

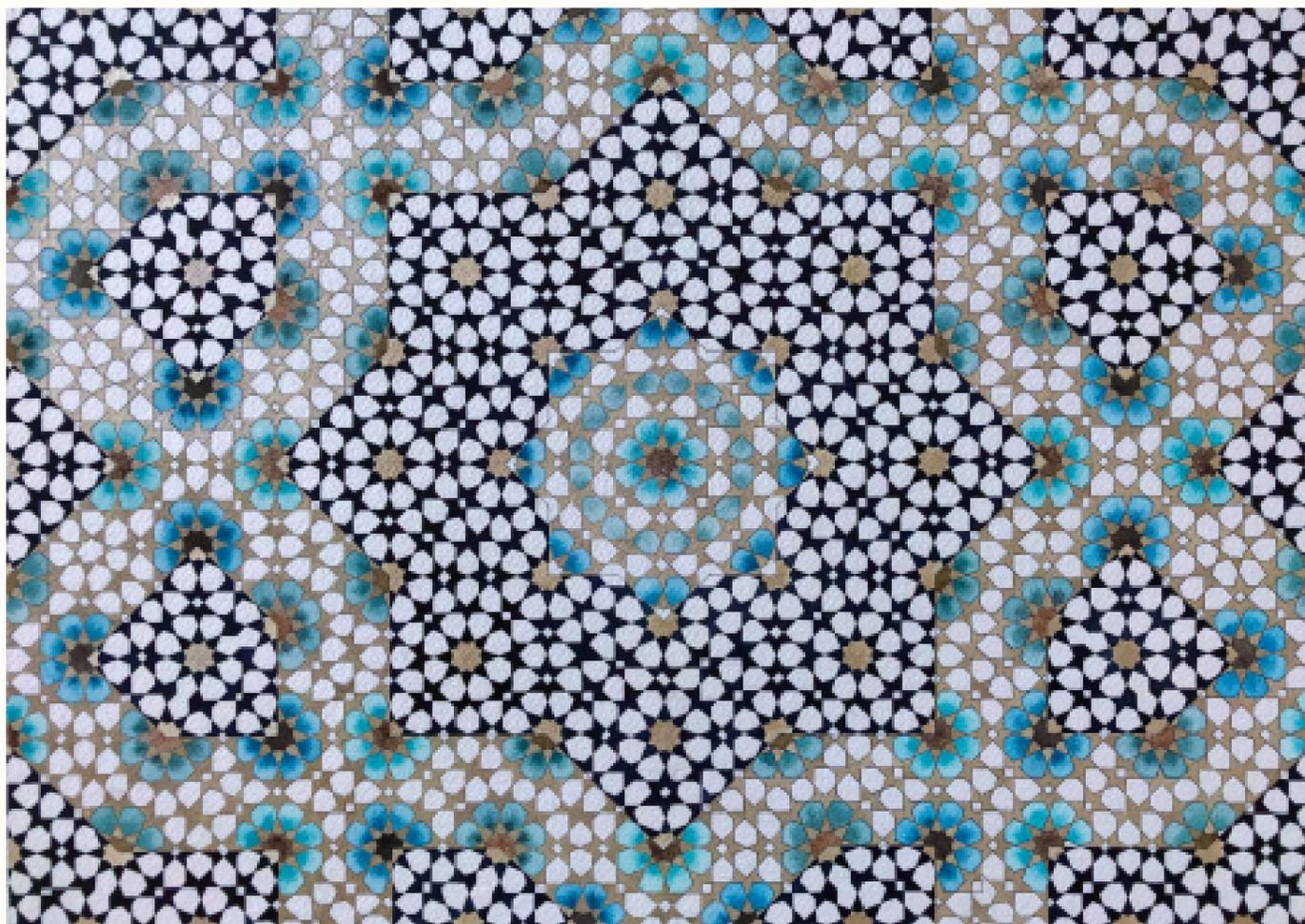
'Sense of Eternity'

by

Margi Lake



Museum Tesseract Gallery Catalogue



Sense of Eternity, 2021
41x51 cm
Margi Lake

A behind the scenes exposition of the processes involved in transforming an Islamic geometric pattern into a contemporary artwork

Catalogue to accompany the 24 artworks in Margi Lake's Tesseract Gallery

Introduction by Jay Bonner

Margi Lake's Website



Museum Website



MARGI LAKE

Artist-geometer inspired by traditional geometric patterns from Islamic lands.

Born and raised in England, since 2014 Margi has studied Islamic geometry and arabesque with world-renowned masters in the UK, Spain and on location in the Islamic world. Her work reflects a lifelong interest in the world's wisdom traditions, and her approach to the creative process of drawing and painting Islamic geometric designs integrates the timeless principles found within those traditions. Her designs are constructed by hand using traditional tools and techniques. Her watercolour palettes reflect a love of harmony, balance, symmetry, translucence, ancient patinas and the dynamic interplay between light and shadow. The rich variety and intrinsic beauty of nature's patterns and palettes inspire and inform her work. She has travelled widely to study and research Islamic architecture, visit Islamic art museums and document the historical patterns portrayed in her artworks.

Introduction

Islamic geometric art is arguably the most sublime aesthetic expression of mathematical concepts created over the long history of human endeavor. Within this discipline are diverse examples of repetitive schema and symmetry types, including all 17 plane symmetry groups. In the early eleventh century, these explorations lead to the first known examples of artwork comprised of 5-fold and 7-fold symmetry. The three-dimensional surfaces of domes and semi-domical niches were occasionally ornamented with geometric designs that employed the underlying structure of the Platonic and Archimedean polyhedral. At the height of maturity, Muslim geometric artists produced designs that combine seemingly incompatible regions of local symmetry into a single repetitive structure: for example, regions of regular 11-fold and 13-fold symmetry. And during the fourteenth century in Morocco and Spain and the fifteenth century in Persia, geometric artists developed ingenious dual-level designs that adhere to the modern mathematical principles of self-similarity and, some have argued, quasi-periodicity.

There is evidence that early in the history of this discipline artists collaborated with mathematicians. The degree to which Islamic geometric art is indebted to mathematicians for the development of this highly complex artistic tradition is impossible to know for certain and is the subject of some debate. It is the view of this author that the inherent geometric skills of the artists themselves, as passed down from master to apprentice, and born of a great love and appreciation for this form of beauty, must be regarded as the primary developmental *raison d'être* for this magnificent artistic tradition.

This leads me to mention an important feature of this discipline that is no less relevant to contemporary circumstances as it would have been to Muslim geometric artists of the past: that practitioners do not need a deep mathematical knowledge even while working at the highest levels of innovation and creativity. It is in consideration of this fact that I am honoured to introduce the outstanding geometric art of Margi Lake.

Since the 1970s, there has been a growing international interest in Islamic geometric patterns. In recent years, thanks in large part to the design programs at the Prince's Foundation for Traditional Arts in the U.K., there has been an increasing focus among artists from all corners of the world to paint stand-alone examples of Islamic geometric design; often using watercolour as a preferred medium. Margi Lake has emerged as a leading light in this burgeoning artistic discipline. Indeed, the paintings in this exhibition are among the finest contemporary expressions of Islamic geometric artwork.

As seen within this catalogue, Margi Lake selects diverse pattern examples from the rich historical record. These designs are intrinsically beautiful, even in their most stark form, but Margi Lake imbues these patterns with her own aesthetic sensibilities, thereby bridging two worlds: historical mastery of geometric design and highly personalized contemporary inspiration.

In addition to her deep appreciation of the beautiful examples from the past, Margi Lake draws inspiration from her sincerely held convictions for the harmony, rhythm and proportion that pervades the cosmos, and for how these principles can find expression through the creative process. As such, her work is a spiritual discipline that, like poetry, reveals multiple levels of meaning to her personally, and potentially for the viewer.

Within contemporary scholarship there are several different methodological approaches that are advocated for designing and drawing Islamic geometric patterns. Over many years, Margi Lake has sought out methodological knowledge from diverse sources, keeping an open mind throughout, and a sincere respect for her teachers. This catalogue includes examples of her drawing processes, and these illustrate her diverse approach to this discipline. The meticulous care and attention to detail that she has given to each of her paintings is testament to Margi Lake's technical skill and artistry. Combined with her inspired use of colour, her paintings draw the viewer into a contemplative appreciation that suspends time – even if for just a few moments. And upon closer and closer inspection, new forms emerge, and new truths are revealed. Truly, these paintings reveal the objective beauty of geometry just as successfully as the subjective beauty of one person's superlative and inspired artistry.

Santa Fe, New Mexico, USA
November 2021

Jay Bonner

Acknowledgments

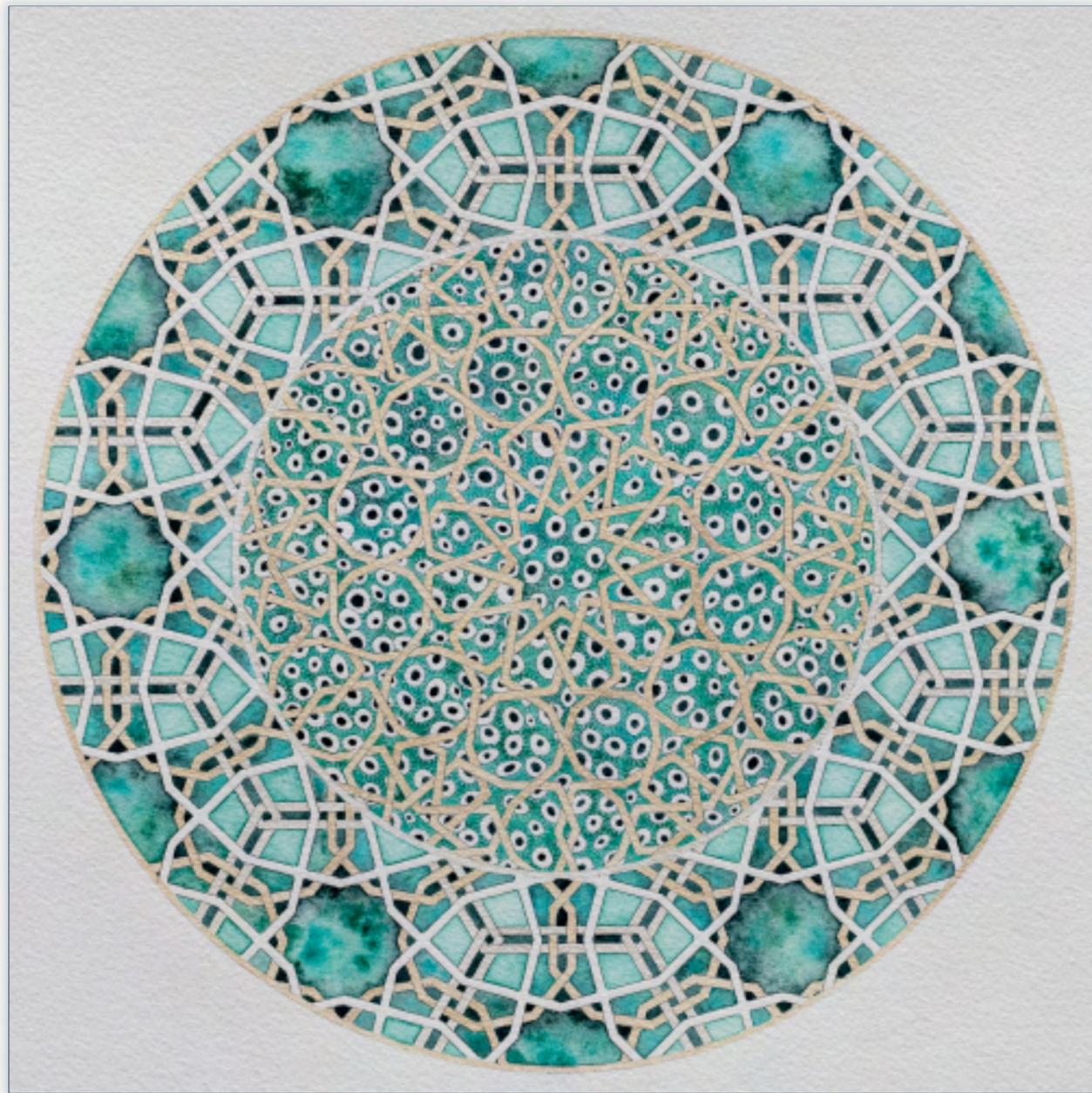
I would like to express my gratitude to the 'Ars et Mathesis' foundation and the curators of the Museum Tesseract for providing me with an online gallery to exhibit a selection of my recent work. Sincere thanks also to Henk Hietbrink for his appreciation of my work and key role in realizing this project.

I owe an immense debt of gratitude to the many geometry tutors whose technical analyses of historical and contemporary Islamic patterns underpin my work. Special acknowledgement and thanks to Alan Adams, Ameet Hindocha, Rajen Astho, Richard Henry, Adam Williamson, Ayman Soliman, Abdelhalim Ghodbane and the many skilled geometry teachers at The School of Traditional Arts in London for sharing their knowledge, skills, resources and passion for Islamic geometry.

I am most grateful to Jay Bonner for agreeing to write the introduction to my online catalogue. Jay is an internationally recognized specialist in the design methodologies employed by Muslim artists of the past in the creation of Islamic geometric patterns; including traditional systematic design techniques, and the non-systematic design methodology employed in the creation of particularly complex geometric patterns. He is committed to the revitalization of Islamic geometric design through the teaching of traditional methodological practices and to this end has lectured and taught design seminars at many universities and conferences in North America, Europe, North Africa and Asia. His remarkably informative 600-page book featuring images of historical designs and a wealth of pattern analyses, 'Islamic Geometric Patterns: their Historical Development and Traditional Methods of Construction' (Springer, September 2017) is a valuable resource for countless students of geometry, the history of mathematics, and the history of Islamic art, architecture and culture.

Groningen, NL
November 2021

Margi Lake



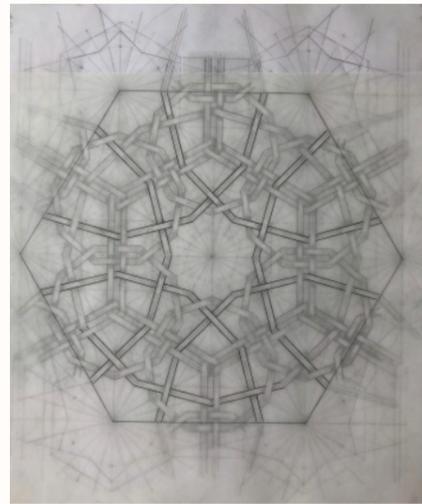
Emerald millefiori (thousand flowers) floating in a cosmic sea of dodecagons.

Medallion comprising two interlaced patterns. Pattern 1 (the outer ring) is a 12 Pt pattern found on a Seljuk tomb tower at Maragha (1196-97 CE / 593 AH). Pattern 2 (the inner circle) is an unusual contemporary 12/10 Pt pattern.

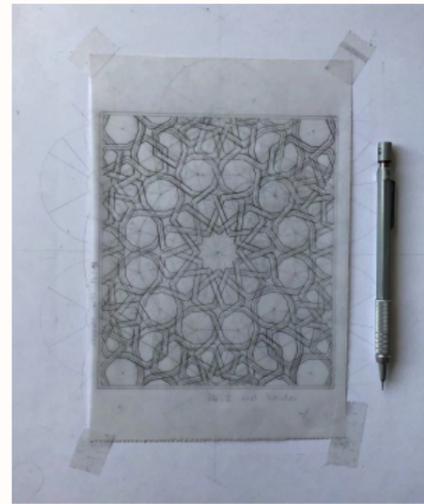
The decorative elements are inspired by ancient 'millefiori' glassmaking, a technique first practiced by the Egyptians in 1400 BCE, and further developed by the Romans and Sassanians, and rediscovered by Islamic glassmakers of Baghdad and Samarra in the IX century CE.

The palette is emerald, pearl and pale gold.

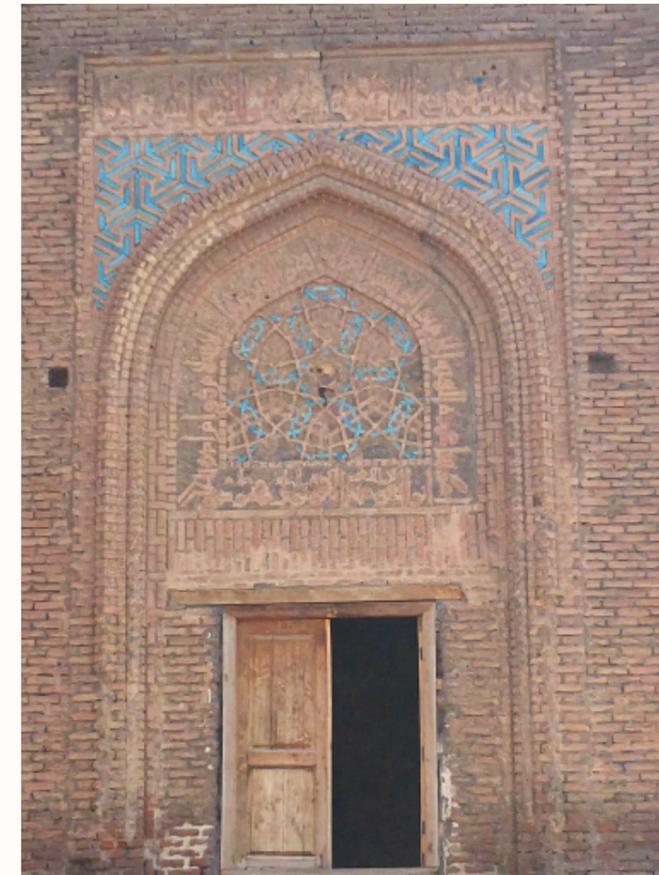
Millefiori, 2021
51x36 cm
Margi Lake



Pattern 1: 12 Pt layout

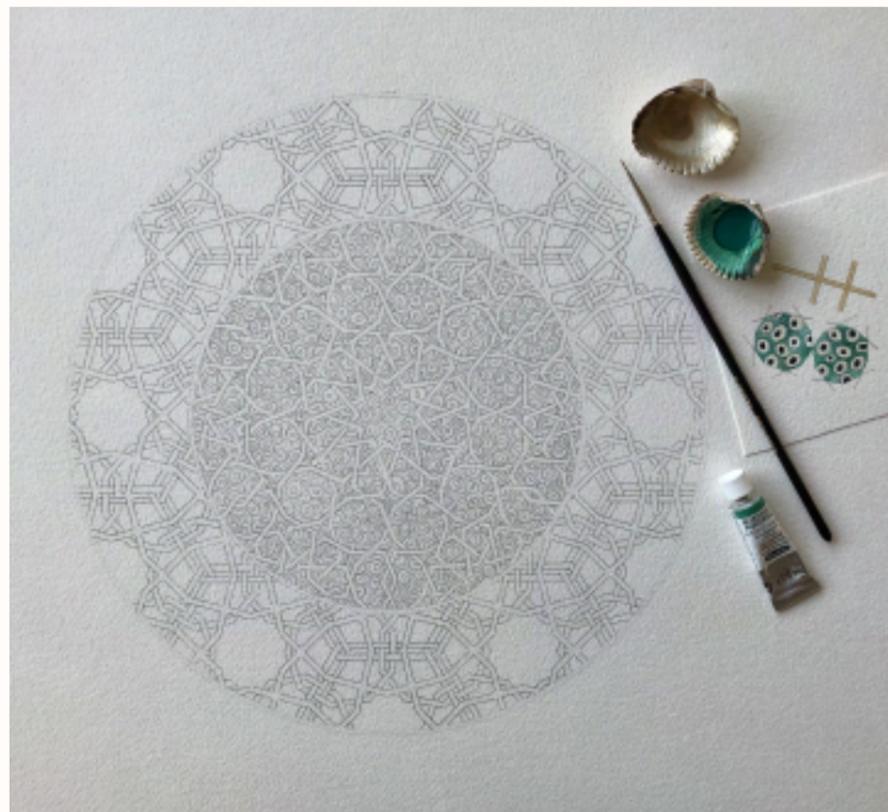


Pattern 2: 12/10 Pt layout



Brick and mosaic faience on the tympanum of the entry portal to the Gunbad-i Surkh mausoleum in Maragha, Iran.

Image credit: Farkhondeh Ahmadzadeh



Work in progress, starting with a little 'Millefiori' palette trial.

Millefiori glass made by melting together glass threads of different colours into rods, which in turn are cut into pieces and placed side by side in a mould to be melted together.

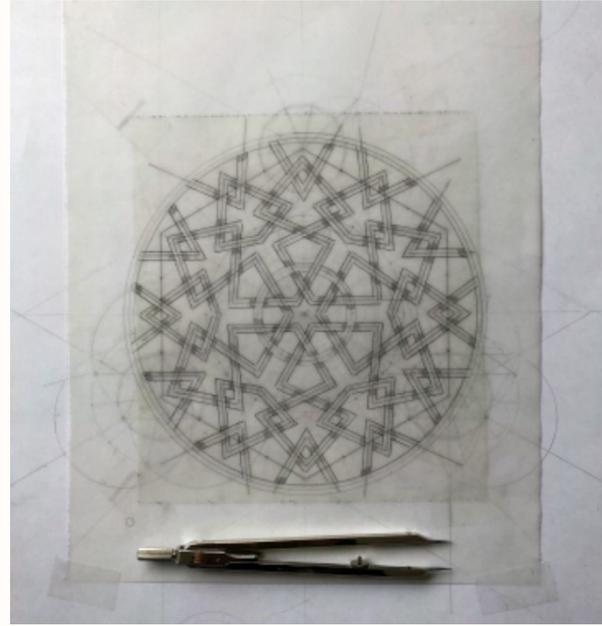
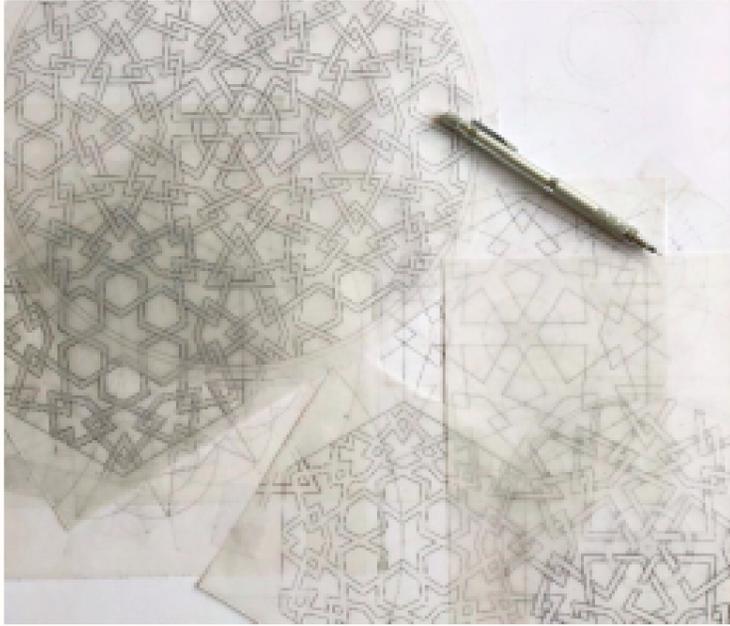




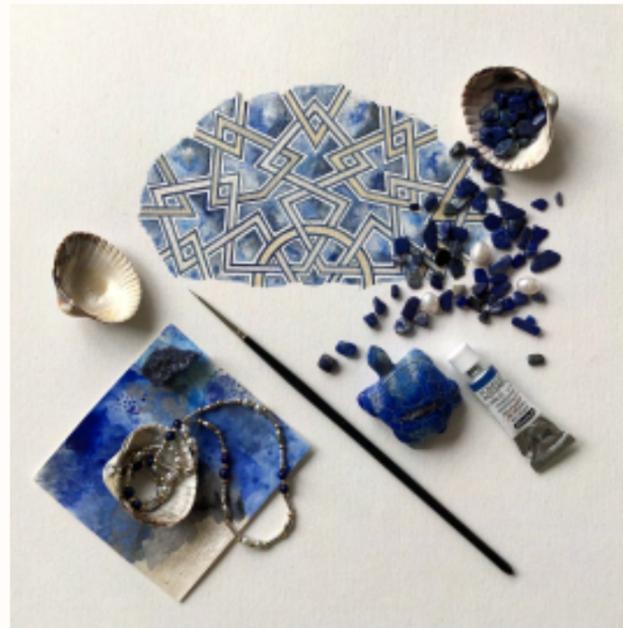
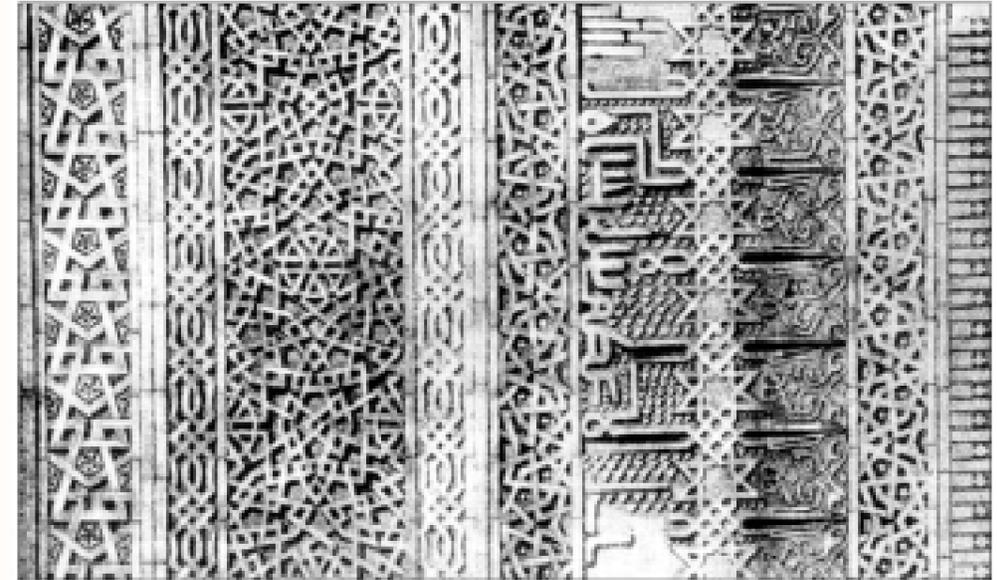
Cosmic Wind is a 6 Pt medallion design comprising kites, pentagons, reverse taper petals and a floating circle. The pattern is found on a surviving peshtaq (portal) on a XII century mosque in Abiverd, an ancient Seljuk/Qarakhanid city on the Silk Road in Northern Khorasan (now Turkmenistan). Prior to the Mongol invasion, the fertile land of Khorasan with its rich bazaars served as a link between the East and the West, Asia and Europe.

The palette consists of ultramarine, gold and lapis lazuli, a blue metamorphic rock composed of calcite, pyrite, sodalite, mica and many other minerals that together form one of the most beautiful and treasured stones in history.

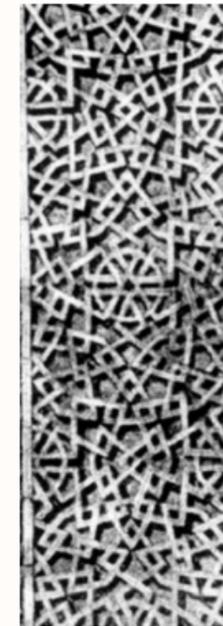
Cosmic Wind, 2021
51x36 cm
Margi Lake



Underlying geometric structure and medallion composition.

