

The Themes of Metalworking in the Saljuqid period vis-à-vis Khorasan and Mosul Schools

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ABSTRACT

The Saljuqs were originally nomadic tribes and nomadic Turkmen from Kyrgyz regions of Central Asia. In the early eleventh century, the Saljuqs began their reign by seizing a major part of Transoxiana. The Saljuqid is one of the most important eras in Islamic-Iranian civilization in which different fine arts reached an unprecedented apogee of flourishing in the history of Iran. The remaining objects from this period show that metalworking was highly developed. Similar to previous eras, silver and gold were rarely used in the Saljuqid era because of religious bans. Silver and gold were used for plating less valuable metals such as bronze and brass. The aim of this article is to examine the forms, themes, and metals used in the Saljuqid era and to investigate the innovations made by two artistic movements, namely, Khorasan and Mosul. Some of the most important art and crafts schools, especially metalworking, of this era were Khorasan and Mosul. This article is based on bibliographic research with an analytical-descriptive approach. First the themes are analyzed, followed by a study of the symbols, and finally an analysis of the intention behind them.

KEYWORDS

Metalworking, Decorations, the Saljuqs, Khorasan, Mosul

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Introduction

The emergence of Islam had an enormous influence on art and other artistic crafts, changing almost all previous artistic forms, especially those in Iran. With Islam, artistic crafts were no longer limited to royal courts and began to be used for religious purposes. Artistic objects were made in a way as to be compatible with the spiritual aspects of Islamic religion. Metalworking distanced itself from its pre-Islamic pedigree and was totally transformed in the course of a few centuries. These changes can be seen in the shape of new containers and utensils, new and innovative forms, kind of metals, type of

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technique, and the use of Arabic language as a technique of decoration on metals. The art of metalworking was continued in the course of history and underwent major changes during the Saljuqid dynasty. Despite being of nomadic origins, and lacking in fine arts, the Saljuqid helped flourish an independent form of art in Iran by supporting artists and craftsmen – often with political aims – known today as the Saljuqid School. Among the many different aspects of the art of the Saljuqid School, its metalworking stands out as the most prominent form of art in throughout the Islamic-Iranian civilization. It is in this period that an especial technique of Islamic metalworking, combined with the spirit of tradition and Islamic religion, becomes an independent mode of artistic creation. Although many metalwork from the Saljuqid period have been discovered, there remains little comprehensive research about this topic. It should be added that in comparison to other periods in the history of art, the Islamic art is a new field of inquiry. This goes for the Islamic art in the Saljuqid era too. Moreover, unauthorized archeological explorations in the last century in Iran, in contrast to other Islamic countries, have led to an unconventional and distorted image, especially with regard to metalworking (Bazot et al, 2001: 159).

The Saljuqs, art, metalworking centers:

The Saljuqs were originally nomadic tribes and nomadic Turkmen from Kyrgyz regions of Central Asia. In the early eleventh century, the Saljuqs began their reign by seizing a major part of Transoxiana. Within a few decades, they occupied the areas previously under the control of the Ghaznavids in Khorasan. With more victories, in 1068 Tughril conquered Baghdad and officially founded the Saljuqid Empire. It should be noted that the Saljuqs were Sunnite Muslims and were ardent supporters of the Caliphate. The Saljuqs based their government on Quran and Sunnah, and popularized the Arabic language in the court as well as in the society and the arts.

The Saljuqid era can be considered the golden era of crafts and industry, in addition to various cultural and artistic developments (Ayatollahzadeh-Shirazi, 1983: 167). The art of this period reflects the close ties between rational sciences and the fine arts (Rafei & Shirazi, 2007: 107).

The Saljuqid Empire extended its power from and Central Asia to Egypt and in the course of time created a kind of scientific-artistic renaissance in the Islamic world, especially in Iran. In this period, the scientific, political, and cultural context of Iran was prepared for advancements in culture, industry, and art. This is clearly manifested by the emergence of such prominent figures such as Nizam al-Mulk in politics and government, Hakim Omar Khayyam, Khagani, and Nizami Ganjavi.

