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Spanish and Mamluk Carpets: Comparisons of Decoration and Structure

Carol Bier, *The Textile Museum*



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SPANISH AND MAMLUK CARPETS

Comparisons of decoration and structure

Carol Bier

*Mameluke rug in geometric style.
Egypt, late 15th century.
Washington, Textile Museum,
inv. no. R16.1.2,
George Hewitt Myers acquisition,
1928.*

Two recent exhibitions, *Carpets of Andalusia* and *Mamluk Rugs from Egypt*, at The Textile Museum afforded a rare opportunity to compare two radically different rug-weaving traditions

from the perspectives of design and weave structure. While not often evident to the casual viewer, there is a significant relationship between design, pattern, and weave structure in all Oriental carpets. The opportunity to explore such differences warrants careful examination and critical viewing.

The Mamluk rugs all probably date from the last quarter of the 15th century. They comprise a cohesive group defined by color, a geometric style, and similarity of weave characteristics. The range of colors is limited to reds, blues, and greens, with the occasional addition of yellow, white, or brown for outlines and highlights (p.10). The geometric style is characterized by the recurrence of particular shapes and relationships, and a consistent pattern layout that is often based upon a square unit that defined both the composition of the central field, and the proportions of upper and lower panels, as well as the borders. The weave structure exhibits uniformly distributed knots on paired warps that are significantly depressed. The linear horizontal and vertical knot density is usually the same (p.11, above).

In contrast, the Spanish rugs,





other rug-weaving traditions (with a few notable exceptions, such as some Kurdish rugs). And all other carpet-weaving traditions utilize paired warps in the construction of individual knots. In the Spanish tradition, the placement of knots produces an offset relationship because the knots are not in vertical alignment. The physical characteristics of the single-warp knot and its orientation on a set of warps, directly affects the kinds of lines that the weaver may incorporate into the designs of the carpets (p.12, below).

In this detail, for example, the linearity of horizontal rows of knots is evident, but linearity in vertical alignment is not possible. Such disparity in the qualities of vertical and horizontal lines may lead us to conclude that such patterns, when they appear this way in Spanish carpets, are most likely the result of copying carpets of other weaving traditions. The carpet illustrated at pages 12 and 13 is modeled after a large-patterned Holbein or "Wheel" carpet from Turkey. Notice also the effect of the single-warp knot alignment on diagonal lines in this

although representing a great diversity of cultural traditions, share a unique knot structure that utilizes single warps – unlike those of any other well-known rug-weaving tradition. The single-warp knot is so typical of Spanish carpets that it has become known as the "Spanish knot". This type of

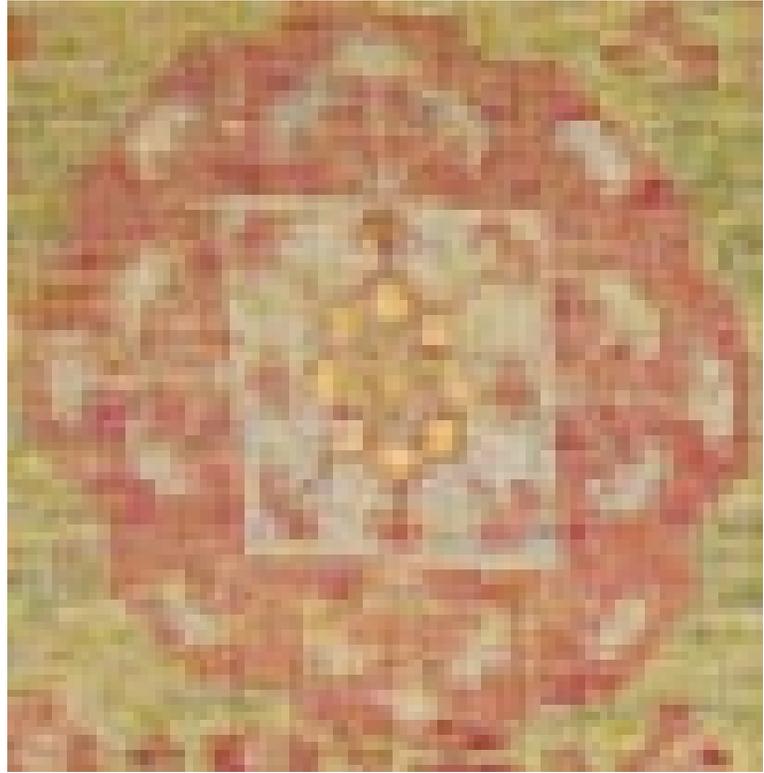
knot, and its offset placement on a set of warps, is particularly significant in relation to characteristics of design. In this tradition, knots are wrapped around alternate warps in successive rows, resulting in a staggered alignment. They are not placed one directly above the other as in most

*Mameluke rug in geometric style.
Egypt, late 15th century.
Washington, Textile Museum,
inv. no. R16.2.1,
George Hewitt Myers acquisition,
1926.*

example.

