

Wooden Box in Timurid Style

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Abstract

This is a box similar to those made in the Persian Timurid Period (1370-1507). During this time craftsmen from all Asia came to the capital (Samarqand) and a created one of the most prolific and brilliant periods in Islamic Art which was copied from Anatolia to India. In addition to art, poetry and literature flourished.

Decorative boxes were used to house gifts, food, silks and other precious items. They were also commonly used as steps, and even chairs. They were decorated in the same artistic style as architecture, miniature paintings and book illuminations. Usually they included beautiful calligraphy, often with words from the Quran, or one of the many poets of the time. This box has a poem by Saadi that gives an eternal message of the oneness of mankind.

Beside art and literature, it was also a period when Persia was seeking to maintain its Identity. A new style of script was developed, called Nasta'liq by the best known calligrapher, Mir Ali Abrizi. At the time all Persian writings were in Arabic or Turkish. This scrip was developed specifically to use with Persian poetry, literature and art. It features long, sweeping ascenders and defenders. The idea came to Mir Ali Abrizi in a dream about geese. He said the wings of the geese in flight inspired him. It is still favored today.

While I did use modern tools to cut the wood, and modern hardware to assemble the box, all the hardware is derived from hardware available in Persia at the time. The pigments used in the paints were also commonly used and procured in ancient Persia. The paint was an oil based paint that was available then too.

The designs come directly from existing architecture and miniature paintings, and were transferred to the surface using a paper piercing system that was then used.

To see the research sites, the procedures with photographs and the process, please look at the full documentation in the binder.



Persian Box Based on Timurid Empire Boxes and Art
(Cooler cover)



Box painted in Timurid Empire (1370-1507) style, made to fold flat for transportation

Highly decorated Persian Boxes have been use for hundreds of years, probably thousands; they have been used to carry books, food and other items. They have also been used for stepping stools and chairs.



Figure 1 “Siyavush Receives Gifts” attributed to Qadimi c. 1530 Safavid dynasty Jon Thompson and Sheila R. Canby. Hunt for Paradise, Court Arts of Safavid Iran 1501-1576. New York: Asia Society, 2003.

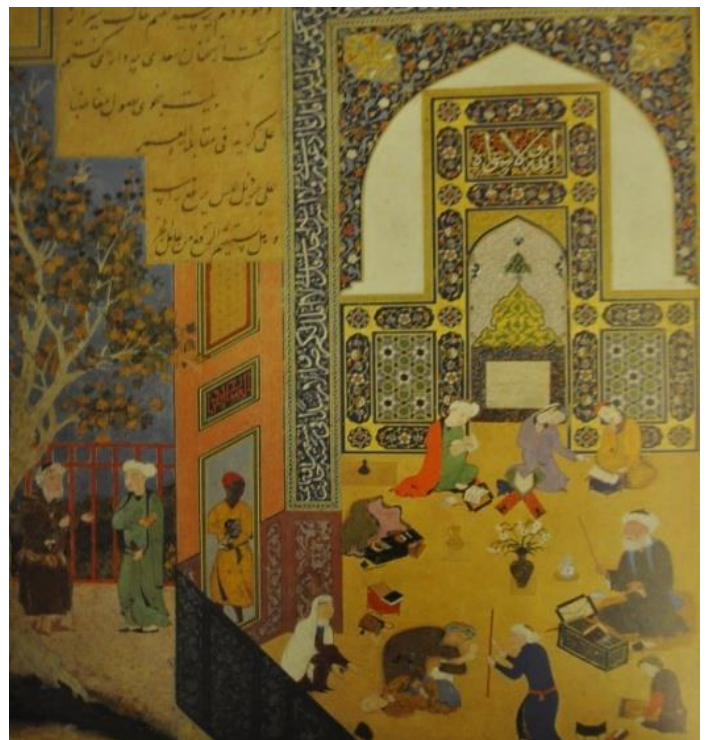


Figure 2 Two “book boxes” and three “table boxes” S’adi and the Youth of Kashghar attributed to Behzad, dated 1486 Timurid Empire Soudavar, bolala and Milo Cleveland Beach. Art of the Persian Courts. New York: Rizzolii International Publicancs Inc., 1992. Page 108