There is nothing in the arts and industry of the Saljuqid period which is not influenced in one way or another by the culture and art of Iran. Although the Saljuqid were of Turkish origins, there seems little of the Turkish elements in the Iranian and other eastern states in terms of their art and industry. This shows the dominance of Iranian craftsmen and artists on the creation of visual arts (Bazot et al, 2001: 160).

The important ruling centers of the Saljuqs included Merv, Nishapur, Ray, Isfahan, Hamadan, Sijistan, Herat, parts of Iraq, especially Mosul, and Syria.

Most of these regions were also important metalworking centers (Helmi, 1985: 196).

Metalworking and metal artefacts reached their apex of quality and popularity in the Saljuqid era. The Province of Khorasan was the best known region in terms of metalwork. One reason for the centrality of Khorasan in this regard is that during the Samanid dynasty, Khorasan was the biggest center for making and decorating bronze pots and containers according to traditional, i.e. Sassanian, forms and shapes. Some of these metal works, painted with pre-Islamic shapes and forms, can be found in the museums and antique collections. Only a few details and nuances help the experts estimate the time of the creation of these works (Muhammad-Hassan, 1987: 15-16). Metalworking can be considered to epitomize the advancements in Islamic arts and industry. Iranian-Islamic metalworking is in fact the continuation of metalworking in the Sassanid era.

The Saljuqid metalworking:

The influence of Islam on the arts of Iran for four centuries changed the forms and decorations of the art of metalworking too. Gradually, metalworking developed in the region of Khorasan, findings its unique techniques, which led to the establishment of the Khorasan School of metalwork. This school reached its epitome in the Saljuqid era (Lakpour, 1996: 12). The Saljuqid metalworking combined the grandiose of the Sassanid art with various dimensions of Islamic art. The support and patronage of the Saljuqs were highly important in this regard. A few private and public museums and art collections contain some of these works, including, cups, dolls, small boxes, thuribles, ewers, and other metal equipment such as horse saddles. All of these works are painted with different images of animals, birds, Kufi nastaliq, and humans (Katly et al, 1997: 37). The craftsmen used different methods in making metal works. Some used etching and others carvings as two methods of metalwork. The making of metal pots and artefacts reached their epitome in this period. Khorasan has an especial place in the history of metalworking in this period (Muhammad-Hassan, 1987: 15-16). The images of birds and animals which attracted the attention of the potters can be seen on silk, brocade, and metal surfaces (Price, 1968: 65). Khorasan has always been famous for its metalwork, especially copper and silver. Most of these metal works are decorated with lines. At this time, the industry of gold-plating flourished. Mosul was the first center for metal work, gold-plating, and silver-plating. This school had a great influence on the metalworking industry in other Islamic countries. Some of the members of this school emigrated to Cairo, Aleppo, Baghdad, and Damascus and therefore spread its style and technique (Ayatollahzadeh-Shirazi, 1983: 12-20).

The Saljuqid schools of metalworking:

a. **Khorasan School:** the authors of the present article have carried out extensive research about this topic and have found the following as the main characteristics of this school.

The Khorasan School maintained the traditional forms of metalworking, but also included new forms and ideas in making the metal works. This variance in form is reflected in the shape of pitchers, ewers, fat-burners, and incense-burners of the period.

The replacement of small and compact designs with the usual isolated Sassanid forms.

The inclusion of ivy-forms and inscriptions known as “armband designs” which are unique to the Khorasan School of metalwork.

In the Islamic era, inscriptions have an especial status in the art of metalwork, particularly in the Khorasan School. On most metal works, one can notice inscribed words of prayer. These inscriptions are written in Arabic language, e.g. Kufi, Nosakh, and Salsa. It should be noted that on some metal works the long Kufi letters including Alif (A) and Dal (D) are sometimes longer than the usual size, ending in the images of the heads and bodies of humans and animals.

