

CELESTIAL TURQUOISE

Sandrine Martin, Graduate Gemologist

« It is said that turquoise is like a cherry – the more it ripens, the better.
But all the cherry needs to ripen is the sun of one season,
whereas for turquoise it takes one thousand years »

19th century Persian natural history

Exalted by great civilizations throughout ages, turquoise is with lapis-lazuli one of the oldest gemstone materials known to man. A relatively rare gem found in dry geological environments such as deserts, turquoise was historically mined in a wide mineral-bearing stratum extending from Egypt through Iran and Tibet, with the most valuable desirable color turquoise, sometimes referred to as 'Persian Blue', originating from the legendary mine of Nishapur in Iran. Archaeological discoveries reveal that the gem was first utilized in western Iran around 7,000 BC (Hole et al.) and was known to the Egyptians before 5,500 BC. In China, turquoise was first used along the Yellow River in the Henan Province by the civilization of the Erlitou (1,900-1,600 BC). Highly praised by the Pre-Columbian societies, turquoise was used in the American Southwest and the first occurrences of the gem in Mesoamerica date to around 600 BC. Today turquoise is primarily sourced in the American Southwest, Iran, and China. Other deposits include Afghanistan, Argentina, Australia, Brazil, Chili, Egypt, Israel and Mexico.

An opaque blue-green copper-aluminum phosphate mineral, turquoise legendary unique hue mainly depends on the content of copper and iron in the rock: copper enhances the blue, while iron brings out the green. Turquoise nodules usually form between other stones and rarely appear as large pieces. Most often fashioned as a cabochon, the gem is also used for carvings and to produce small items such as beads. Gracefully incorporated into mosaics as inlays, turquoise unique bright blue-green colors and striking features create dazzling contrast with the other materials.



Turquoise nodule - California
Rob Lavinsky | Wiki Commons

Turquoise hue is positioned between blue and green on the color wheel. The color of turquoise is so unique that it has become the common word used to describe the slightly greenish shade of cyan and similar colors. Its English name, which has cognates in most European languages, is fairly recent. It dates back to the 17th century when the gem traveled from its legendary home in the vast plain of North-Eastern Iran to Venice, Paris, and other European cities. There, it became associated with the Turkish Empire and was called 'pietre turchese' in Italian and in French 'pierre turquoise', or 'Turkish stone'.

In Ancient Egypt, the gem was known as *mafkat*. The Persian word for turquoise - *firuz* - shares roots with the word for victory - *piruzi* - and the signification resonates with a similar meaning in Arabic, where it is known as *puruza* - fortunate. (Khazeny) In the Aztec civilization, turquoise was referred to as *xihuitl*, with the finest gems called *teoxihuitl*.

Praised in cultures of the Old and New World as a bringer of good fortune, a talisman, and a sacred gem, turquoise comes adorned with countless legends. Connected to the first sun rays in Ancient Egypt, "the stone garnered such high esteem in the Persianate world, that it became the name of the victorious dynasts and of cities and mountains where it was not even to be found". (ibid.) Considered of the divine essence to the Aztecs, many Pueblo American Indians believe that turquoise stole its color from the sky. (Lowry)

Unrestrained by time and geographical locations, the sky blue gem was associated with similar meanings of fertility, joy, nobility, power, and of which is divine. For many civilizations, turquoise is also a powerful symbol of transformation and regeneration. The present article focuses on the common fascination that turquoise - gem and color - has aroused for the Ancient Egyptians, the Persian, Timurid, Safavid, and Mughal Empires, and in Mesoamerica, especially for the Aztecs as a stone of life, prestige, and eternity.

1 – LIFE

I - ANCIENT EGYPT

1) - History

Turquoise may have been known to the Egyptians before 5,500 BC. The earliest evidence of mining by local Bedouin clans of the Sinai come from fragments of high-quality turquoise found in tombs in the El-Qaa region dated to around 5,000 BC. (Schorsch) Located in the southwest Sinai peninsula, the most important ancient turquoise mines are found in two locations: Wadi Maghara and Serabit el-Khadim. Wadi Maghara - "The Valley of Caves" - is an archaeological site known to the Ancient Egyptians as "the Terraces of Turquoise" which contains pharaonic monuments and turquoise mines dating from the Old (ca. 2,700 - 2,200 BC), the Middle (2,050 - 1,800 BC), and the New (ca. 1,550 - 1,100 BC) Kingdoms of Ancient Egypt. Serabit el-Khadim - "Heights of the Servants" - is a locality where turquoise was mined extensively in antiquity, mainly by the ancient Egyptians.

The interactions between Egypt and Sinai evolved under Sneferu (c. 2,600 BC), the founding Pharaoh of the Fourth Dynasty worked at Maghara and was also in contact with the sanctuary at Serabit el-Khadim. Later ages looked upon him as specially connected with Sinai, reckoning him as one of the protecting divinities of the place. As civilization developed, the Sinai sources of turquoise, and its malachite, and copper ores were becoming more important, especially during the Middle Kingdom when the occurrence of the blue gem increased greatly. Great activity was again shown during the reign of Hatshepsut (r. 1479-1458 BC), the first female ruler of ancient Egypt with the full authority of Pharaoh, and the 'Foremost of Noble Women' ordered the reopening of Wadi Maghara mines which had not been worked for nearly four hundred years.



