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OTHER PILE-WEAVINGS FROM SAFAVID IRAN - THE PERSIAN VELVETS AT ROSENBOG

Tr. Andere Knüpfarbeiten¹ aus dem safawidischen Iran: Die persischen Samtstoffe in Rosenborg

*this should be Flor, not Knüpfarbeiten (see note 11)*

Among Persian pile-weavings, the most famous are carpets produced in Safavid Iran connected with the Persian monarchy or with European royalty. These include the Habsburg hunting Carpet today in the Österreichisches Museum für Angewandte Kunst, Vienna¹, the Swedish royal carpet², and perhaps the Boston Hunting Carpet³. A hunting carpet which may also be categorized as a "medallion carpet" is that in Milan at the Poldi Pezzoli⁴; another celebrated medallion carpet is the Ardabil carpet in the Victoria & Albert Museum, London⁵, with a companion in the Los Angeles County Museum of Art.⁶ More numerous are the star medallion carpets generally considered to be from northwestern Iran, probably from the turn of the 17th century.⁷ Also more numerous, but more problematic in their attribution, are the so-called Herat carpets that are sometimes referred to as Indo-Persian carpets for a lack of clear definition of their origins.⁸

Surviving in larger quantity with firmer grounds for attribution are the so-called Polonaise carpets from Kashan and Isfahan in the first half of the 17th century.⁹ Of these, perhaps now the most famous is that referred to as the Coronation Carpet presented to the wife of a Danish king in 1665 and used since in several anointment ceremonies and stored with the Danish regalia (throne, lions, orb and scepter) at Rosenborg Castle, Copenhagen (Rosenborg).¹⁰

Less well-known pile-weavings of Safavid Iran are Persian velvets of the 17th century.¹¹ These velvets are scattered in various museums and private collections, usually singly or in small undistinguished groups. Also fairly neglected in the literature, such Persian velvets were both better known and better appreciated at the Mughal court in India, and at royal and ducal courts of 17th century Europe than they are perhaps today.

The lack of familiarity of velvets, today compared to carpets, may be explained by several reasons. First, to judge from unique surviving examples, velvets may not have been made in vast quantities as they are so labour intensive. A few examples suggest they were made in groups, some to be used together (as in the case of four panels designed to be viewed horizontally, today in the Cooper-Hewitt Museum (the Smithsonian's National Museum of Design) in New York, The Royal Ontario Museum in Toronto, the Keir Collection outside London, and the National Museum in New Delhi).¹² This is perhaps also the case with related panels, made to be seen vertically, (today in the Walter's Art Gallery, the Los Angeles County Museum of Art, the Royal Ontario Museum, and an example recently sold at Sotheby's in New York).¹³ Secondly, as velvets were often made for interior decor in palaces, residences, and private quarters, they were removed and discarded as fashions changed or as they became worn out. Thirdly, the history of collecting in modern times has focused to date on carpets not textiles, and likewise, the history of scholarship, which itself is a Western phenomenon, has concerned itself more with carpets whereas the study of textiles has assumed a position more in the realm of applied arts. Fourthly, reduction of Persian export of textiles (due to various causes), and substantial increase in Persian carpet exports at end of the 19th and into the 20th century, may be a factor. A fifth reason for the lack of familiarity with velvets today, may be the changing nature of world markets from one of exclusivity to one of broadened consumption world wide, and the development of the bourgeoisie in Europe and America. Finally, the fact that so few Persian velvets are actually preserved today -- an easily countable

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number -- and that nearly all are fragmentary and relatively small in size, may also contribute to their relative obscurity.

Carpets, on the other hand, are larger and have gained renown for their intricate and colorful designs and the warmth and exotic opulence they have imparted to residential interiors in Europe for several centuries and in America now for more than two centuries. And since Persian carpets became important luxury commodities on the world market in the 19th century, often still drawing on the great 17th century prototypes, they have retained an important awareness in the eyes and minds of the wealthier classes.

But in the early 17th century it was silk textiles that were promoted commercially by the Persian court, destined to attract the attention and fancy of European royalty. During the reign of Shah 'Abbas I and his immediate successors, numerous embassies were sent abroad from the Safavid capital at Isfahan with a mission to generate income from the sale of silk. Among the finest of these materials were Persian velvets, richly ornate with figural and floral patterns. Today in the collections of the Rosenborg Palace, they were probably first brought to Europe by Persian ambassadors on an embassy to Holstein, and subsequently transported to Copenhagen when Gottorp castle came under Danish control.

