Review of Gulru Necipoglu, The Topkapi Scroll: Geometry and Ornament in Islamic Architecture

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buildings or objects of major importance that are not mentioned, but the descriptions never degenerate into mere lists. Objects are described in sufficient but not exhaustive detail, and ample documentation is provided in each case. The illustrations are of generally high quality and well integrated with the text with only very minor glitches apparent. In all, the book meets its purpose well and should prove to be a most useful teaching tool.  

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Reproducing the patterns from a 15th-century scroll (Topkapi Palace Museum Library, MS H.1956) that served as a guide for architects and artisans, Necipoğlu brilliantly explores the juncture of geometry and philosophy that informed Islamic art and architecture over the centuries. Lucid essays accompany illustrations of the scroll’s 114 sequential patterns and place this virtually unknown work within the dynamic intellectual discourses on geometry, religion and building that were taking place in Europe and parts of the Islamic world during the 15th century.

The Babylonians, Pythagoras, Euclid and Plato, al-Farabi and the Neoplatonists, Leonardo Fibonacci of Pisa, Ghiyath al-Din al-Kashi, Albrecht Dürer and Johannes Kepler, among others, are brought to bear in discussions of the history of mathematical thought and its non-linear relationship to architectural practice.

Necipoğlu develops convincing evidence for a tradition in which scrolls played an important role in the transmission of architectural theory and knowledge in the Islamic world. Linking this development to expanded book production in the 15th century, she suggests that the abundance of paper led to the wider use and dissemination of architectural drawings in scroll format. Unlike drawings in plaster, scrolls were easily transportable, so buildings throughout the Islamic world in the 15th and 16th centuries could share a unified architectural and decorative style based on geometric constructions using the radius of a circle as the unit of measurement. What she calls the Timurid-Turkmen style emerged as a result of conscious efforts undertaken in the Timurid courts of Samarkand and Herat, which strongly influenced architecture and the arts of Safavid Iran, Mughal India, Uzbek Central Asia and the Ottoman Empire.

The scroll’s grid-based designs, which Necipoğlu refers to as gīrīh (a term drawn from contemporary architectural practice in Central Asia), contain many formulaic expressions and invocations. There are no internal hints as to date, but using comparisons to standing architectural works, Necipoğlu ascribes the scroll to the late 15th- or 16th-century Iran and suggests Tabriz as a likely place for its execution. Its significance is incontrovertible even if exact origin cannot be ascertained.

This outstanding publication has one major drawback: Necipoğlu does not recognize the spiritual implications of the work she meticulously reproduces and eloquently explicates. Applied geometry often seems to be associated with a
phenomenon that transcends culture—a human response that links mathematics with mysticism. What is needed is a broader contextualization of the spirituality and sacred geometry that has informed, among others, the Pythagorean Society, the Ikhwān al-Safā', Gothic builders, Timurid-Turkmen architects and craftsmen and the Freemasons.

This work addresses areas of global impact in the history of science and culture, technology and art. It deserves a broad readership among both theoreticians and practitioners in the arts and sciences, including philosophers, mathematicians, architects, designers and art students who seek to understand the inspired genius of earlier generations. 

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This unique collection of 17th-century Safavid velvets, first published by F.R. Martin in 1901, is the subject of Bier's new and extensive examination.

Three chapters follow a brief introduction. The first chapter encompasses the international trade in Persian velvets and the complicated looms and skilled weavers required for velvet production, although the origin and transfer of the technique are obscure. The second chapter scrutinizes the specific weaving structure with photographs (not all in color) and a diagram. Dyes without analyses, colors from three to eight and stylistic characteristics of the figural and non-figural velvets are investigated. The comparison of the figures with contemporary Persian painting and lacquers is apt. Yazd and Kashan are the presumed centers of production, although Isfahan, Tabriz, Qum and Saveh also had known workshops.

The velvet structure is the same for both figural and non-figural pieces with some variations. It is a cut and voided silk velvet on a 4/1 satin weave foundation with discontinuous supplementary warps, and a 4/1 twill with continuous and discontinuous supplementary wefts, faced with metallic strips or metal-wrapped yarns. Discontinuous supplementary warps is a distinguishing trait for 17th-century Persian velvets. The non-figural pieces contain a cotton weft and some have no supplementary warps, perhaps indicating a different workshop.

In the third chapter, Mogens Bencard discusses the textiles in palace inventories at Gottorp. In 1635 Friedrich III, Duke of Holstein sent an embassy to Iran accompanied by (the noted) Adam Olearius to serve as secretary. In 1639 a Persian embassy arrived in Gottorp and presumably presented the velvets to the Duke. Both Bier and Bencard attribute the velvets prior to 1639: royal exchanges of goods but not presents were recorded between the Shahs of Iran and India. The Rosenberg velvets should be viewed as potential export goods to Europe and not as gifts.