almost simultaneously imitated in the glass houses of Egypt. For this reason it is often impossible to distinguish between the glass products of countries as far apart as Egypt and Persia. The scientists have not yet devised a wholly satisfactory method of establishing these differences.

The glasses selected for this exhibition range from the 8th to the 14th century and represent some of the achievements of the principal glass-making centres in the Islamic world. Broadly speaking these six centuries can be divided into two distinct periods. First, from the 8th to early 11th century the glass-makers achieved their decorative effects by manipulating the surface of their glasses. In the second period from the 12th to the 14th century, when the glass houses of Persia and Mesopotamia had apparently ceased to produce fine decorated glass, the glass-makers of Syria and Egypt concentrated their main efforts on polychrome effects.

A comparatively simple method of decorating a glass surface is that of scratching or incising with a diamond. This technique was widely practised in the early Islamic centuries (8th–11th) in Mesopotamia, Persia, Egypt and Syria. The round based beaker with incised decoration (No. 120) was also found in Syria where it was most likely made. The incised lines show white since the interior walls of the V-shaped cut are unpolished. The technique allowed for a freedom of line which is apparent in the rather naturalistic treatment of the leafy foliage.

Far more beautiful effects could be obtained by cutting on the wheel which could be used both for grinding and polishing; and the glasses selected for the exhibition show the variety in which wheel cutting was exploited. In Persia and Mesopotamia, the glass-
makers of the Sasanian period developed a particular application of the technique. By carving a series of concave facets on the curving surface of the glass, they produced a honeycomb effect in which the play of light over the concavities gave a wonderful sense of movement and vitality. The typical vessel which they treated in this manner was a hemispherical bowl which had to be thick in order to withstand the tensions caused by the grinding of the facets. For this reason, these bowls were probably moulded rather than free blown. The technique continued to be practised in these regions during the first three Islamic centuries but was now applied to an elegant form of flaks with long neck and globular or bell-shaped body (nos. 122–3, 125).

By using the wheel to produce linear designs, the glass-makers were able to adapt to their vessels the artistic idiom which was being developed in the metropolitan centres of the Abbasid empire. Having mastered the technique of incising designs on glass (no. 121) they turned their attentions to carving in relief. In the beaker from Berlin (no. 124) the carver has used his wheel on the comparatively thin wall to produce a design in shallow relief. To this purpose he has adapted the so-called bevelled style of ornament which was current in Mesopotamia and Persia in the Abbasid period. Strictly speaking this is not relief carving since the defining lines of the design are merely indicated by a cut line, slanting in section. In true relief carving the ground is carved down to leave the design standing clearly in relief such as on the flaks (no. 125). It is still not clear where this technique was developed. The glass-cut wares of Mesopotamia were already famous in the West in the 9th century: and fine fragments of relief cut glass have been found at Samarra. A considerable quantity of relief cut glasses have been found in Persia in recent decades and it is likely that they were made in a centre in Khurasan, possibly Nishapur.

Another development of relief cutting was the so-called cameo glass technique. An overlay of coloured glass—usually green or blue—was applied to a surface of colourless glass. The glass-maker then carved his decoration so that the design elements were left standing in the coloured glass, the background being carved back to the colourless glass. Included in this exhibition are two beautiful examples of this technique (nos. 131–2) which are attributed to a Persian glass workshop.

Persian and Mesopotamian glasses with incised and relief cut decoration reached Egypt certainly by the 9th century. Evidence for this has been supplied by the excavations of the American Research Centre at Fustat of the earliest Islamic settlement in the southern part of modern Cairo. Whether or not it was migrant glass-makers from the eastern provinces who first introduced the glass-cutting techniques, we know that the Egyptian glass-makers had acquired these skills by the 10th century. The magnificent bowl (no. 130) carved in cameo relief with a pair of ibex and a kufic inscription shows the technical mastery which the Egyptian glass-cutters could achieve.

The relief carved decoration on the large beaker (no. 133) has an almost monumental quality. This remarkable vessel is one of a group of beakers which are generally thought to have been produced in Egypt in the 12th century. On present evidence, however, the glass-makers were no longer producing carved wares at this date. Moreover, the shape, type of glass and style of cutting have no parallel in the glasses of the Islamic world. Against this, the decorative composition of this beaker has been compared to that of an Egyptian flaks found near Kairouan; and two of the group are said to have been brought back from Syria by Jacques de Vitré, Bishop of Acer, who on his return to Belgium in 1226 presented them to the Prieuré d’Oignies at Namur. There can be little doubt that even if evidence is turned up to prove a Western or Byzantine origin for these beakers, the inspiration of their decoration and mode of cutting are from the Islamic world.