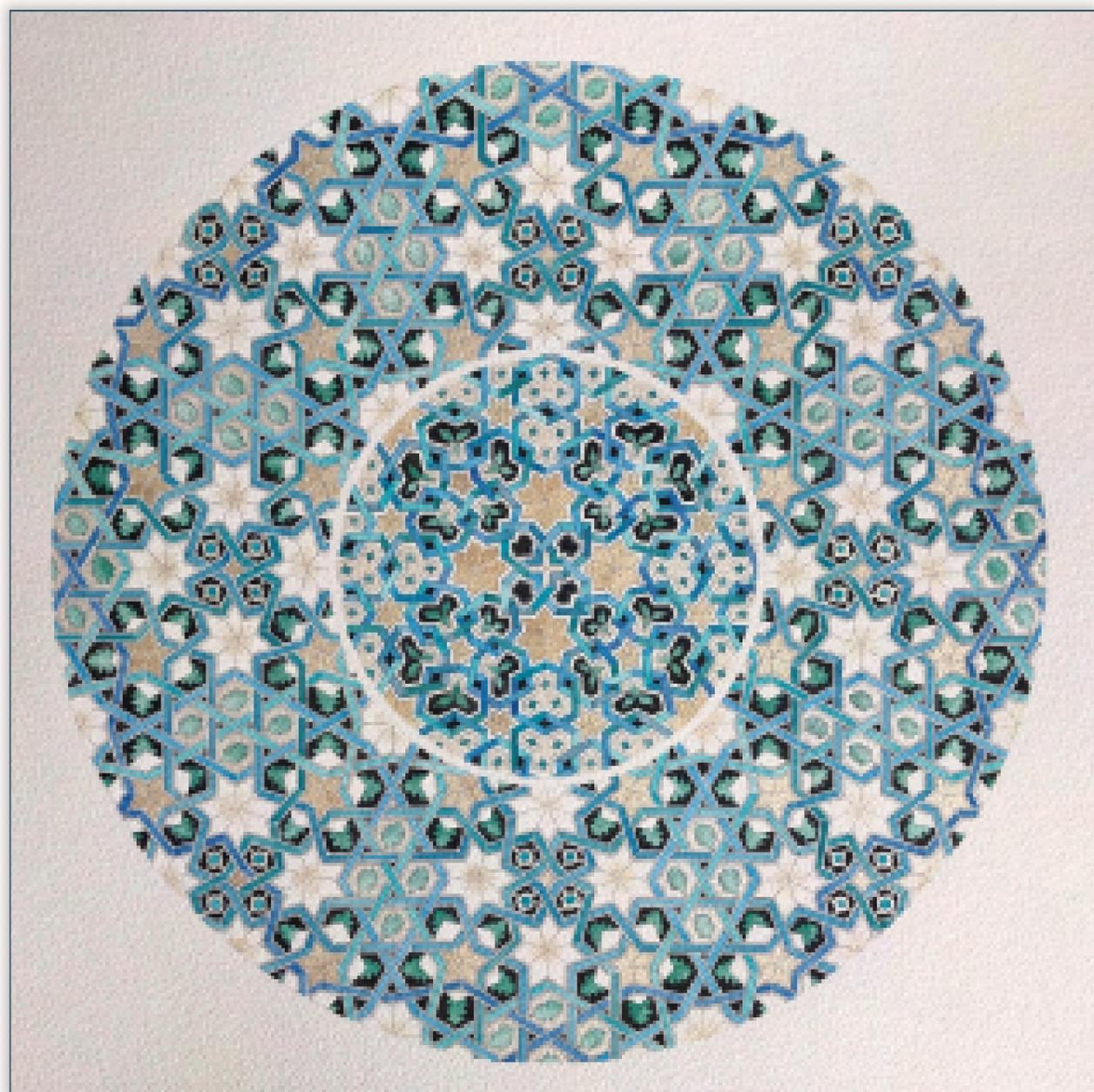


Palette inspiration and trials with ultramarine, lapis lazuli, pearl and pale gold.



Detail of Abiverd Peshtaq pattern

Image credit: IICAS



Acanthus Globe, 2021

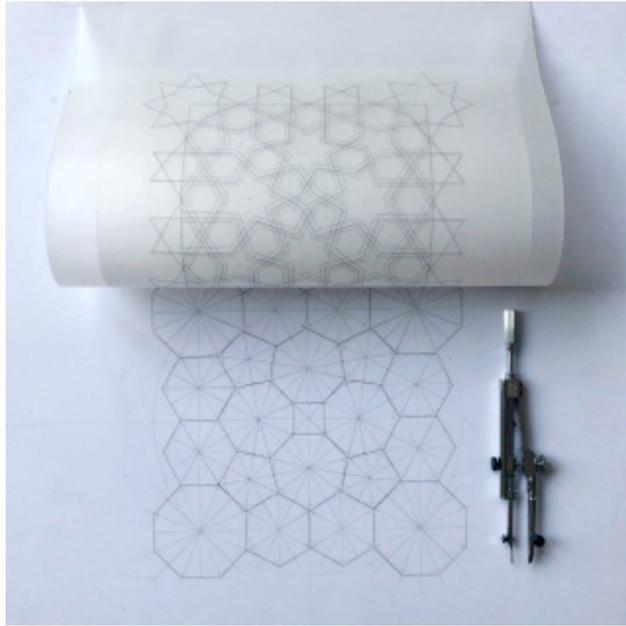
51x36 cm

Margi Lake

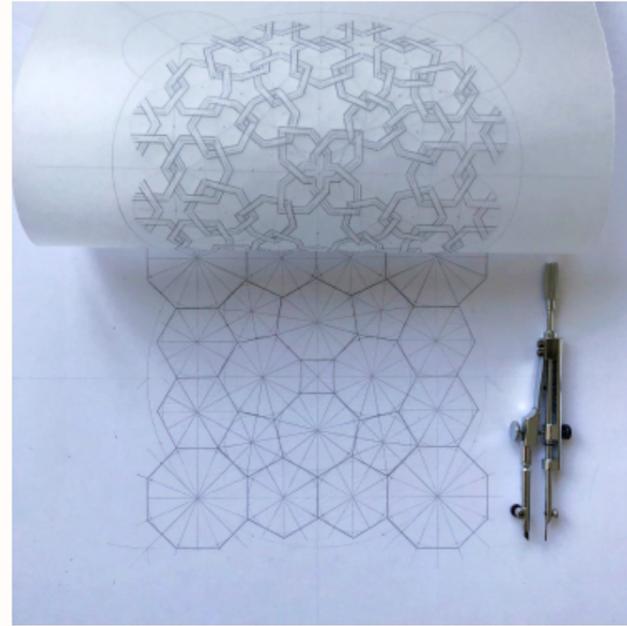
Medallion comprising two interwoven 8-, 7-, 6- and 5-fold geometric patterns extracted from the same underlying polygonal grid. The outer pattern is found on the XII century decahedral brick tomb tower of the Mu'min Khatun mausoleum in Nakhichevan, Azerbaijan.

The decorative acanthus leaf motifs are similar to those carved on the original mausoleum. The acanthus leaf symbolizes immortality

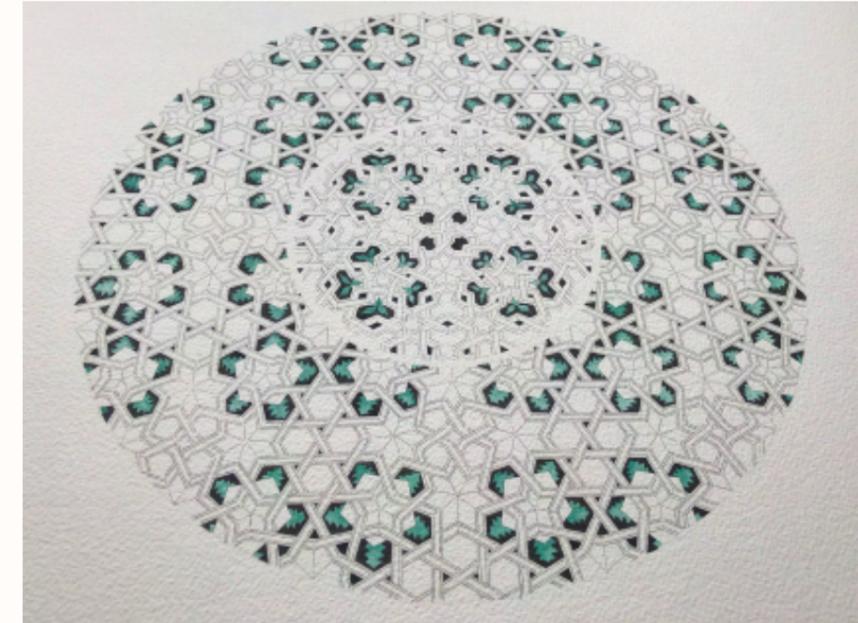
The palette blends diverse shades of cobalt (azur, turquoise, green), iridescent pearl and various shades of gold (deep rusty yavapai, raw umber and pale gold).



Pattern 1: Outer Circle



Pattern 1: Inner Circle



Work in progress



Trials for the decorative motifs and palettes for both patterns.



In situ pattern 1 with carved acanthus leaves

Image credit: Will Riding



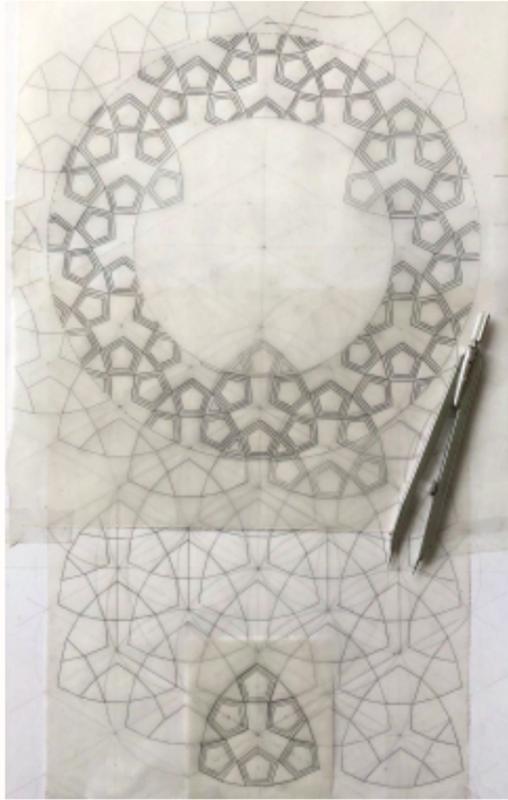
Timurid Shield, 2020

51x36 cm

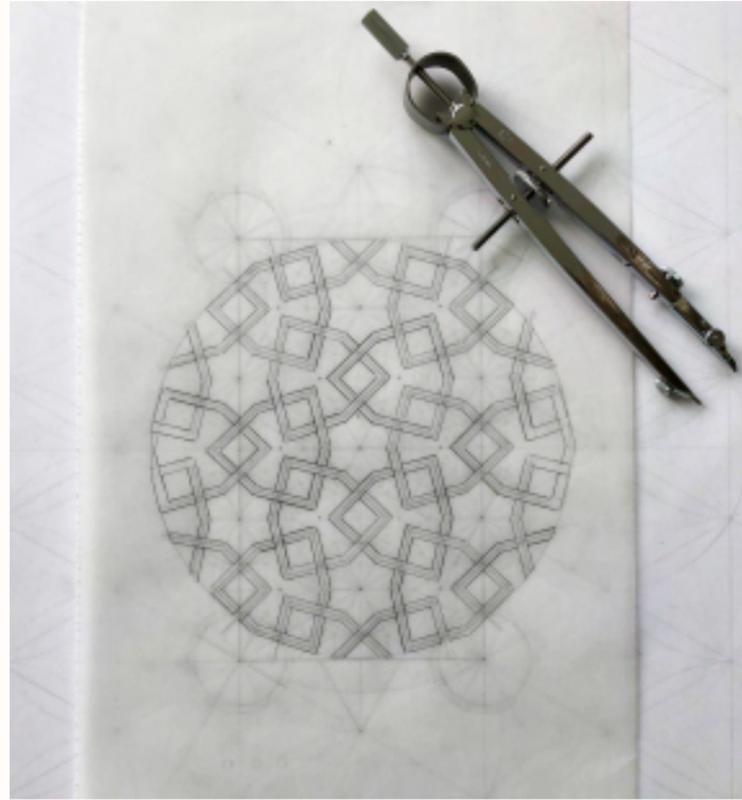
Margi Lake

Medallion comprising two interlaced 6 Pt 'shield' patterns constructed on the same isometric grid. The pattern in the outer ring has regular pentagons and the convex hexagon shape known as a face-ditrigon. The pattern in the inner ring contains regular hexagons, squares and convex hexagons.

An exploration into complementarity, colour proportionality and the concept of 'integral geometry' - an inner and an outer pattern constructed on one underlying isometric grid with an identical palette of blue, turquoise, ochre and gold. The decorative elements are inspired by traditional Timurid motifs from Central Asia.



Pattern 1: Outer Ring



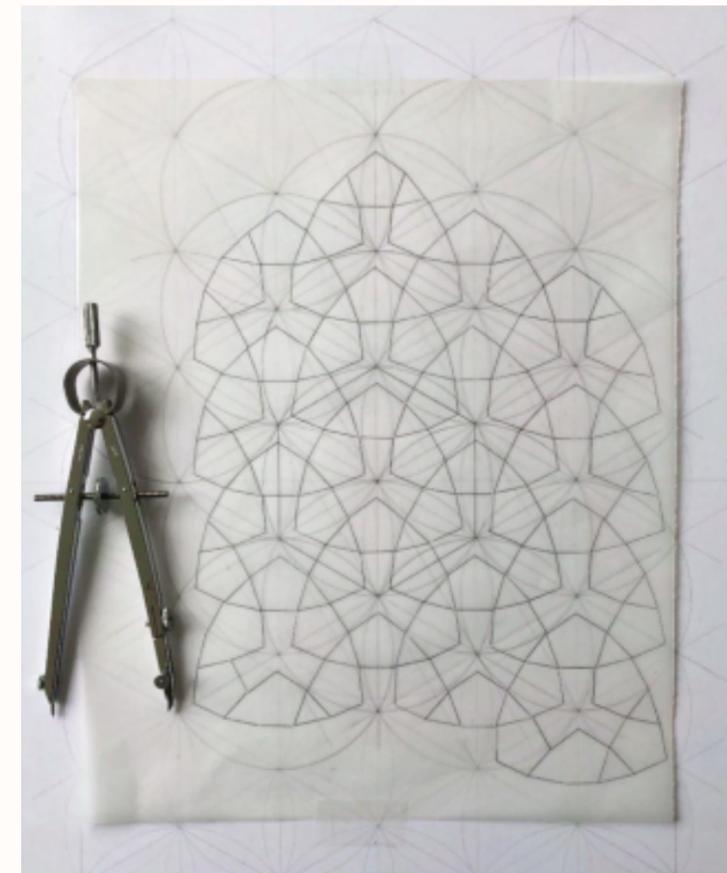
Pattern 1: Outer Ring



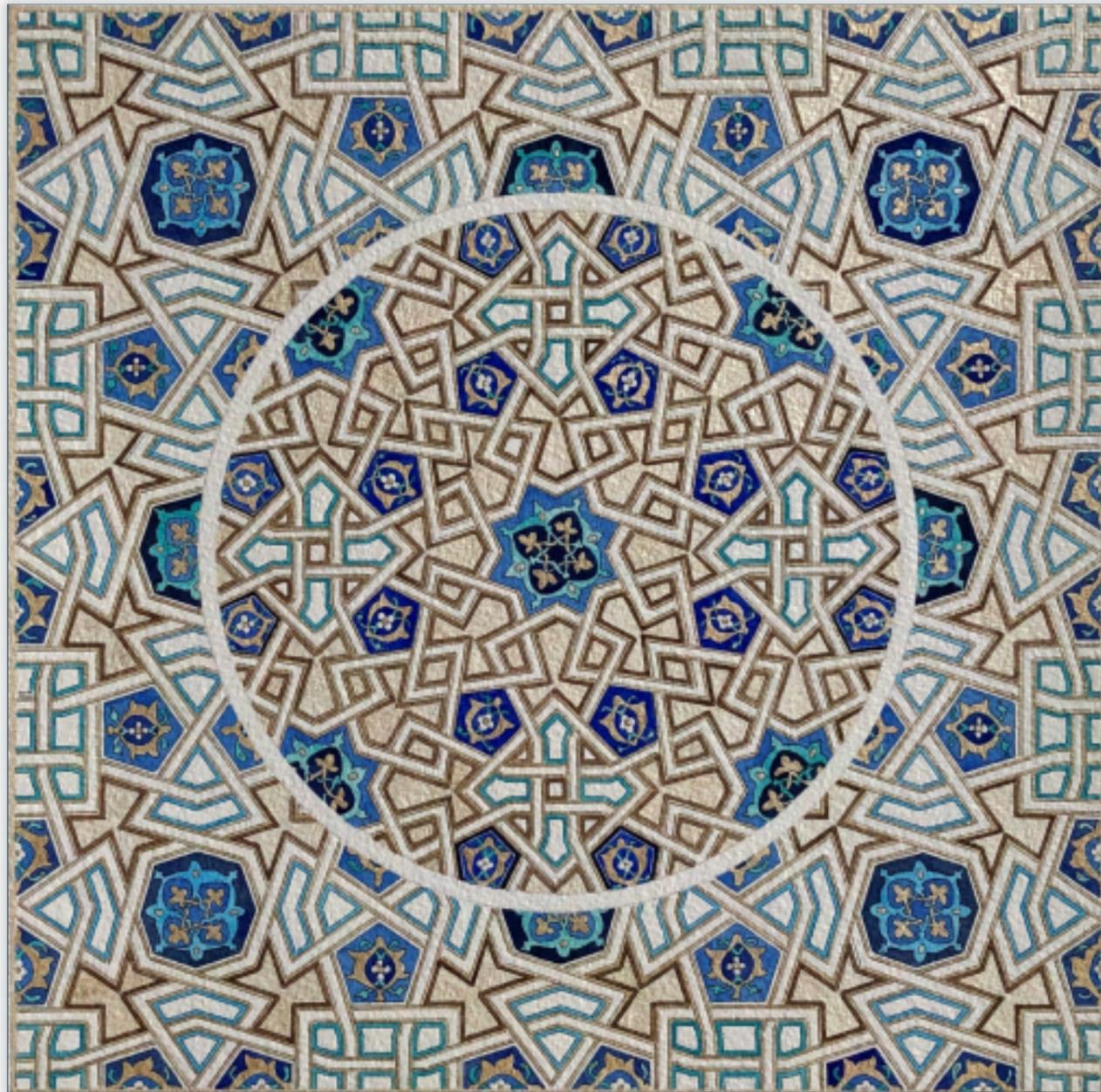
Work in progress



Palette and motif trials



Shield layout of convex hexagons (face- ditrigons)

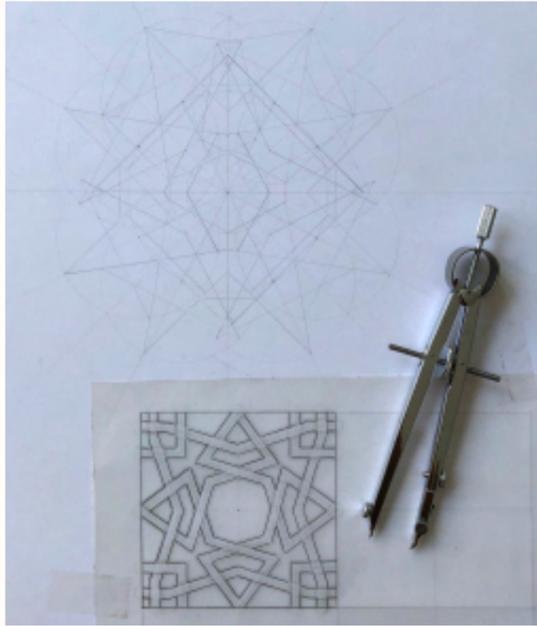


Integral Symmetry, 2020
36x51 cm
Margi Lake

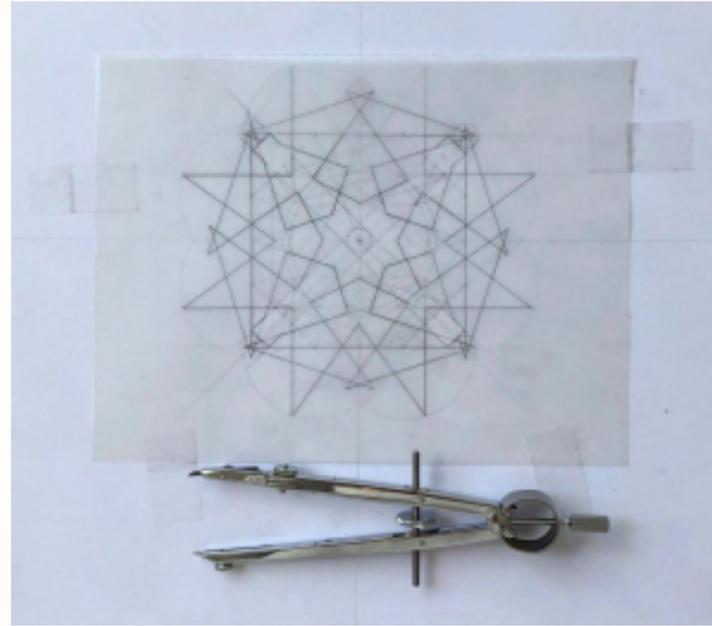
Composition comprising two 8 Pt strapwork patterns with interlocking kites, squares, bow ties and regular pentagons dating from the Ghurid era (Central Asia, XII century). The inner pattern (in dynamic orientation) is found on a portal of the Friday Mosque in Herat (Afghanistan). The outer pattern (in static orientation) is a border pattern from the Abiverd Peshtak in Turkmenistan.

This piece further explores the concept of 'integral symmetry'. The harmonious relationship between two different patterns extracted from the same isometric grid structure and sharing the same palette.

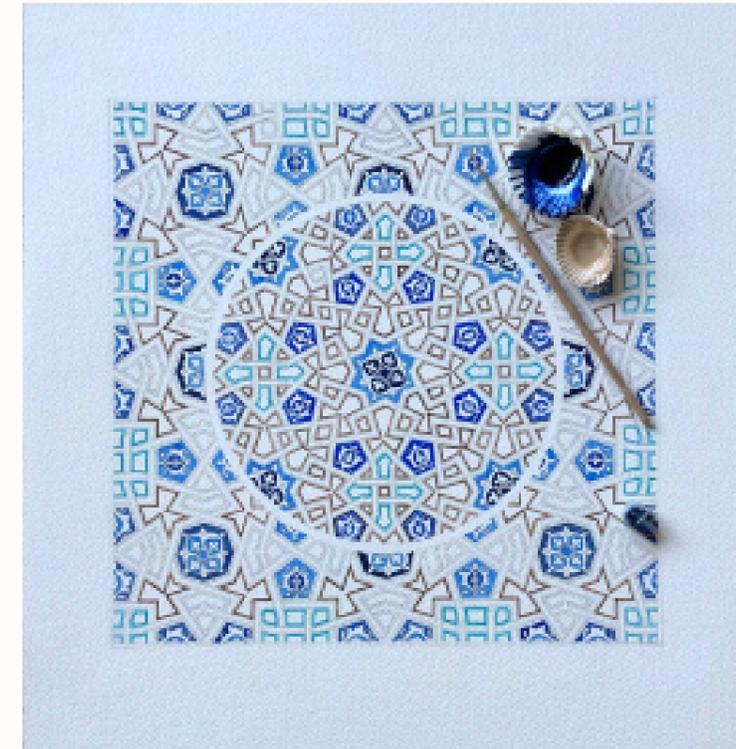
The decorative elements are inspired by traditional ornamental motifs from Central Asia.



Pattern 1: Outer Circle



Pattern 2: Inner Circle



Work in progress

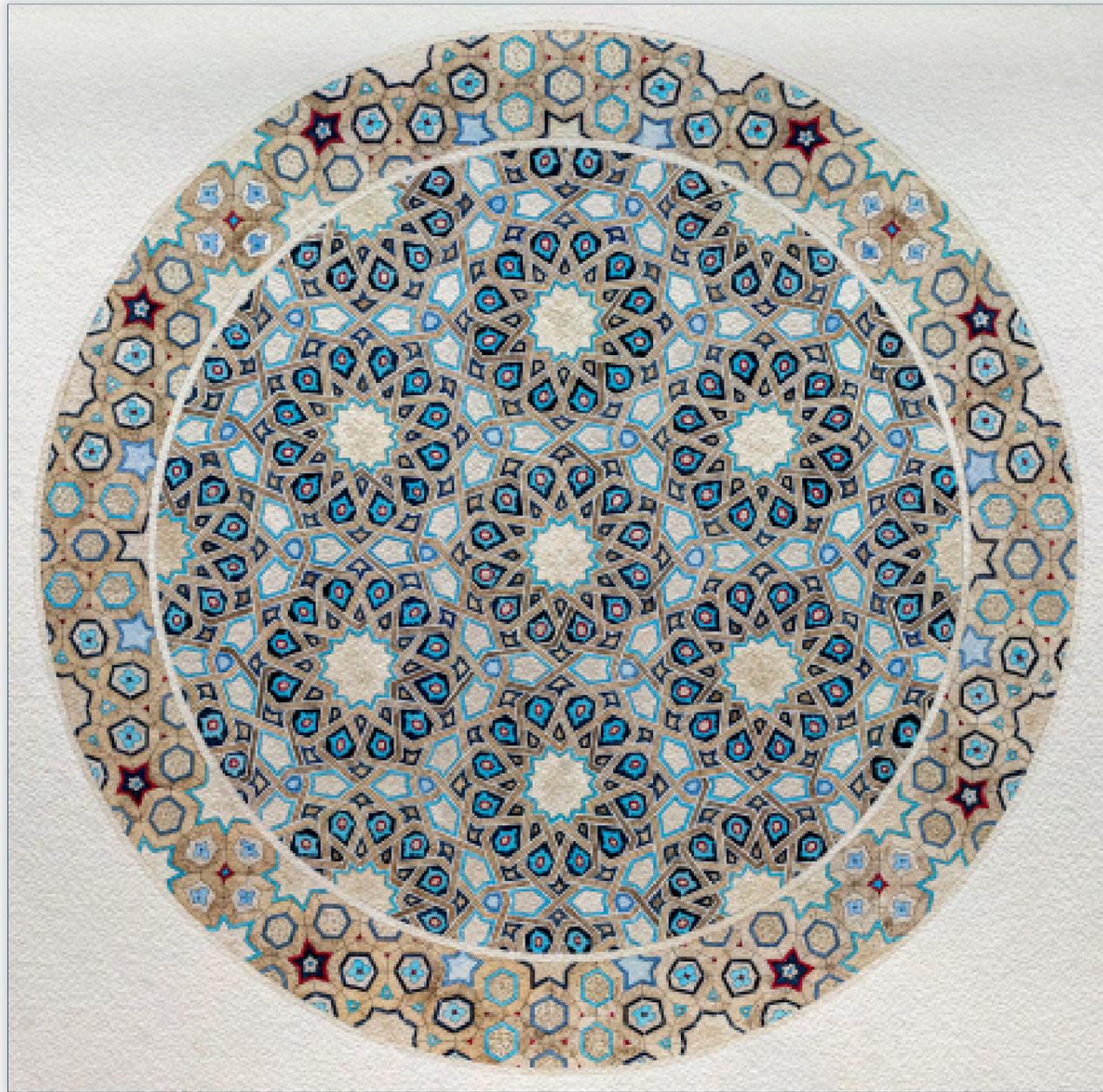


Palette and fish scale motifs inspired by Al- Khidr 'the Green One'.



Un glazed bricks and blue glazed inserts on the Ghurid portal (iwan) of the Friday Mosque in Herat, Afghanistan.

Image credit: archnet.org (ref:41826)

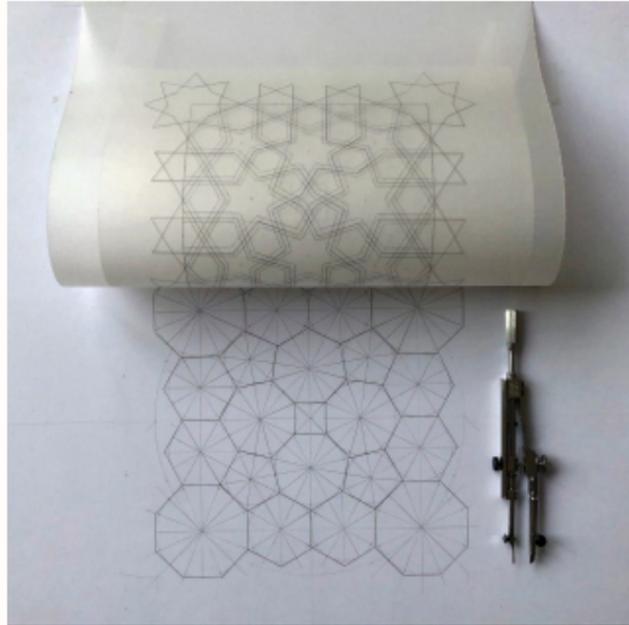


Radial composition comprising two patterns with different symmetries fanning out from a central point. The outer design is an 8-7-6-5- fold symmetry pattern from a XII century decahedral brick tomb tower of the Mu'min Khatun mausoleum in Nakhchivan, Azerbaijan. The inner design is a 12-fold rosettes 'ring count' tessellation.