Hathor - 3rd century BC | Musée du Louvre
Credit: Siren-Com | Wikimedia Commons

The workers dedicated the work to Hathor, the goddess of turquoise, and built temples in her honor. The last pharaoh to operate the mines and leave an inscription at Serabit el-Khadim was Ramses VI (r. c. 1145-1137 BC). The mines were exhausted and abandoned, as was the temple of the turquoise goddess Hathor after the Twentieth Dynasty. (Khazeny) Also associated with malachite, gold, and copper, Hathor was the patron of miners. As the goddess of the Sinai, she was the protector of desert regions. "It is by praying to the goddess Hathor, the Lady of Turquoise, and surrendering to her divine will that the miner will receive the inspiration to discover the mother lode from which he will draw exceptional benefit." (Aufrère)

2) - The Egyptian chromatic universe, a symbolic realm

"Uncovering the Egyptian chromatic realm is an invitation to consider the symbolic and suggested aspects of the chromatic means, and to take into account the material in its wholeness: with its texture, brilliance, intensity, and with its appearance - clear or dark."

Bernard Mathieu

The word 'color' as we know it was non-existent in the hieroglyph lexicon and at least two words could be translated by 'color': *jnm* and *jwn*. The first one refers to the material and to the tactile aspect of a surface. The latter could be translated by 'pelage/coat'. Holding a very similar meaning, *jwn* refers to a surface in terms of its outside texture and "complexion". Moreover, both *jwn* and *jnm* could be used to refer to a person's 'complexion' or 'behavior'. Ancient Egyptians thereby attributed the main colors a symbolic value according to their perception of the natural phenomena in relation with these colors: the yellow of the sun, the green of the vegetation, the black of fertile earth, the blue of the sky or the red of the desert. (Mathieu)

Blue *



Azurite - *tfr*



Lapis Lazuli - *hsbd*

The equivalent of our color 'blue' is non-existent in the Pyramid Texts, the oldest ancient Egyptian funerary texts reserved only for the pharaoh, dating to the Old Kingdom, and the words that are likely to correspond seem rather afar.

Conceived as a variant of black, the color for lapis-lazuli was *hsbd*.

Notably used for divine hair, it was eminently positive. (ibid.)

Green and blue-green * - The color of the waters and the sky



Wahdj



Malachite



Turquoise

Associated with notions of viridity and growth, *wahdj* was the color of freshness and humidity. It was the color of vegetation and new life.

The hieroglyph for green is a papyrus stem and frond.

Doing 'green things' was adopting a positive behavior, asserting life itself.

Along with black color, it was also the color of resurrection. (ibid.)

* Color credit: Wikimedia Commons

Green *wahdj* was also the color of the "Wedjat Eye", the most popular amulet of Ancient Egypt. The eye represents the healed eye of the god Horus. It embodies healing power and symbolizes rebirth, as well as regeneration and protection.

The goddess Hathor, Lady of Turquoise, is also associated to the Wedjat

Wedjat Eye Amulet

Faience, ca. 1070 - 664 BC

Credit: Metropolitan Museum of Art , New-York



Thus turquoise was considered a mineral extension of *wahdj* to Ancient Egyptians. When written with the determinant for minerals - three sand grains - *wahdj* is the word used for malachite, a color that represents joy. Geographically associated, organically, and chromatically related, the Egyptians brought the two gems together within a complementary system. With copper entering into their composition, the two main products of the Sinai, malachite and turquoise, show different shades of green, and were considered to be *wahdj*. (Mathieu)



Turquoise



Malachite

Credit: Wikimedia Commons

3) – Use and symbolism

Known as *mafkat* - the term also referred to copper and malachite - turquoise was a rare and precious commodity in Ancient Egypt. Metaphorically associated with fertility and vegetation, as well as with joy, creation, and life itself, its delicate and unique light blue-green color was much valued. Fashioned into small objects, such as beads, the blue gem of the Sinai was also used in gold jewelry, and divine offerings, including mummy ornaments and amulets.



When attached to the end of the plait of a child or young female, fish pendants were worn as amulets, and were used as a charm against drowning. Usually depicting either the upside-down catfish or the tilapia, both species were associated with regeneration. (Stünkel) Besides, tilapias were also a symbol of fertility and connected with the goddess Hathor.

Fish pendant - Turquoise and gold
Middle Kingdom, ca. 1878–1749 BC
Credit: Metropolitan Museum of Art, New-York

To complete the artists' popular palette of colors and to imbue precious objects with the symbolic content of viridity, man-made vitreous materials such as faience, glazed steatite, and glass were also used. Known as early as the Predynastic period - the end of the fifth millennium BC - the Egyptian faience was one of the most popular materials used for man-made amulets. Produced in green and blue colors - favored for their association with fertility, life, and regeneration - the material was eminently positive and may have been developed to simulate highly prized and rare blue stones like turquoise.

Metaphorically associated with the eternal cycle of the death and rebirth of the Sun God, the lotus flower was a prominent symbol of regeneration, creation and life in ancient Egypt.



Lotiform Chalice
Faience, ca. 945–664 B.C.
Credit: Metropolitan Museum of Art, New-York

II - MESOAMERICA

1) - History

Green and blue colored stones were highly esteemed in ancient Mesoamerica from the middle of the 11th century BC to the Spanish Conquest in the 16th century. Jadeite was for long the most preferred precious gemstone among pre-Columbian Mesoamerican cultures, such as the Olmec (2,500-500BC), whose achievements and radiance highly influenced the civilizations to come in Central Mexico. Broadly called 'greenstone' or *chalchihuitl* in Nahuatl (the language of the Aztecs), its green color enhanced with an exceptional luster was associated with water and maize. (Ji Mary Seo, Lifchez-Stronach)

While the first occurrences of turquoise in Mesoamerica date to around 600 BC, the gem became widely present approximately nine centuries later by the end of the Late Classic period (AD 600-900) (Weigand). The demand for the blue gem continued to grow through the flourishing Toltec civilization (ca. 900-1168CE).