It now seems that the techniques of painting in a metallic lustre on glass was first developed in the glass houses of Fustat. The technique is similar to that of lustre painting on pottery. A rare and beautiful example was discovered at Fustat in 1965 and according to its inscription can be firmly dated in the 8th century (no. 119). The finely-drawn decoration serves to show how at this early date the Muslim artist had succeeded in transforming two motifs from the classical world—the acanthus and the palmate scroll—into a new idiom.

In the period from the 12th to the 14th century the production of fine glass wares seems to have been the monopoly of Syria and Egypt. It has already been said above that colouristic effects were the principal aim of the glass houses in these two countries. Colour had, of course, already been exploited in the early period such as in the cameo-cut technique described above. Another technique was that of marrering. Opaque glass threads were wound around the molten vessel and then pressed into the latter by means of a stone rod. This technique was practised in Syria from Roman times and continued through the Islamic period to the 14th century. In the bowl (no. 144), the opaque white threads were wound around the transparent purple glass; the vessel was then reheated and blown into a mould in order to obtain the vertical ribs. In the elegant flak (no. 134), the white threads were ‘combed’ into a feather pattern before being ‘marrered’ into the transparent purple glass. The bowl was made in Egypt, the flak in Syria, and it was the Syrian glass-makers who invented and developed the technique of enamelling and gilding on glass towards the end of the 13th century. Painting in fired pigments was practised in the ancient world both in the Near East and the West; but it was the Muslim
glass-makers of Syria who perfected the technique and added the technique of gilding. Vitreous enameled, that is, coloured glass pastes, were applied to the surface of the vessel and then fixed by firing, by which means the enamels were fused onto the surface. When gilding was required, gold, too, was applied at the same time as the enamels, either in the leaf or more usually as powdered dust and likewise fused to the surface in the firing.

Most of the gilded and enamelled glass was produced in Syria. Aleppo and Damascus were the principal centres, and Aleppo probably ceased production after the devastations inflicted on it by the Mongols in 1260. On present evidence, the Egyptian glass houses were producing enamelled but not gilded glass. The glass used for these gilded and enamelled vessels is of markedly inferior quality to that of our earlier period. It often has a brownish-yellow tinge and is rarely free from bubbles. The enamellers were evidently so concerned with the decoration that they were prepared to overlook these defects. Indeed it is quite likely that the vessels were made in one glass house and then brought to another glass house which specialised in gilding and enamelling. Many of these decorators were artists who adapted motifs from the artistic repertory of the Ayyubid and Mamluk period to their vessels. Such a one is the master who decorated the great pilgrim flask (no. 136). His elaborate composition which includes arabesques, the legendary 'Talking Tree' of Islamic cosmology, and lively paintings of huntsmen, was an artist of great imaginative invention. Technically, too, this is a remarkable achievement combining, as it does, no less than eight coloured enamels with gilding.

The great basin (no. 137) is an exact reproduction in glass of a type of brass basin current in the metal working establishments of Syria and Egypt. So too is its decorative composition which combines the naskhi inscriptions with roundels containing the lotus, a 'Chinoiserie' motif popular at the period. There could hardly be a more telling example of the close relationship that existed between the arts of the period.

Among the most spectacular achievements of enamelled and gilded glass are the mosque lamps (nos. 138–40). These were intended for suspension from the ceiling of the sanctuary in the mosque, by chains or cords attached to the looped handles on the main body of the vessel. In common with many other mosque lamps, two of those exhibited (nos. 138–9) are inscribed with the beautiful Koranic verse from the Sura of Light which proclaims the significance of the lamp:

‘Allah is the light of the heavens and the earth; his light is like a niche in which is a lamp in glass and the glass like a brilliant star, lit from a blessed tree...’ (Koran, II, 35)

Many of these lamps were made to the order of a Sultan or high dignitary of state for presentation to a particular mosque or religious foundation.

Other vessels were destined probably for mere decoration such as long-necked bottles (nos. 135, 144) and vases (nos. 142–3). Characteristic of the decorated glasses of the 14th century are birds and

Flowers freely drawn in a thin and fluid red enameled line, a style of decoration which reached Syria from Ilkhanid Persia where it may have been adapted from Chinese originals. The same style is rendered in full enamels on the tall vase-like goblet (no. 142) which was acquired in China where it had quite probably found its way as early as the 14th or 15th century – the enamelled and gilded glass of Syria was renowned in the East as well as in the west.