Some other characteristics of this school include the representation of human beings in different images such as playing a musical instrument, dancing, wrestling, seated on the throne, and in the form of celestial constellations.

Rabbits with two unusually long ears.

The image of small birds in the clay pottery of Nishapur.

The works made in this school usually contain the signature of the maker and place of creation. Accordingly, we know that Herat was the most important center for seal metal work (Dimand, 1986: 143-144).

b. Mosul School: after Herat in the thirteenth century, Mosul (Iraq) can be considered the most important center for metalworking and silver-plating. This city was under the rule of the Saljuqid Atabakan over the years 1142-1280. Some of the characteristics of the Mosul School include:

Most of the works in this school are in bronze and are plated with silver or gold.

With regard to the decoration schemes, most of the decorations are done on a background of winding threads.

Most of the metalwork in this school have the name of Sultan Badruddin Lulu Mosul inscribed on them. He was one of the prominent kings of Atabakan. Some of the works in this school are sixteen small medallions on which there is the image of six seated men covered with the crescent moon.

Some of the similarities between Khorasan and Mosul Schools include:

- a. Big medallion designs contain images of the life of the Sultan.
- b. Twelve small medallions decorated with the images of constellations, planets, and fortune signs.
- c. Landscapes of festivals and celebrations with music instruments (Dimand, 1986: 142-149).

Metals used in the Saljuqid art of metalwork:

The metals used in the Saljuqid era were the same as those used in other Islamic periods. Gold, silver, copper, iron, lead, and tin were all used before the Islamic period by the metalworkers in the Middle East. Metals like gold and

silver had an especial status in the economics and commerce of the time. However, the use of these metals were limited in the Islamic period because according to the Islamic code piling up wealth and storage of gold and silver in the form of metalwork are banned. This ban helped improve the economic conditions of the time (Bayani, 1999: 18-19). The metalworkers began to use zinc in the Islamic period. Before that, zinc was rarely used with copper-alloyed metals in the form of bronze. Bronze would always be added to the alloy to increase the strength the strength of the metal. However, this was often referred to as bronze because of limited amount of information about metalworking and the analysis of metal alloys (Khalili & Madison, 2008: 146). Bronze was an appropriate replacement for gold in the Islamic period. Bronze was vulnerable and would rust quickly. It might even cause poisonous and harmful toxics and diseases. Therefore, it was not suitable for kitchen pottery and containers unless these were plated with a thin layer of tin. Bronze was valuable for its similarity to silver and its resistance to rust (Ward, 2005: 28-29). In the Islamic period and the Saljuqid era, Iron was hardly used in metalwork. Instead, it was used for making war equipment, locks, keys, and window frames (Lakpour, 2006: 12). Although silver was abundant in the Saljuqid era, there exists little silver metalwork today. The silver metalwork is made in different shapes, including, spoons, rose-water pitchers, accessories, shining decorations, cups, bottles, trays, tankards, and delicate chains (Pope, 2001: 85).

Production methods of metalwork in the Saljuqid era:

The methods for producing and making metalwork in the Saljuqid era can be divided into three main parts:

Hammering and wicket-forging: objects are made of layers of copper, iron, and bronze. Gold and silver are hardly used in this method.

Framing method and molten method: brass and bronze are the most commonly used of metals for making metal objects in this method. Copper, silver, and gold are rarely used.

Compound objects: these are made by a combination of the two previous methods (Ehsani, 1997: 174).

Objects belonging to the first group include those made and shaped into different forms by metal sheet bending, hammering, and flattening. Melting tools used by the craftsmen included heavy and cumbersome instruments such as furnaces, wheel forging, and lathe (Ward, 2005: 22). Forging with molten metals such as bronze to make mirrors and other plates with images of animals was popular in Iran and Iraq during the reign of the Saljuquids (Dimand, 1986: 139).