Figure 3 Two Wrestlers, c 1482 Timurid Empire Soudavar, bolala and Milo Cleveland Beach. Art of the Persian Courts. New York: Rizzolii International Publicancs Inc., 1992. Page 353

Persian art, from its paintings to its illuminations use vibrant colors and repeating patterns. I chose this pattern as a typical representation of Persian art of the Timurid Empire. The art for the box is taken from the balcony and wall of a Persian miniature.



Figure 4 Harem of Soltan Hosayn Mirza Baygara attributed to Shah-Mozaffar Heart, dated 1481, Timurid Empire from Art of the Persian Court,¹ Soudavar, bolala and Milo Cleveland Beach. Art of the Persian Courts. New York: Rizzolii International Publicancs Inc., 1992. Page 91



Pigments:

All the pigments for this project are based on those which were traditionally used in Persia

Ultramarine:



Ultramarine was first used in 6th century Afghanistan, (a part of Persia at that time). It was considered more precious than gold. The pigment is made from the stone *lapis lazuli*, finely ground. During the middle ages the main source was from the Badakshan mines in Afghanistan. This pigment was widely used in Persian illuminations and miniatures as well as buildings and tiles.

Daniel Thompson states that "the lapis lazuli from which this pigment is made is not found in Europe, but only in Persia" (Thompson, 1956), showing that this is a traditional pigment for Persian art.

Zarnikh – Orpiment



Orpiment is a rich lemon or canary yellow. It is a **common arsenic** sulfide which occurs naturally. It is mentioned by Pliny and Vitruvius and was widely used in Persian and Asian works as well as in Europe. The largest source of orpiment is found in Turkish Kurdistan, this **wealth of sulfide ores suggests it was widely available (PURINTON, 1991)**. It is easy to conclude that it was in use in Persian art. Orpiment was also mentioned in Greek and Roman literary sources. The Hellenistic Leyden papyrus described its use for late Egyptian painting, as does the Mappae Clavicula for early mediaeval painting.

Lead White/Bone White

The most common white used in Europe was Lead white. Bone white was also used, and it was most likely used in Persia in conjunction with Ultramarine blue since lead white would cause the blue to break down and discolor over time. This fact was known at the time according to the Kilgarlin Center (Baker, 2010).

Verdigris



Verdigris, an acetate of copper, was the most vibrant green available until the 19th century. Often seen in illuminations, book illustrations and maps, it is used often, from antiquity through the middle Ages. Alanna M. Benham says that verdigris is a very destructive pigment and will damage the paper on which it is painted. Despite this, it was widely used in Persia during the Timurid period (Benham, 2010)

Vermilion



Many reds were available to Persian painters. One of the most common was red ochre made from iron oxide. A more brilliant red was made from vermilion (BENHAM). Vermillion was originally made from cinnabar, later it was made artificially (from the 8th century). It was made from mercury and sulfur, it was the principle red in painting until the manufacture of its modern synthetic equivalent, cadmium red. It was used throughout Europe the Middle East and Asia. Alanna M. Benham also confirms vermilion as a period pigment in Persia in wide use.

Orange and Lavender

Orange was often used in Persia (made from mixing orpiment yellow with a red) – this is the manner in which I produced the orange for my work. The lavender color on the small flowers was made from mixing colors as well. “The range of mauve and lavender tones seen in miniature paintings are secondary color mixtures of a red, blue, and white. (Benham, 2010)”

I used synthetically derived, virtually identical, colors for the box due to the cost, and ease of procurement. I also chose these paints to eliminate the toxicity of the original pigments.