In 1400 Timur captured Damascus and carried off many of its skilled craftsmen, including glass-makers, to his capital, Samarkand. It is doubtful if the Syrian glass industry survived this catastrophe for we have evidence of the Venetian workshops of Murano executing orders for enamelled glass mosque lamps for the Near East already in the 15th century.
117 Octagonal inkwell of glass
Height 7.5cm, diameter 6.3cm
Iranian Museum, Tehran, no. 6849, excavated at Siraf, Persia, 9th-10th century

The octagonal form was obtained by blowing the molten glass into a mould. The small loop handles attached to the shoulder may have been intended for suspension.
Published: Whitehouse (1974, pl. XIVb)

118 Inkwell of blue glass
Height 5.7cm
Dakar Hill Collection
Persia, 9th-10th century

Blue glass, of similar form to no. 117
Unpublished

119 Goblet of lustre-painted glass
Height 9.5cm, diameter (rim) 13.5cm
Musée des Arts et Traditions Populaires, Cairo, discovered at Faqra in 1974, Egypt, Abbasid period, 8th century

The goblet is now in the form of a rounded cup, but a sharp break at the base may be the remains of a stem and a base, rather than a point made. No remains of them, however, were discovered with the vessel. The chestnut lustre is painted both on the inside and outside of the colourless glass which has a greenish-blue tint. This goblet provides significant evidence for the early development of lustre painting in Egypt. It may be compared to a fragment of lustre-painted glass dated 162 AH (779-80 AD) in cotic numerals, also in the Museum of Islamic Art, Cairo (no. 12750/6). The inscription painted on the exterior of the slightly thickened rim is in Arabic.

120 Beaker of transparent honey-coloured glass
Height 8cm, diameter 8.4cm
National Museum, Damascus, no. A 17403, discovered at Raqqah, Syria, 9th century

The decoration is incised and the missing piece restored. The finely drawn decoration, characteristic of this group, was probably executed with a diamond. The technique was applied usually to coloured glasses, most commonly blue. Other examples have been found at Samarra, Nishapur and Fostat.
Published: Damascus (1964, no. 179, fig. 20, and 1969, p. 269, vitrine 7, no. 23, fig. 199)

121 Beaker of transparent colourless glass
Height 8.7cm, diameter 9.8cm
David Collection, Copenhagen, no. 10/1966
Persia, 9th-10th century

The incised linear geometric decoration is formed by the interlacing of two bands each consisting of three separate strands.
Published: Davodi-Samling (1970, p. 107 and no. 20, p. 147)

122 Bottle of dark green glass
Height 20cm, diameter 11cm
Iranian Museum, Tehran, no. 8487
Persia, 9th-10th century

The decoration is created with wheel-cut alternate round hollow carved facets with and without a central boss. While the hollow carved facet is known as early as the 3rd or possibly 2nd century AD, the central boss is only found on raised discs in the early Islamic period. Corming (1970, p. 173, no. 16) illustrates a bottle similar in shape but decorated with three rows of raised discs, each with a central boss.
Published: Washington (1964–5, no. 606, illustration p. 165)
123 Flask of colourless glass with blue tinge
Height 12cm, diameter 8.5cm
British Museum, London, no. 1953.2-18.1; Brodie-Smith Bequest
Persia, 9th century
Pitting and patches of milky weathering. Wheel-cut decoration on body consists of five rows of oval concave facets.
Published: Pinder-Wilson (1968b, p. 26, pl. XVIa).

124 Beaker of transparent glass with a slight yellowish tinge
Height 12.5cm, diameter (upper) 9cm, diameter (lower) 6.6cm
Staatsliche Museum Preussischer Kulturbesitz, Museum für Islamische Kunst, Berlin-Dahlem, no. 1-4539
Persia, 9th century
Wheel-cut decoration in the so-called ‘bevelled’ style in which the designs are purely linear, the outlines being distinguished by angled cuts. The main field consists of palmettes counterposed, a composition found in the first style of Samarra. See Herzfeld (1933, ornament 145, 143, 144). The upper band of freely drawn strokes and figures may be intended to suggest Arabic characters.
Published: Erlandson (1962, Abb. 4).