Taube comments: "there was a virtual cult of turquoise at Tula", the ancient capital of the Toltecs. Its use increased after AD 1300 during the Postclassic period, surpassing jade as the most valued and widespread gemstone within the region. During the Aztec imperial years of the Late Postclassic (ca. 1430 to 1519 CE), the Mexica - the Aztec elites - were fervent consumers of turquoise. Their fascination for the gem largely derives from the Toltecs, legendary sculptors, and artists whom they praised as master artisans, lapidaries, and goldsmiths. (ibid.)

2) – Use of turquoise in Mesoamerica

"Turquoise became an extravagantly valuable possession and status marker, laden with so much symbolism that it is difficult for us to comprehend. The gem appears at almost every explanatory and symbolic juncture within the Mesoamerican ideological system."

Phil Weigand

Relatively soft, thus easy to carve, adorned with a unique blue-green color, turquoise offers the artisans a palette of enchanting hues and shades to create brilliant and graceful visual effects. Typically fashioned of minute tesserae elegantly associated with other precious prestige materials, such as feathers, shells, and mother of pearl, and delicately glued onto a wooden backing (Izeki), turquoise mosaics count among the most celebrated items of ancient Mesoamerican artistry and craftsmanship, including religious artifacts, royal regalia, and complex mosaic artworks.

3) – Turquoise in Aztec cosmology

The term for turquoise in Nahuatl was *xihuitl*, a term that can have such varied meanings as 'year', 'comet (meteor)' and 'herb' as well as turquoise. Turquoise was also associated with 'blue-green hues', and firelights' intense reds and blues. (Taube) The finest gems were called *teoxihuitl*, which translates as 'fine turquoise'. The prefix *teotl* - often translated as god - stands for that which is divine, extraordinary, thus conferring the notion of sacredness. The word *xihuhtic* 'blue' also derives from the term *xihuitl*. (Thouvenot)



To the Aztecs, the blue mineral was a product of the earth, a precious gem born from deep within the 'navel of Earth' in a place known as Tlalxicco - Place of the Earth's Navel, the symbolic center of the earth, that researcher Patrick Johansson suggests may once have been known as Tlalxiuco - In the Place of Turquoise or Xiuhtecuhtli, the Turquoise Lord. (Bassett) Also called Old God, the Aztecs worshipped Xiuhtecuhtli as the creator of all life and the god of fire. He was also the lord of volcanoes, the personification of life after death, warmth in the cold, light in the darkness, and food during famine. Xiuhtecuhtli was also considered the mother and father of all deities that resided in the center of the universe. (Olivier and López Luján, 2009) In Aztec religion, the spirit form of Xiuhtecuhtli was the mythological serpent Xiuhcoatli, Turquoise Serpent.

Seated stone figure of Xiuhtecuhtli - AD 1325-1521
British Museum, London
Credit: Simon Burchell | Wikimedia Commons

4) – A symbol of fertility, growth, abundance and life itself

Thought to attract moisture, turquoise's green-blue color conferred the gem with the symbolic meanings of fertility, growth, abundance, and life itself. More than an extravagantly valuable possession, the precious gem was also a metaphor for life in social and religious realms. (Harbottle - Weigand)

One of the most prominent gods in the Aztec pantheon, Tlaloc - He Who is the Embodiment of Earth or He Who Makes Things Sprout - is one of the most ancient deities in Mesoamerica, with origins tracing back to the Olmec and the Maya civilizations. His name derives from the Nahuatl word *tlalli* which means 'earth' or 'soil'. Considered the god of rain, water, lightning, and thunder, Tlaloc is the patron of agriculture and is associated with fertility.



Now at the British Museum, this mask is believed to represent the Feathered Serpent Quetzalcoatl or the Rain God Tlaloc; both are associated with serpents and with turquoise. Formed of two intertwined and looped serpents worked in contrasting colors of turquoise mosaic, the striking green and blue colors of the mosaic evoke the waters and vegetation, one in green and one in blue. Known as Quetzalcoatl Tlaloc Tlamacazqui, the priest who served Tlaloc in the Templo Mayor at Tenochtitlan may have worn a mask like this as part of his ritual attire. (Vila Llonch)

Turquoise mosaic mask | Aztec or Mixtec (AD 1400-1521)
© Hans Hillewaert - Wikimedia Commons

2 - PRESTIGE

I - MESOAMERICA

1) - Masks in the cultures of Mesoamerica

"The mask possesses a unique power of suggestion for the imagination...

It is the synthesis, the essence, of the deity, of the demon, of the dead or of the hero that is being represented."

Miguel Covarrubias

One of the characteristics of the Mesoamerican artistic tradition was the extensive manufacture and use of masks. Nourished with a shamanistic religious heritage, masks played an important role in the political, social, and religious fields in the cultures of Mesoamerica. They were what the anthropologist Claude Lévi-Strauss termed a "mask culture". Used to honor and pay homage to the forces of nature, masks also played a crucial role in ritual ceremonies serving as a ritual agent of transformation (Markman) and enabling political and religious leaders to assume the identity of the gods, and to create communication bridges between the worldly environment and the supranatural realms. "Serving various purposes, including dances, theatrical representations, as well as political events, and religious celebrations, including war, the mask in the most profound sense, revealed rather than disguised. Aztec masks therefore must be understood as revelations, or signs, of a person's special status. In Nahuatl language, the word for face, *xayacatl*, is the same word used to refer to something that covers the face." (Molina and Karttunen)

2) - Turquoise, an emblem of authority and power

"The king himself Aztec sits in state on his throne, wearing a turquoise cloak and turquoise diadema as symbols of his exalted nobility"

Frances F. Berdan

The most powerful and prestigious masks were made of the rarest and most precious materials. Along with conch and mother of pearl, turquoise was one of the highest-prestige materials in the pre-Hispanic cultures, especially in the Aztec period (1,325–1,521 AD). Attributed to the sun, meteors and fire, the gem was used as an agent, imbuing the masks with its inherent qualities.