This group comprising sixty-one fragments, is the largest surviving collection of Persian velvets and offers superb possibilities for analysis as a corpus. The majority of the pieces retain both left and right selvedges, and several fragments are nearly two meters in length. Structurally, this group is particularly significant because velvet pile, unlike knotted pile, holds a special status in the history of textile technology prior to the industrialization of textile production in the 19th century.

The royal collections at Rosenborg Palace were arranged chronologically and opened as a museum for the public benefit in 1834. It was thought then, fairly correctly, that the velvets dated from the reign of Christian V and they were hung in the Tower Room (fig.1). In 1911 some of the velvets were removed to the Royal Treasury, a room in an upper floor (where they were later exhibited in conjunction with the VII. ICOM with the Coronation Carpets). There they hung until 1976 when they were removed from display in keeping with the development of museum conservation standards. Others have remained in storage since 1911.

This corpus of Persian velvets from the Safavid period came to Denmark after the palace at Gottorp came under Danish control; the velvets were taken to Copenhagen as household effects according to the Rosenborg inventories in 1813. From information detailed in the Gottorp inventories, as compiled by Mogens Bencard, Director of the Rosenborg Palace Collections, it is clear that Gottorp Palace in the 1660s was a lively place richly decorated with Persian silks and velvets in bright colors. From other sources as well, we know that it was the habit in ducal and royal residences to hang beds with elaborately decorated textiles, and in the mid-17th century, Persian was the fashion.

Going back in time, how did these Persian velvets get to Gottorp? In the adventures of Adam Olearius, court mathematician and librarian for the Duke of Gottorp in Slesvig (Schleswig), we may read about the embassy sent out from Holstein in 1636 to secure favorable trade relations with Persia. Received by the Shah, they returned to Slesvig-Holstein in 1639, not without many mishaps along with way. On their return, they brought many gifts back to the Duke. From the descriptions of richly decorated stuffs with birds and flowers and with a golden ground, we may surmise that it may be the very velvets today preserved in the Rosenborg Palace collections that were brought back to Gottorp by the embassy of Duke Friedrich III.
Velvets and carpets from Safavid Iran follow several standard themes in their subject matter. There are hunt scenes, figural compositions, and floral ornament in vast diversity. Hunt scenes on the velvets often favour falconers (fig.2). As in other arts of the early 17th century, the designs exhibit a mélange of European and Persian stylistic influences. Although Persian textiles and carpets of the 16th century may show pictorial or narrative themes, in the 17th century floral ornament is more predominant and figural scenes have become emblematic in nature. The closest parallels in Persian painting of the period to textile images of figures are to be found in album paintings - single-page illustrations of individuals engaged in a variety of activities, often with a contemplative air (figs.3,4).

Persian carpets as well as velvets attracted the attention of many European travelers to Iran in the Safavid period. They often commented on their beauty and fine workmanship. Olearius described his travels to Persia, in 1636-1639, which were published in several editions. In the account published in 1669, we learn of exchanges of gifts (pp.270,289), and he describes the king's activities, of which "the time he spent in hawking", was a favorite (p.282). He also mentions gold and silver carpets (p.271). Among the gifts to the ambassadors from Holstein were forty-five pieces of stuff, "among which there were several, whereof the ground-work was Gold" (p.289).

Several authors described the great bazaar in Isfahan where many kinds of textiles were manufactured and where even more were available for sale. Thomas Herbert described the bazaar as "spacious and uniform, furnished with silks, damasks, and carpets of silk, silk and gold, and of course...wool; no part of the world having better or better-coloured." Engelbert Kaempfer also described the bazaar in Isfahan and provides additional information about textile manufacture there:

The royal weaving mill consists of various weaving shops in which silks as well as gold and silver brocades are manufactured. The director of the establishments is the Superintendent of the traders who controls and supervises the selection of patterns, the preparation of raw materials and the storage of the completed articles. In addition he is the head of all the workshops that supply the clothing needs of the royal household.

The jewel merchant, Jean Baptiste Tavernier located the site of the court workshop in the Maidan area in Isfahan during his stay there between 1622-1667:

At the other end of this self-same side (the "Midday side" since it touches there about the evening time) is a large portal through which one can pass to a secret door of the Royal Palace next to which, as soon as one enters is located the chamber of the Head keeper of the Treasure...through this door are brought all the victuals for the Royal Court and also by this route one reaches the workshops making a large courtyard the one side of which is taken up by the carpet-makers from gold and silk as well as workers of gold pieces which the King maintains for his service.