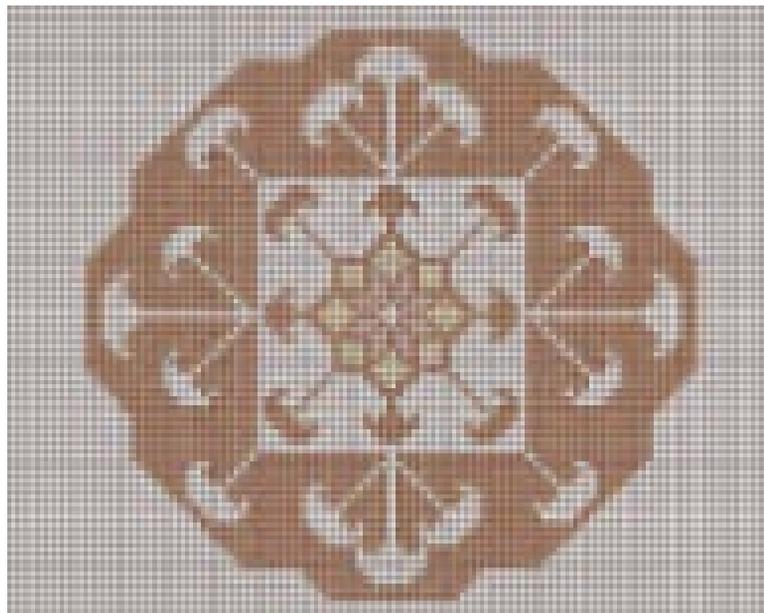
Other Spanish carpets carefully draw out the potential of the offset grid of rug knots to achieve perfect diagonal lines (p.13, below). Diamonds and other design elements based upon acute and oblique angles utilize the angles of offset to advantage in the composition of patterns. The angles may be close to but not necessarily exactly 30- and 60- angles, because the slope will depend upon the ratio of vertical and horizontal knot density. In this example, the design of the quartered medallions seems to reflect the influences of Central Asian weaving traditions, perhaps deriving from Timurid decorative arts. The attitude of diagonals is particularly pleasing. The illusionary interlacing of the outlines of the medallions is a design feature that also links this carpet to architectural monuments in Andalusia in which the play of interlace characterizes stucco and ceramic ornament.

Spanish carpets as a group illustrate the blending of various cultural traditions. Documentary records indicate extensive imports from Turkey. Design influences also