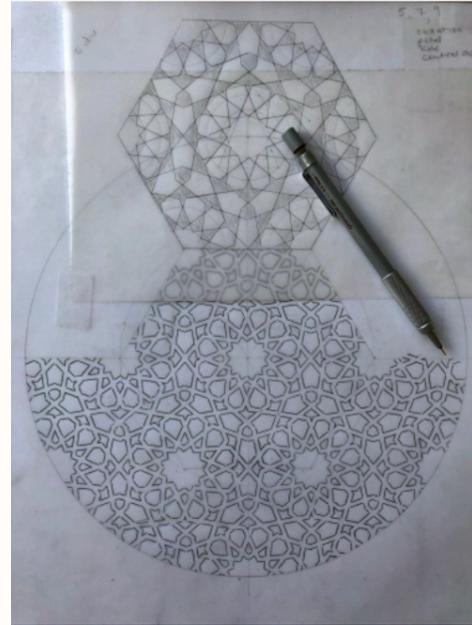
This piece is an exploration into the possibility of creating a harmonious result when two patterns with different symmetries come together in one composition. The decorative elements on both patterns are similar in style. The colour palette is identical for both patterns.

In Persian literature, colours are defined as “the attempt of light to become visible.”

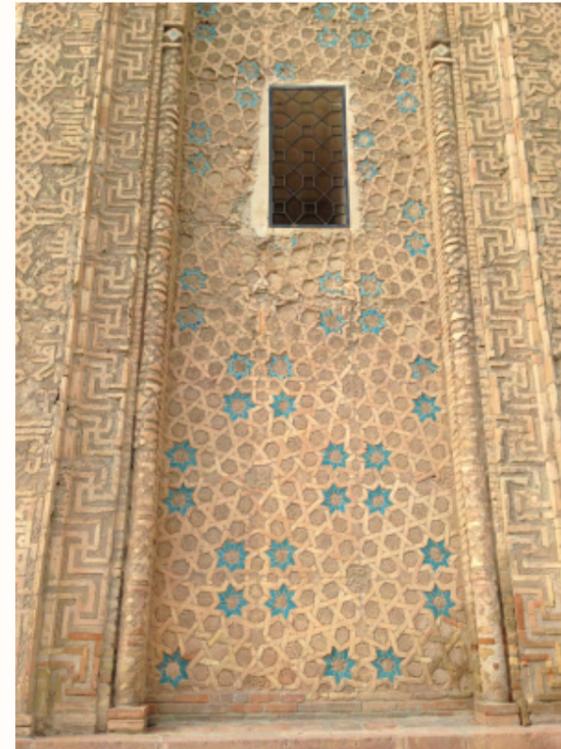
Luminosity, 2021
51x41 cm
Margi Lake



Outer Pattern: 8-7-6-5-fold grid



Inner Pattern: 12-fold 'ring count' rosettes



In situ pattern from the Mu'min Khatum mausoleum in Nakhchivan, Azerbaijan.

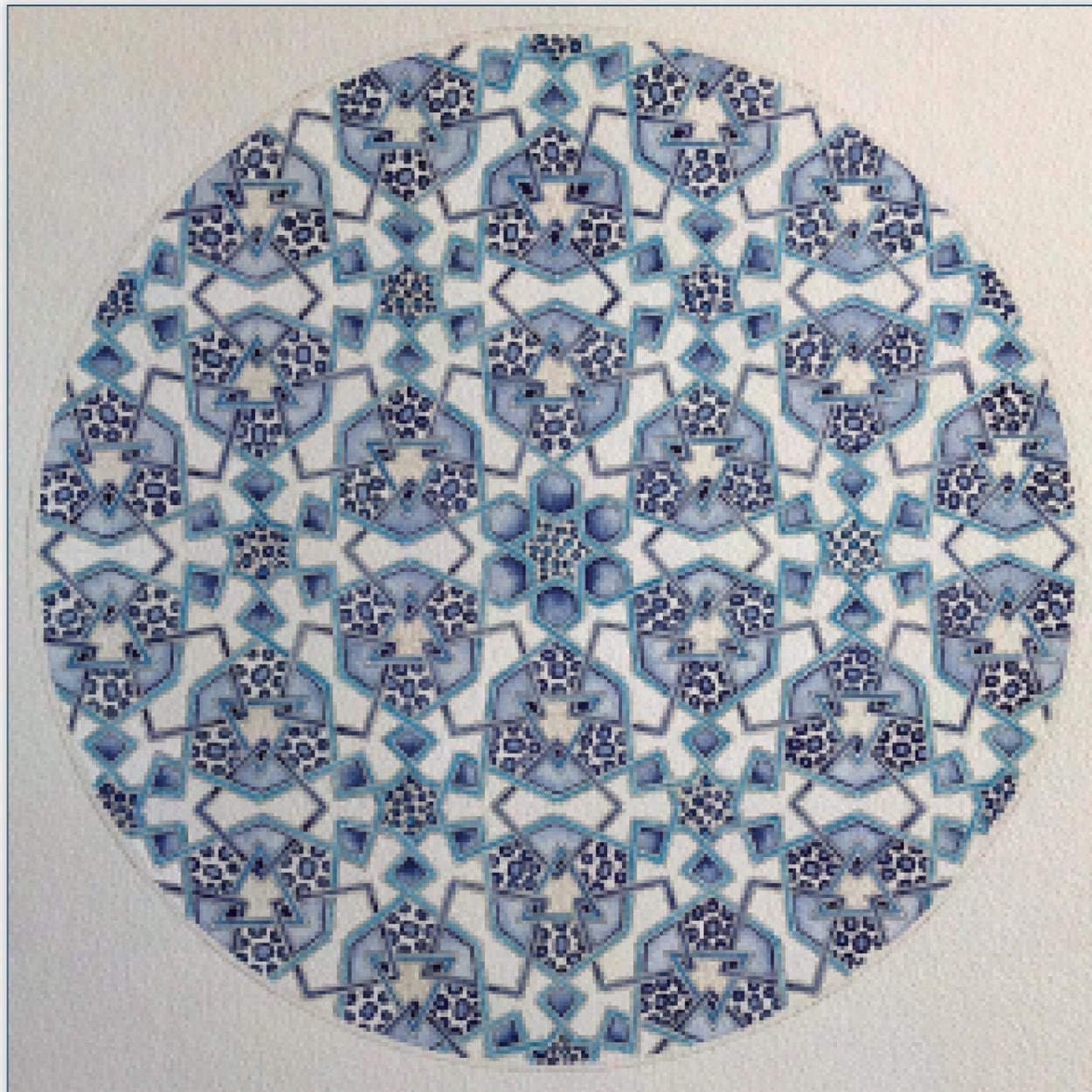
Image credit: Will Riding



The initial palette trial for the inner pattern was inspired by the warm reddish pink of coral gemstones.



The second palette trial used cobalt turquoise and manganese with a range of sepia shades and pale gold.



Delft Tessellation is a 6 Pt roundel composition of a Mamluk design found on a late XV century lintel above a portal of the Wakala al-Ghuri complex in Cairo. This intriguing pattern has rosettes, kites, floating squares, triangles and regular pentagons.

It belongs to a family of repeating, non- decagonal patterns entirely defined by the interaction of pentagrams aligned to the sixfold division of the initial layout circle.

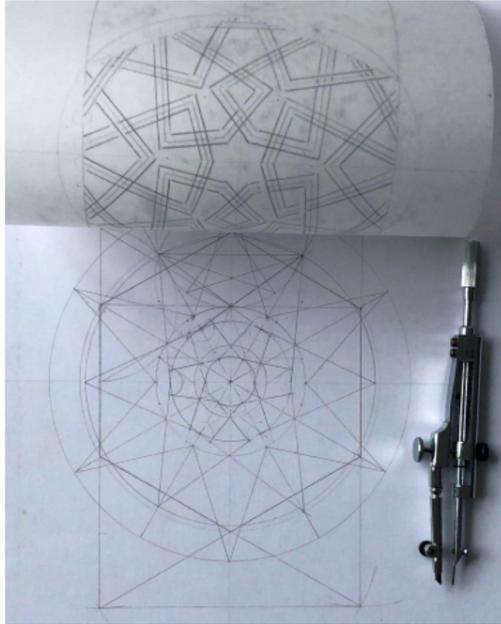
Sixfold patterns with regular pentagons can also be found carved in stone on early XIII century architecture (mosques, mausoleums and caravanserais) in the Seljuk Sultanate of Rûm.

The palette was inspired by Delft Blue porcelain.

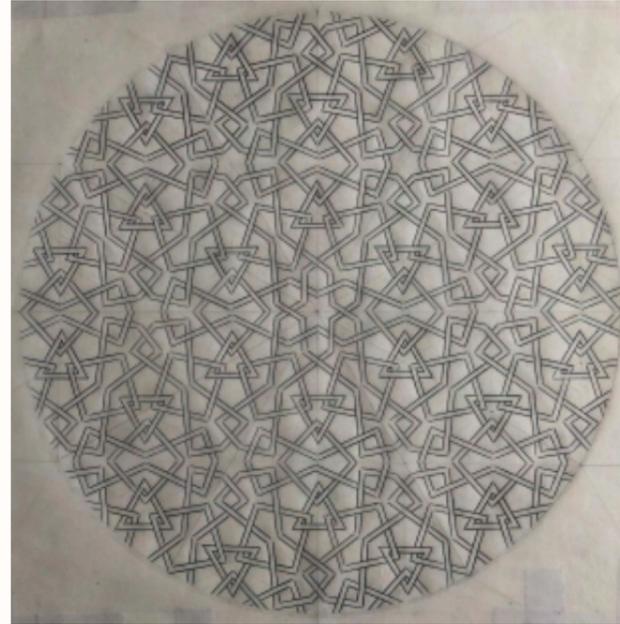
Delft Tessellation, 2021

36x41 cm

Margi Lake



Hexagonal tile layout for the Wakala al-Ghuri pattern



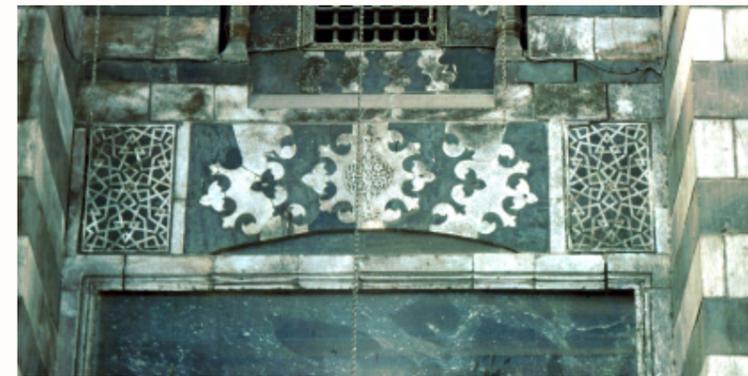
Thickened and interwoven lines and tessellation



Work in progress



Palette trial for 'Delft Tessellation'



In situ pattern on a portal of the Wakala al-Ghuri in Cairo.

Image credit: David Wade (ref: EGY 0930)

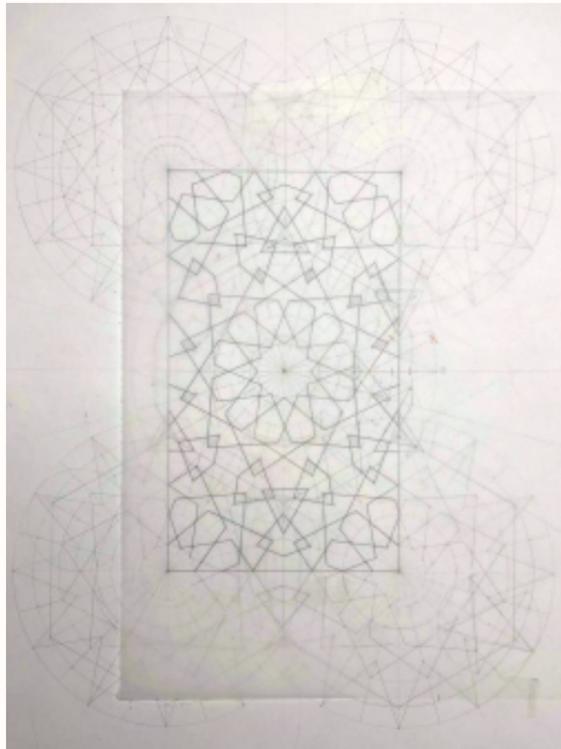


Kismet is a 12 Pt Mamluk rosette and kite pattern with regular pentagons found on a XV century minbar in the Mosque of al Mu'ayyad in Cairo (c. AD 1420/823 AH).

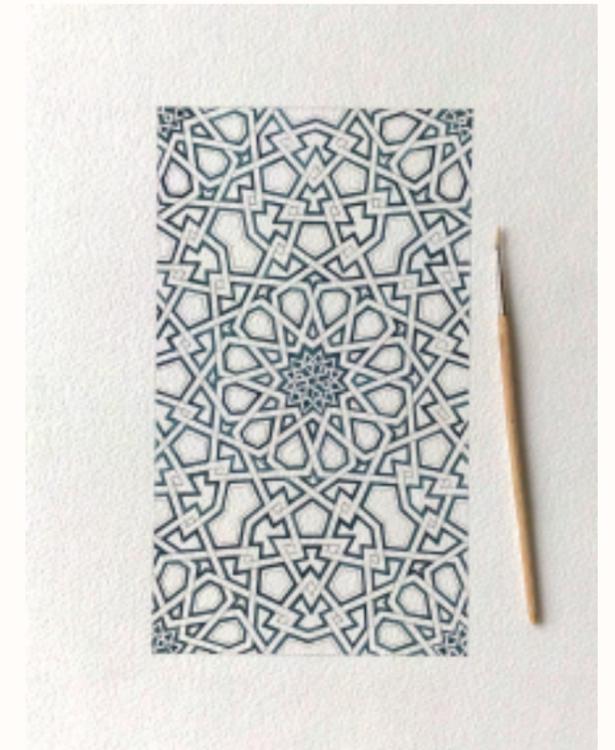
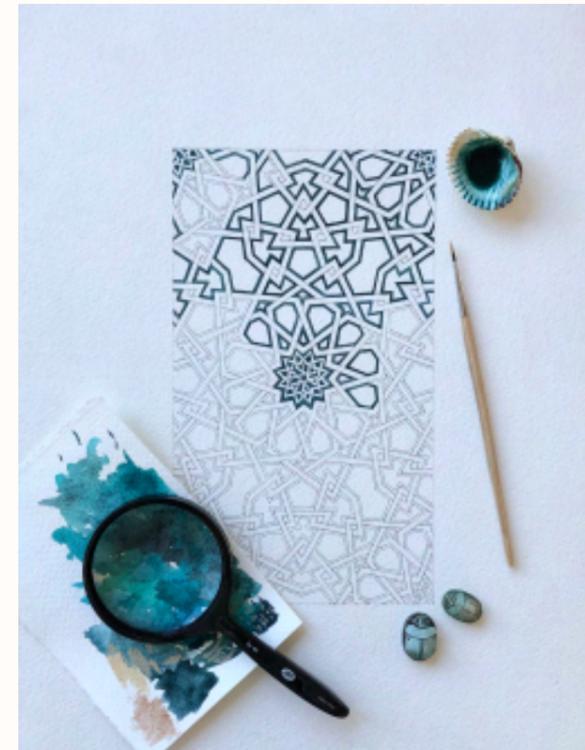
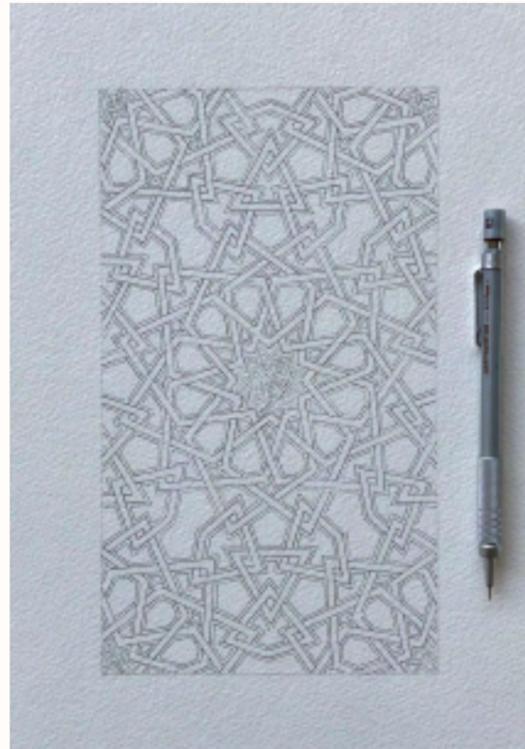
The same pattern is found in the Masjid al-Amir Qijmas al-Ishaqi (also known as the mosque of Abu Hurayba) and elsewhere in Mamluk Cairo.

The political and military dominance of the Mamluks (rulers of Egypt and Syria from CE 1250 to 1517) was accompanied by a flourishing artistic culture recognized across the medieval world for its glass, textiles, wood- and metalwork.

Kismet, 2020
31x41 cm
Margi Lake



12 Pt geometry layout



Work in progress



In situ pattern in the Mosque of al Mu'ayyad, Cairo.

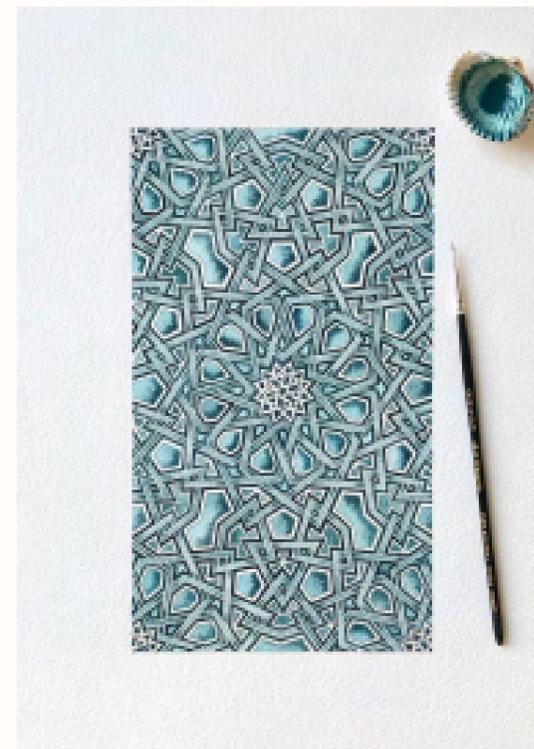
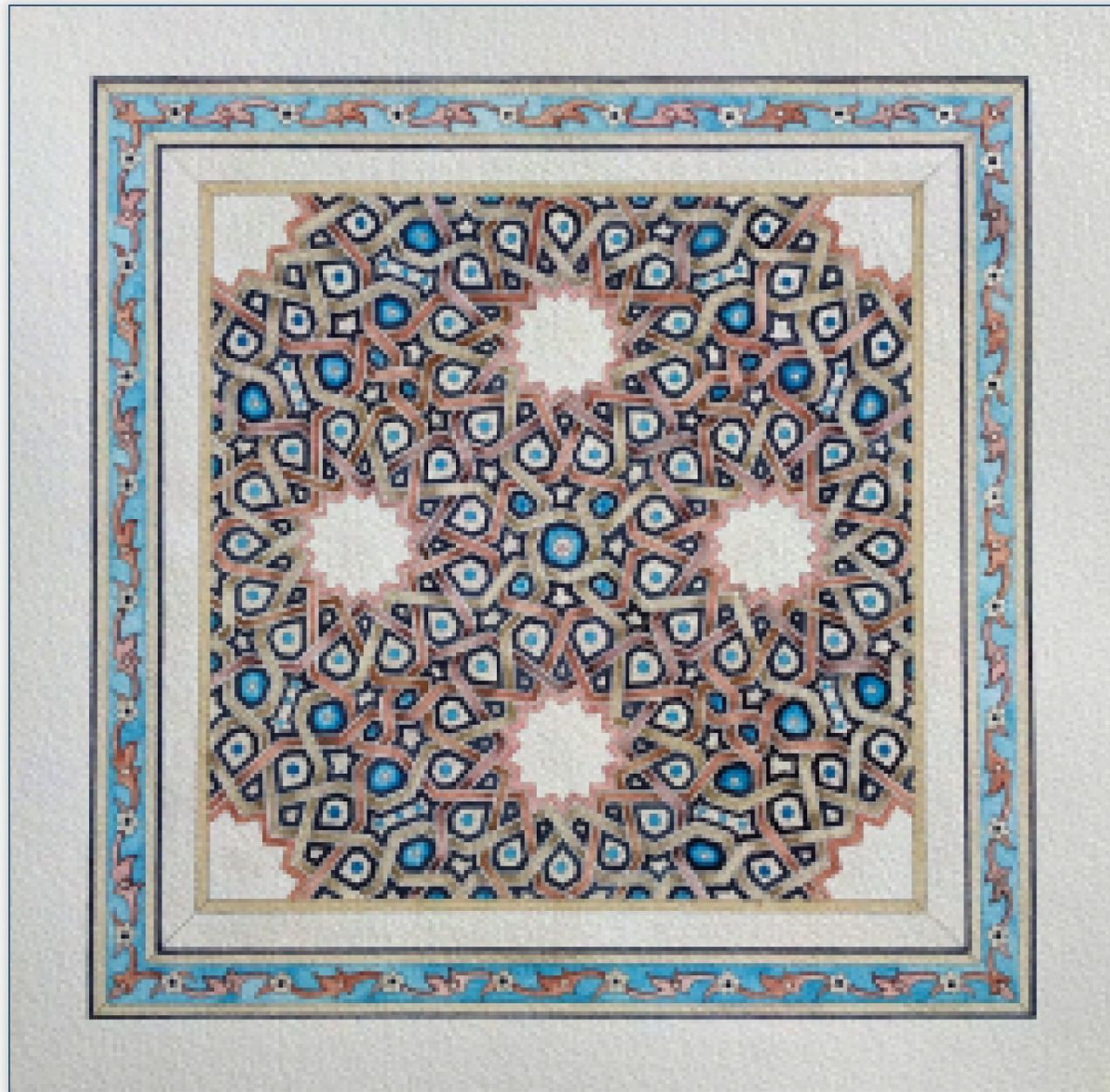


Image credit: David Wade (ref:EGY 1208)



13/16 Pt pattern containing regular 13 Pt (tridecagon) stars and nearly regular 16 Pt (hexadecagon) stars. It is found in the Topkapi Scroll.

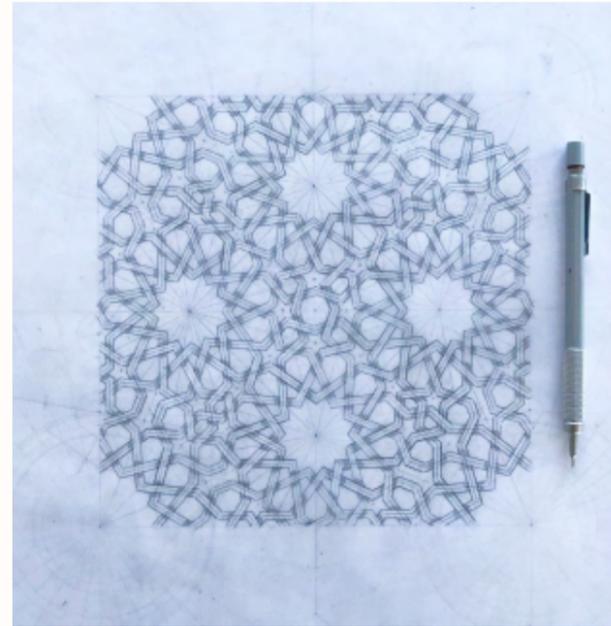
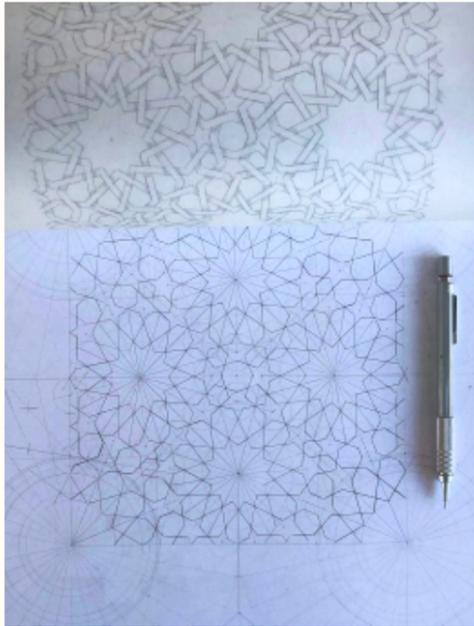
Interlacing has a twofold function. It expresses a 'fixing' (unifying or binding) principle and a 'moving' (dissolving or separating) principle. In alchemy these two principles are known as 'solve et coagula'.

Here the interlace reveals the underlying fourfold symmetry.

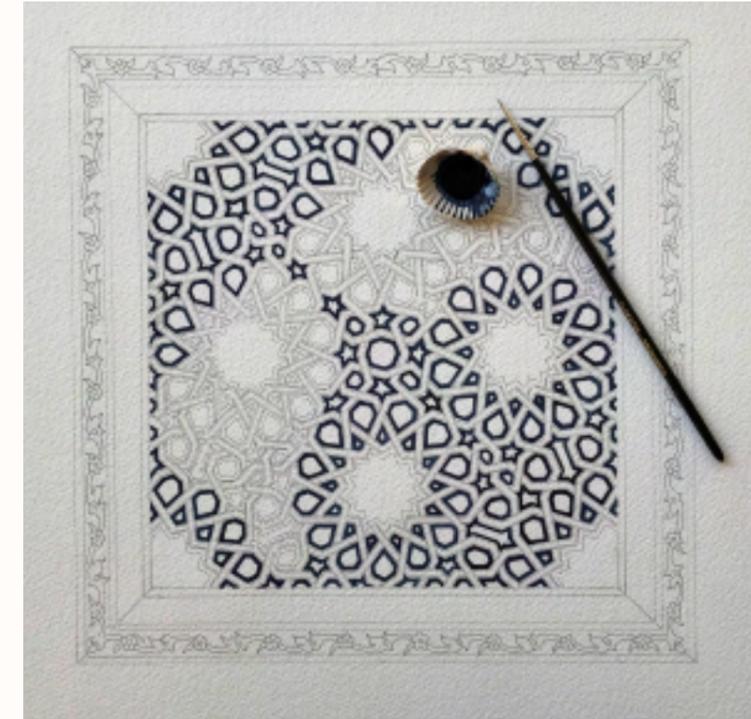
Solve et Coagula, 2020

36x51 cm

Margi Lake



16/13 Pt rosettes geometry and weave



Work in progress



Palette trials for 'Solve et Coagula'





Fourfold symmetry interlaced strapwork pattern from a rare XII century illuminated Qur'an manuscript from Valencia during the Almohad era.

The manuscript was written in Andalusian Maghribi on vellum during the reign of the Almohad ruler, Abu Yaqub Yusuf I (ruled 1163-1184).

For the palette I chose two shades of rich ultramarine blue, various shades of gold for the interlace and a background of creamy transparent pearl.