Paint base

While water based, egg based and gum based paints were all common during Timurid period, they were mostly used for art work such as paintings and book illuminations. Oil based paints were often used for furniture items. Oil based paints have been in use for at least 305,000 years. Archaeologists found pigments and paint grinding equipment in Zambia thought to be between 350,000 and 400,000 years old according to the BBC News, "Earliest evidence of art found" (Barham, 2010).

I used a combination of acrylic and oil based paints for my box. An acrylic base was used to provide a smooth painting surface with “teeth” to which the oil based paint could easily adhere.

Varnish:

A final finish of varnish will be used to protect the box and it’s paintings, to seal it from the elements. Varnish has been used since the 5th century. Aetius Amidenus, a medical writer in the 5th century, mentioned the use of a drying oil as a varnish on paintings. (Letay, 2010)

Design Transfer

The repeating designs were transferred to the wooden panels by use of a template. The template was made by drawing the design to scale and then pricking the lines with a pin. The template was placed into position and dusted with charcoal. To make the charcoal dust, wood was burned until it was charcoal. This was crushed in a pestle until a fine powder was achieved. The powder was placed into the toe of a sock, and that was rubbed over the design. This technique has been in use for hundreds of

years. Leonardo D i Vinci wrote about in his Treatise of Painting, written prior to his death in 1519. (Thompson, The Materials and Techniques of Medieval Paintings, 1956)

The dots left by the charcoal were connected by pencil, and the original charcoal dust was washed away so the charcoal would not “muddy” the paint when it was applied.



1. Holes punched in the motif using a pin.
2. Charcoal dust applied over the motif via a charcoal filled pouch (sock).
3. Dots connected using pencil to reproduce the original design.
4. Charcoal washed away leaving only the pencil marks.



Construction materials:

The wood:

This box was made from ½ inch finished plywood. Plywood is period; Archeologists have found traces of laminated wood in the tombs of the Egyptian pharaohs. A thousand years ago, the Chinese shaved wood and glued it together for use in furniture. (Cour, 1955)

The Persians traveled far and wide and interactions with the Chinese were extensive. It is very likely that the technique of laminating wood would have been imported to Persia. While our modern plywood is vastly different, the spirit of the technique is the same

The hinges:

Hinges have been in use for thousands of years. First in stone, for massive doors of temples, later in iron.



Figure 5 Massive hinge from a door in Egypt, this one is on display at the British Museum. Dated to about 760-650 BC. Exact proportions: 38 cm high, 20.4 cm long



The Romans also used hinges extensively, both for their armor and for cabinet doors and other household uses. Roman Britain, 1st century AD (Arthurs, 2010)

In fact the Romans had a goddess for hinges, Cardea was the goddess of health, thresholds and door hinges and handles. (Heaton, 2010) ¹



Figure 6 From the Roman fort site at Hod Hill, Dorset.

Continuous hinges

In the SCA we must transport or items often and far. To do this many camp items are made to be foldable or collapsible for example, chairs, tables, etc. A box that can be folded or collapsed is in keeping with these items. I used continuous hinges, which were used in Persia during the early Timurid Empire (The world's oldest handbag?, 2014).



Figure 7 Brass purse made in 1300 in Musol, London's Courtauld Gallery

Screws:

Screws, too, are period. Screws did exist in medieval times, the actual concept of the screw dates back to around 200 B.C. Metal screws and nuts used to fasten two objects together first appeared in the fifteenth century, although they had a long history before that. Around the first century AD, screw shaped tools became common. Early screws were made from wood and were used in wine presses, olive oil presses, and for pressing clothes. (Bellis, 2010).

I used screws to attach the hinges. Screws will hold more securely and not pull out of the wood as easily as nails, a more common building component for the time. Screws were used rarely though due to the labor involved in hand making each one.

The design

The box is a rectangular shape with separate lid and bottom. The two end pieces are split in half vertically and hinged to fold inward.



The edges where the four panels connect are also hinged. This arrangement allows the box to fold flat for transport. The bottom is cut to fit snugly just inside the box so it will assist in keeping the box open when in use.