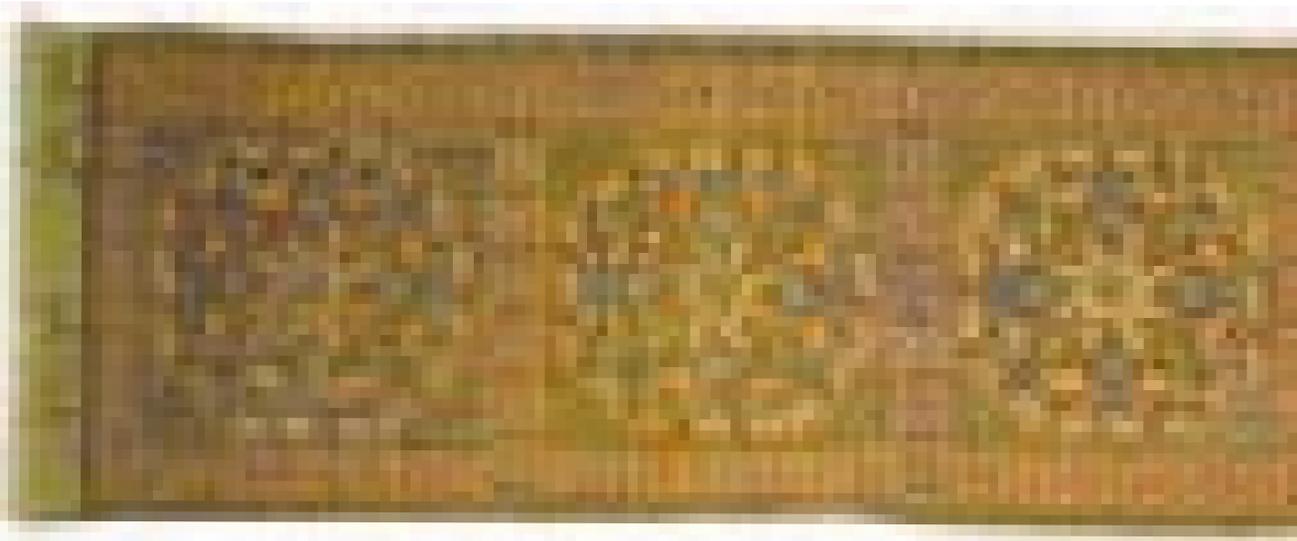


suggest imports or influences transmitted otherwise from the Caucasus, Central Asia, and China. Design relationships also exist with arts in other media known from Egypt and

North Africa. The Spanish carpets, in spite of their cultural diversity, share in the unique use of the single-warp knot. The warps in Spanish carpets are on a single level, showing



Above, Mameluke rug in geometric style. Egypt, late 15th century. Washington, Textile Museum, inv. no. R16.2.4, George Hewitt Myers acquisition, 1926. Detail showing the density of knotting. Alongside, Mameluke rug in geometric style, analytic reading of the structure (diagram by Chris Palmer).

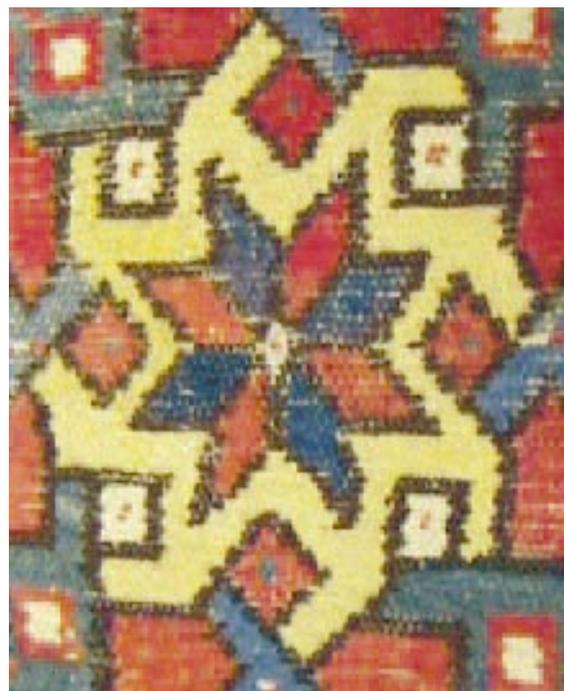
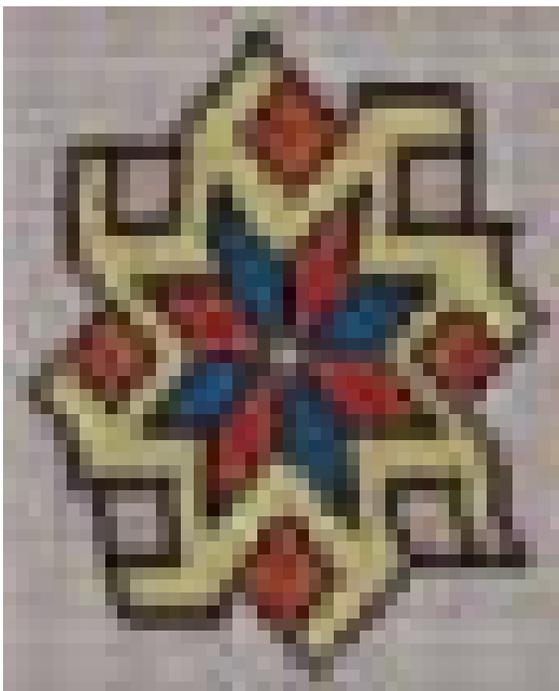