In the bazaar, carpet and cloth merchants offered a rich array of textile arts from the famous weaving centers of Tabriz, Kashan, and Kirman, as well as from the looms of Isfahan and neighboring towns and villages. Silk weavers and other craftsmen practised their craft, and textile printers set up shop. Sections of the bazaar were devoted to the sale of certain kinds of goods, and other areas were reserved for the practise of particular crafts that were produced and sold on the spot.

The Persian velvets at Rosenborg fit stylistically into the decorative arts of early 17th century Isfahan. As mentioned above, they were probably produced just after the reign of Shah Abbas, and transported to Europe most probably as gifts brought back by the Persian embassy. Their special significance today lies in the fact as a single corpus, their sheer quantity, as well as their stylistic and technical uniformity makes it possible to analyse them as a coherent group of fabrics which represent both historical artifacts and supreme technological achievements.
Among the 61 fragments may be identified nine patterns of which four are figural (figs.2,3) and five are floral (fig.4). There are long panels, cut panels, short panels with a fringe, and pelmets. These were superimposed to form panel sets with a few miscellaneous pieces sewn to fill in gaps; together, these made up the interior decor for the Tower Room of Christian V (fig.1) at Rosenborg Palace at the time it became a museum in 1834. Several cuts were made to accommodate doors and hinges; earlier seams and spilled candle wax suggest they may have had an earlier use, perhaps when they were among the household effects at Gottorp Palace. Collectively, and sometimes individually, these fabrics provide extraordinary documentation for the length of bolts, and many fragments have both the left and right selvages preserved.

Color is for the most part lost, the dyes' being fugitive. Examining the back face of the fabrics and areas where fabric is folded back behind a seam reveals much of the original color still preserved. This suggests that most of the fading is the result of exposure to light over time. In areas where the color is preserved, it is indeed remarkable, exhibiting a brilliance and intensity and a wide range tones that hints at extraordinary capability and intimate and specialized knowledge of dyeing technologies and the properties of dyestuffs on the part of Safavid weavers and dyers.

The nine patterns represent two basic fabrics, distinguished by the use of either a silk or a cotton weft. All of the Persian velvets at Rosenborg Palace bear designs executed in velvet pile (fig.5). The weave structure is cut and voided velvet formed by the use of supplementary warps. During the process of weaving at the loom, these warp yarns were selectively pulled to the front surface of the fabric and cut to form tufts. Although the velvets appear to be multi-colored, the velvet warps were in fact positioned in small groups consisting of only one or two colors plus black and carried on the loom in channels that run parallel to the ground warp. It is the careful placement of groups of these yarns in relation to the intended design that yields such a colorful effect. The design process takes full advantage and account of woven pattern construction in velvet.

The basic binding system for all of the velvets is a warp-faced satin weave (fig.5). The background of the pattern, as well as certain features of the design, are defined by the absence of pile in selected areas (called "voided velvet").

What may be identified in every fabric in the corpus are five integrated sets of elements (fig.5) that form a cut and voided velvet with metallic facing: A set of ground warps (1) interlaces with a set of interior ground wefts (2) to create a warp-faced satin weave. A second set of wefts (3), visible only on the back of the fabric, interlaces with every alternate fifth (=100) satin ground warp; these reverse binding wefts serve to hold in place the velvet pile warps (4), which are supplementary to the ground weave. These supplementary warps consist of groupings of one, two, or three colors plus black, held parallel to the ground warps in a set of channels built up as weaving progresses. Thus, the supplementary warps (4) are held in place between the ground wefts (2) and the reverse binding wefts (3), lying in a plane just behind the satin ground warps (1). The ground wefts are not visible on either face of the fabric, except where they are revealed by breaks in the satin ground warps.

Supplementary metallic facing wefts (5) made of cut strips of metallic foil also interlace with the ground warps (1). The facing wefts run throughout the width of the fabric including pile areas and return just inside each selvage. This forms an internal selvedge as the metallic strip reverses direction in each successive shed.

Seven of the patterns utilize additional supplementary wefts (6) made up of cut strips of metallic foil plied with white silk. These wefts are discontinuous, used selectively in particular areas to add color and texture to the pattern. Introduced into the fabric from the
back face, they interlace only on the front face with every other satin ground warp to form a twill binding order, carrying the metallic facing wefts in the same sheds. Finally, seven of the patterns utilize a technique called warp substitution to effect color changes in addition to those carried in the supplementary warp channels. The amount of warp substitution varies from pattern to pattern.

PILE STRUCTURES-DIFFERENCES BETWEEN CARPET PILE AND VELVET PILE

The weave structure that forms the velvet pile, as described above, results from the interlacing of wefts with two sets of warp: the ground warp and a supplementary warp. This represents not only a difference in process from that used to produce pile carpets, but also a different technology. The pile of carpets, referred to as knotted, is actually the result of a wrapping technique. Although it is also weave structure, it is effected by the manipulation by hand of a discontinuous supplementary weft around a pair of adjacent warp yarns.

