

Ancient Bronze of Kazakhstan

The invention of bronze did not only mark a new era in the history of humankind, but caused a revolution in the field of economics and defense. Durability, low smelting temperature and beautiful gold color characteristic of bronze made it a good material for decorative art.

This alloy is optimally formed from two metals, copper and tin, in a nine-to-one ratio. Small amounts of lead, antimony and arsenic were also included as additives to give it other properties.

Chemical and spectral analyses of early bronze reveal an intriguing panorama of the bronze metallurgy development, showing how the ancient masters experimented with different alloy ratios and additives in their quest to make the bronze more durable and beautiful.

Kazakhstan's rich lead and copper reserves was one of the factors that fostered the development of bronze metallurgy here during II-VII BC. That was the period when Andronovo and later Begazy-Dandybai cultures were formed on the territory of Kazakhstan.

Copper and bronze smiths mastered the art of casting, forging and embossing in the early stages of the formation of the Andronovo culture.

Spearheads, arrowheads, choppers, axes and celts were made out of bronze. Despite the fact that they were meant for use, these articles were artistically made. Some of the celts found in Eastern and Western Kazakhstan were decorated with geometric patterns like rhombuses, triangles and rings.

The jewelers' rich creative fantasies enabled them create wonderful ornaments and clothes decorations, which were outstanding for their elaborate work, miniature sizes and mould of some of the elements. Geometrically shaped badges, richly ornamented by punching, knurling and crimping, constituted the majority of all types of wearable decorations made. Ornamental patterns pointed to the strong influence of the solar-astral cult. Undoubtedly, these peculiar "sun" circles sewed on clothes served as talismans.

The ancient jewelers achieved great skill by producing different types of bronze-cast beads and bracelets with conical spirals at the ends.

The production of massive bronze mirrors takes an important place in the bronze-casting craft. These mirrors came in two shapes – round and square. There is an opinion that mirrors originated from North Iran or Mesopotamia. However, research data convince us that ancient art objects could be found in any place where copper and bronze metallurgy was developed. Bronze plates and ornamental patterns in the form of four-petal rosettes that appeared during Begazy-Dandybai cultural period consequently became the basic motif of the Kipchaks and later inherited by Kazakhs.

The early nomadic period, spanning from 8 BC to 4 AD, heralds in the next stage in the copper and bronze casting craft. The Saks, Savromats, Usunes and Kanguis were not only good warriors but also good farmers, cattle breeders and metallurgists. They extensively used many articles made of gold, silver, bronze and iron.

When the bronze casting craft further improved arrowheads, spearheads and daggers were made in two or three detachable parts. At that time these ancient craftsmen had already mastered complex metalwork techniques like wax-mold casting. Basically, a wax model of the article was made, covered with clay and dried into shape. It was then heated to melt away the wax and molten metal poured into the hollow casing to achieve the desired shape. The most artful and big objects, such as massive copper cauldrons, sacrificial tables and lamps were cast by this technique.

Special attention was paid to the manufacture of the cumbersome and complex harnesses of the early Sak period, weapons and household utensils. These harnesses consisted of bronze bits, the ends shaped into miniature stirrups.

The manufacture of weapons was also extensively developed. Armorers made small bows, arrows, daggers, akinaks, spears and battle hatchets of different types. The Sak warrior's armor comprised of a bronze helmet, a small shield and a battle girdle with a quiver for the arrows. Bronze arrowheads were different with the more ancient rhombus or irregular rhombus in the form of a laurel leaf. Later models had a point with three radial blades.

Since 5 BC, the ancient type of arrowhead with three-edged sections became widespread on the territory of Kazakhstan. Much later they started producing standard arrowheads that were easier to be mass manufactured and gradually crowded out of the archaic types.

The distinctive features of the akinaks of 7-6 BC were the hilt tops of daggers acquire the shape of broken bars with their cutting edges either up or down. They

often had a vulture head depicted on them. The hilts of such daggers resembled the butterfly's wings.

The quivers and akinaks were usually found together with battle girdles. The Saks' girdles were massive, often assembled, big bronze empty chargers. The surfaces of these chargers were at times decorated with ornamental patterns.

The most common bronze finds among domestic utensils were knives. They all had straight small blades and a handle topped with a ring or with a perforation in the handle.

During 7 BC mirrors with massive circular discs and high-bordered edges become widely distributed. They were attached to the female girdle with a loop on the reverse side of the mirror. Somewhere around 5-6BC mirrors with plain discs and simple handles at the edge came into fashion and outmoded the earlier ones.