The top is placed on top without any hinges or latches for easy access to the contents.



Although not period, I also added a lining of insulation to all six sides of the box. Since it will not be seen, it should not matter for authenticity's sake, and it will increase the insulating quality of the box considerably.



The Process in Pictures:



Base coat of acrylic paint

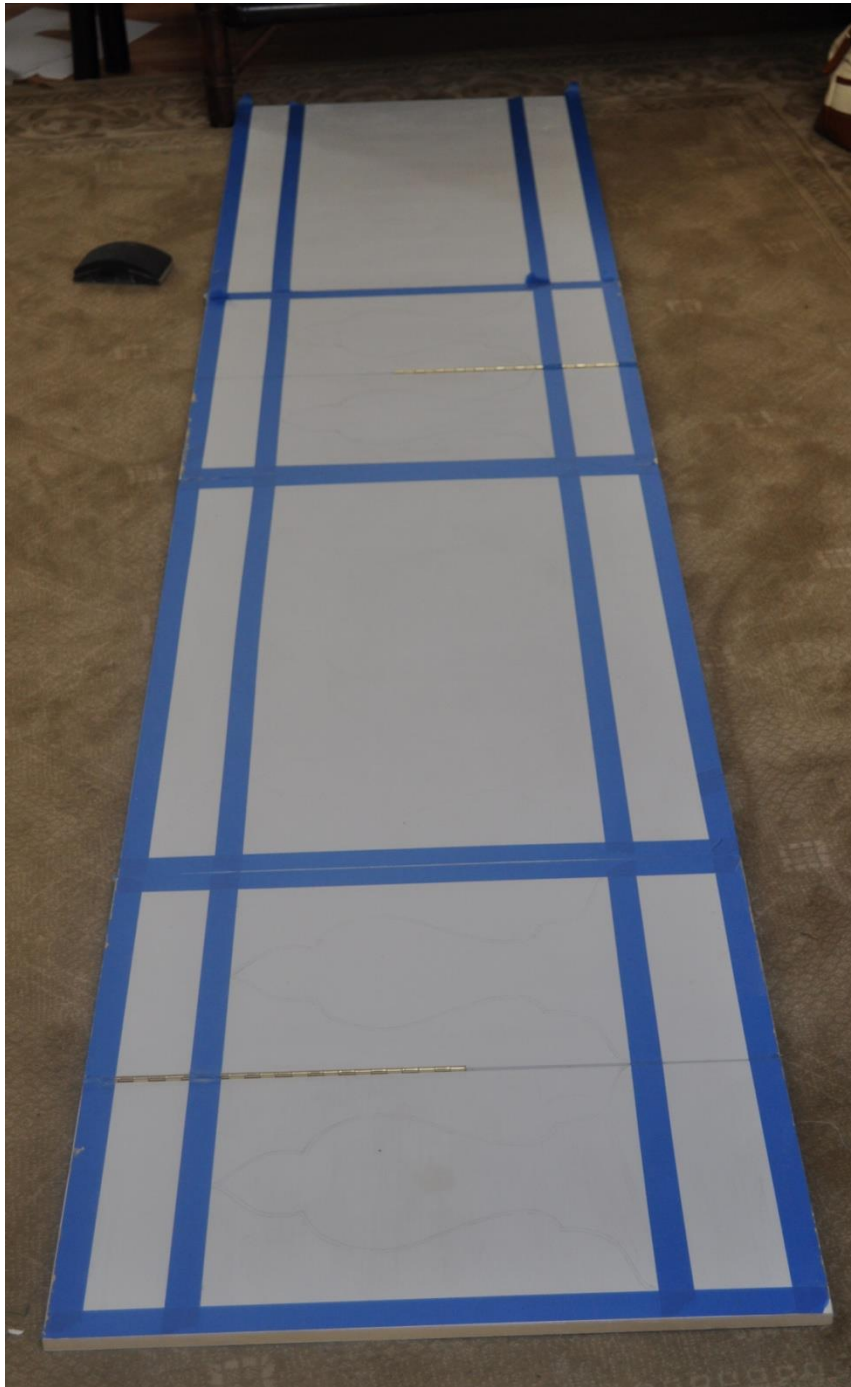




Designs selected and sketched out.