The distinction between knotted pile (Knüpfarbeiten) and other pile (Flor) lies in the pile structure and how it was achieved. Persian carpets are constructed using three sets of elements: warp, weft, and discontinuous supplementary weft which is inserted, wrapped around adjacent pairs of warps and then cut to form the pile. But the finest of the velvets consist of six or seven sets of elements: 1) ground warp, 2) ground weft, 3) supplementary warps which are carried on the loom and selectively pulled to the face of the fabric as weaving progresses to form the velvet pile which is then cut, 4) continuous supplementary metallic facing wefts, 5) discontinuous supplementary metal-wrapped wefts, and 6) an inner weft that holds the velvet warps in place.

CONCLUSION

The Safavid period in Iran was a golden age for the textile arts: it was in the sixteenth century that the Classical Persian carpet evolved to its fully developed form. In the seventeenth century Persian velvets evolved to the highest technical levels of textile production. These other pile-weavings from Safavid Iran, the Persian velvets, deserve to be better known and recognized for their role in the forging of international economic ties between East and West, and for their place in the history of technical achievements in weaving. In subsequent periods of Persian history, textiles and carpets reflect the extraordinary achievements of the Safavid era which have never been exceeded.

NOTES

1 Bier 1987, pp.102,103-5.
2 King and Sylvester 1983, cat.no.65, p.91.
3 Ettinghausen 1971.
4 Bier 1987, p.104.
6 Ford 1983-84; Stead 1974.
7 Examples survive in several museum collections: Bier 1987, pp.98-104; King and Sylvester 1983, cat.nos.57-60, pp.84-87.
8 Klose 1994.
9 Examples held in museum collections include those of the Textile Museum, Cleveland Museum of Art, Art Institute of Chicago, Walters Art Gallery, Baltimore, and the Corcoran Gallery of Art. See Bier 1987, pp.158, 235.
11 In the [HALI] abstracts for the VIIth ICOC, Hamburg, the published translation of my title is incorrect: Knüpfarbeiten is knotted pile; more generic pile should be Flor of which there
is the knotted type used for carpets, correctly translated as *Knüpfarbeiten*, and that woven using supplementary warp yarns, as in velvet, which is *Samt*.

12 McWilliams in Bier 1987, p.140; Sunday 1987, 77-83; McWilliams 1990.
13 Art Institute of Chicago (Youth Smelling a Flower) [Welch 1973, no.21, pp.44-45]; Cleveland Museum of Art (Youth Smelling a Flower) [Reath and Sachs 1937, no.89, pp.130-131]; Royal Ontario Museum (962.60.1) [Hayward Gallery 1976, no.83, p.110 and p.61 (color detail)]; Walters Art Gallery, Baltimore (83.630); *Catalogue of Fine Oriental and European Carpets*, Sotheby's, New York, December 11,1991, Lot. 87, cover (detail, color).
15 Dating initially advanced by Martin 1901 is advocated by Bencard (in press) who has conducted additional primary research into the archives of Gottorp Palace.
16 See, for example, the falconer velvet at The Textile Museum (3.320) [McWilliams 1987, no.10, pp.154-155 with full bibliography] and its parallels at the Museum für Islamische Kunst Berlin on permanent loan from the Kunstgewerbe Museum Berlin (91,71) [Neumann and Murza 1988, no.17, fig.41 and p.264].
17 Farhad 1987.
18 Herbert 1919, p.218.
20 Quoted in Spuhler *et al.* 1987, p.33.

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LIST OF ILLUSTRATIONS

fig.1. Rosenborg Palace, Tower Room of Christian V.
fig.2. *Falconer* velvet, Rosenborg Palace.
fig.3. *Suplicant* velvet, Rosenborg Palace.
fig.4. *Rosette scroll* velvet, Rosenborg Palace.
fig.5. Weave structure: cut and voided velvet.

Analysis: Carol Bier; artwork: Ed Zielinski.
The Persian Velvets at Rosenborg Palace

CUT AND VOIDED VELVET
CROSS SECTION DIAGRAM

Key
1. Warp (satin ground weave)
2. Interior weft (ground weave)
3. Reverse binding weft (supplementary)
4. Velvet pile warps (supplementary)
5. Metallic facing wefts (not shown)
6. Metallic-wrapped brocading wefts (not shown)

Analytic Carol Bier
Artwork Ted Zeltenski

FIG 5

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