“The Semirechye artistic bronze” stood out among the ancient bronze collection and comprised of lampions, cauldrons and sacrificial tables. Dating shows that they were made in the first half of the 1st millennium BC. The mould-cast articles were often decorated with small sculptures of winged snow leopards or tigers, yaks, zebu, camels, horses, ibexes, rams, wolves, birds and armored warriors. Sometimes female figures in tunic dresses support the altar table on raised arms like the mythical character “Atlantes”. The sculptures of animals usually decorated the borders and corners of sacrificial tables, edges and planes surfaces of censers, sometimes served as candleholders or legs and handles of cauldrons.

Since these objects directly reflected the outlooks, spiritual culture and ideology of the people, deciphering their semantics could help restore the cosmogonic concepts of the Saks and the Usunes.

The central article of these three objects (lampions, cauldrons and sacrificial tables) was certainly, lampions. Two of them shall be described in detail. The first is a quadrangular tray with almost vertical borders fixed on a conical support. Figures of a winged feline, most probably a snow leopard or tiger occupy four corners of the tray. The images of these beasts are characteristic of the art, culture and folklore of the Eurasian tribes. They served as mascots and guarded the vast expanse or in other words, four corners of the world.

The second lampion consists of a round tray mounted on a conical, open-work support. Sculptural figures of the zebu line the edges of the flat tray. Two figures of horsemen (only one of them is preserved) holding bows were positioned on the tray.

III-II BC ushers in the period of gradual decline of the animal style art. The style changes into ornamental décor and is replaced by so-called polychrome style employing precious stone inlay techniques, granulation and other methods of decoration. That was the period when some applied art work in which the schematic images of animals are incorporated into the luxuriant polychrome ornament.

In the domain of the ancient applied art of Eurasia, namely the Scythian-Siberian animal style, it is easy to identify its Savromatian-Sarmatian variation. This variant appeared in the middle of VI century BC. The nomadic tribe, Savromatians, that inhabited steppes of West Kazakhstan, South Ural and Don regions, invented it. The intermediary location of the Volga-Ural steppe defined its close interrelations and dependence upon the zoomorphic art style of Scythia on the one hand, and the similar style of Central and East Kazakhstan, Semirechye, Altay and South Siberia. The felines and griffin-like predators depicted on early Savromatian articles clearly support the logic of this interdependence.

The development of Savromatian-Sarmatian animal style can be subdivided into two main stages. The first (VI-IV centuries BC) is connected with Savromatians; the second (III BC- II AD) pertains to the period when the Sarmatians entered into new military alliances and settled in the western parts of the region up to the Danube provinces of the Roman Empire.

Sarmatians decorated their things (clothes, armor and harness, toilet articles and stone altars) with the conventionalized images of animals, which were indubitably inspired by the remains of totemic concepts. However, the main significance of both Savromatian-Sarmatian and Scythian-Siberian style is that they were considered sacred and magical. The Savromatian craftsmen vividly accentuated eyes, ears, horns, sharp-toothed jaws, beaks and paws, features of the organs that symbolized sharp sight, hearing, strength, dexterity and bravery. All these listed peculiarities of style are similar to those of Scythian-Siberian style. This testifies again to the common origin of animal style art on the vast territory of Eurasia.

A new boom in the applied arts is observed at the beginning and during the first centuries A.D., when Sarmatians together with the other tribes of southern East Europe attain high skill in toreutics and jewelry art. Sarmatian applied art used the experience of ancient Middle Asia, Greek-Bactrian kingdom and Parthia. Besides, the Sarmatian craftsmen considerably oriented towards the artistic craftsmanship of North Black Sea region, especially the Bosphorus kingdom. Predators and dragon-like creatures with curved bodies were given decorations preference.

During the first centuries of our era, Sarmatian animal style ascending to the Savromatian epoch is substituted by polychromatic style, in which zoomorphic motifs are gradually replaced by geometrical one.

The Middle Ages marked the beginning of Turkic era. Within that period, West Turkic, Turgesh, Karluk, Oghuz, Kipchak and Karakhanid states came to power in succession.

It was the period when ethnopolitical unions were formed to become the intermediate precursors and ancestors of Turkic nations, including Kazakhs. Spiritual culture took a new form. Turkic scripture and literature appeared and so was the assimilation of great religions like Zoroastrianism, Buddhism, Manichaeism, Christianity and Islam.