According to Nicholson (1971), Xiuhtecuhtli 'Turquoise Lord', 'served as the archetype of all rulers'. Commonly identified as the god of fire, its *nahual*, or spirit form, is Xiuhcoatl, the Fire Serpent. He was associated with youthful warriors and with rulership. Taube explains that Xiuhtecuhtli "was explicitly evoked during Aztec rites of imperial coronation. However, in accession ceremonies, it was not only the god but the turquoise that he embodied in particular ornaments, such as the *xihuitzolli* crown and *yacaxihuitl* nosepiece".

By the late Post Classic, turquoise has become "the most esteemed form of royal regalia with the *xihuitzoli* royal crown of the Aztec emperors made of turquoise. The royal ceremonial attire also included the *yacaxihuitl* nose ornament, the latter of which was also used by nobles and heroic warriors." (Taube) "The *xihuitzolli* and other turquoise ornaments directly connected the sovereigns to the god of fire, Xiuhtecuhtli, the mother and father of all deities that resided in the center of the universe." (Olivier and López Luján)

Mask of Xiuhtecuhtli - British Museum
Mixtec-Aztec, AD 1400-1521
Turquoise on wood, mother of pearl, conch shell
Credit: Wikimedia Commons



3) - An object of tribute

"Masters of the world, their empire so wide and abundant that they had conquered all the nations and that all were their vassals. The guests, seeing such wealth and opulence and such authority and power, were filled with terror."

Diego Durán, the Spanish friar, quoted in Nichols, 451

With its capital city Tenochtitlán, the Aztecs emerged as the dominant force in Central Mexico from ca. 1345 to 1521, with an empire covering at its greatest extent most of northern Mesoamerica. The most important sources of income for their empire were tributes and taxation. Fierce warriors, they continuously engaged in military interventions and imposed the conquered regions to pay a tribute, generally in the form of precious local materials and luxury items, including animal skins, tropical bird feathers, fine jade, and turquoise. The 16th-century manuscript Aztec Codex, the *Codex Mendoza* shows items received as tribute in the Aztec capital, including turquoise masks from several provinces in the empire (Smith 1998).

At the height of the Aztec Empire, between 1428 and 1521 CE, many Mixtec towns came under Aztec rule and paid tribute to the emperor, including gifts of gold and turquoise. One of the major civilizations of Mesoamerica, the Mixtecs were famed for their exceptional mastery of jewelry, in which gold and turquoise figured prominently. The



refined work of Mixtec artisans and artists was highly regarded throughout ancient Mesoamerica, and their craftsmanship was much prized in Tenochtitlán and greatly influenced Aztec art.

Mixtec Funerary Mask
Monte Alban Santo Domingo Cultural Center
Oaxaca City, Mexico
Credit: Adam Jones - Wikimedia Commons

II – PERSIA and EURASIAN EMPIRES (Timurids, Safavids, Mughals)

1) – Origins of the Persian sky blue stone

“It is known that turquoise is a stone the kings of Persia still adorn themselves with. (...) He who carries the turquoise shall triumph over enemies and shall be honored and respected in the sight of the people. For this, they call turquoise the stone of victory, the stone of honor, the stone of the eye... It is among the attributes of Venus and God knows best.”

Aristotle - Al Bayhaqi

Archeological discoveries from the Deh Luran Plain in western Iran indicate that turquoise may have been first used around 7,000 BC (Hole et al., 1969), and the quantity of turquoise artifacts discovered in burial sites suggests the importance of this mineral in this ancient civilization's traditions. While the turquoise deposits of Nishapur, at the foot of the Binalud Mountains in the eastern Iranian province of Khurasan, are famed for delivering the finest gems, other important mines include the Baghu deposit in southern Semnan Province and the Shahr-i Babak deposit in western Kerman Province, the latter of which was mentioned in Marco Polo's Book of the Wonders of the World between 1390 and 1430 (Weisgerber, 2004). In fifth and sixth centuries, the city of Nishapur was the central market of jewels and turquoise in Iran (Rahmati et al., 2013).

Birthplace of polymath Omar Khayyam, the home for the legendary intense sky blue color gem is auspiciously located along the Silk Roads, and was once the most important urban centers in western and central Asia before repeated earthquakes combined with the Mongol's invasion in 1221 would reduce its radiance. The source of the valuable turquoise mines, however, remained well-alive, and Nishapur continued to be the heartland of the sky blue stone and the axis of the gem's global trade. (Khazeny)

2) - An object of trade and barter

Kazheny suggests that the Timurid, Safavid, Mughal, and Ottoman empires negotiated their power with rival states and their subjects through the exchange and display of regalia and nature's objects, one of which was the circulation of turquoise and its culture. After the conquest of Samarkand from the Mongols in 1369, Timur (Tamerlane) founder of the Timurid dynasty (1370-1510/1526), established Samarkand as the capital of his empire. By sparing the lives of local artisans and bringing the most gifted artists from different conquered lands to his capital, Timur established Samarkand as a vibrant hub for arts and culture, initiating one of the most brilliant periods in Islamic art.