Methods of decorating metal objects:

1. **Framing method:** in this method, the decorative themes are mostly geometric forms and inscriptions. In this process, the image is inscribed on the object by means of molten. The quality of this method depends on the accuracy and ability of the craftsman and the type of the alloy.

2. **Etching:** etching is a kind of carving and engraving on layers of metal. The decorative themes are used by the etching artist in this method. Etching can be divided into different groups:

Engraving: it is a kind of etching done by means of making indentation and protrusions on layers of metal and engraving of different themes.

Relief: it refers to the art of creating simple and shallow themes on a variety of metals by means of simple tools. Reliefs are usually done on silver, copper, and bronze. The details of the relief can be seen on the back of the surface because of the delicacy of the effect of the relief pen (Seyyed-Sadr, 2005: 722).

Grid-work: grid-work is a kind of etching in which the negative spaces of the design are excluded to achieve the main design as a grid on the surface of an object. Grid-work is done by removing and carving certain parts of the object (Seyyed-Sadr, 2005: 802).

Jewelry-work: in general, jewelry-work can be done in two different ways:

a. **Simple jewelry-work:** this refers to the use of gems and gemstones on metals by means of frames in which the gems are attached via soldering.

b. **Kufi jewelry-work:** this refers to the use of metals like gold, silver, copper, and other alloys in the carved and etched parts by means of hammering and in line with the pre-planned designs and themes.

Dark etching: black etching refers to an especial technique in decorating metals. It has a long history but was frequently used in the Islamic period in metalwork. In general, it refers to the use of dark colors in the etched, engraved, and relief parts to create the effect of contrast. This contrast is intended to highlight the bright sections in relation to the dark background. Dark etching is done by the use of bitumen, paint, and tree gums.

Enamels: the contemporary use of enamels refers to the utilization of metal oxides to create decorative themes on objects. In this method, metal oxides of tin and copper are turned into molten. After the engraving of the images, the objects are put in the furnace (Razani et al, 2010: 60).

The decorative themes of the objects in the Saljuqid era:

Decoration has an especial status in Islamic art because there is an intention behind all decorations, i.e. in addition to the aesthetic dimension they are meant to express the themes of Islam. An important point in studying Islamic decoration is to make a distinction between the mysteries of decorative themes and symbols, signs, and mysterious ambiguities which are intended to express certain ideas in the form of themes and designs. Through these forms various emotions and messages are expressed. There are examples where a historical event is expressed in the form of small designs and frames. Accordingly, it should be noted that the decorations on the metals were not only meant for the aesthetic pleasure of the viewer, but were also intended to express deep meanings which require different interpretations (Bayani, 2007: 13-15).

Some of the most commonly used themes in the decorations of the Saljuqid era include: 1. Human images, 2. Mythological animals, 3. Inscriptions, 4. Plant images, 5. Astrological themes, and 6. Geometric themes

Human images: the use of human images in different forms such as, musicians, drinkers, horse-riders, hunting images, accession to thrones, mythological scenes and stories. The most widely used human images in the decorations of the Iranian art reflect parts of the court life (Shayestefard, 2005: 60). This includes hunting images, court life, sports, music, and war scenes

(Picture 1). One of the most famous war images engraved on the objects in the Saljuqid era is about the siege of the Merv castle by Sultan Sanjar and his troops, which is found on a bronze pot in Dagestan, and is currently kept in the Hermitage Museum. In the war scenes, the warriors are shown as mounted and dismounted usually in pairs and fighting with different war equipment such as swords, daggers, shields, bows and arrows, and mace (Heydarabadian, 2009: 30). This method of decoration was initially used for recording historical events but in the Islamic period it was used for representing war scenes (Tohidi, 2007: 54).