The box side panels are done first.





Borders laid out and lined up – two end panels hinged at this time to facilitate painting.





First motif is painted one each panel.



Second motif is added.





The top is painted



Hinges added



An insulating liner fitted



The cooler placed inside



The calligraphy

The Calligraphy was added several years after the box was made – due to the time it took to select the poem, and my personal fear of doing the calligraphy.

On the front of the box is a poem by Iranian poet Sa'adi, from the 13th century (Timurid Empire). Sa'adi is one of the major influential Persian poets of the medieval period, recognized for the quality of his writing style and in the depth of his thoughts (Zuafishan, 2011).

The poem chosen is called “Bani Adam” or Children of Adam. It was chosen because the SCA has many wars, representing the differences in men, so a poem that identifies all men as the same would reflect on the chiverlous part of the SCA. Later it was learned that this poem is on the door of the United Nations building in New York.



Transliteration:

"Bani Adam `aazaye yek pigarand
Keh dar aafarinesh ze yek guharand

Cho `ozvi be dard aavarad rozigaar
Degar ozvaha raa namaanad qaraar

To kaz mehnate digaraan bi ghami
Nashaayad ke naamat nahand Aadami"

.Figure 8 Saadi's poem on door of UN Building NYC

Figure 9 Transliteration by Zaufishan

As with all poetry translations can be difficult; here are several translations of this poem:

1. Translation by H. Vahid Dastjerdi:

Adam's sons are body limbs, to say;
 For they're created of the same clay.
 Should one organ be troubled by pain,
 Others would suffer severe strain.
 Thou, careless of people's suffering,
 Deserve not the name, "human being" (Zaufishan, 2011).

2. Rhyming translations by M. Aryanpoor:

Human beings are members of a whole,
 In creation of one essence and soul.
 If one member is afflicted with pain,
 Other members uneasy will remain.
 If you've no sympathy for human pain,
 The name of human you cannot retain! (Bani Adam, Children of Adam, 2013)

3. Translation by Dr. Iraj Bashiri:

Of One Essence is the Human Race,
 Thusly has Creation put the Base.
 One Limb impacted is sufficient,
 For all Others to feel the Mace.
 The Unconcern'd with Others' Plight,
 Are but Brutes with Human Face (Zaufishan, 2011).

The script used for the calligraphy is called "Nasta'liq. It is represents one of the most accomplished forms of Persian art exhibition, according to Simon Rettig, curator and fellow at the Freer and Sackler galleries. "In a sense, it became the visual embodiment of the Persian language enthusiastically embraced from Istanbul to Delhi and from Bukhara to Baghdad." The elegant script is a blend of the naskh (meaning "to copy") and ta'liq (meaning "suspension") styles of calligraphy (Alaou, 2014)

Persian calligraphy was previously written in Arabic and Turkish script. The Nasta'liq script was specifically created for the Persian language and culture, said Mr. Rettig. "There was a need to visually render the difference between traditional, Koranic scripts and a new medium for Persian culture." It was developed by Mir Ali Tabrizi, considered to be the most famous calligrapher of the Timurid dynasty. Legend says that Tabrizi invented the new style after a dream of flying geese. The script was to represent the flying wings of the geese (Larson, 2014).

I do not know how to write Nasti'liq, so I spent a bit of time studying the characters, and then copied the script, using the inscription on the UN building as my model. This was painted using the same oil based paint as was used for the rest of the box.



A Spar varnish (a marine grade varnish - to insure a good water seal) was applied to the top of the box a while ago. In six months it will also be applied to the rest of the box itself. This time period is to allow the oil paint to completely dry before varnishing.

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