Bibi Khanum Mosque, Samarkand, Uzbekistan
Credit: Shakti | Wikimedia Commons

Considered a masterpiece of the Timurid Renaissance and one of the most important monuments of Samarkand, the Bibi-Khanym Mosque was one of the largest and most magnificent mosques in the 15th century's Islamic world.

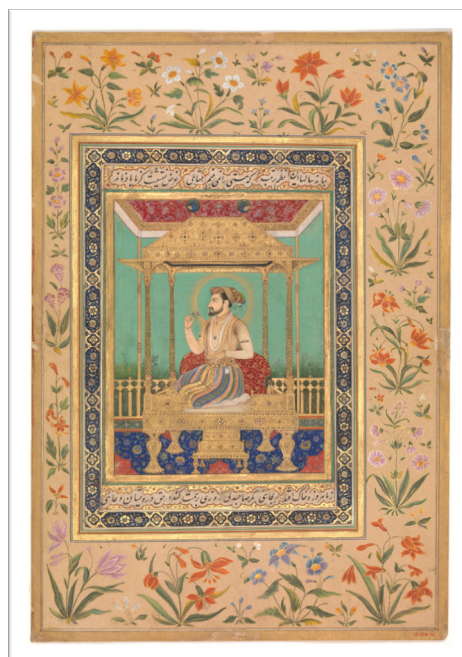
Great patrons, the Timurids were renowned for their prodigious building projects and sparking artistic and intellectual life in Iran and Central Asia, which they dominated in the fourteenth and fifteenth centuries. Under their domination, turquoise was raised into a symbolic object of inter-imperial contact and exchange, power, and sovereignty across Central Asia, South Asia, and the Near East. Traded as an ornament, talisman, and precious jewel, the blue gem became a treasured object of trade and material culture of early modern Islamic empires. (ibid.)

Under the Timurid and Safavid dynasties, the legendary Persian mines reached their peak production, and in 1510 the city and mines of Nishapur came under the control of the Safavids (1501-1722). Like the other post-Timurid empires of Islamic Eurasia, the Safavids negotiated their sovereignty and power through tributary exchanges that included natural resources and objects such as precious stones. Turquoise counted amongst the most valued tribute material. Shah Abbas (r. 1587-1629), also known as Abbas the Great, placed the precious mines of Nishapur under direct imperial control and reserved the finest gems for his own to store in his treasury and to present as gifts to kings and princes. The remaining was sold or traded away. (ibid.)

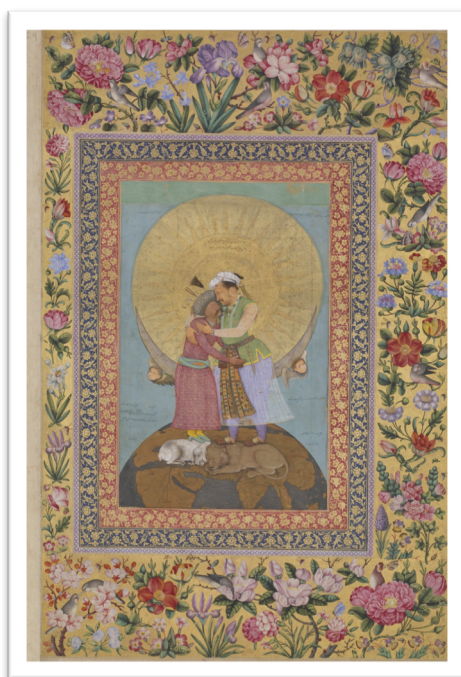
3) - A symbol of imperial power

Established in the 1520s, the Mughal Empire extended across northern India and Persia and was led by Muslim rulers descended from Genghis Khan. Turquoise and its culture were ingrained in the Mughal consciousness - in his memoirs, *The Baburnama*, founder emperor of the Mughal dynasty Babur (r. 1525-1540) reports on the turquoise mines in his native Ferghana. With the empire's growing commercial and cultural contact with the outside world, and the Indo-Persian crossroads, the trade between the Safavids and the Mughals thrived, and the blue gem became emblematic in the commerce between the two Islamic empires, with the finest material originating from the mines of Nishapur. By the seventeenth century, the sky blue gem had become part of the imperial Mughal regalia, incorporated in jeweled thrones and displayed in elaborated court ceremonies marking the anniversary of the coronation of emperors such as Jahangir (r. 1605-27) and Shah Jahan (r. 1627-58). (ibid.)

Portrait of Shah Jahan on the Peacock Throne 19th century
Credit: Metropolitan Museum of Art , New-York



4) – The stone of conquest and of victory



In the early 16th century, turquoise as an imperial gift was at the chore of a conflict opposing the Safavids and Mughals over the Afghan city of Qandarah, which lay between the two empires. Strategically positioned in southeastern Afghanistan on the caravan routes that connected Safavid Iran and Mughal India and traversed Central Asia, the city was of such importance that it was besieged and changed hands on many occasions in the 16th and 17th centuries.

Commissioned by the Mughal Indian emperor in 1618 from the court artist Abu'l Hasan, the image illustrates the Safavid–Mughal power rivalry and the role that turquoise played as a symbol of imperial power. Entitled 'Emperor Jahangir Embracing Shah Abbas of Persia,' perhaps used as a form of propaganda at the time, the painting displays Jahangir embracing Shah Abbas the Great, standing on top of the world. As the Shah of Persia rests on a lamb, the Conqueror of the World rises "on a sleeping lion that straddles India and Central Asia. On his right hand, he wears a ring of sky-blue turquoise, the stone of victory and conquest". (ibid.)