Figure 1. Human images with the themes of music and hunting on bronze urn (Ward, 2005: 56)

Mythological animals: in the Islamic period, mythological animals became one of the most important aspects of the decorations on metal objects (Tohidi, 2007: 55).

The different mythological animals used in these decorations include:

a. **Griffon:** a mythical animal with the body of lion, head and feathers of eagle, and ears of a horse (Dehkhoda, 1994: 248). The origins of this animal goes back to the civilizations in Mesopotamia, Egypt, India, and Iran (Hawkins, 1986: 308). This animal was the symbol for protecting treasures and sacred places. These mythical animals are represented on the metalwork of the Saljuqid era which in turn manifests the thoughts and worldviews of the people of the time (Zomorodi, 2006: 255).

b. **Sphinx:** it is made of different animals. In the Islamic art, the sphinx is usually represented to be similar to a woman.

c. **Harpies:** it is the name of three supernatural winged animals. It has the face of a woman, the body of a vulture, and upturned nails. Harpies symbolize death and bitter conflict (Dehkhoda, 1994: 286). In terms of its origin, the image of woman-bird comes from Iran and Urartu. In most cultures, birds symbolize the soul especially when it goes to heaven after death (Hall, 2004: 39). Birds symbolize absolute freedom, superiority of soul over body, and the dominance of spirit on earth. Accordingly, birds are associated with God, heaven, and celestial power. Wings on animals and human beings are signs of heavenly power and the power of protection. In the Islamic worldview, birds with human heads represent the power of soul over body (Jobs, 1991: 29).

Inscription decorations: basically, the Iranian art is based on decorations. Inscriptions on metal objects are one example of the art of decoration. The texts of the inscriptions include prayers, Quranic ayahs, religious teachings, hadith, and Persian poems. Along with manuscripts, and metalwork (pottery, candlesticks, coins, etc.) inscriptions are important source for historical knowledge. Inscriptions play a pivotal role in revealing some information about the identity, date of creation, ruling methods, supporters and patrons. With regard to the decorations of objects, Maurice Dimand notes that the objects in the Saljuqid era such as bowls, urns, and bottles are decorated with the images of birds, animals, plants, and Kufi inscriptions on a background of texts. The decoration design is done by carvings, etchings, and relief (Dimand, 2004: 137) (Picture 2).

In the Saljuqid art of metalwork, Quranic ayahs, hadith, prayers, and religious instructions are used. Some of the contents of these teachings in Arabic include, prayers, providence, governance, long life, better fate, forgiveness, mercy, and health for the owner of the metalwork. Most of the inscriptions of the metalwork were about the wish for the health of the owner of the metalwork in simple language. Sometimes, the words inscribed on these objects were written in Kufi language in *nastaliq* form. Instructions were also used in these inscriptions.



Figure 2. Golden cup with the images of birds, plants, and inscriptions (Dadvar & Zojaji, 2015: 81).

Plant images: in the Iranian art, plants are significant both in terms of economics and tools for expressing the Islamic worldview in the form of visual arts (Enayat, 2008: 36). Images of plants have an especial place in the Islamic arts. These images constitute a large part of decoration in the Islamic arts. In fact, it can be claimed that most Islamic themes such as geometry and arabesque are rooted in the images of plants (Vaziri, 1994: 56). The images of plants including trees – referred to as *shajar* in Quran – refer to anything which grows on earth (Okhovat, 2009: 75). In the Saljuqid era, different plant images such as cornflower and seven-flower – especially in the Khorasan School of metalwork – were used. The tree of life was used in most of the metalwork of the Saljuqid era (Picture 3). This tree symbolizes heavenly powers, the resurrection day, life and death (Sadagheh, 1999: 142). In most cases, there are guardians standing next to the tree of life, such as real and mythical animals. This means that to reach the tree of life one needs to fight these animals (Debucoart, 1994: 13). One can mention the cypress tree as another example of plant image used in the metalwork of the Sassanid era.