125 Bottle of blue glass with silver top
Height 2.3cm, diameter 10.8cm
Iran Bastan Museum, Tehran, no. 6825
Persia, 9th–10th century
Wheel-cut decoration, vertical ovals on neck and horizontal ovals on body. Silver mounts with drop spout and domical stopper are inscribed with blessings in kufic in niello.
Published: Rome (1956, no. 448, pl. 67); Washington (1964–5, no. 603) and illustration p. 162.

126 Flask of transparent green glass
Height 16cm, diameter 8cm
Iran Bastan Museum, Tehran, no. 3756
Persia 10th–11th century
Patches of iridescence and greyish white weathering. Facet and linear cutting in the ‘bevelled’ style. On body, a row of counterposed palmettes, compare no. 124.
Published: Washington (1964–5, no. 608 and illustration p. 165).

127 Flask of transparent colourless glass
Height 14cm, diameter 10.5cm
David Collection, Copenhagen, no. 215/1964
Persia, Nishapur, 8th–10th century
Relief cut decoration in main field consists of two rows of counterposed trefoils alternating with trefoils on a long vertical stem.
Published: Davids-Samling (1970, p. 201f, no. 16, illustration p. 236) and 1975, p. 18 with illustration.

128 Flask of transparent colourless glass
Height 23cm, diameter 14cm
David Collection, Copenhagen, no. 215/1972
Persia, 11th century
Green and brown glass overlays are combined with cut linear decoration. In the main field is a stylised floral decoration with confronted lions and dove carved in cameo.
Published: Davids-Samling (1975, p. 19, illustration p. 20).
130 Bowl of transparent colourless glass
Height 8cm, diameter 11cm
David Collection, Copenhagen,
no. 18/1964
Persia, Nishapur, 9th–10th century
Relief cut decoration. In main field, kufic characters in relief: `Allah (`), `the blessing of God (`).
Published: Davids-Smiling (1970), p. 106f.,
no. 17, illustration p. 157, fig. p. 140 and
1975, illustration p. 17.

131 Flask of transparent colourless glass with slight yellowish tinge and green glass overlay
Height 12cm, diameter 7.5cm
David Collection, Copenhagen,
no. 3/1971
Persia, 9th–10th century
Relief cut decoration in main field consists of a full palmate flanked by confronted birds. The vessel was blown from colourless glass and then given an overlay of transparent green glass. The green glass was removed on the wheel leaving the decoration in the form of a raised line notched at intervals. The glass is similar in technique and material to no. 130.
Published: Davids-Smiling (1975, p. 17,
illustration p. 18).

132 Ewer of colourless glass with an overlay of transparent green glass
Height 15.5cm
Private Collection, England
Persia, 10th century
The green overlay was removed on the wheel except for the outlines of the design as in no. 131. The main face of the body is decorated with an eagle attacking a pizzle repeated in heraldic fashion. Flanking the handle are addorsed parrots. The ewer was acquired in Persia and is probably of Persian origin. This and the so-called Buckley ewer in the Victoria and Albert Museum, London, see Buckley (1935, pp. 66–71, pl. 1 A, B), are the only surviving examples in glass from Persia of a type which was to serve as the model for the carved rock crystal ewers of Fatimid Egypt, both with regard to shape and to the style of relief carving.
Unpublished.

133 Beaker of colourless glass with a smoky topaz tinge
Height 12cm, diameter (top) 12.9cm,
diameter (bottom) 10.3cm,
thickness (average) 1cm
British Museum, London,
no. 18/1974 1/13
Islamic (2), 12th century
Relief carved with incised linear elements: a lion and a griffin confronting an eagle with outstretched wings and two paired half-palmettes placed one above the other. The projecting foot-ring is broken away at three points. This is one of the fourteen ‘Hedwig’ glasses, including one fragment, so-called because some are associated with the Silesian princess Hedwig (1174–1245). While the 12th century date is generally accepted, their attribution by Schmidt to Egypt has been generally rejected. On present evidence, there is no Islamic relief cut glass of the 12th century. Philippe suggests a Byzantine origin, but the possibility of a Western origin remains to be investigated.

134 Flask of transparent purple glass
Height 20cm
British Museum, London, no. 1913
2–3 cm, collected by Mr. Durghali in Syria
Syria, Ayubid period, 12th–13th century
This flask is decorated with opaque white marvered trails combing into a feather pattern. There are patches of iridescence. The technique of decorating glass by pressing into the surface coloured trails (‘marvering’) was practised in Egypt as early as the 2nd millennium BC and then in Mesopotamia and Syria through to the Islamic period.
Published: Lamm (1930, ii, taf. 20, no. 135).