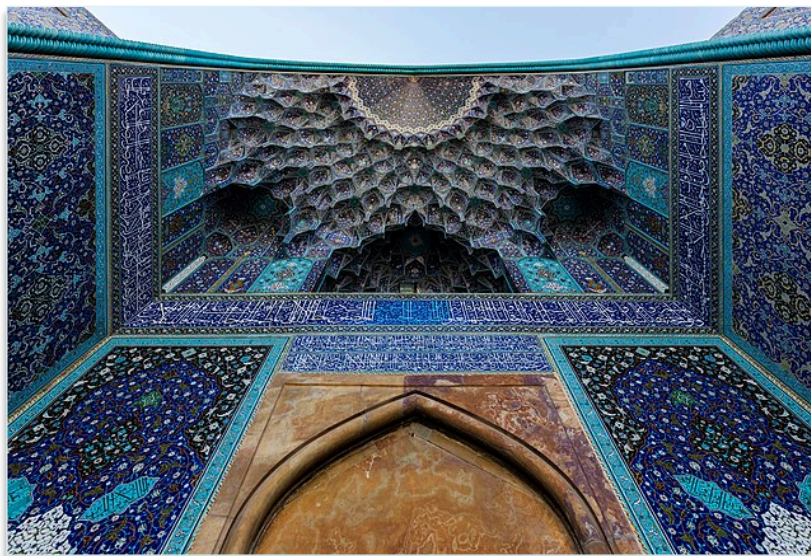
Allegorical representation of Emperor Jahangir and Shah Abbas - Abu al Hasan
The St. Petersburg Album - Freer and Sackler Gallery | Wikimedia Public Domain

3 - ETERNITY

I - PERSIA - ISLAMIC EURASIA

"The temple I frequent is high,
A turkis-vaulted dome – the sky,
That spans the world with majesty."

Omar Khayyam



Bottom view of the iwan of the main entrance to the Shah Mosque in Isfahan
Credit: Diego Delso - Wikimedia Commons

Regarded as one of the seven colors *haft rang* of heaven - turquoise blue, night blue, black green, red, ocher, and white - rooted in Persian mystical romances, turquoise's celestial shade imbued the gem with a significant meaning of sacredness. As the turquoise trade spread in Central Asia, the holy blue became a defining color of imperial cities and architecture of Islamic Eurasia. Adopted for the palette of tiles fired in the workshops of ceramicists, its vibrant celestial color shined along the trade routes of Islamic Eurasia from Timurid Samarkand to Tabriz and from Safavid Isfahan to the Mughal province of Sindh, adorning the domes, minarets, madrassas, and mausoleums across early modern Eurasia as an expression of power and holiness. (ibid.)

The monumental architecture of the sky-blue city was first exemplified in the Timurid Empire with the imperial and religious architecture of Shahr-i Sabz and Samarkand. The birthplace of Tamerlane, Shahr-i Sabz, was the early Timurid capital city before the emperor elected Samarkand as his capital in 1370. Imperial chronicler Sharaf al-Din Ali Yazdi attests to the grandeur of Shahr-i Sabz and honors the sky blue gem in the *Zafarnam*, or 'Book of Victories', circa 1436:

"The loftiness of its pinnacles reached such a height that the very sky fell from the eyes of the stars.
In the dark night, the white light of its walls made the muezzin think it was time for the morning call to prayer...
Because its surface was the color turquoise (*rang-i firuza*), it became one with the stars."

The Timurid architectural style largely influenced the development of later Islamic architecture. Particularly the Safavids and the Mughals aspired to erect blue mosques and monuments to epitomize the display of their political and religious power. "Mixing roasted copper, lead, and tin, skilled craftsmen, tile makers, and ceramists strived to reproduce the precious turquoise color of *firuza*." (Khazeny)



“The best work of shahs while on the throne
Is to solidify the foundations of the faith
By building monuments of stones,
Stones that bring colors into the world. ”

Kamal al-Din’s chronicle and travel account, Abd al-Razzak Samarquandi,
describing the Timurids’ monumental spaces of pilgrimage and veneration.

Cupola of Tilla Kari Mosque, Samarkand, Uzbekistan
Credit: Almutamid | Almuta - Wikimedia Commons

The imperial architecture of the turquoise city culminated in Persia when Abbas the Great decided to move the capital of his empire to Isfahan in 1598, and envisioned a city of immense scale, consisting of monumental buildings tiled in blue and gold. The master jewel in this project was the Masjed i Shah, now regarded as one of the masterpieces of Persian architecture in the Islamic era. Considered as Shah Abbas’ largest architectural monument, the Royal Mosque was built to center political, religious, economic, and cultural activities. Constructed with a vision of grandeur with the largest dome in the city, the grand ceramic domes of the elegant Mosque displayed most brilliantly the color of turquoise. (ibid.) The Masjed i Shah and the Naqsh-e Jahan Square are UNESCO World Heritage.