Figure 3. The candlestick in Iran's National Museum; it has inscriptions, human and animal images, geometric themes, and plant images such as the cypress tree (Bani-Emam, 2016: 35).

Astrological images: astrology and astrological instruments became important parts of the scientific changes in the Islamic era because of the need for the Muslims to become aware of the time of sunset and sunrise (time of prayers), geographical issues especially navigation, astrological fortune-telling, and other important daily hours. The metalworkers of the time were influenced by these changes in the society and reflected the astrological themes in decorations in addition to making some astrological instruments such as astrolabe and sundial (Picture 4).

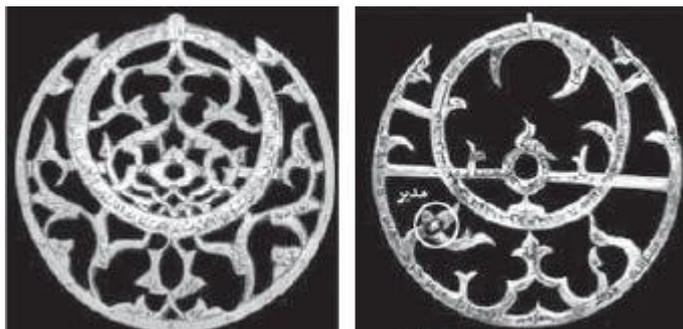


Figure 4. Metal astrolabe (Afrough & Norouzitalab, 2011: 79).

Geometric images: geometry has an especial status in the Islamic culture. The influence of geometry is reflected in all visual arts and crafts. The association of geometry with symbolic and philosophical concepts is one of the main reasons for its significance in the Islamic worldview (Wilson, 1987: 47). Geometrical forms can be considered the second kind of forms in the Islamic

arts. These are examples of traditional Iranian forms which are valuable in terms of their aesthetic dimensions and different functions; and possess artistic and mathematical complexities (Picture 3). The beautiful forms and symmetries reflect larger orders of beauty in the cosmos. A spiritual person tries to discover geometric patterns as a means of knowing God. The geometric forms used in the arts of the Saljuqid era include squares and circles, both utilized in framings. Other geometric forms were the sun and stars. In terms of the symbolic significance of the stars, one can mention that stars represent mysterious signs which foreshadow victory. Stars were believed to change an unfavorable fate (Spuler, 1995: 191). It can be pointed out that the use of stars in the metalwork of the Saljuqid era might have represented the reverence of the metalworkers to God as the decorator of the heaven with the stars. This tradition was reflected by the metalworkers in their decoration of objects. Since a star is something which shines in darkness, it can symbolize the soul (serlu, 2010: 470).

Discussion and conclusion:

The Saljuqid art of metalwork is one of the most prominent artistic forms in Iranian-Islamic traditions. Metalworkers created the best of artefacts in the eleventh and twelfth centuries. These included different objects such as bowls, cups, ewers, candlesticks, and war equipment among many other things. The metalwork changed in this era as a result of the changes in the science and crafts of the time. The scientific changes immensely influenced the type and shapes of the metalwork created at the time. These changes included the type of materials and metals, i.e. the most commonly used metals in the Saljuqid era were copper, silver, gold, bronze, and zinc. Some of the main techniques used in the Saljuqid era were framings, engravings, etchings, enameling, carvings, and wicket-making. Most of the decorations in the Saljuqid era were done on practical instruments. Plant and animal images were the most frequently used forms of decoration. The human and animal images used in the decorations included battle scenes, hunting scenes, dancing scenes, warriors, fight scenes, astrological forms, and astrological themes. The most frequently used inscription was the Kufi writing done on different metal objects. Some of the contents of the inscriptions in Arabic include, prayers, providence, governance, long life, better fate, forgiveness, mercy, and health for the owner of the metalwork. The geometric forms, designs, and drawings were also commonly used.

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