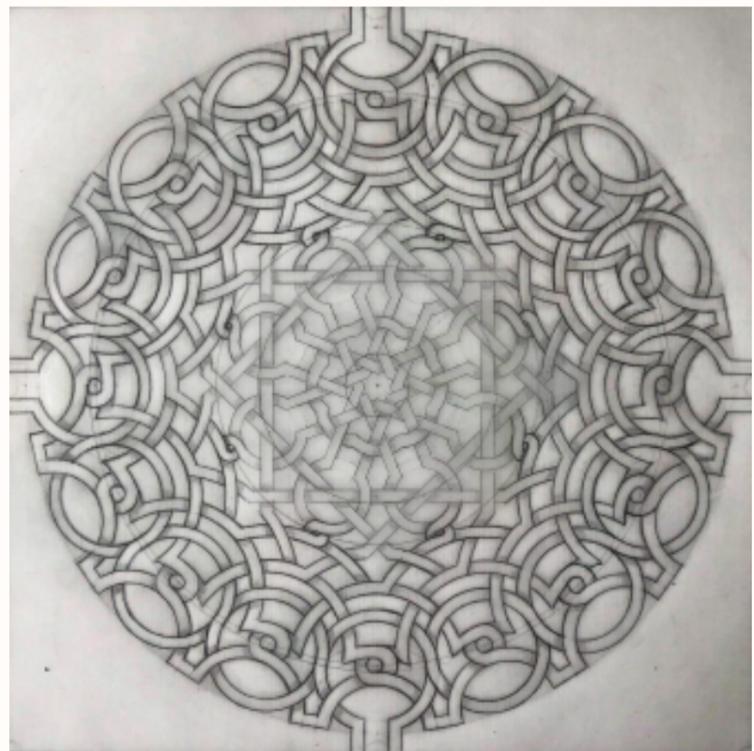
Beyond Time, 2018
42x56 cm
Margi Lake



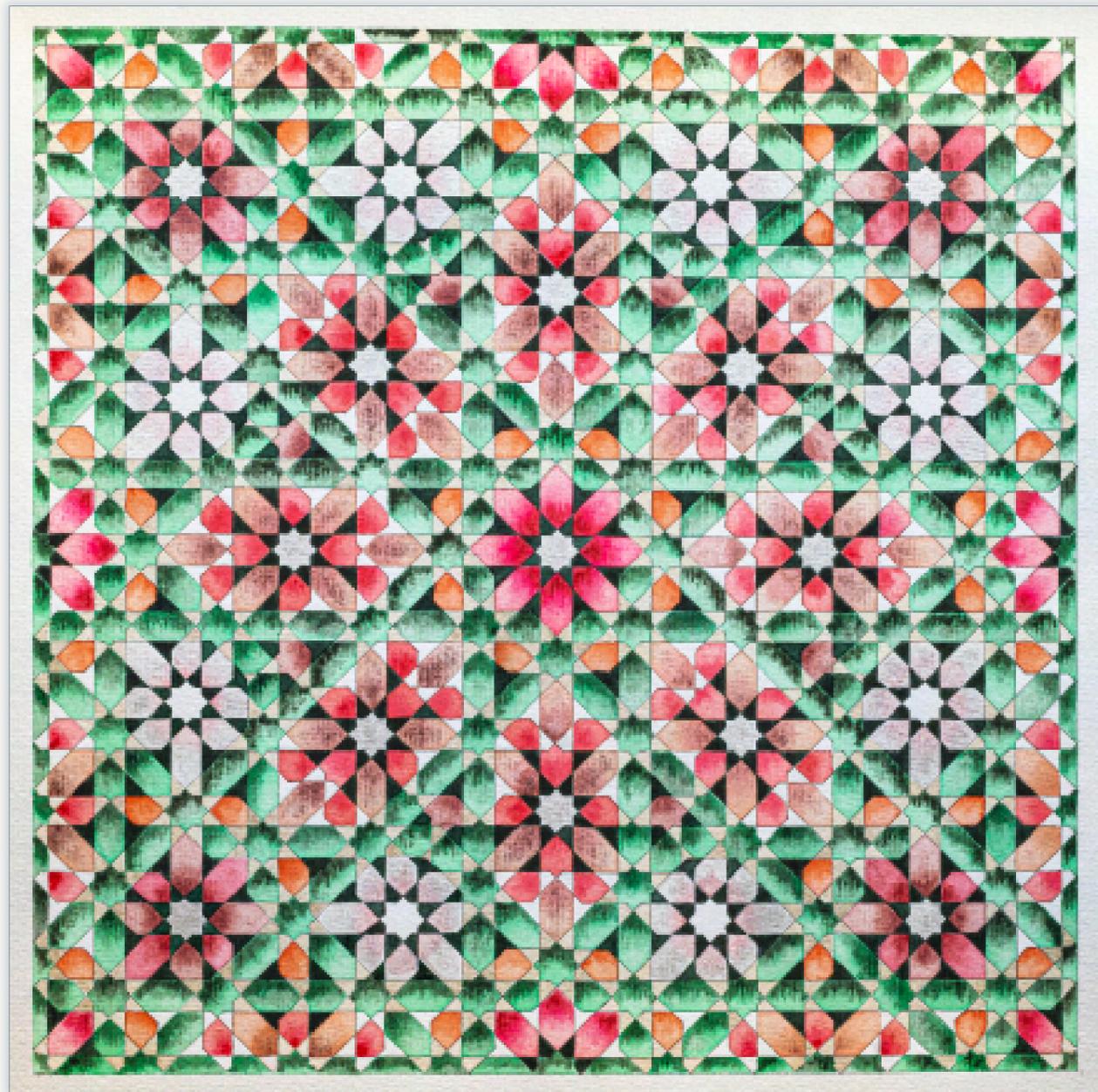
Fourfold symmetry layout, interlace and palette trials



Work in progress and palette trials



XIV century plaster decoration from the Real Alcazar, Seville. Interlaced and calligraphic frames and borders are commonly used elements in the decorative arts of Andalusia.

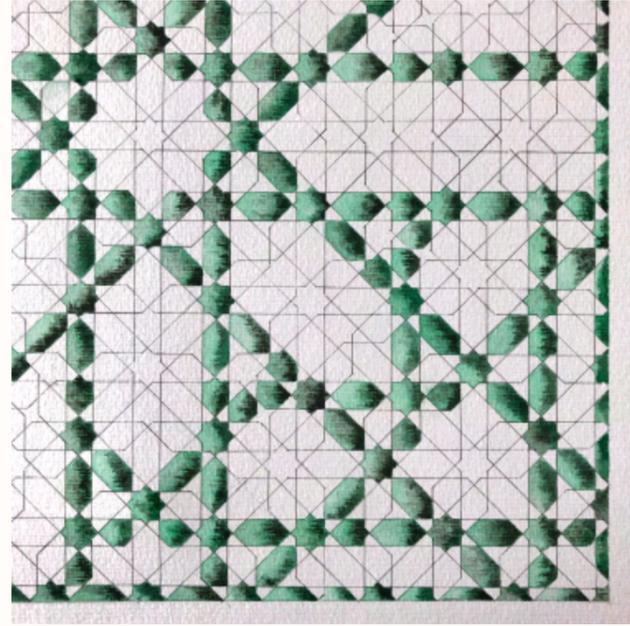
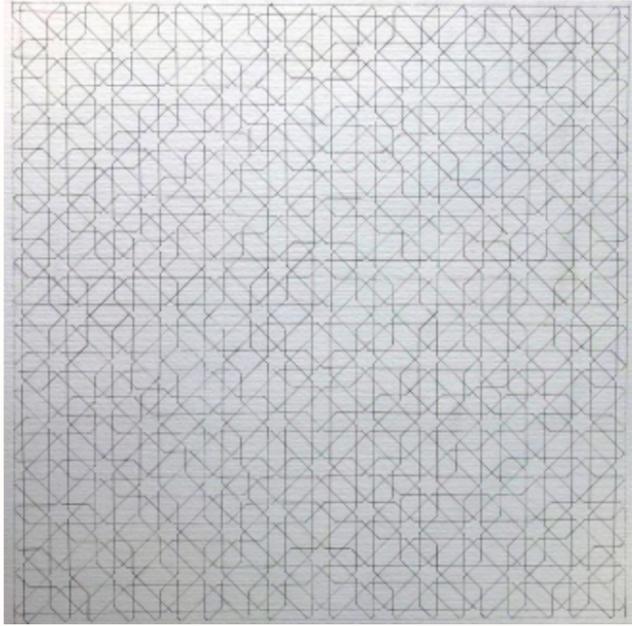


Paradise Garden, 2019
42x56 cm
Margi Lake

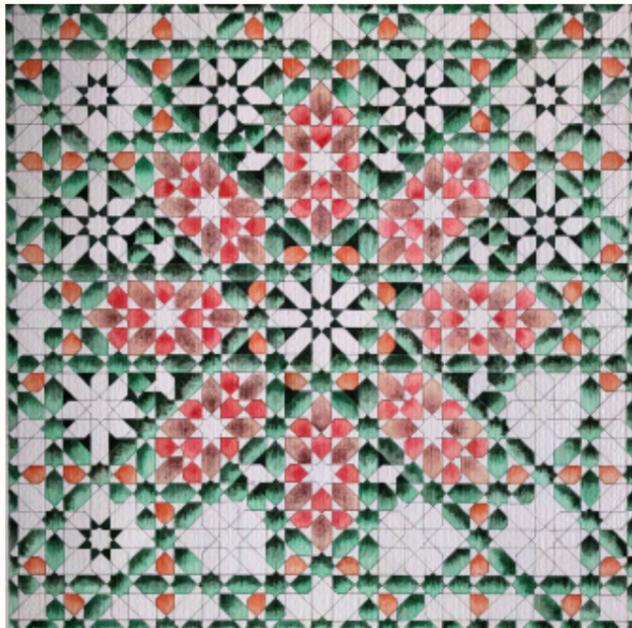
Dual level Mudejar mosaic pattern from the Patio of the Maidens (Patio de las Doucellas) in the Real Alcazar Seville, Spain.

One of the features of fourfold designs during the Mudejar period is the use of colour to differentiate the primary (large scale) pattern from the secondary (small scale) pattern.

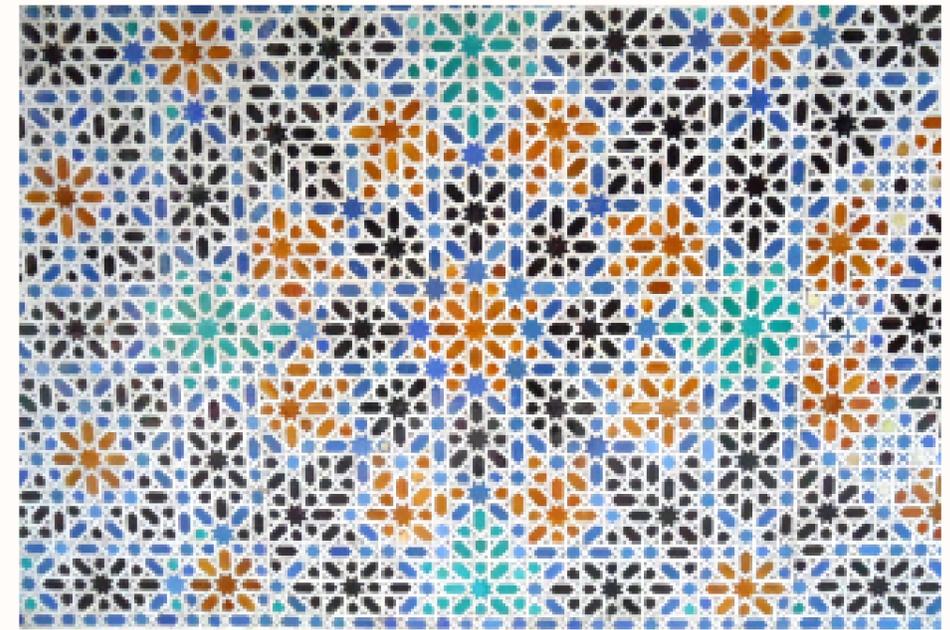
Dual-level and self-similar patterns reflect the universal principle of correspondence: 'as above, so below', the macrocosm and the microcosm.



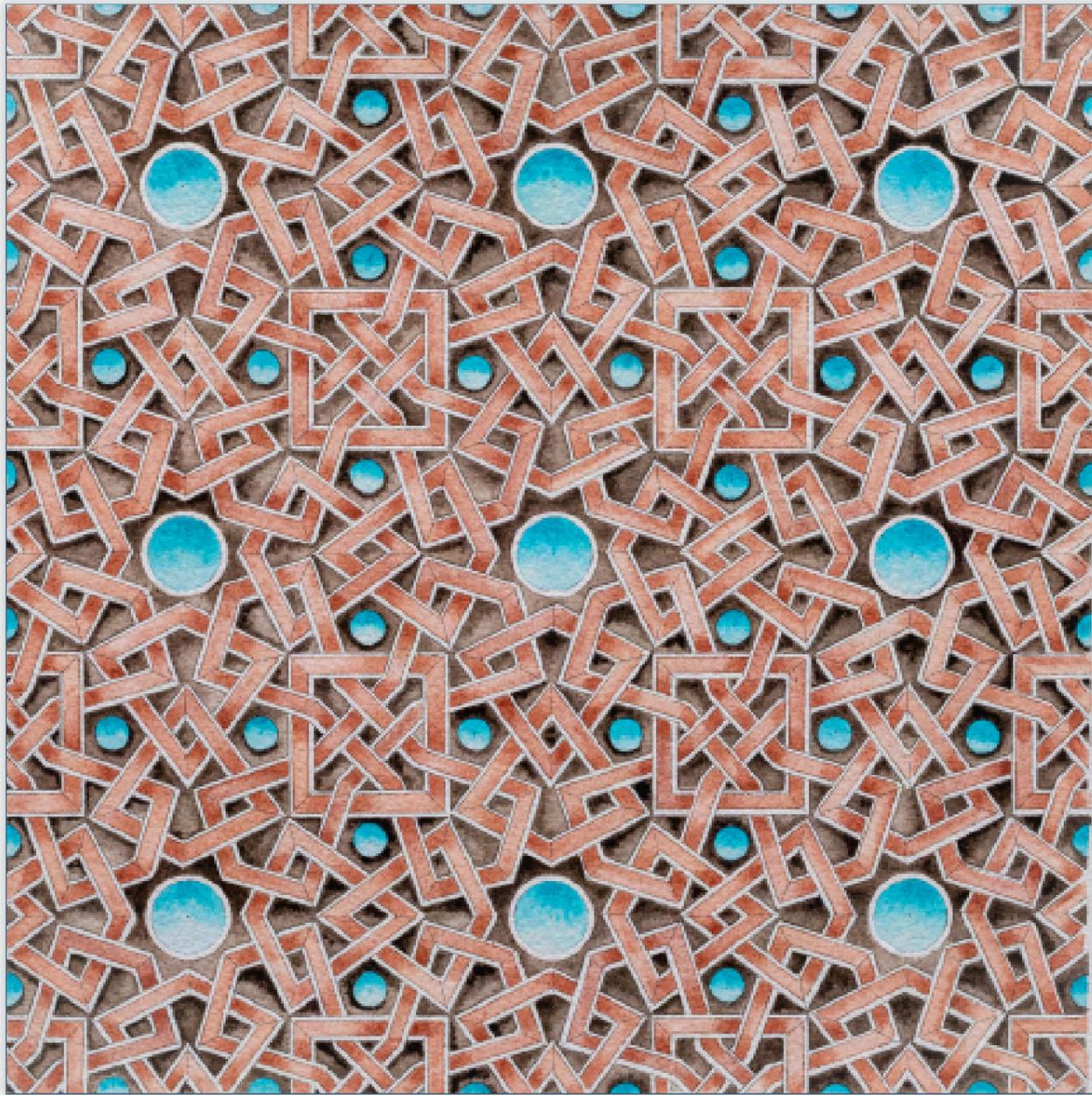
Dual level layout



Work in progress



The original XIV century tile mosaic
in the Real Alcazar Seville



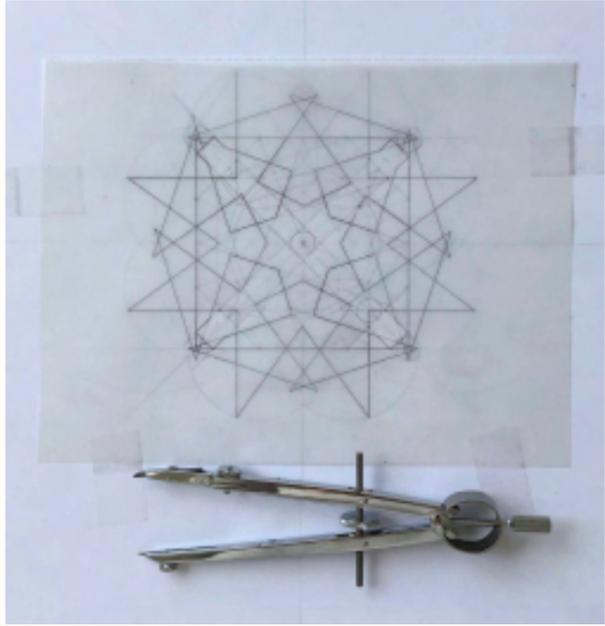
8 Pt strapwork pattern of unglazed bricks and blue glazed inserts found on a late XII century Ghurid portal (iwan) of the Friday Mosque in Herat, Afghanistan.

The medieval craftsmen of Herat set round, blue-glazed inserts into the unglazed brickwork pattern of their Friday Mosque. For their glazes they would have used ground gemstones from the ancient turquoise mines of Nishapur.

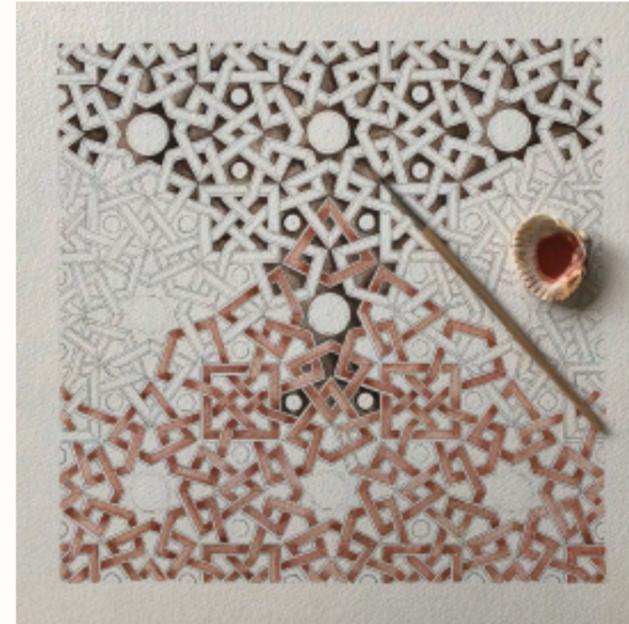
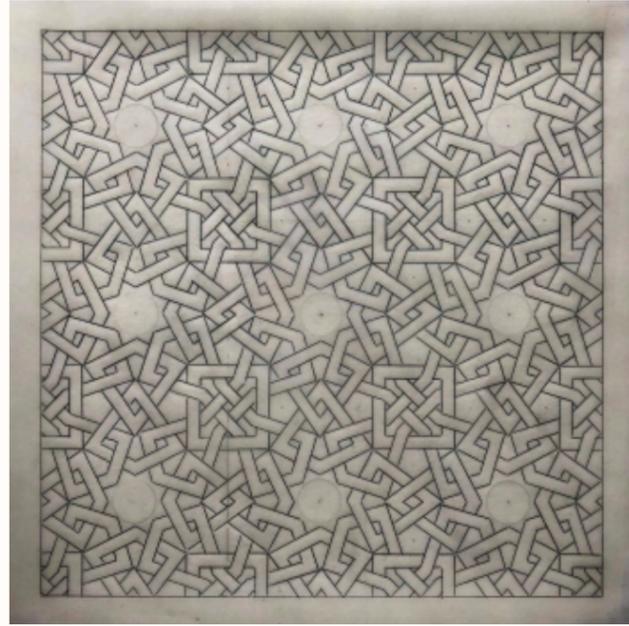
Song of Synergy, 2020

51x36 cm

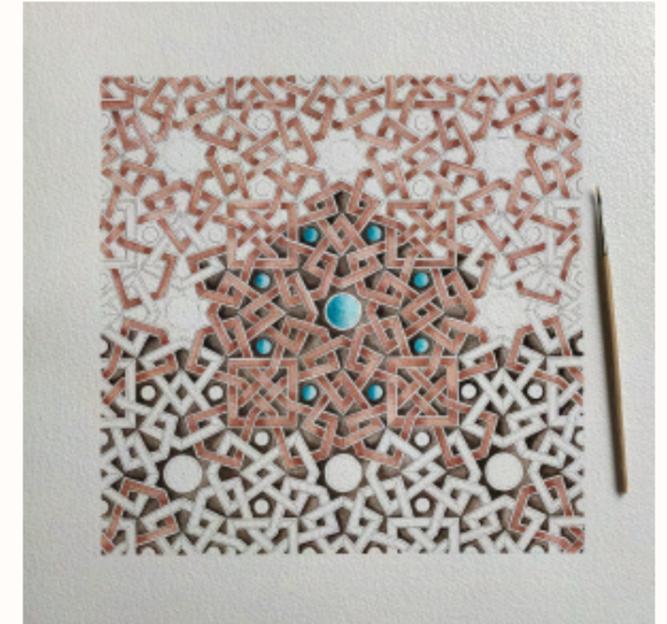
Margi Lake



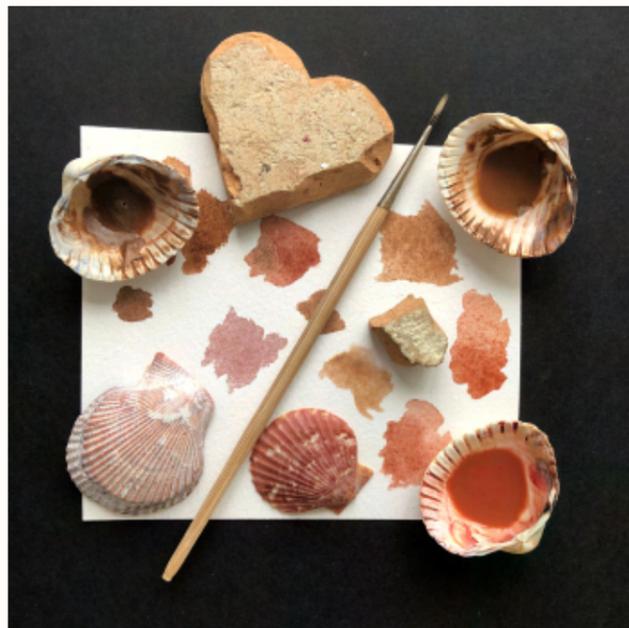
Tile layout for the 8 Pt strapwork pattern



Work in progress

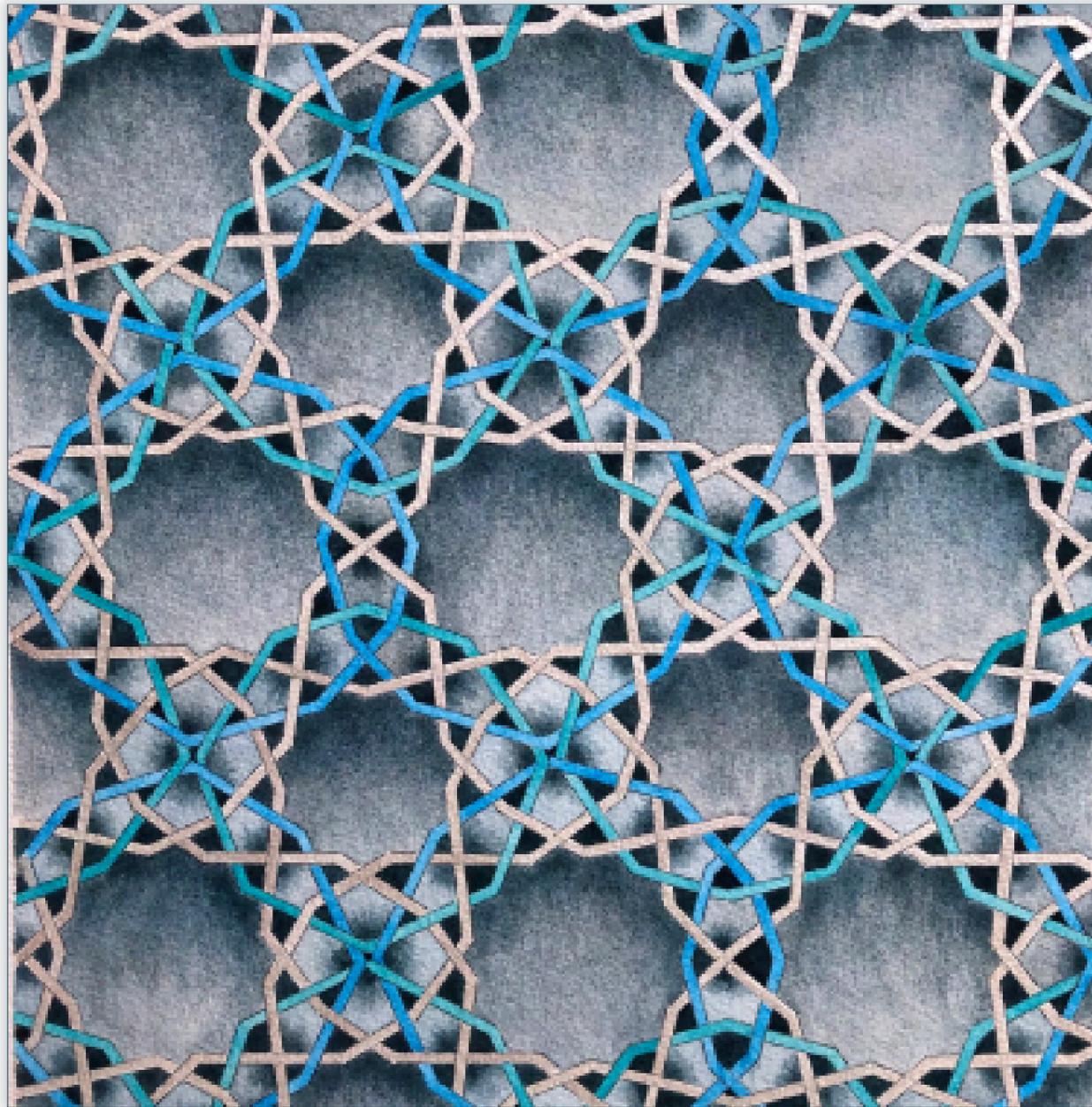


First and second palette trials



Brickwork decoration on the Friday Mosque, Herat.

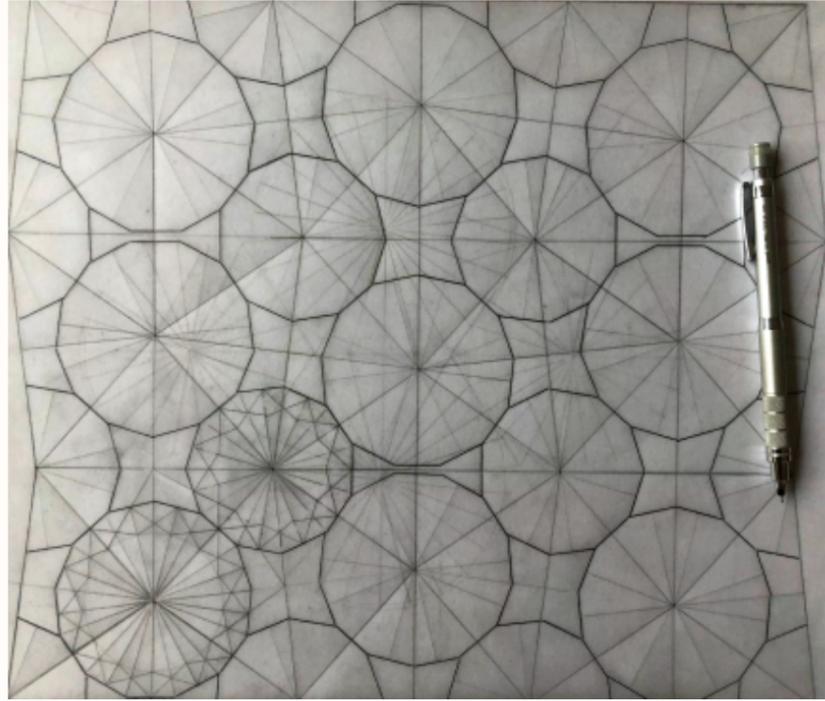
Image credit: archnet.org (ref: 41826)



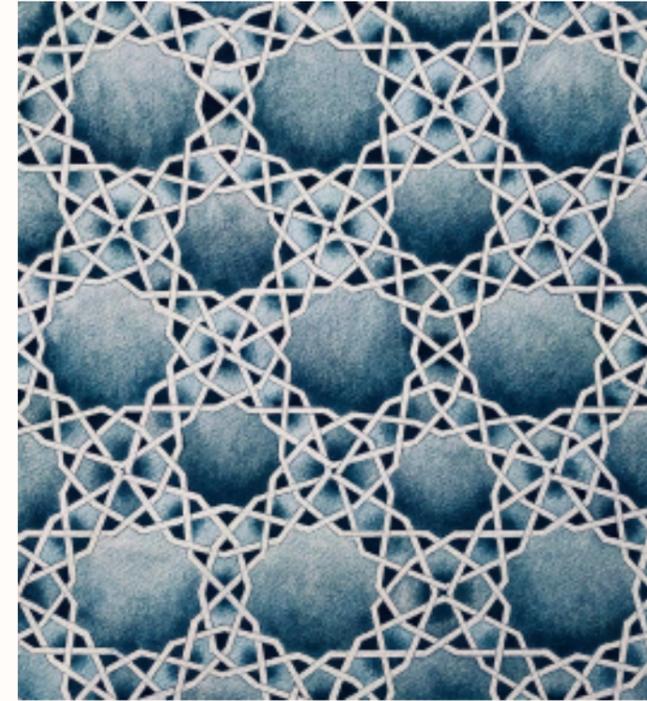
An unusual design with thirteen- and eleven- point interlocking rosettes. Subgrids of hendecagons and tridecagons are rare, though examples of similar patterns do exist in Central Asia.