Naqsh-e Jahan Square, Isfahan - Drawing of Xavier Pascal Coste (1781-1878)
Credit: Wikimedia Commons

The Timurid metropolitan style of turquoise cities journeyed through Central Asia to India where it was adopted by the Mughals with certain variations. Integrated into the empire capitals' monuments as displayed in Dehli, Fatipur Sikri, and Agra, it was most elegantly evoked in the Shah Jahan Mosque in the city of Thatta, the capital of Sindh in the 16th and 17th centuries. The Taj Mahal in Agra, completed in 1653 on the order of Mughal emperor Shah Jahan is adorned with bountiful precious stones from across Asia, including sky-colored turquoise from Iran and Tibet, is also influenced by the Timurid imperial vision. (ibid.)



a
Shah Jahan Mosque, Thatta
Credit: Amanasad83 | Wikimedia Commons

II - MESOAMERICA - AZTECS

As demonstrated earlier, the term used by the Aztecs for turquoise *xihuitl* covers a wide range of meanings, including 'turquoise', 'grass', 'solar year', 'comet', 'preciousness' (Izeki), and the finest gems are endowed with a notion of sacredness. A metaphor for life in social and religious realms, turquoise became a potent symbol of nobility and was widely used in mosaic masks, part of the royal regalia and religious ceremonial attire. The gem imbued the masks with its divine essence, and thus invested the wearers with its qualities. Similarly, 'masks in Pre-Columbian Mesoamerica served in death and life as a metaphor for the ultimate nature of reality. From the earliest time, masks and their accompanying ritual were a part of Mesoamerican life and death. Turquoise mosaic masks specifically were a common feature in the elaborate tombs and burials of Mixtec rulers and important citizens and were also part of the Aztecs' funerary rituals. (Hartmann) Additionally, Taube notes that turquoise ceremonial attire made of turquoise, including the *xihuitzolli* crown and the *yacaxihuitl* nosepiece, was used in Aztec mortuary rites for dead warriors.



The skull mask was yet another way of suggesting the link between life and death, a link represented metaphorically by the conception of the funerary mask. The idea of preserving and decorating the skull of an important person is reminiscent of the Maya practice, and several similarly decorated skulls were found in both Aztec and Mixtec offerings. The alternating bands of blue turquoise and black lignite which compose the face suggest the facial painting of Tezcatlipoca whom this mask may well represent. (Hartmann) Brought to central Mexico by the Toltecs, Tezcatlipoca - Smoking Mirror - is the god of the Great Bear constellation and of the night sky. He ruled over the Aztec pantheon with Huitzilopochtli, Tlaloc, and Quetzalcoatl.

Turquoise skull-mask | Mixtec-Aztec (1400-1521)
Now at the British Museum
Credit: Wikimedia Commons

Quetzalcóatl - the Feathered Serpent - was one of the most important gods in Mesoamerica, particularly for the Toltec and Aztec civilizations. Associated with the god of wind and dawn, he was the patron of the priests. With Huitzilopochtli, Quetzalcóatl was given the task of creating the earth, other gods, and people. (Smith) Imbued with a complimentary dualism typical to the Aztec cosmology, Quetzacoatl represents the union of the earth and sky.

Serpents were connected with fertility, renewal, and transformation and played a prominent role in the Aztec religion and cosmology. The word for serpent *coatl* is associated with several gods, including Quetzalcoatl - Feathered Serpent - and Xiuhcoatl - Fire Serpent - both related to turquoise.



Double-headed serpent | Aztec 1400s-1500s
Credit: Geni - Wikimedia Commons

Now at the British Museum, this double-headed serpent is emblematic of the Aztec art. Carved in wood and decorated with turquoise mosaic, coral and shells, it was probably worn on ceremonial occasions as a chest-ornament. Double-headed serpents *maquizcoatl* were considered to be the bearers of bad omens and were associated with elite figures. *Maquizcoatl* was one of the names given to the supreme Mexica god Huitzilopochtli. (Vila Lonch)

III – ANCIENT EGYPT

Metaphorically, metals and minerals were considered to be imbued with divine essence, with the gods themselves, by the Ancient Egyptians; so much so that they represented the gods in the form of precious materials. The conception of nature and mines was largely symbolic; in the Egyptian universe, metals and precious minerals were associated with poetry and superstitions. They irrationally belonged to the realms of the fantastic and the supernatural. Verbs such as *prj* and *bsj* - 'coming out' and 'emerging' - were used, connoting the idea that minerals grew under the influence of some powerful force governing underground products. Turquoise served as the medium through which one comes into contact with the goddess Hathor. Hence the gem was believed to regenerate the deceased in motherhood and was associated with birth and rebirth. (Aufrère)

For the ancient Egyptians, the image of the goddess Isis suckling her son Horus was a powerful symbol of rebirth. The goddesses Isis and Hathor embody motherhood and are closely associated.



The Goddess Isis and her Son Horus
Faience | 332–30 B.C. (Ptolemaic Period)
Credit: Metropolitan Museum of Art, New-York



Turquoise, stone and color, was often used to carve or represent scarabs. Worn as protective amulets and piece of jewelry, the scarab beetle was associated with the eternal cycle of life.

Ring with Uninscribed Scarab
Turquoise | ca. 1850-1640 BC
Credit: Metropolitan Museum of Art, New-York

At the time of the Judgment of the Dead, the heart of the deceased is weighed in the scale against *Maât* - Truth, Justice, Harmony. Intended to restore to the deceased the use of his heart, not as a vital organ but as a seat of thought, the scarab amulet became an essential element of the funeral trousseau by the New Kingdom (ca. 1550 - 1100 BC). (Ziegler)



Scarab Inscribed "Hatshepsut, United with Amun"
Steatite (glazed) | New Kingdom, ca. 1479–1458 BC
Credit: Metropolitan Museum of Art , New-York

Born from deep within the 'navel of Earth', turquoise - gem and color - continues to exert an extraordinary and brilliant fascination. Through its poetry and symbolism, its color has suggested tenderly, yet powerfully, to many peoples and civilizations much that is common to us all, something that has transcended time and space, as we all share the same Earth and celestial vault.