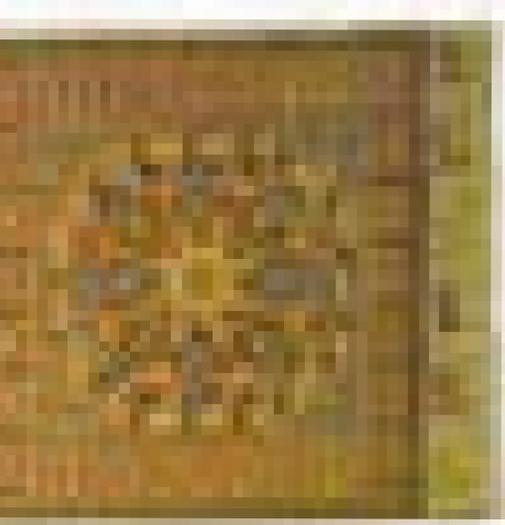
no warp depression. These rugs have a particularly floppy handle and are relatively lightweight for their size in comparison to carpets from other rug-weaving traditions. This characteristic handle is due to the combination of several features: the single-warp knots, which are offset, the lack of warp depression, and a relatively low knot count. In addition

to the unique knot structure, Spanish carpets often exhibit multiple weft yarns interlaced within a single shed. Thus there is relatively considerable spacing between each row of knots, while the warps remain on a single level. The resulting weave structure, with staggered knots in diagonal alignment set between multiple wefts, allows the weaver to create

a relatively light-weight carpet. The designs and patterns

Above, "wheel" rug. Spain, 15th century, Washington, Textile Museum, inv. no. R44.2.2, George Hewitt Myers acquisition, 1931. Below, detail of the same rug and analytic reading of the structure alongside (diagram by Chris Palmer).





are nonetheless complex, although they are achieved with a notable economy of materials.

The oblique grid thus created lends itself to a different aesthetic response to diagonal, horizontal, and vertical lines. On the one hand, carpets constructed using a cartoon for a square grid (p.12, right) will show straight horizontal lines, but irregular vertical lines and diagonal lines. Depending on the angle of a diagonal, it may be realistic (more approximate), or stepped (less approximate), as determined by the physical spacing of knots within the rectilinear grid established by the interlacing of warp and weft. Thus, the Spa-

Rug in Turkoman style. Spain, 15th or 16th century. Washington, Textile Museum, inv. no. R44.3.1, George Hewitt Myers acquisition, 1926.

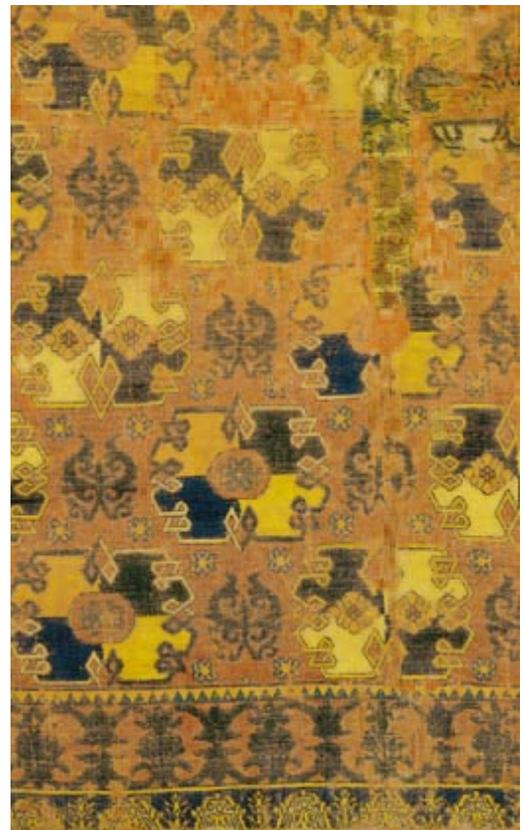
nish knot, wrapped around alternate warps in successive rows, and their offset placement, allows for a wide variety of possibilities for designs incorporating diagonal, horizontal, and vertical lines.

We know very little about workshop practices in Spain under Muslim rule, or after the Christian reconquest. But evidence in the carpets themselves hints at commercialized production using cartoons, or graphed renderings of the designs with each square marked in a particular color, corresponding to a single knot. Such traits as the abutment of horizontal and vertical borders suggests this method of design transfer. Documentation of the placement of color within the oblique grid suggests that the designs rendered were adjusted from patterns delivered to the weavers, with the implication that there was likely a division of labor among designers and weavers.