The blue apatite background was inspired by the interplay of light and shadow as night transitioned to dawn on a winter's morning in the north.

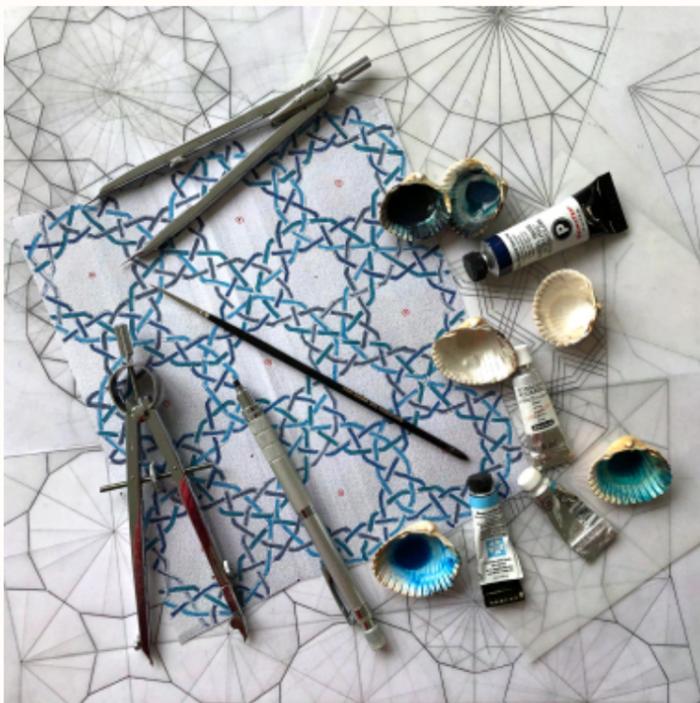
Transition, 2019
51x36 cm
Margi Lake



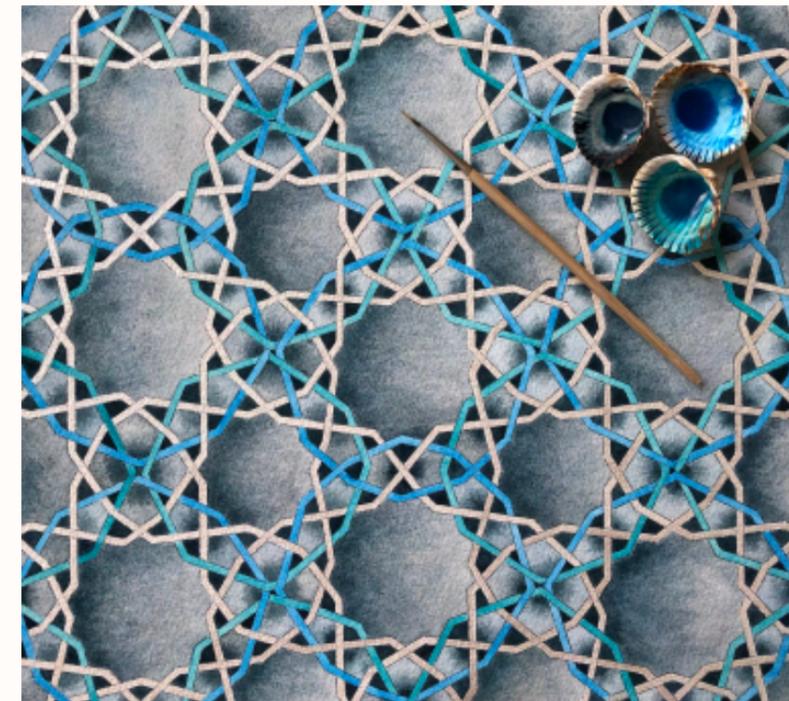
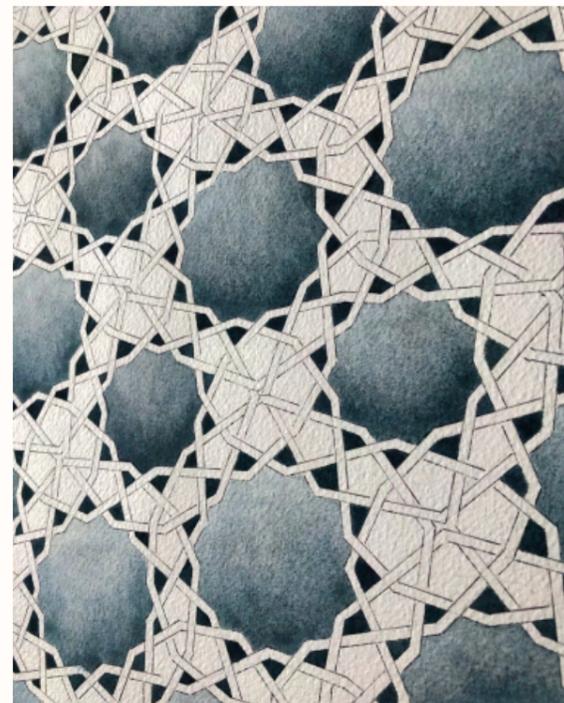
Polygonal 13/11 Pt layout

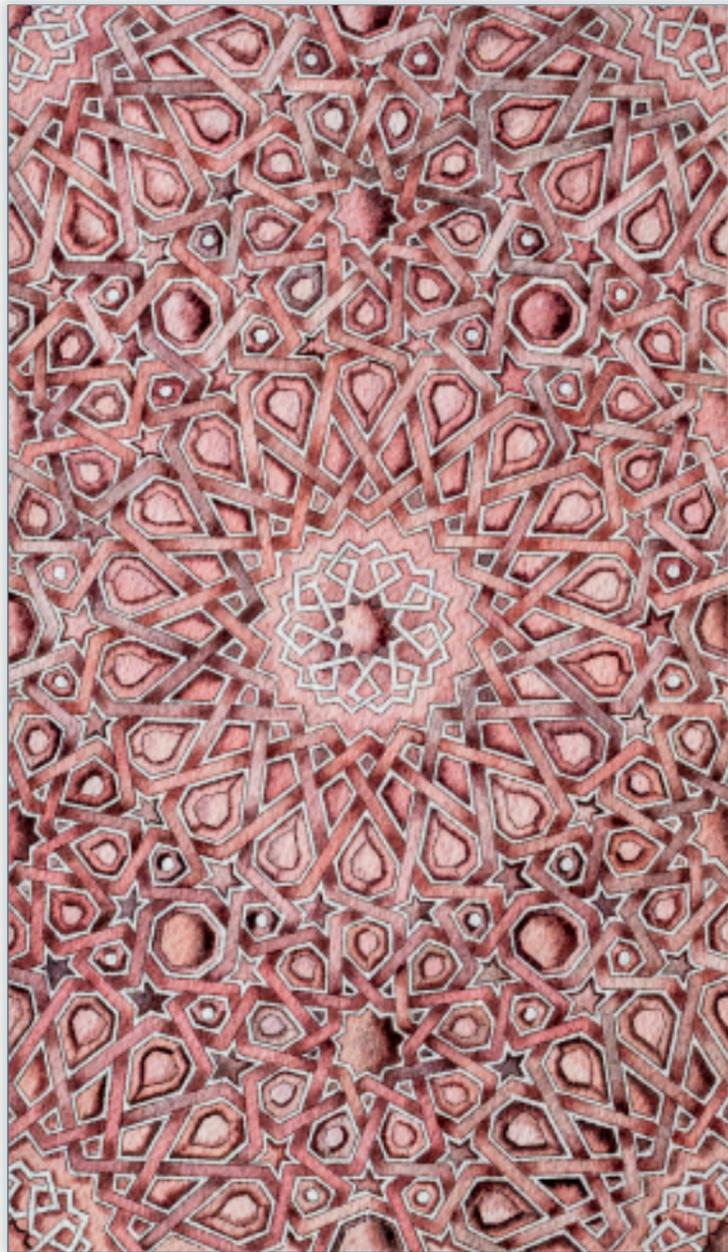


Work in progress



Work in progress





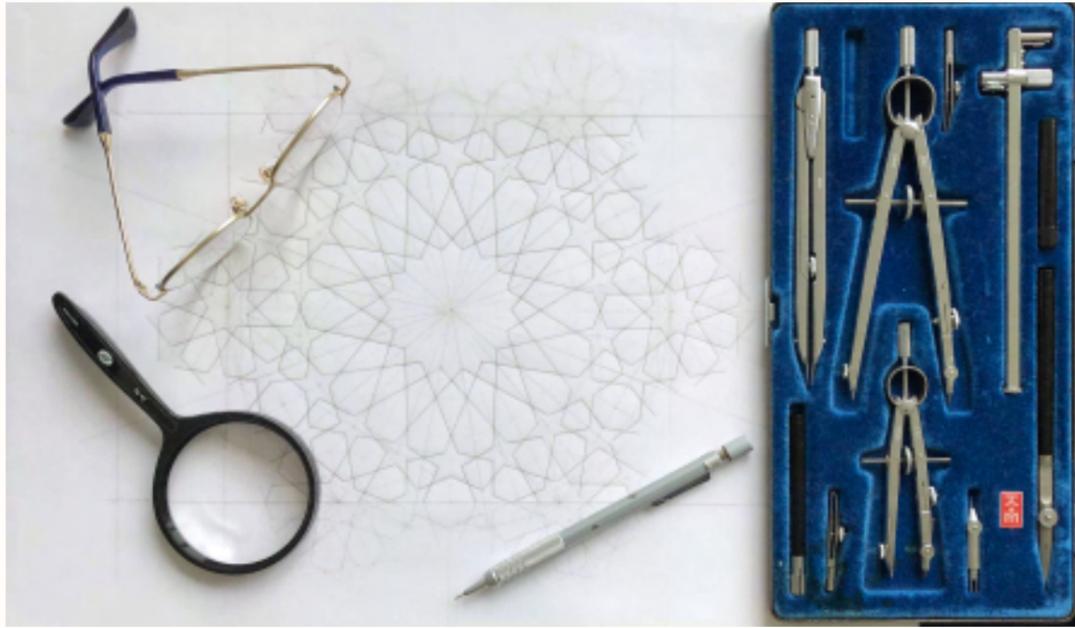
Rose of Qijmas, 2019
36x51 cm
Margi Lake

Rose of Qijmas is an 18/9 Pt rosette pattern with (almost) regular octagons found on a late XIV century minbar in the Amir Qijmas al-Ishaqi mosque in Cairo (1479-81).

Jay Bonner provides detailed information on this and other 18-gon patterns in his book 'Islamic Geometric Patterns' (Figs 357/358).

A similar 18/9 Pt is found on a door displayed in the Bayt al-Suhaymi house (museum) in Cairo. The house itself dates from the Ottoman period (built in 1648), but the pattern on the door most likely originates from the Mamluk era.

The palette is ton-sur-ton Piemontite, a rare mineral from New Mexico.



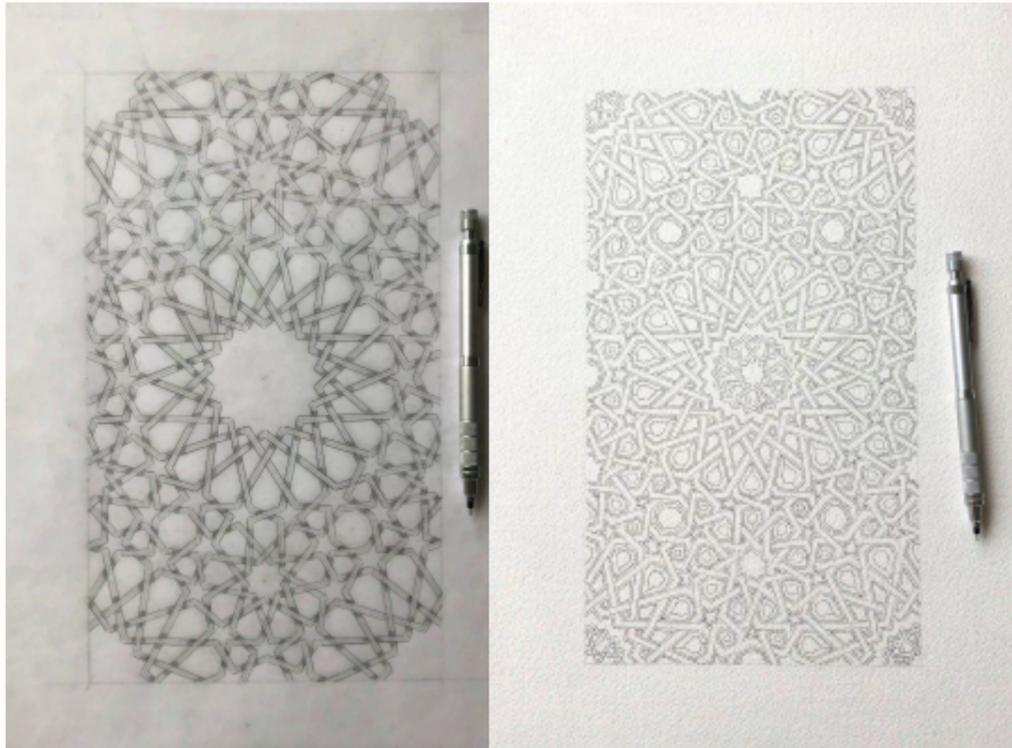
18/9 Pt layout



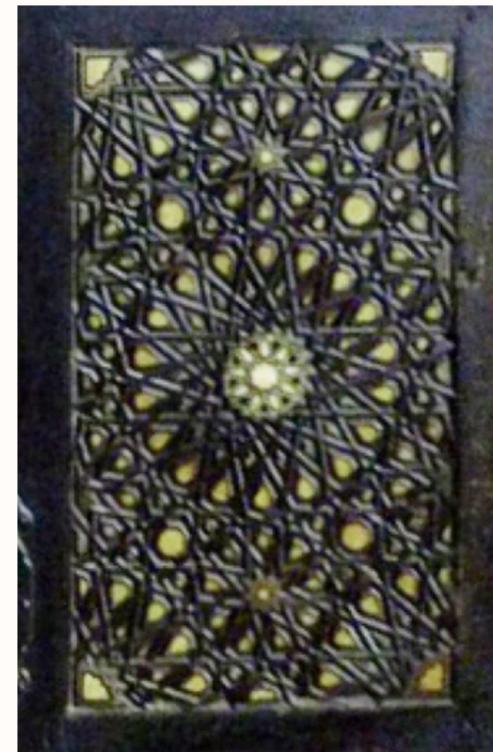
Palette trial



Work in progress

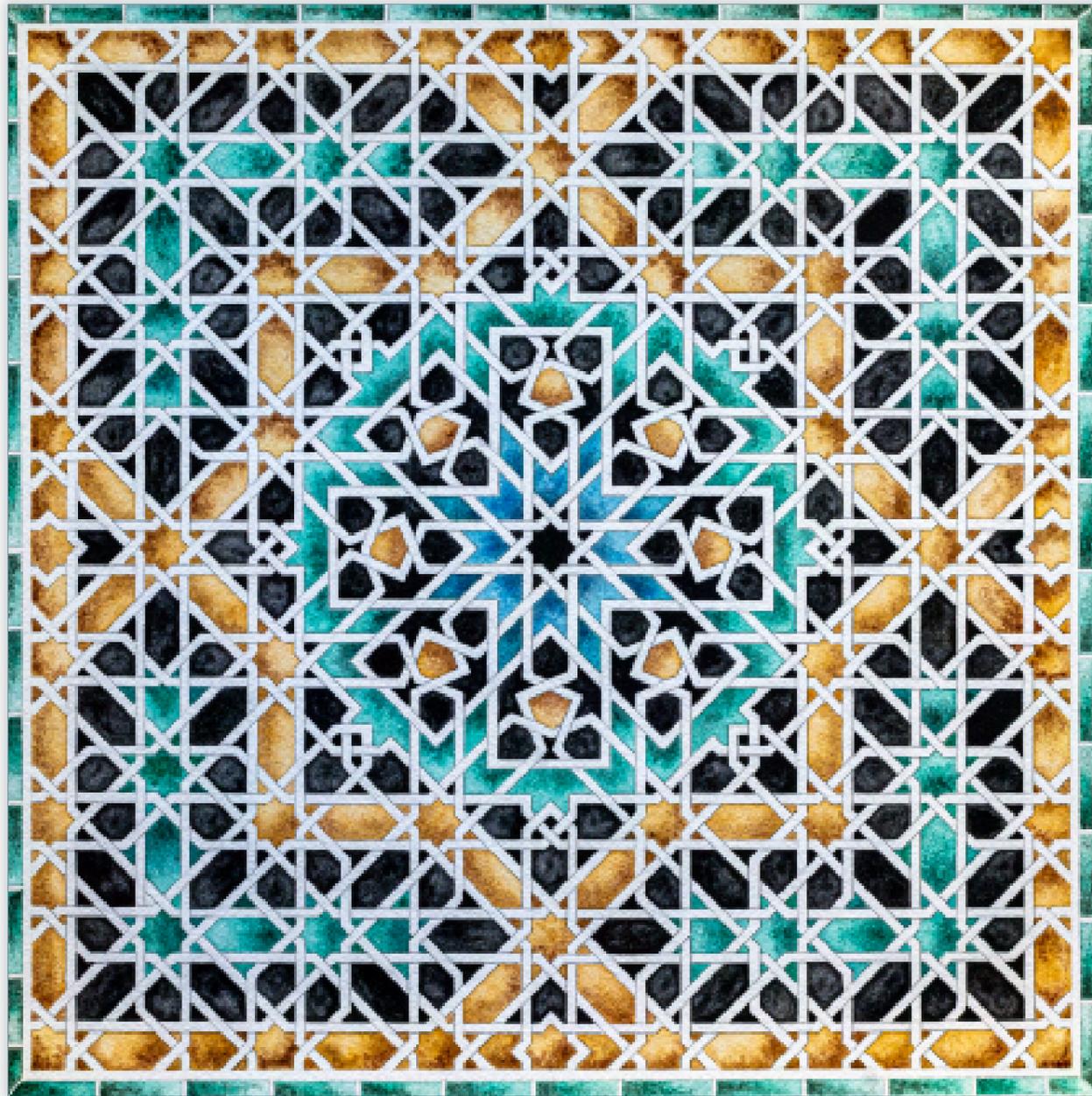


Work in progress



Qijmas al-Ishaqi minbar, Cairo

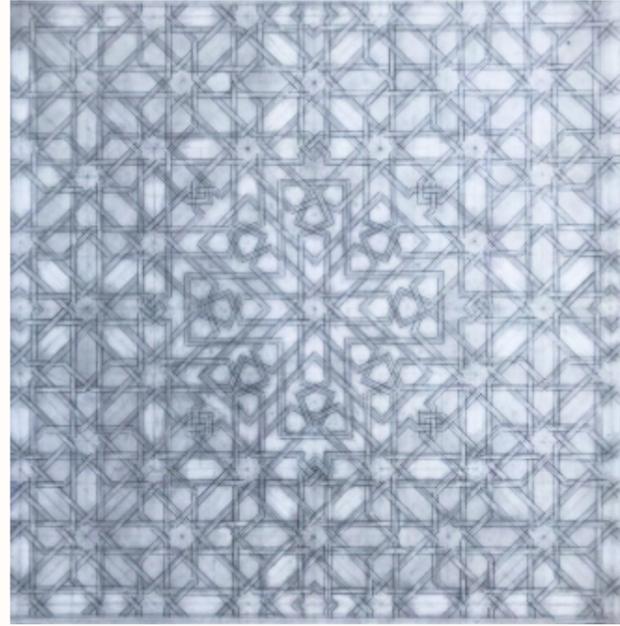
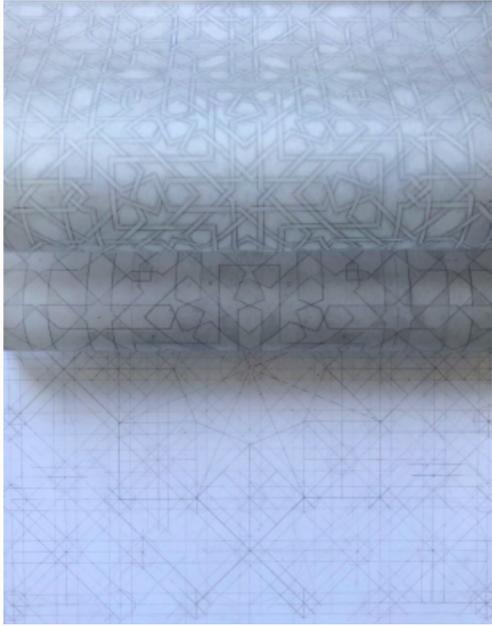
Image credit: Robert Prazeres



Aquarelle rendition of a XIV century dual level 8 Pt design on a mosaic tile panel, one of four square alicatados found in the Salón de Comares (also called the Hall of the Ambassadors) in the Nasrid palaces of the Alhambra, Granada, Spain.

In Pythagorean thought, eight terms were thought to symbolise the world actualised in time and space.

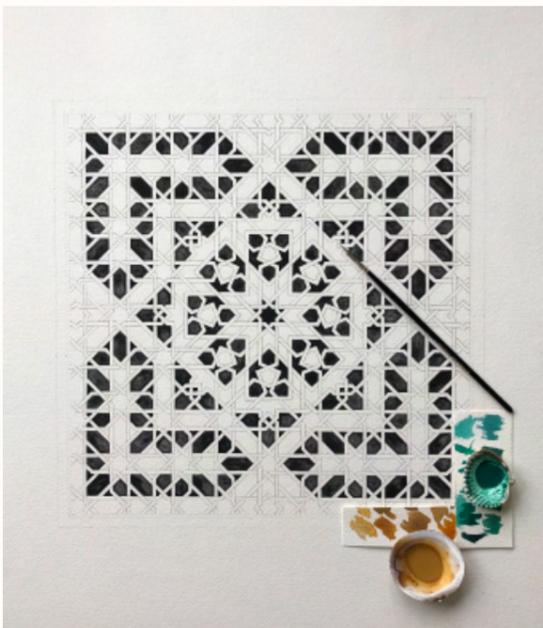
Ode to Boabdil, 2021
36x51 cm
Margi Lake



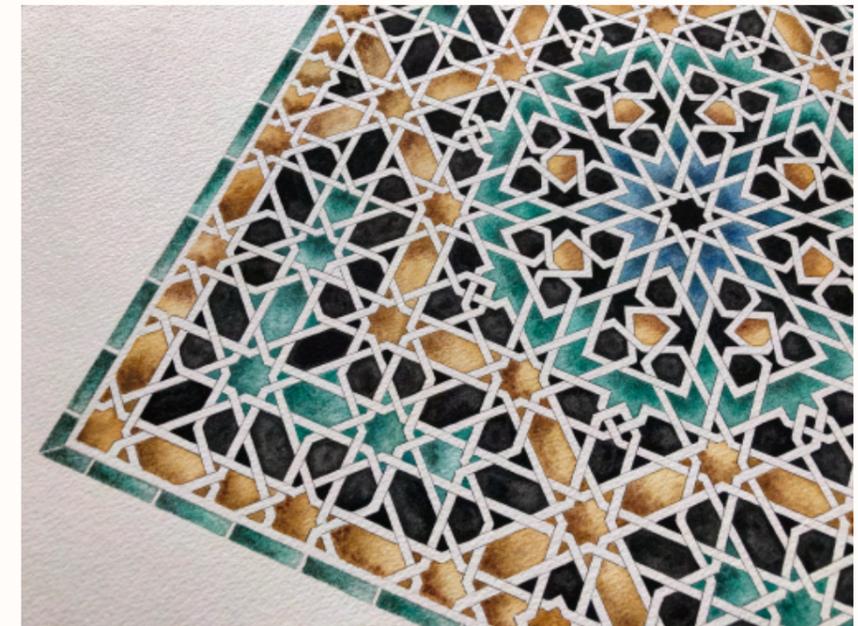
Dual level 8 Pt geometry

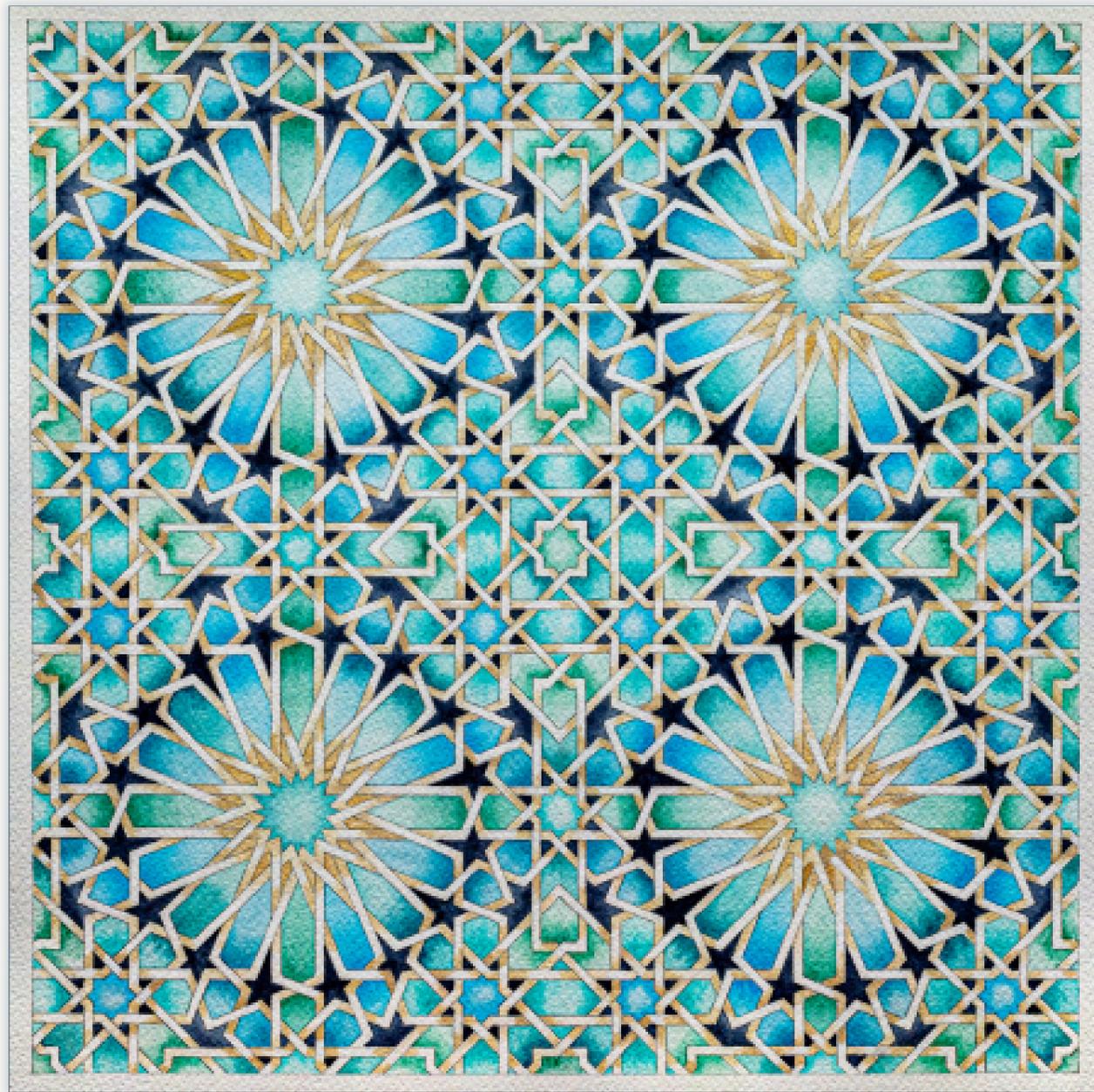


Historical pattern



Work in progress





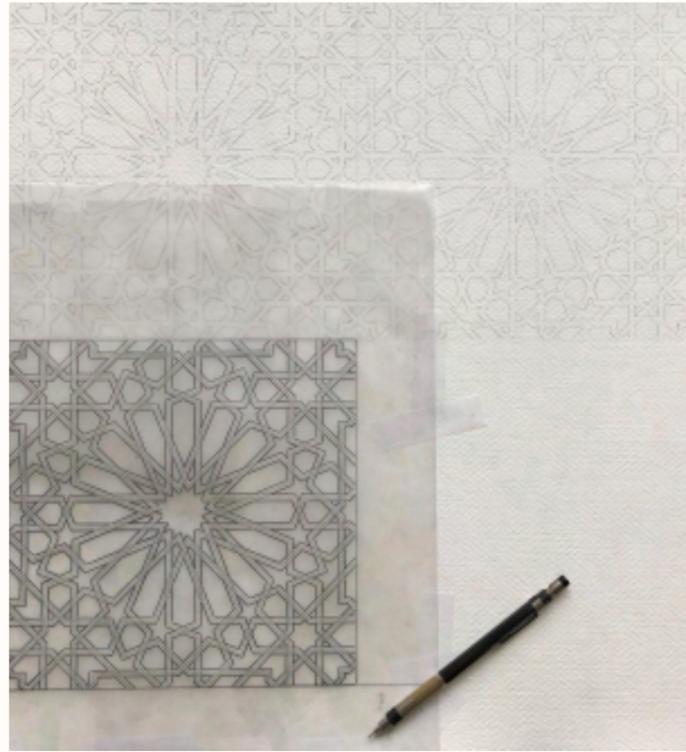
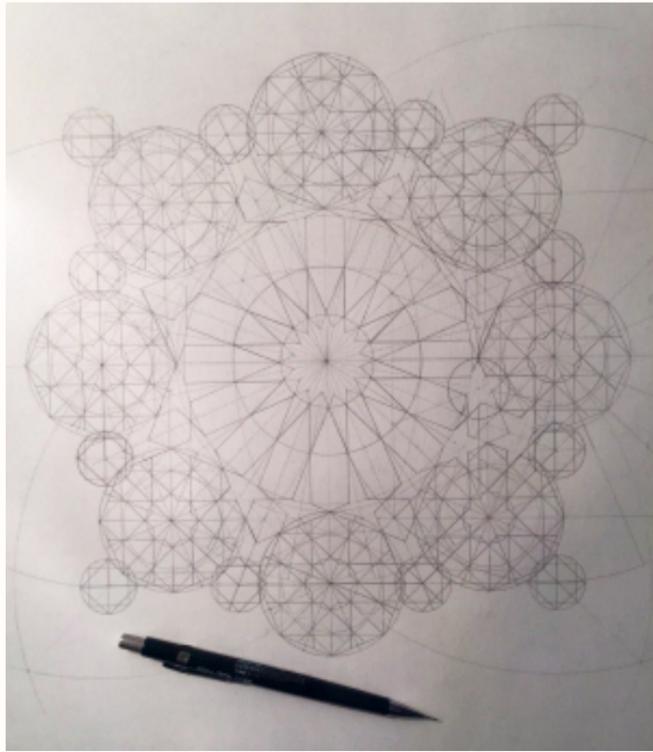
Twenty Shades of Turquoise, 2021