Winged Scarab Amulet - Faience | 664 - 332 B.C.
Credit: Metropolitan Museum of Art , New-York

REFERENCES AND FURTHER READINGS INCLUDE:

ANCIENT EGYPT

L'univers Minéral Dans La Pensée Égyptienne. Institut Français d'Archéologie Orientale, Cairo - Sydney H. Aufrère, 1991

L'Univers Minéral Dans La Pensée Égyptienne: Essai De Synthèse Et Perspectives (Autour De L'univers Minéral X) Archéo-Nil n° 7 - Sydney H. Aufrère, octobre 1997
<https://www.archeonil.fr/revue/AN07-1997-Aufrere.pdf>

Couleurs de l'Égypte Ancienne - Alistair Boddy-Evans, updated January 2019

A History of Sinai - Lina Eckenstein, 1921

Les Couleurs Dans Les Textes Des Pyramides : Approche Des Systèmes Chromatiques - Bernard Mathieu

Turquoise in Ancient Egypt - Heilbrunn Timeline of Art History Essay, Department of Objects Conservation, The Metropolitan Museum of Art - Deborah Schorsch, April 2018

<https://www.metmuseum.org/blogs/now-at-the-met/2015/upside-down-catfish> - Isabel Stünkel, 2015

Les Pierres Précieuses De l'Égypte Pharaonique, L'exemple Des Bijoux Du Serapeum De Memphis. Bulletin de la Société Nationale des Antiquaires de France, 1996, 1999. pp. 244-251- Christiane Ziegler
https://www.persee.fr/doc/bsnaf_0081-1181_1999_num_1996_1_10097

MESOAMERICA - AZTECS

The Fate of Earthly Things: Aztec Gods and God-Bodies - Molly H. Bassett, 2015

The Aztecs: Lost Civilizations - Frances F. Berdan, July 2021

Aztecs of Central Mexico : An Imperial Society - Frances F. Berdan, 1982

Turquoise in Pre-Columbian America - Garman Harbottle and Phil C. Weigand, 1992

Cracking the Code of Pre-Columbian Turquoise Trade and Procurement Strategies
www.researchgate.net/publication/237043762 - Sharon Hull and Mostafa Fayek, 2012

"Images of Moctezuma and his Symbols of Power", Moctezuma: Aztec Ruler - C. McEwan and L. López Luján (eds.), London, The British Museum Press, 2009, pp. 78-91, 304-312.
<https://www.mesoweb.com/es/articulos/sub/Images-of-Moctezuma.pdf>

Masks of the Spirit: Image and Metaphor in Mesoamerica - Peter T. Markman, Roberta H. Markman, 1989

Máscaras mexicanas, simbolismos velados - 2015 Exhibition, Instituto Nacional de Antropología e Historia, Mexico - Sofía Martínez del Campo Lanz, Curator

The Oxford Handbook of Mesoamerican Archaeology - Deborah L. Nichols, Christopher A. Pool, 2012

Golden Kingdoms. Luxury Arts in the Ancient Americas - Joanne Pillsbury & Al., 2017

Turquoise Mosaics from Mexico - Rebecca Stacey, Caroline Cartwright, Andrew Middleton, Colin McEwan, 2006

The Symbolism Of Turquoise In Ancient Mesoamerica - K.A. Taube, 2012

Was Aztec And Mixtec Turquoise Mined In The American Southwest? - Thibodeau Et Al., Science Advances, June 2018

La Turquoise Selon Les Sources En Nahuatl - Marc Thouvenot

Archaeology without Borders: Contact, Commerce, and Change in the U.S. Southwest and Northwestern Mexico / Turquoise - Formal Economic Interrelationships between Mesoamerica and the North American Southwest - Phil Weigand, 2008
<https://www.rediech.org/inicio/images/k2/Archaeology-3-19.pdf>

Turquoise Artifact from Teotihuacan - Phil Weigand, 1999

PERSIA AND ISLAMIC EMPIRES (TIMURID, SAFAVID, MUGHAL)

Sky Blue Stone – The Turquoise Trade in World History - Arash Khazeni, 2014

An Inquiry into Iranian Architecture Manifestation of Identity, Symbolism, and Power in the Safavid's Public Buildings.pdf - Rafooneh Mokhtarshahi Sani, Sep. 2009

Turquoise Grading in Persian Historical and Modern Times; A Comparative Study - Masoud Ovissi, Mohammad Yazdi, Mansour Ghorbani, 2017

Persian Turquoise: The Ancient Treasure of Neyshabur - Bahareh Shirdam, Andy H. Shen, Mingxing Yang, Zahra Mokhtari, and Hamed Fazlian, G&G Fall 2021 |

OTHERS

The Potency of Tradition: Turquoise, Coral, and Pearl in Sowa Rigpa, July 2019 - Barbara Gerke

Pigments et Colorants de l'Antiquité et du Moyen Age 'La couleur et l'historien' - Michel Pastoureau, 1990

Photo Credit Turquoise Nodule: Rob Lavinsky, iRocks.com - CC-BY-SA-3.0

Turquoise, The World Story of a Fascinating Gemstone - Joe Dan Lowry, 2018

The Turquoise: A Study of Its History, Mineralogy, Geology, Ethnology, Archaeology, Mythology, Folklore, and Technology - Joseph E. Pogue, 1915

The History Of Turquoise And Mining In China - Dr. Philippe Smolarski, October 2021

Omar Khayyam | Translation by Louisa Stuart Costello

Turquoise Ornaments and Inlay Technology in Ancient China - Asian Perspectives, Vol. 55, No. 2 © 2016 by the University of Hawai Press - Qin Xiaoli