Carpet production relied upon sheep-rearing, as well as technologies of yarn preparation, weaving, and dyeing. Spain had an enviable commercial reputation for its sheep, Christian rulers having supplied Flanders and England with wool for several centuries; Muslims were renowned for their weaving of rugs, and Jews held the hi-

ghest reputation for dyeing. Spanish rugs, apart from reflecting a diversity of cultural influences also incorporate Christian symbols of faith and power, indigenous Iberian motifs, patterns drawn from Roman pavements, and Islamic interlace designs. Later Spanish carpets herald styles of the Italian Renaissance. The carpets of Andalusia thus offer tangible evidence for *convivencia* (living together), reflecting the shared cultural heritage of Jews, Christians, and Muslims in Spain before the final *reconquista* in 1492.

With the fall of Granada in 1492, Christian dominion was finally reestablished throughout the peninsula, and soon Jews and Muslims were forced to convert, or leave. Many emigrated across the Straits of Gi-





braltar to North Africa; others were welcomed to the Ottoman imperial capital at Istanbul and elsewhere. During this period the vigor of Spanish rug-weaving seems to have waned. The color palette is reduced to a range of blues and yellows, suggesting the possible loss of technological expertise with respect to red dyes, at least at some weaving centers (above). Some later carpets in Renaissance styles, however, retain a vibrant red color (p.15, left). Others seemed to have purposefully adhered to a restricted color range of yellows and blues (p.16, right). Production in Cuenca, particularly, seems to have had a longer life well into

the 17th or 18th centuries. Scant evidence remains for carpet-weaving in early Muslim Spain. But the Spanish carpets of the 15th and 16th centuries represent some of the oldest preserved carpets in the world. And several of them seem to reflect earlier prototypes from elsewhere, which are no longer extant.

Mamluk rugs offer striking contrasts from every perspective, except that they are also among the oldest surviving groups of carpets. In comparison to Spanish carpets, initial inspection reveals the use of more lustrous wool, and frequently the presence of dyed warps, occasionally striped in groups of variable

quantities. Design and pattern are linked with weave structure in a different relationship. The weave structure of Mamluk rugs is not itself unique. Alternate warps are depressed, lying on two levels held in place by successive wefts, one that is taut, and one that is looser. A similar weave structure, with depressed warps and asymmetrical knots, is also observed among Persian carpets, Dragon rugs, and some Turkmen rugs: knots are wrapped around paired warps and they are disposed in vertical alignment. The knotting is tighter than in Caucasian and Turkish rugs, although not as dense as in some Persian carpets, or among the highest quality Turkmen. In general, the knot density of Mamluk rugs is much higher than that of Spanish carpets with their single-warp knots. The handle of Mamluk rugs is markedly heavier than that of Spanish carpets, which are among the most lightweight of any rug-weaving tradition. But the knotting is also tighter, and the yarn dimensions smaller. All of these features allows for more curvilinearity in the designs, and a higher resolution in patterning. This certainly contributes to the hi-

*Carpet with Lotto design. Spain
16th century.
Washington, Textile Museum,
inv. no. R44.00.1, George Hewitt
Myers acquisition, 1940.*



gher knot density. In the Mamluk rugs, knot density is fairly uniform at 11 knots per li-

Above left, rug in Renaissance style. Spain 16th century. Washington, Textile Museum, inv. no. R44.3.2, George Hewitt Myers acquisition, 1926.

Right, rug in Renaissance style. Spain 16th century. Washington, Textile Museum, inv. no. R44.0.0.

near inch in both horizontal and vertical directions, which yields a proportion of 1:1, allowing for squares and circles to be executed with good approximation within the square grid created by the interlacing of warp and weft.

There are two contributing factors to the effective delineation of geometric shapes in Mamluk rugs: The first is the unitary proportion of knots in both the horizontal rows and vertical lines of knots that

comprise the square grid. The second contributing factor is the relationship of knots set on pairs of warps that are effectively on two levels. This reduces the surface area exposed for each knot, allowing construction of more realistic diagonal lines and curvilinear forms. The geometric layout and patterning, along with minimalist coloring, distinguishes Mamluk rugs from all other rug-weaving traditions. □