50x50 cm

Margi Lake

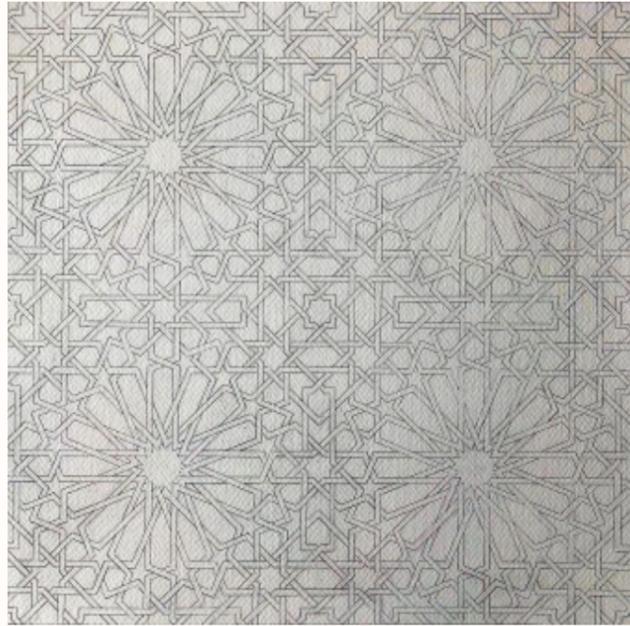
Moorish 16/8 Pt tile design known as 'Zellij' from The Nasrid palaces in the Alhambra, Granada. Zellij designs comprise tessellations (a series of tiles creating geometric patterns), a visual feast of proportional form and harmonious colour.

This piece shows the interplay of translucent blue-green and green-blue polygons in differing shades and intensities within a framework of pale gold interlaced pattern lines and a dark indigo background.



Work in progress

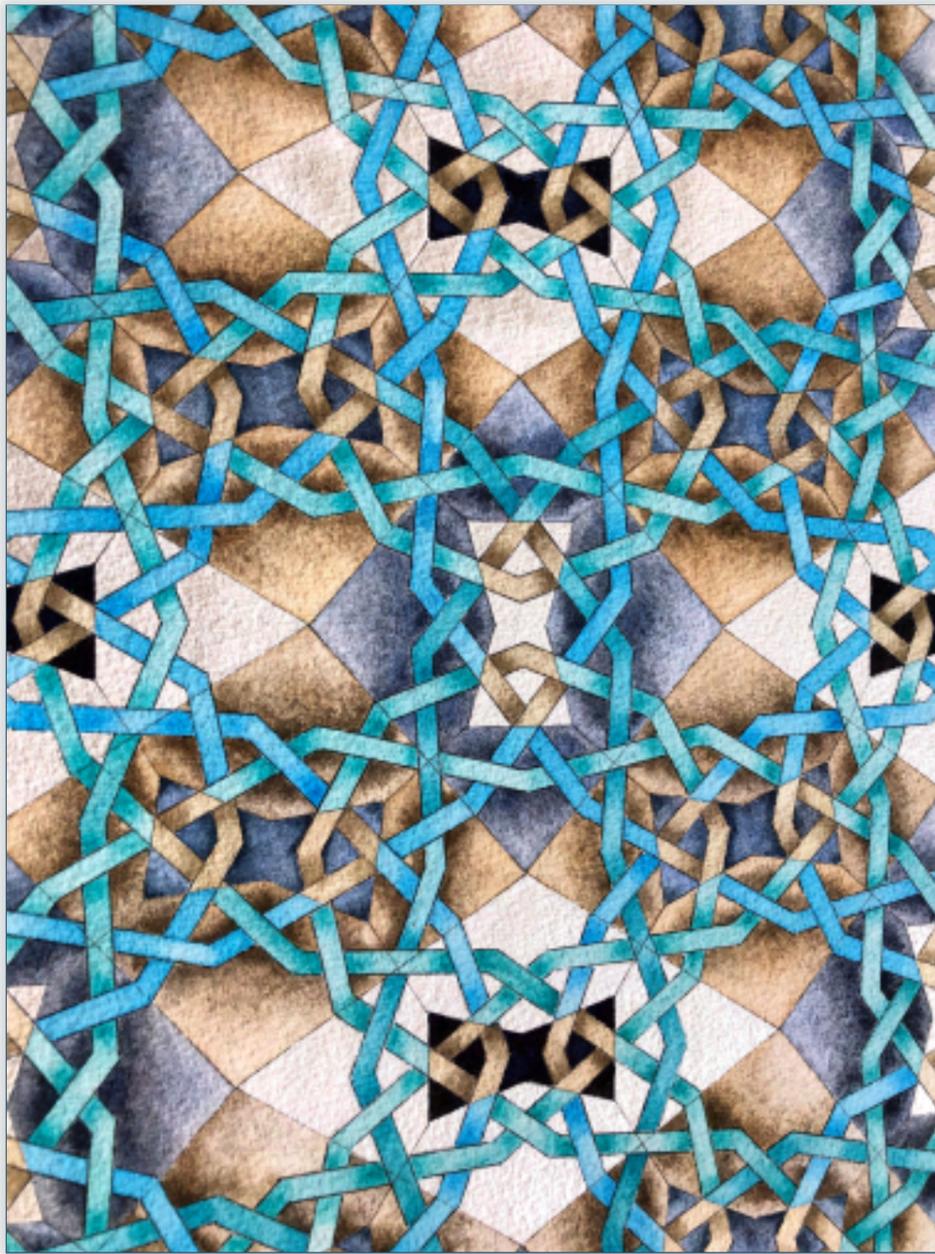
Geometric pattern



Work in progress



Historical pattern in the Nasrid Palace of The Alhambra (XIII-XIV century)

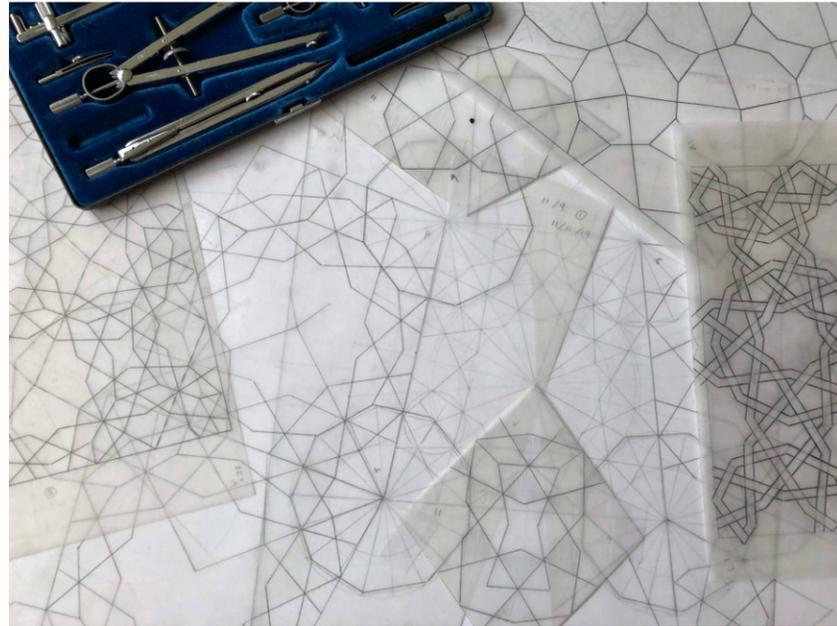
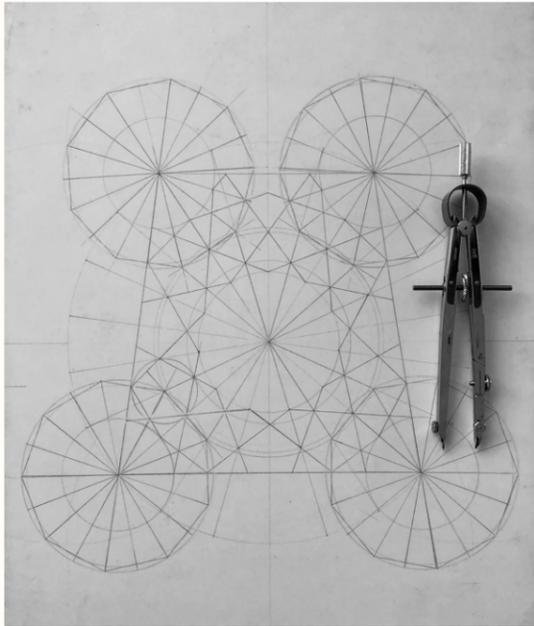


This piece is an unusual 11/9 Pt rosette tiling found in the XV century Topkapi scroll.

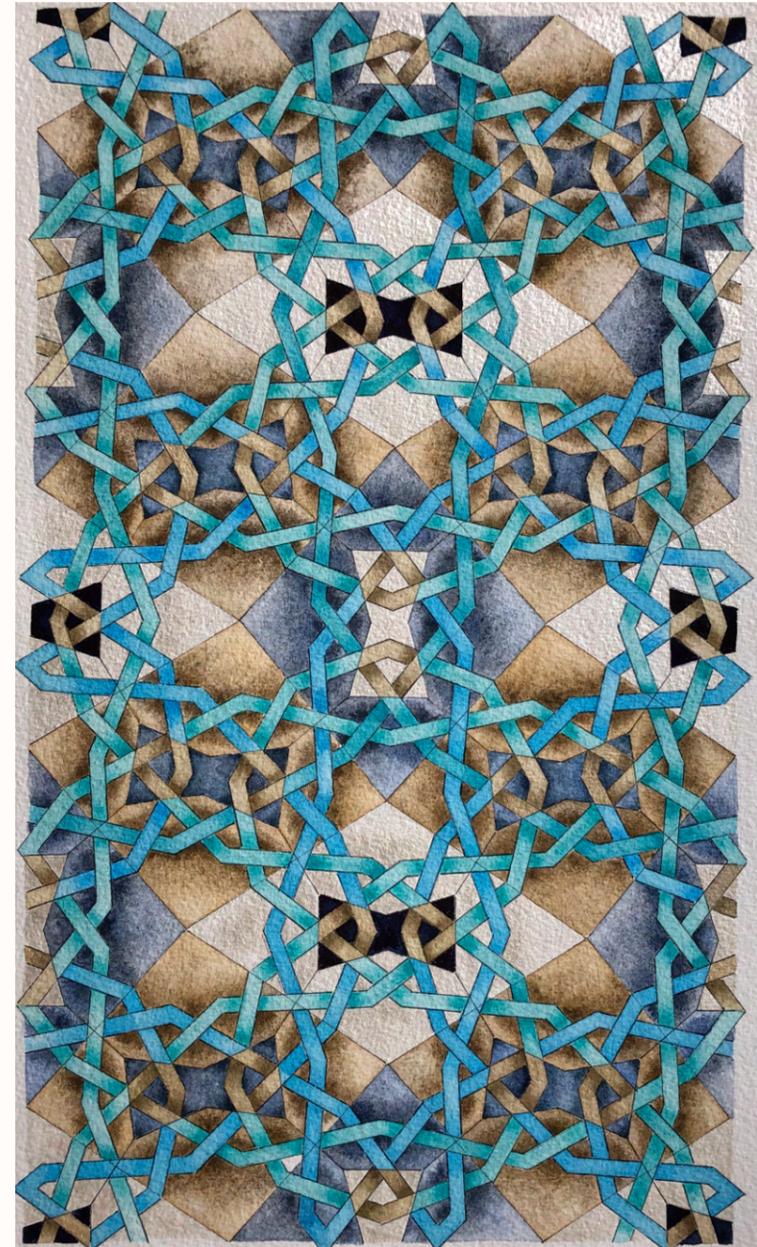
Underlying subgrids are generally invisible in Islamic artworks, but this piece shows the substructure of hendecagons (11-gons), enneagons (9-gons) and rhombic repeat units underneath the interlaced 11- and 9-point rosette pattern.

The palette is typical of Central Asia in shades of dark blue, light blue, turquoise and ochre- gold.

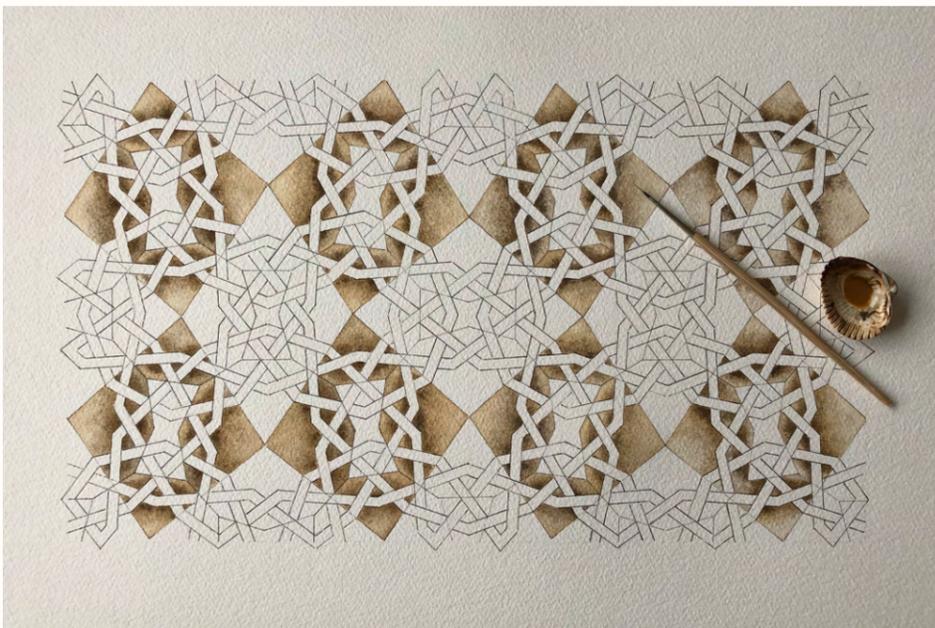
Polygons in Contact, 2019
36x51 cm
Margi Lake



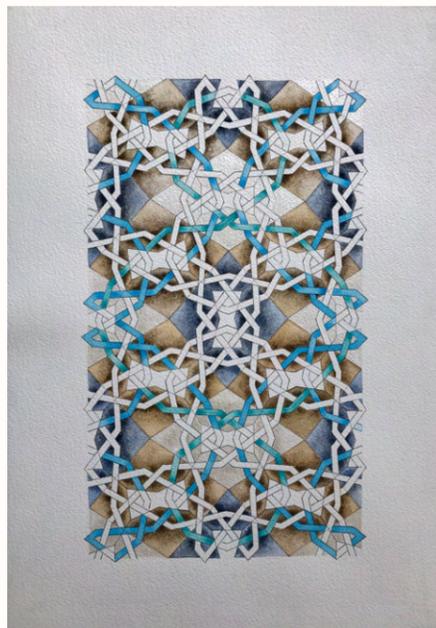
11/9 Pt Topkapi Scroll rosettes layout



Final long piece



Work in progress





8 Pt star pattern found on a portal frame at the Timurid necropolis of Shah-i Zinda (The Living King) in Samarkand (circa CE 1371).

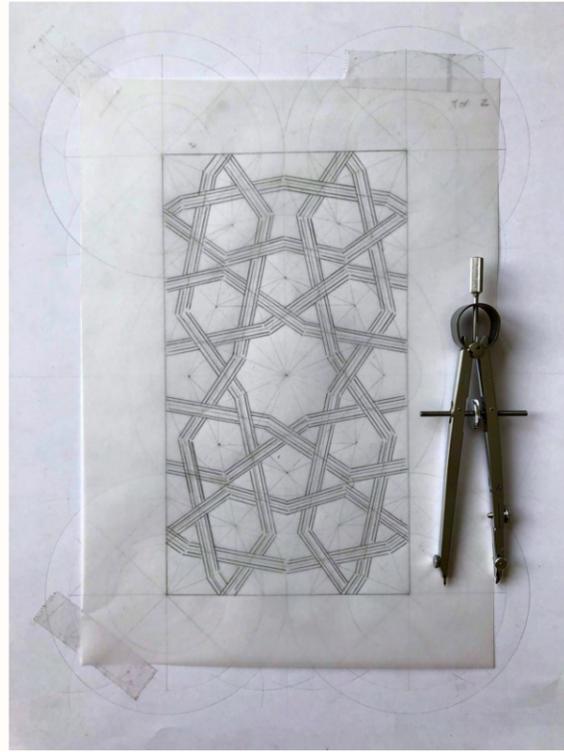
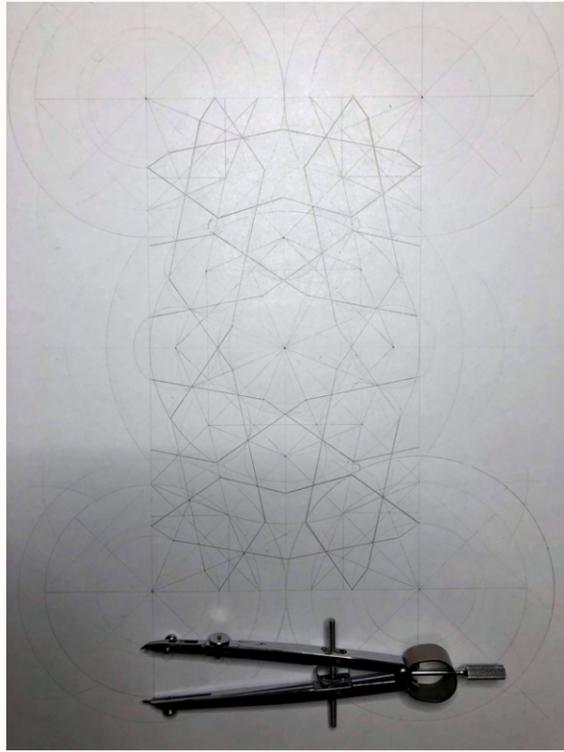
The necropolis commemorates the Muslim martyr, and companion of the Prophet, Qutham ibn 'Abbas (d. 677) who allegedly died in Samarkand. It is one of the most sacred pilgrimage sites across Central Asia.

The glittering deep blue and turquoise faience mosaics and glazed tiles produced during the Timurid era demonstrate that medieval craftsmen were experts in understanding how patterns and surfaces interact with light and shadow. In Islamic architecture and illumination, it is customary to juxtapose diverse patterns over a surface and to place large-scale patterns inside borders and arches to imply that they extend to infinity beyond the boundaries that contain them.

Return to Samarkand, 2019

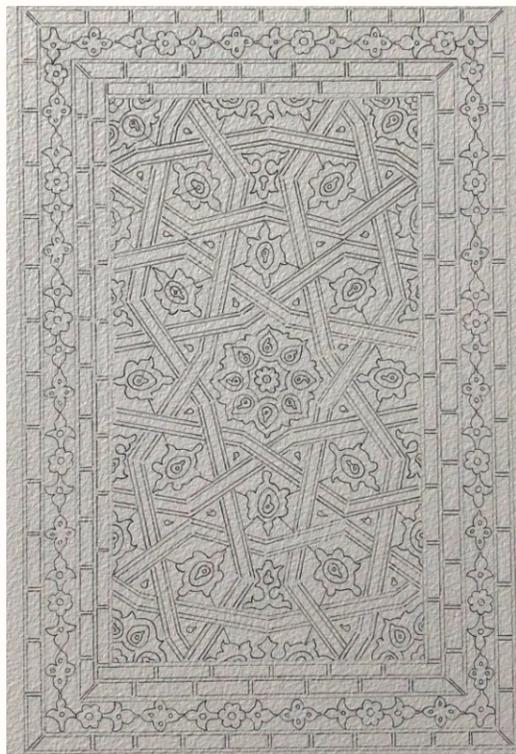
31x51 cm

Margi Lake



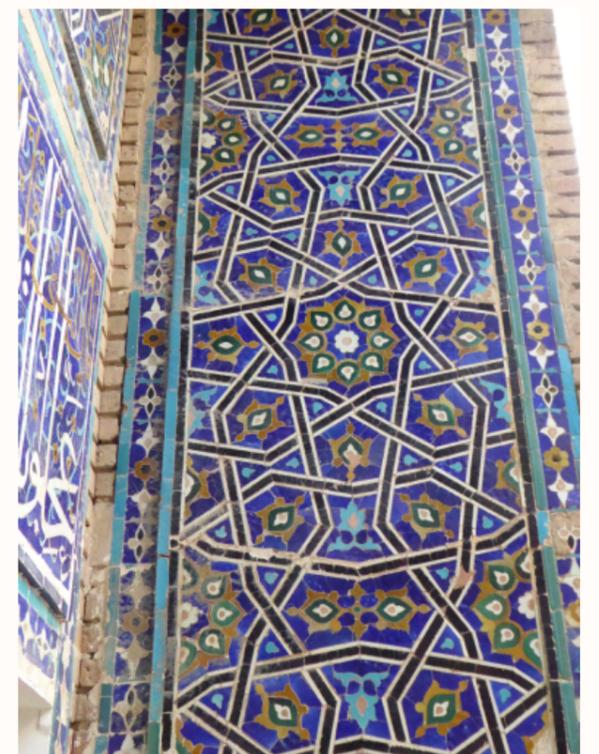
Work in progress

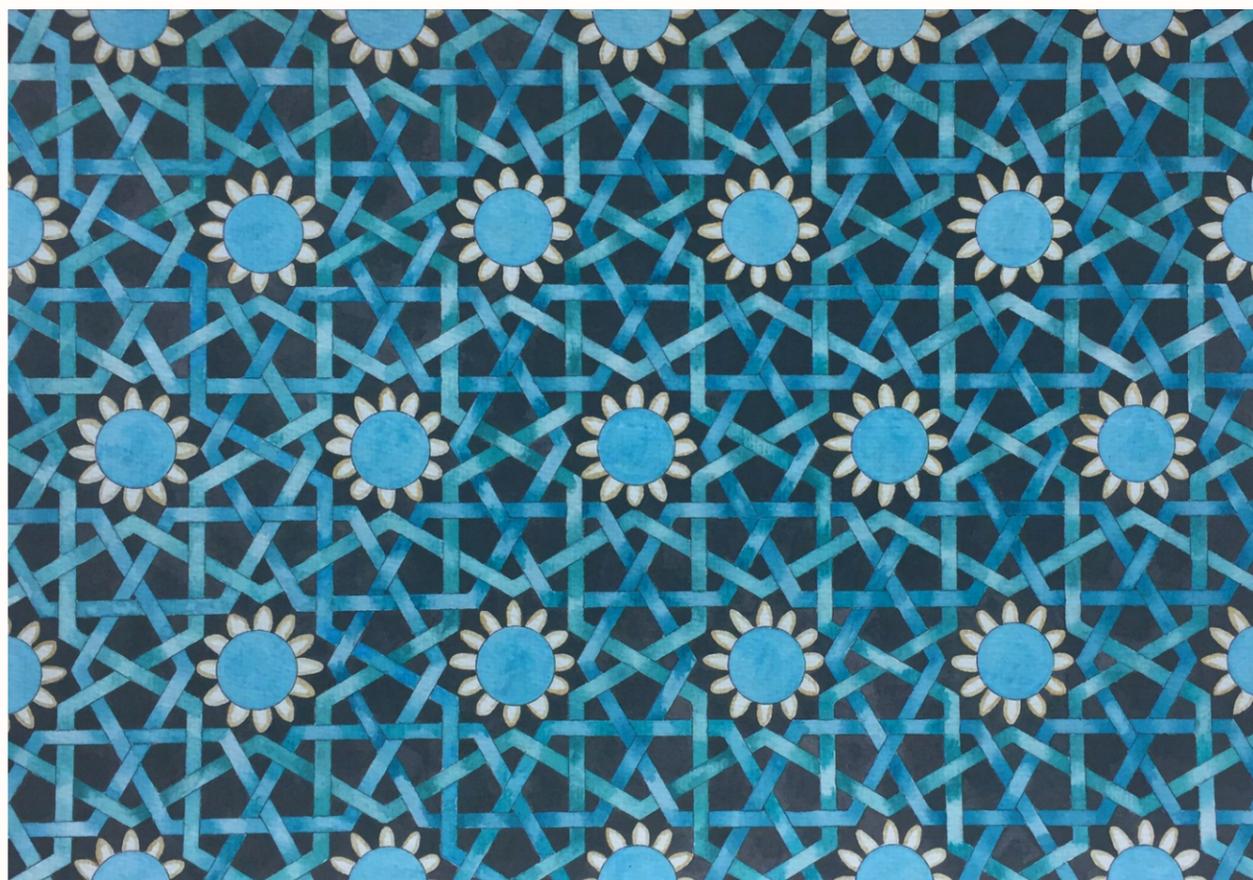
Timurid 8 Pt layout, interlace



Motifs and palette

Historical pattern in the XIV century
Shah-i Zinda necropolis, Samarkand



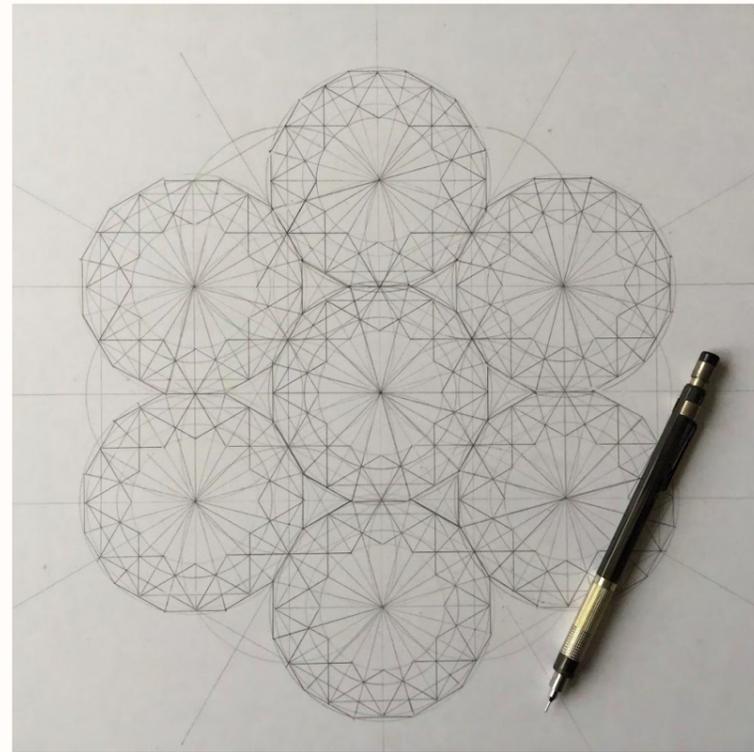


Seljuk Mosaic, 2017
42x56 cm
Margi Lake

The original of this XIII century mosaic tile panel from Seljuk Anatolia can be seen in the Turkish and Islamic Arts Museum in Istanbul. The provenance of historical patterns from different periods in history fascinates me. Each pattern has a story.