The cities, linked to the Eurasian civilizations by the Great Silk Road were being developed along with urban culture.

New tendencies, tastes and patterns were introduced into the applied art. The bronze-smiths' produced weapons, armor, girdles, domestic utensils and jewelry that obviously met demand. Turkic craftsmen set the pace in styles for girdle and girdle fittings. Many parts of these girdle sets were found by archaeologists.

Girdle set styles changed very quickly on this vast territory. At the beginning of Middle Ages, the animal style that seemed to be lost is revived in new forms. Representations of animals "poised to fight or contending" appeared in Sassanid Iran, Samarkand and Altai.

The Turks appreciated mythical juxtaposition of animal and human images as favorite artistic motif. The ideal warrior image composed of "a number of qualities attributed to different animals" was characteristic of Turkic epic literature. Turkic rulers believed that a great and worthy commander had to possess the following ten animal qualities. These were: bravery of a cock, readiness to argue of a hen, heart of a lion, impetus of a wild bear, slyness of a fox, patience of a dog, flight of hawk, sensitivity of a crane, avidity of a wolf and lastly the fatness of a nugayr, a little animal found in Khorasan, which grows fat in spite of any hardship.

Turkic applied art, while maintaining nomadic traditions to a certain extent, made a comprehensive use of the contiguous civilizations' art. Elaborate multi-figured compositions, iconographic canons and complex ornamental patterns were all new forms of art that attracted the Turks. However, the steppe art remained intact. For example, the Sogdiana floral patterns borrowed by Turks were transformed into a composition of abstract elements. Images of real and fantastic animals vividly

reflected the taken nature of the ornament that became “an artistic folklore” in the Middle Ages.

The jewelers made abundant use of bronze casting techniques. Punching of copper, gold and silver was applied too. The bronze was dip-gilt with amalgam to achieve artistic impression. Mostly relief décor was common on cast and punched articles. Openwork was also done but to a rare extent.

The basic motifs of ornamental patterns could be classified into three main groups: geometric, floral and zoomorphic.

Geometric patterns were the simplest and comprised of zigzags, rhombuses, triangular figures, curves and linear motifs (heart-shape, spiral and rosettes). The rosettes represent a transitional stage to the floral pattern because many of them can be attributed to the group of conventionalized flower rosettes. Four and six petal rosettes decorated the girdle plaques and badges.

Floral forms were close to the geometric petal rosettes and the Lotus – an element of Buddhist iconography – was sometimes substituted by other flowers.

Plant motifs and compositions were often mingled with zoomorphic ones, presenting a peculiar example of “new steppe décor style”, in which the floral pattern is predominant, while the animal and birds figures are wholly subject to it. This form of composition was completely different from the old animal style art.

The silver crisis of IX-XIII centuries catalyzed the shift to bronze and copper products. The upsurge of feudal craft in these cities gave rise to new creative styles where subjects of feudal epic and folk tales resurrect to a new life.

It was traditional, in the 11th-13th centuries, to find a number of vessels (dishes, jugs) stands and lampions bearing the figure of a woman-bird and a prophetic Simurg, often merge together.

On several trays one finds the images of a lion-griffin with woman’s face, a sphinx – the favorite motif originally interpreted by local masters.

An excellent copper dish decorated with the figures of crowned winged sphinxes with scorpion’s tails in the center and a band filled with the figures of running animals – dogs and foxes – was found in Talgar. A bronze mirror with the same sphinxes was discovered in Dzungar region.

The central figure on the Talgar dish is worth description. A closer look at the lion’s tails shows that it ends in a spike. Unlike the mirror with Arabic inscriptions, which was easily deciphered as well as wishes, the meaning of this spiked tail is

difficult to comprehend. Craftsmen also produced bronze cast mirrors, relief plaques with figures of birds and animals, spoons and small spoons with incised décor and inscriptions, not to mention the minor metallic articles – pendants, medallions. Articles made by the medieval craftsmen using engraving, casting and embossing show the respect and quest for high skills they had for the craft.

XIV-XV centuries, an epoch of the Central Asian states military, political and cultural upsurge is marked by the outstanding achievements in all spheres of artistic craft. Alongside with the new styles of polychromatic architecture and monumental decorative art was the revival of a new form of metalwork.

During XVI-XIX centuries, the art of casting and embossment went on existing in the forms developed and proven in XV-XVI centuries. Mostly, bronze vessels, door hinges, plaques, medallions, rings and earrings were made. Many of the skills of this art continue to be preserved in modern Kazakh applied art.