This is a 12 Pt pattern constructed on a semi-regular grid of dodecagons and equilateral triangles.

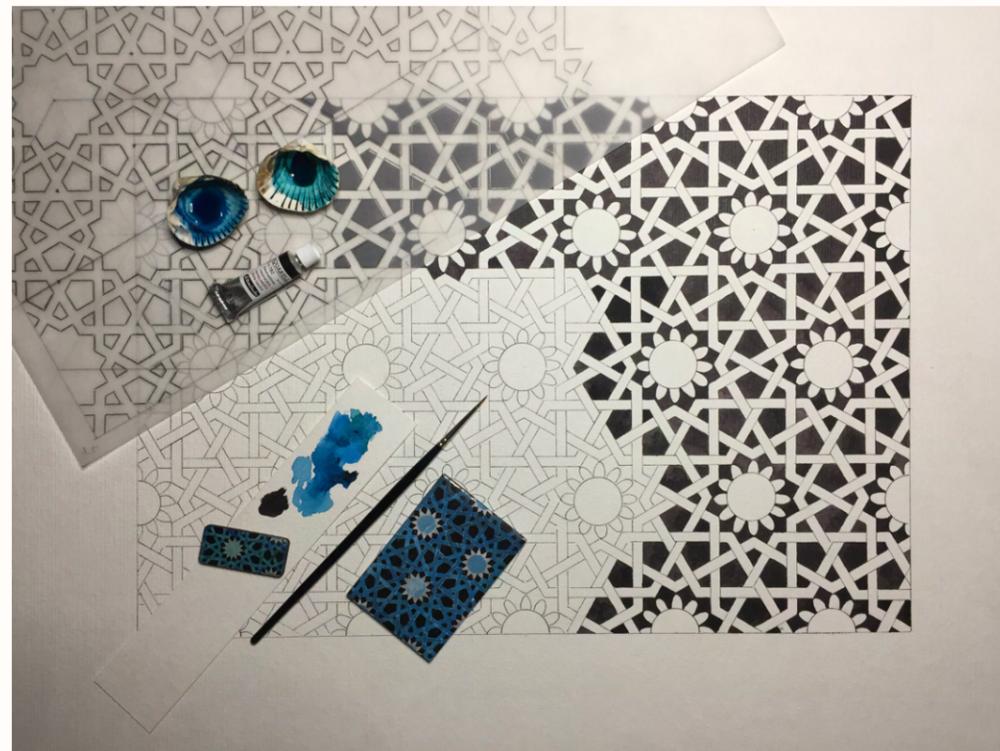
The palette follows that of the original mosaic panel.



12 Pt layout of dodecagons and equilateral triangles



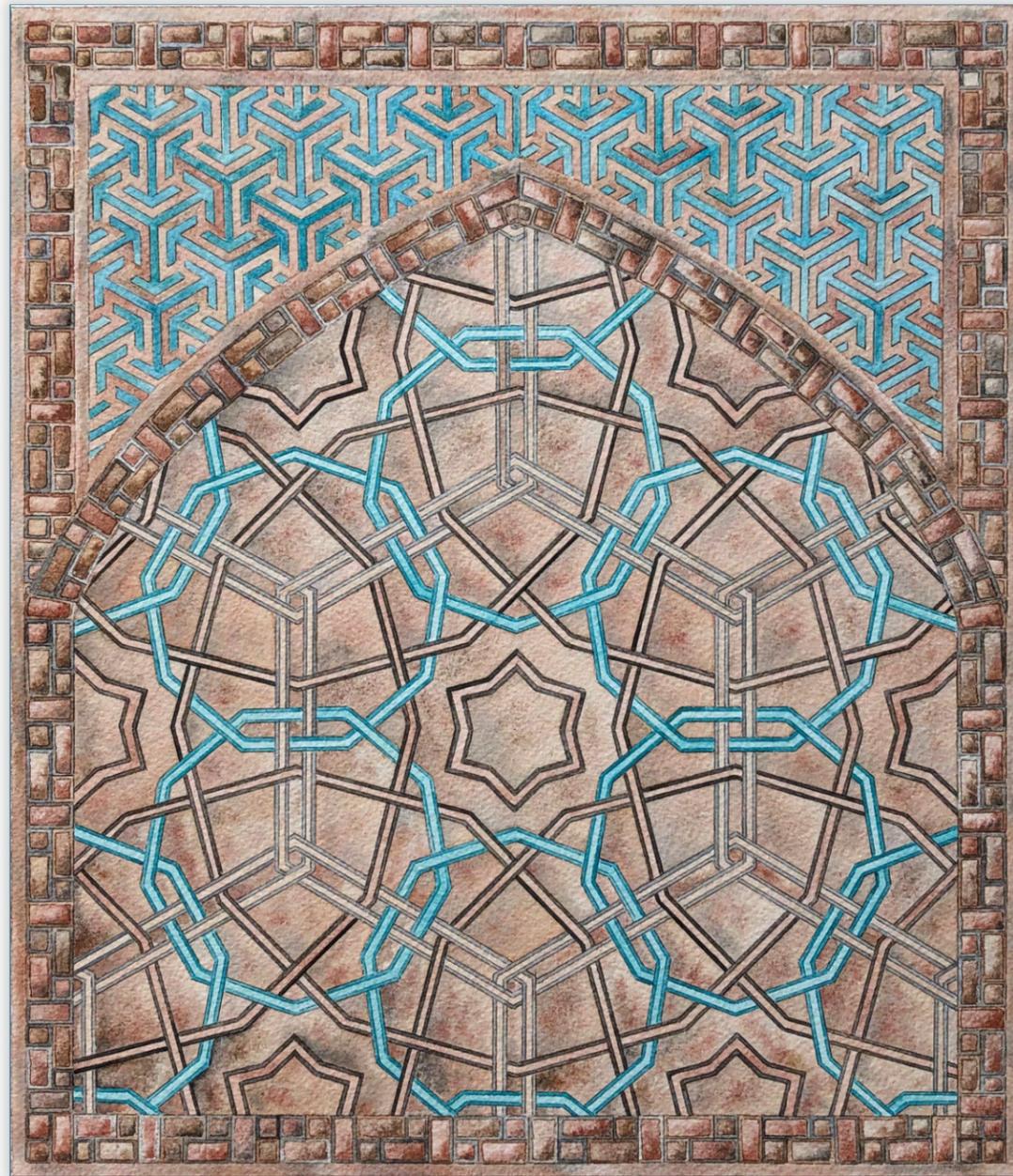
Work in progress



Motifs and palette



The original pattern on one of the fridge magnets purchased in the Turkish and Islamic Arts Museum shop.

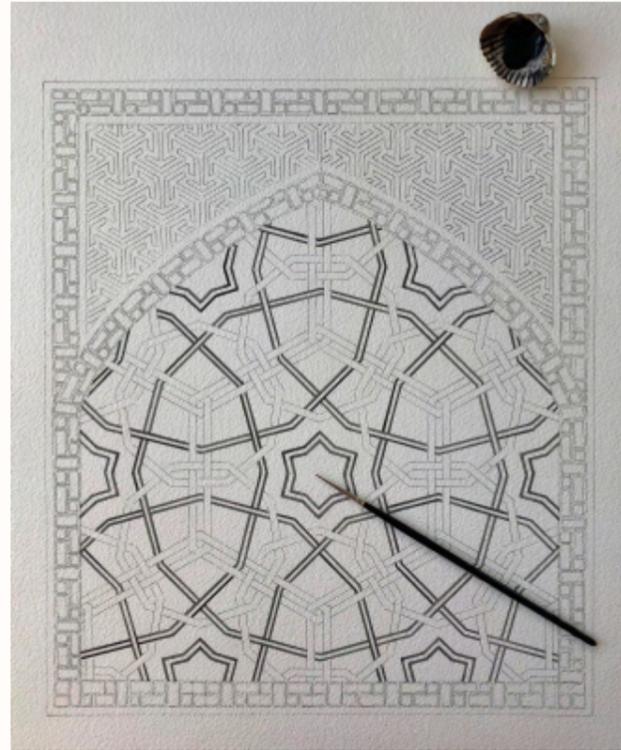
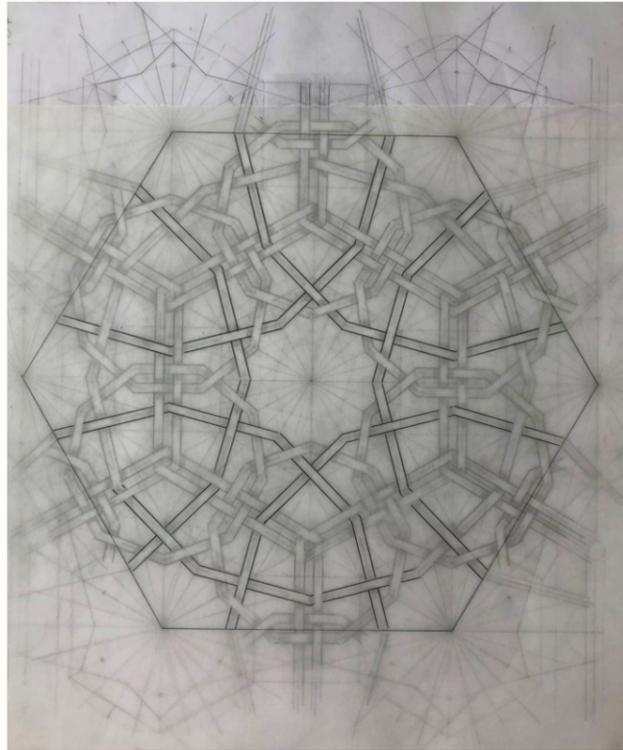


Composition comprising two designs found on a XII century tympanum of terracotta brickwork and turquoise glazed ceramics decorating an entrance to the Gunbad-I Surkh mausoleum (Red Tomb) Maragha in Azerbaijan (CE 1148).

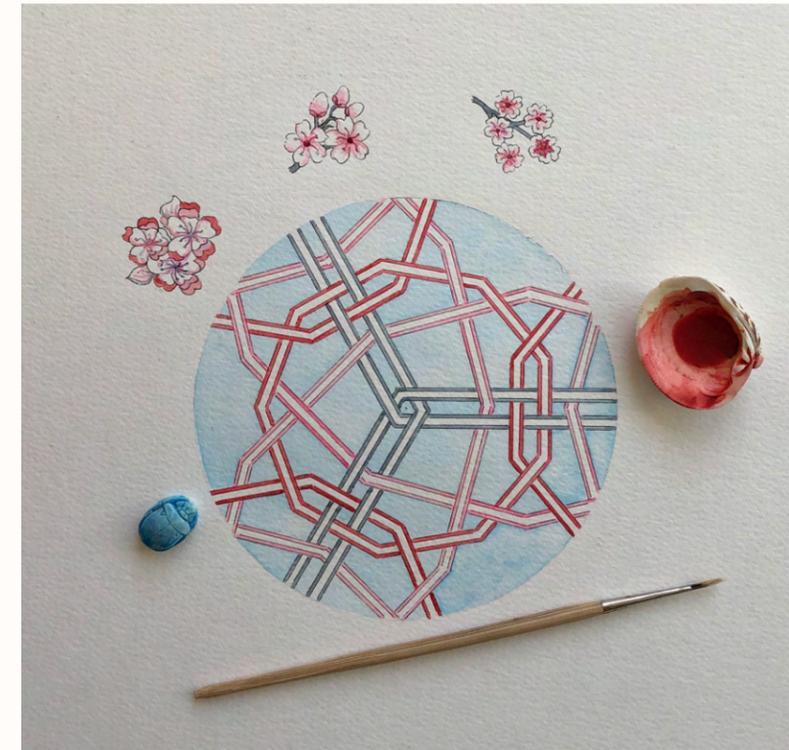
Constructed on an Archimedean grid, the central pattern is made up of interlocking dodecagons, nonagons and hexagons. The pattern on the frieze above the arch is a simple 3 Pt pattern.

Arches are archetypal symbols of transition between realms, domains and spheres; thresholds connect in-between spaces.

Threshold, 2020
36x51 cm
Margi Lake



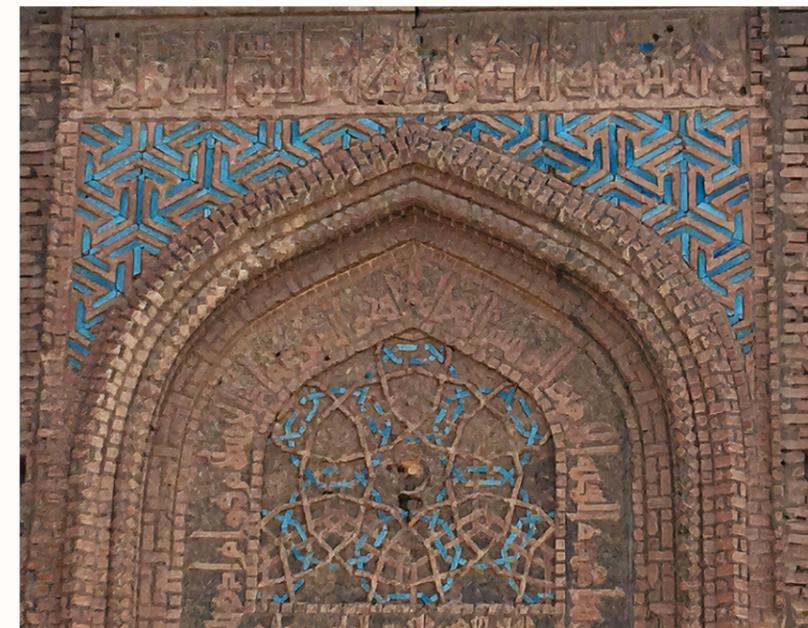
Hexagon tile (inner 12 Pt) and 3 Pt pattern in the frieze



Initial palette trial inspired by Japanese cherry blossom

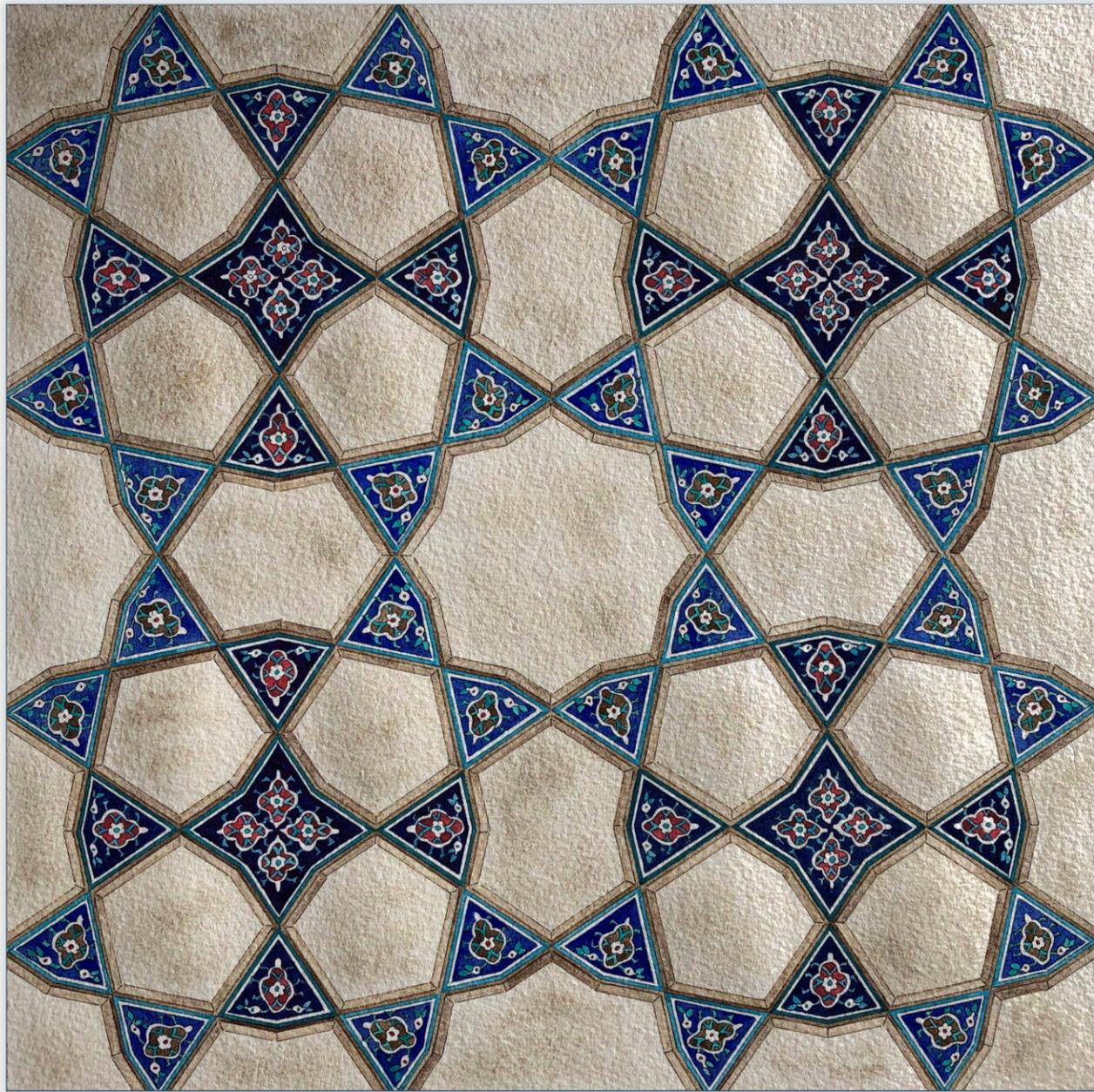


Work in progress



Gunbad-i Surkh mausoleum in Maragha, Iran

Image credit: Farkhondeh Ahmadzadeh



8 Pt star polygon pattern decorating on the East wall of the Khoja Ahmed Yassawi mausoleum in Turkestan, Kazakhstan. The same 8 Pt pattern with quasi-pentagons is found on a wall of the Kalyan Mosque in Bukhara, Uzbekistan.

The shrine complex was commissioned by Emir Timur (Tamerlane) in CE 1389/AH 792 to express his gratitude and respect for the XI century Sufi sage and master, poet, and author Ahmed Yassawi, who, according to legend, had predicted Timur's conquest of Bukhara in a dream.

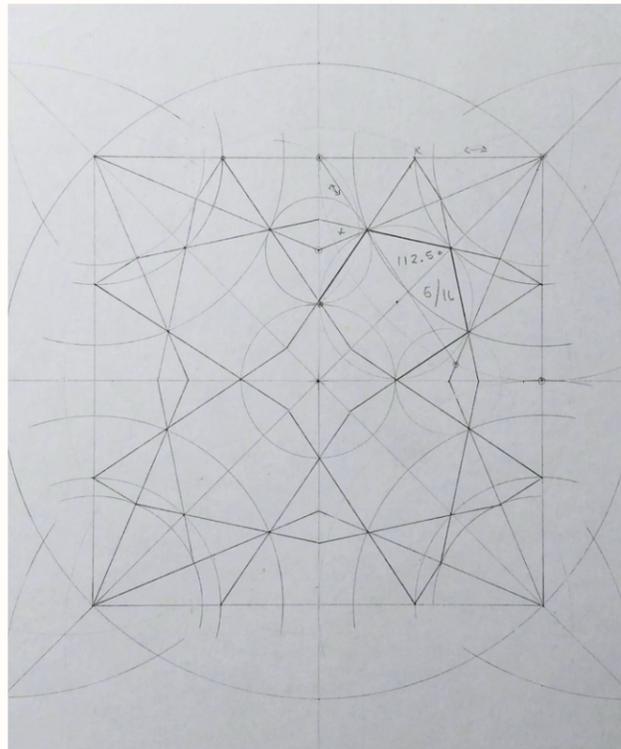
Khodzhi Hussein Shirazi, an acclaimed Turkestani architect, supervised the construction of the vast complex.

The design and palette of the Timurid style motifs replicate those found on the XIV century mausoleum.

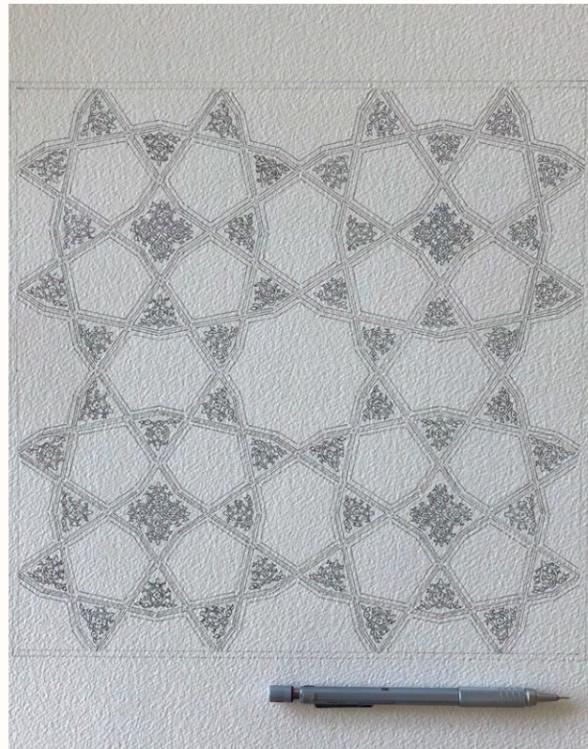
Harmony of the Spheres, 2020

36x51 cm

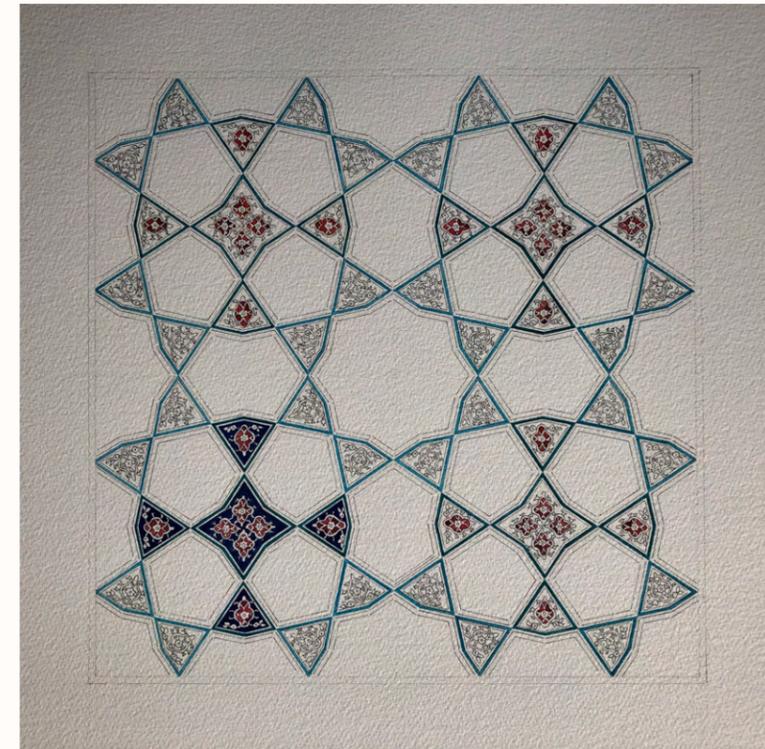
Margi Lake



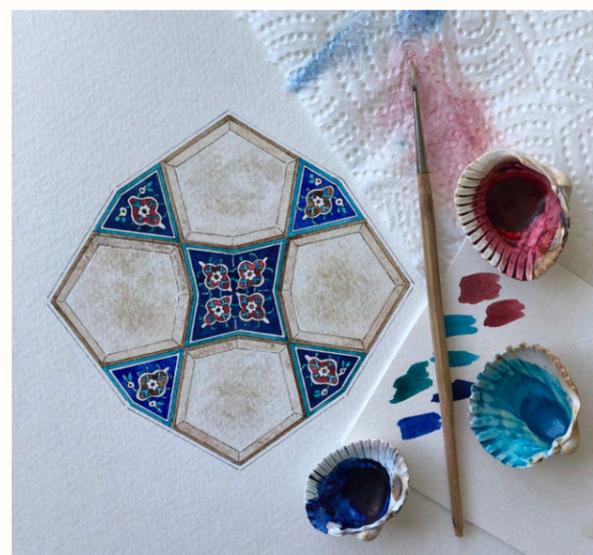
8 Pt polygonal layout



Tessellation and motifs



Work in progress



Palette trial

Historical pattern on the
Khoja Ahmed Yassawi
mausoleum.

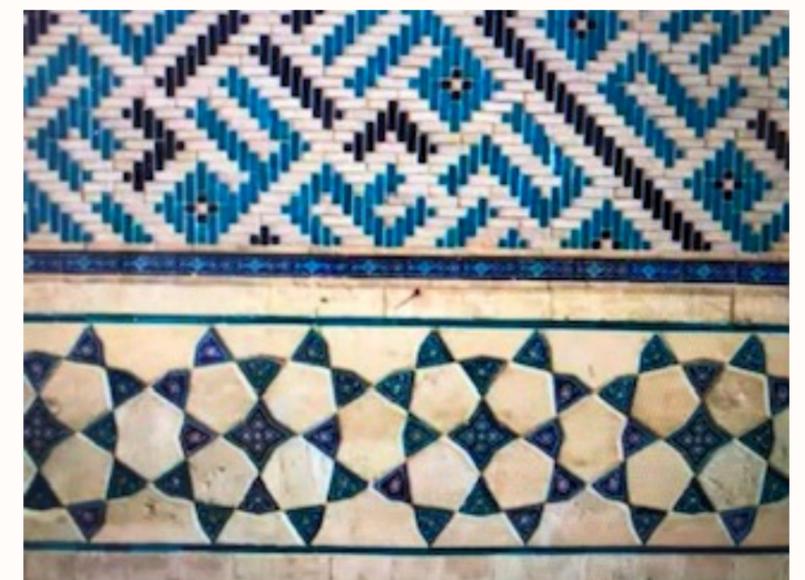


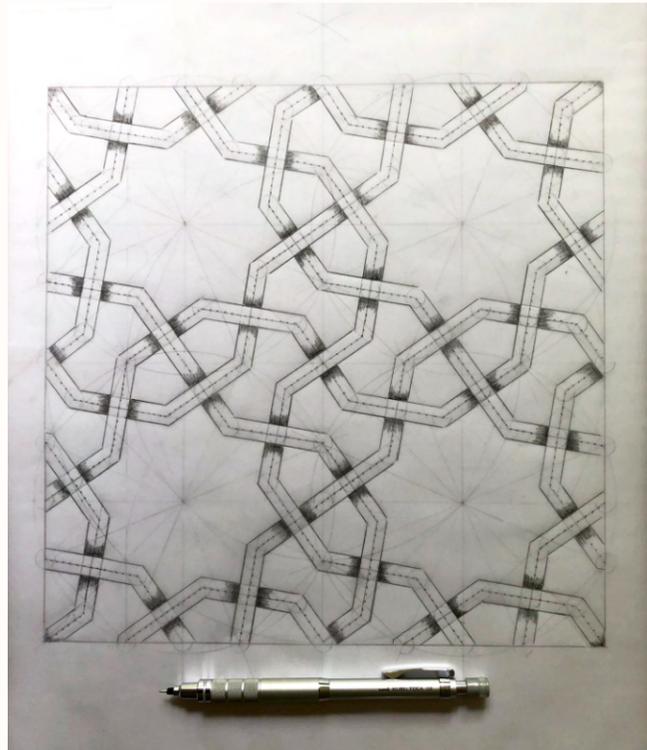
Image credit: Christopher Wilton-Steer



Synthémata, 2020
36x51 cm
Margi Lake

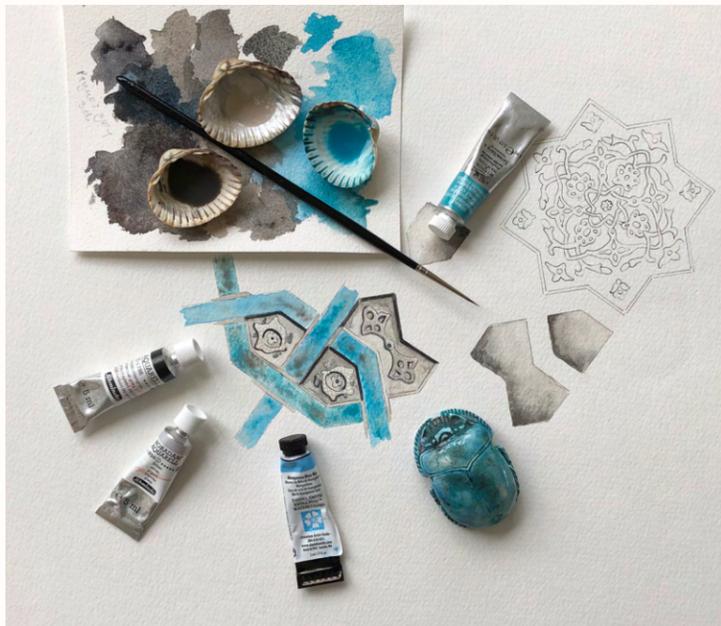
Synthémata is a 8 Pt polygonal pattern found in the Topkapi Scroll and many other locations in the Islamic world from the Seljuk period onwards, in particular in Anatolia (the Sultanate of Rûm).

The arabesques and palette are inspired by the time-worn blue- and turquoise-glazed tiles of Central Asia whose beauty lies in their faded, cracked, rough-textured imperfection.

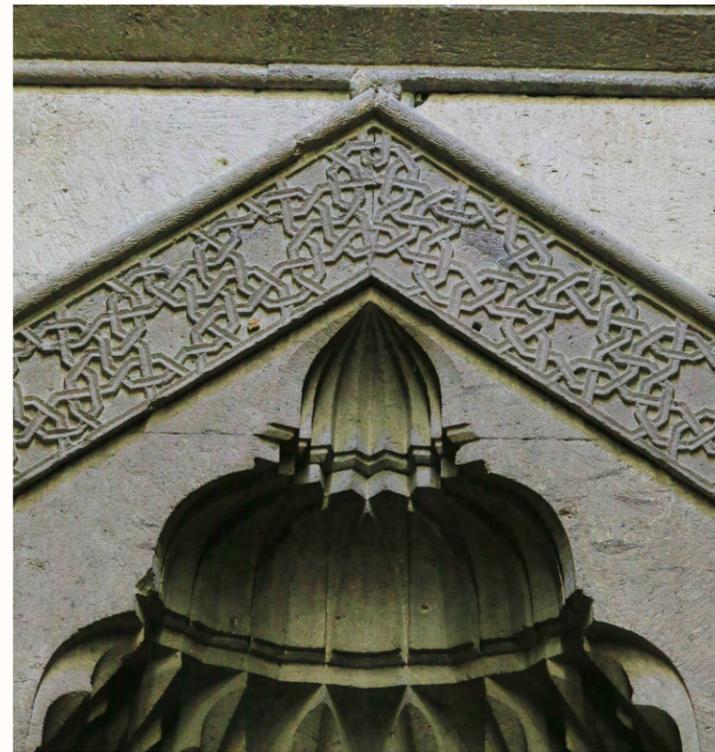


Work in progress

8 Pt polygonal layout, interlace, Timurid-style motifs

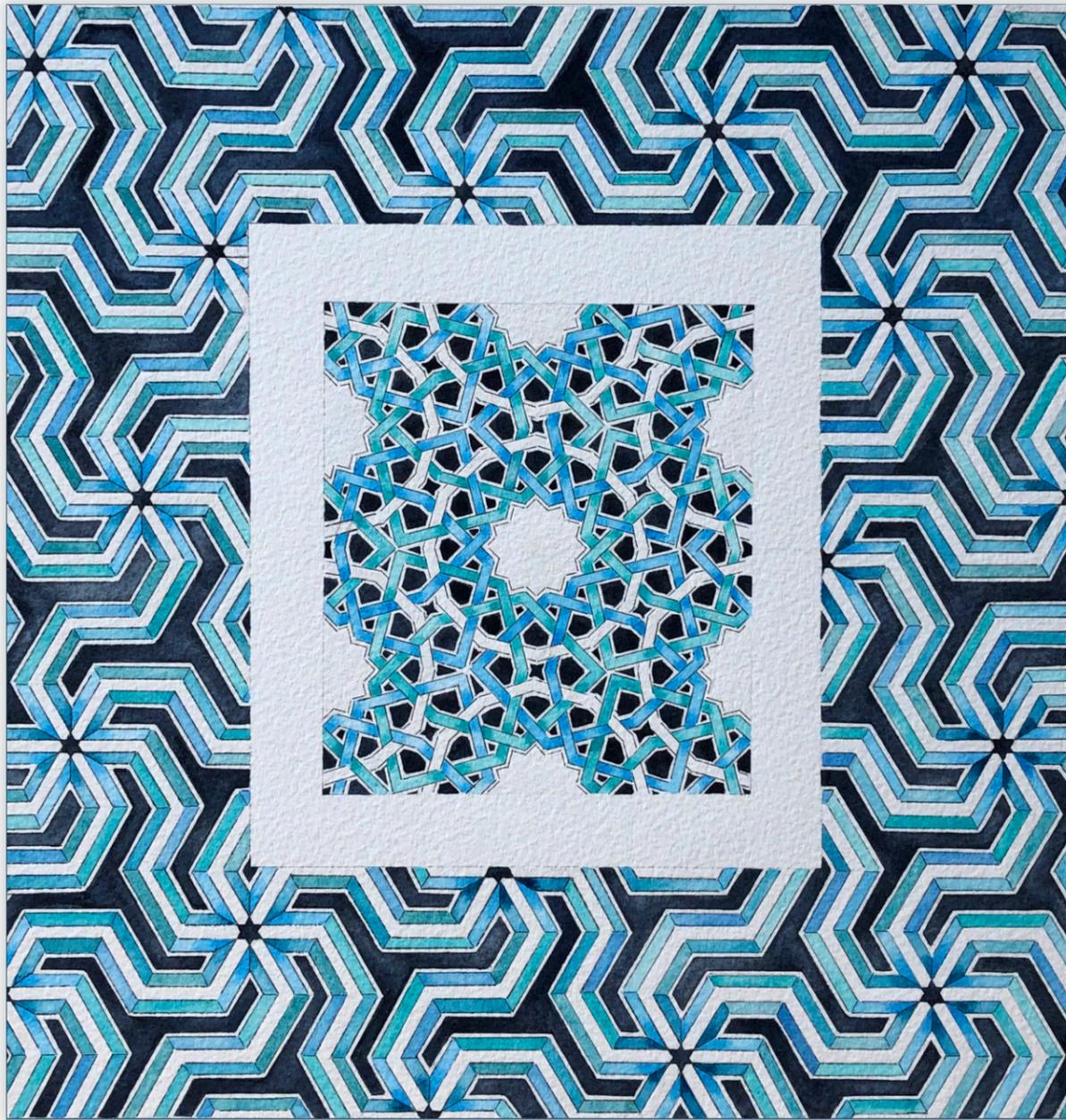


Palette trial



Historical pattern from the Huand Hatun Mausoleum, Kayseri.

Image credit: Serap Ekizler Sömnez

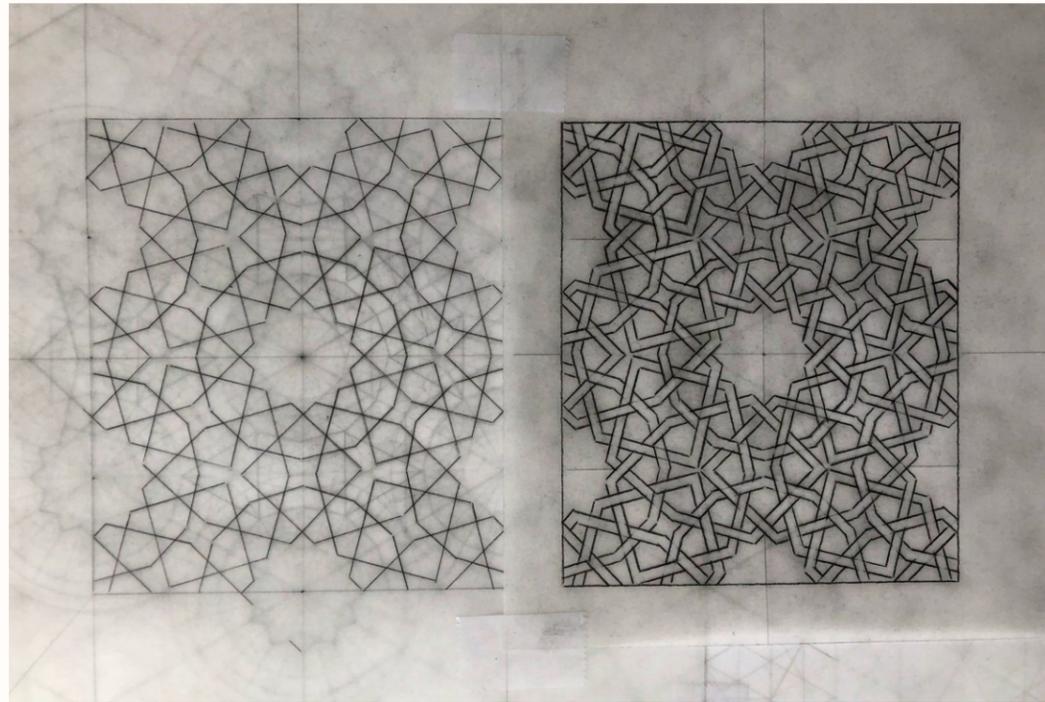


Composition comprising two late XIII, early XIV century Seljuk patterns constructed on the same isometric grid.

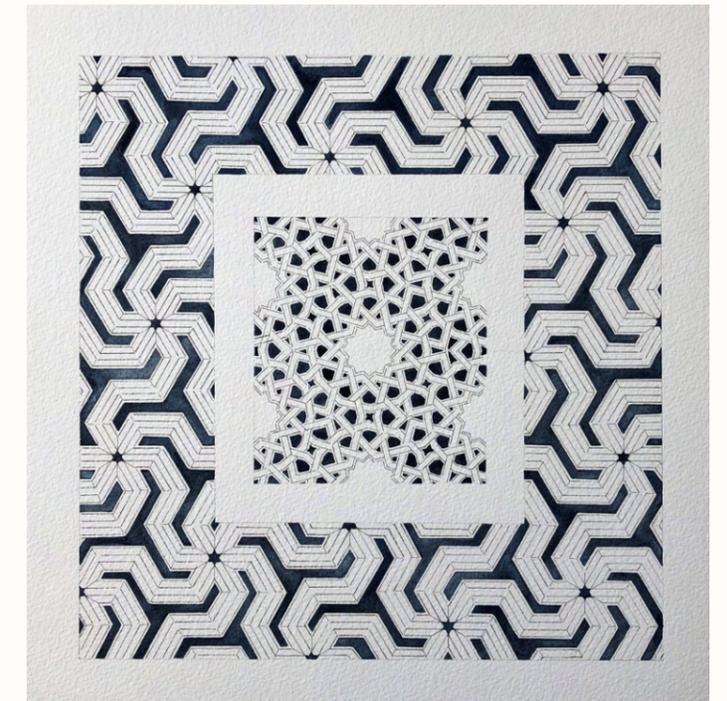
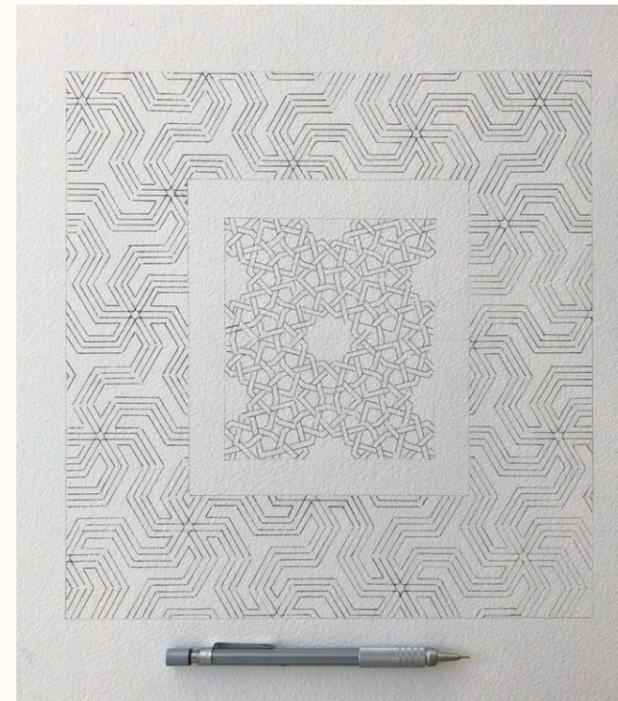
A 12 Pt design of interlocking rosettes surrounded by a 3 Pt pinwheel design.

A natural synergy exists between designs drafted on the same underlying geometric grid similar to that between shoots grafted from the same tree.

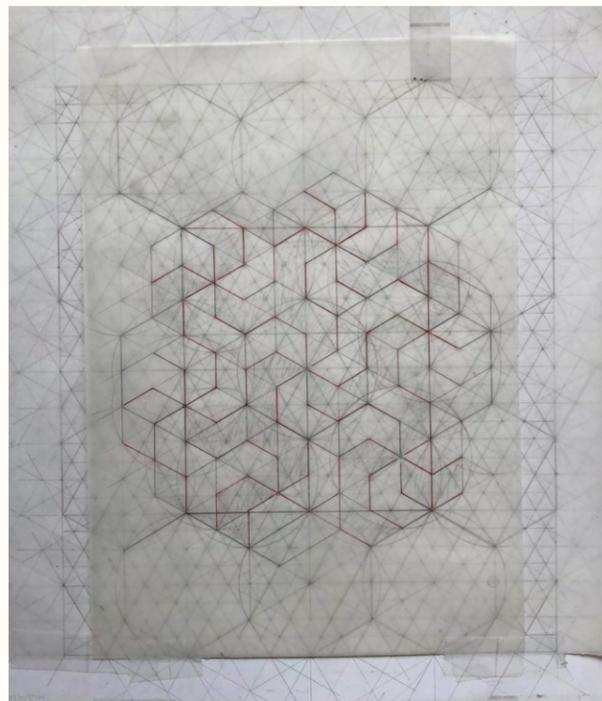
Isometric Duo, 2020
31x41 cm
Margi Lake



Geometry layout for the 12 Pt design of interlocking rosettes



Work in progress



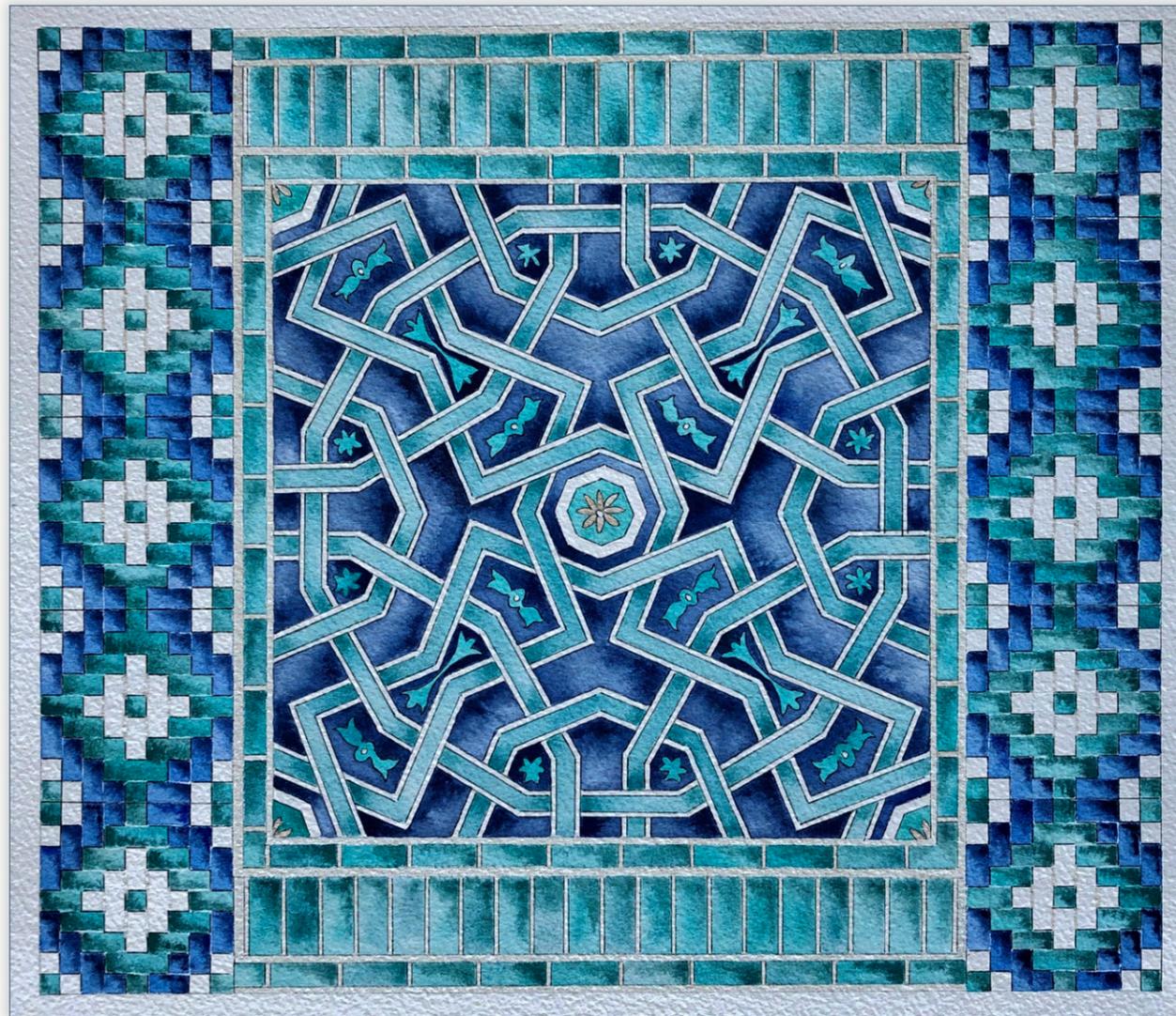
3 Pt pinwheel pattern



Palette trial



Work in progress



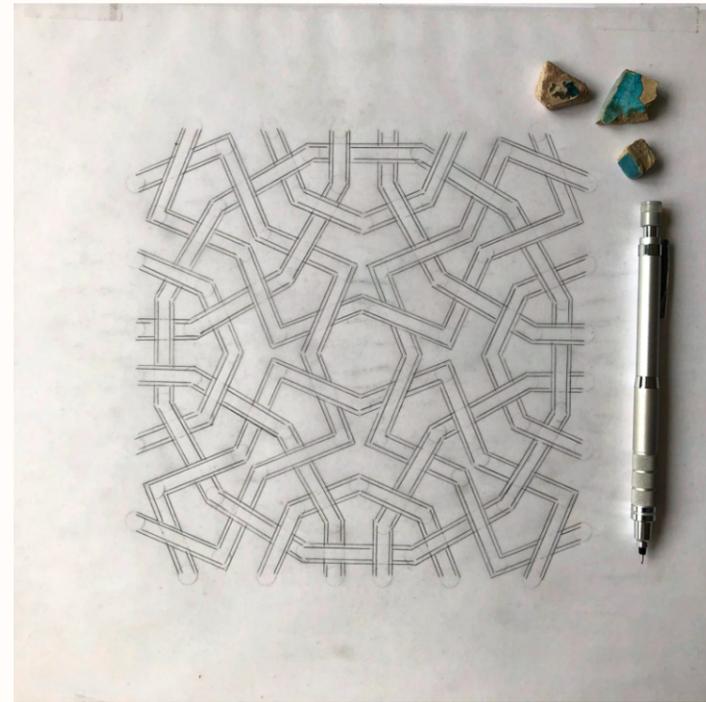
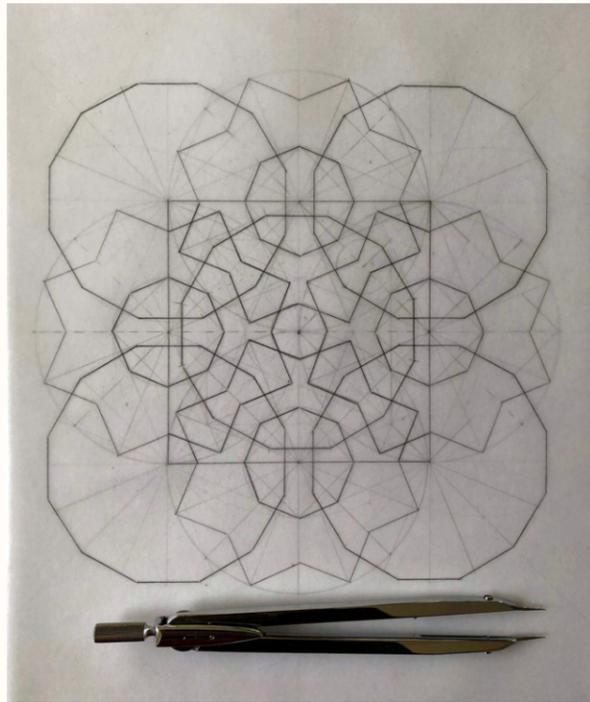
Reconstruction of a mid-XV century glazed terracotta tile panel from the Shah-i Zinda necropolis in Samarkand. The original has glazed ceramic facings in different shades of cobalt, azure blue, turquoise, pearly white and a gold star in the central octagon.

The inner design is a traditional 12/8 Pt interlaced pattern found in many locations in Central Asia.

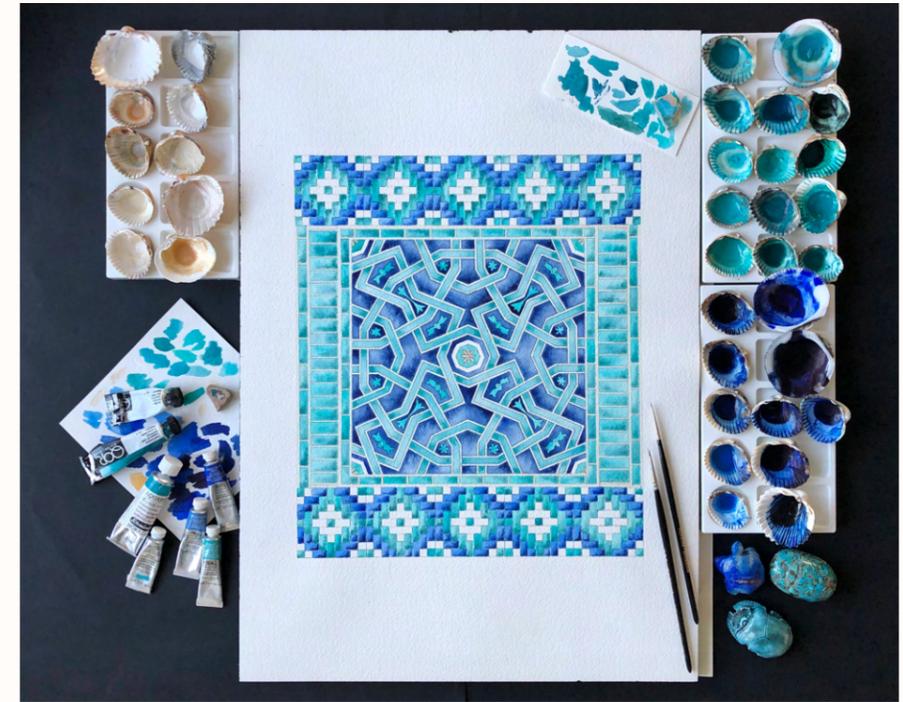
Shah-i Zinda, 2019

36x51 cm

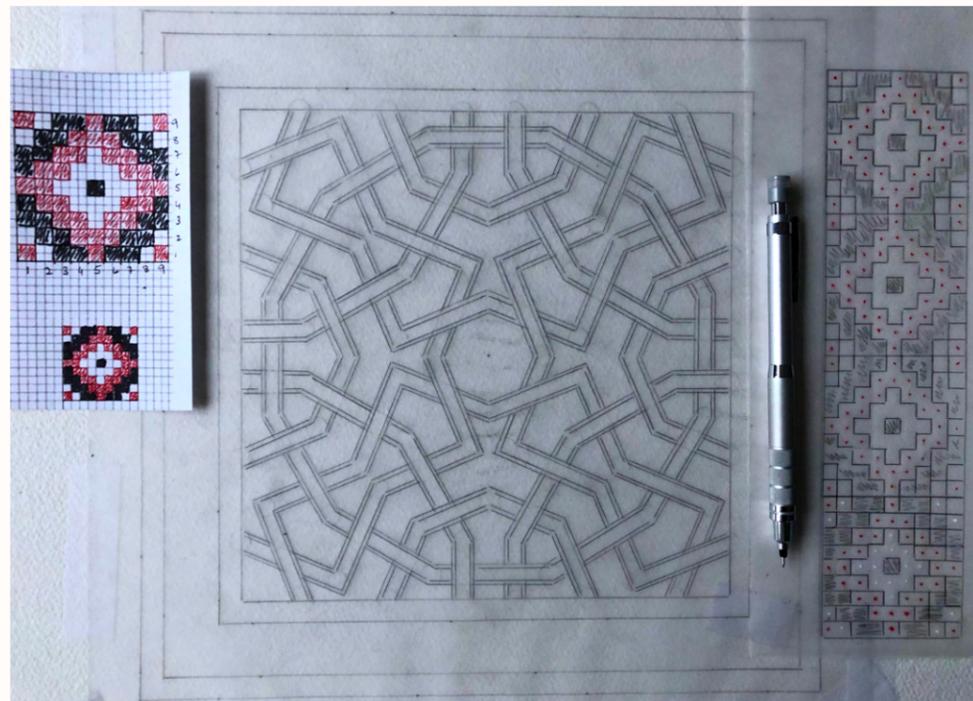
Margi Lake



12/8 Pt layout, border design



Work in progress



Work in progress



Historical tile panel from the Shah-i Zinda necropolis.



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