

THE QUATREFOIL MOTIF AND ITS PROBABLE ORIGINS IN SAKHA FOLK ORNAMENTAL ART

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Abstract. The quatrefoil motif is a popular ornament in Sakha decorative and folk arts and crafts. It is popular not only in Yakutia, but all over the world. Until now, however, there have been no generalized works on this ornamental motif. Its symbolic signs have not been studied. Our study has revealed that the quatrefoil motif in ornamentation and decorative art dates back to the Neolithic period in the Halaf culture of Mesopotamia around 5765 BC. A number of researchers believe that this motif was a symbol of male fertility. We hypothesized that the quatrefoil motif probably appeared in the seals of Caucasian persimmon merchants and depicted the quatrefoil of its calyx. Thanks to the growing influence of trade, this motif has spread around the world. The oriental persimmon, as an important product for the well-being of the ancient Chinese population, became an image of the quatrefoil motif, which was adopted by the Xiongnu as a symbol of protection and resurrection. From them, the motif probably spread widely among the Turkic peoples. The Sakha apparently borrowed this motif from the Xiongnu, as indicated by the abundance of ornamental forms and the presence of archaeological, anthropological, and genetic data, which show the existence of sufficiently close links with the Xiongnu culture. The quatrefoil motif similar to the decorative forms of Gothic cathedrals was probably introduced to the Middle Lena by representatives of the Chaatas and Tyukhtyat cultures in Khakassia.

Key words: Sakha folk ornamental art, ornament, quatrefoil motif, origins, Halaf culture, ancient China, Xiongnu, Turkic peoples.

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Introduction. The quatrefoil motif takes many forms in decorative and applied arts and crafts. Until now, there have been no generalized works on this ornamental motif. Its symbolic signs among different peoples have not been studied. This motif is widespread in Sakha applied folk art and can be found in archaeological materials and museum exhibits from the pre-revolutionary period, which confirms its archaic past. In this paper, we have analyzed the literature mentioning the quatrefoil motif in order to clarify its origins and history. Knowing the origins of this motif in ornamentation will make it possible to find out the roots of this ornamental motif in Sakha folk art and crafts.

Materials and methods. We have reviewed the literature with the search query "quatrefoil motif" in JSTOR, Google Academy, and eLibrary databases, article references, as well as image data

in museum catalogs. The resulting images of the quatrefoil motif were summarized and analyzed, and the oldest quatrefoil motifs in the museum and archaeological collections were identified by the dating of the artifacts.

Results and discussion. The quatrefoil motif is widely used in the design of architecture, ceramics, bronze items, and in the ornamentation of folk arts and crafts. In the literature this motif refers to ornamental images resembling clover leaves, persimmon sepals, four-petaled flowers and decorative elements mainly used in architecture and in small architectural forms, in the form of a quatrefoil outline with rounded edges, inside which various images can be placed [1].

One of the earliest motifs of the quatrefoil in pottery ornamentation is found in artifacts from the Neolithic culture of the Middle and Late Halaf period (5700-5300 BC) in northern Mesopotamia (northern

Syria). During the Late Neolithic period of the Halaf culture, there was widespread colonization of northern territories [2]. During that period, seals with quatrefoil motifs appeared in the foothill settlement of Domuztepe in modern Turkey between Gaziantep and Marmaris (5755-5450 BC) [3]. A number of researchers suggest that: "...the quatrefoil and polypartite rosette forms may be understood as highly stylized composite depictions of male genitalia" [2]. It should be noted that the Domuztepe settlement was in the area of the original distribution (hometown) of the Caucasian persimmon (*Diospyros lotus* L.) [4]. It should be noted that the quatrefoil motif in the seal found in the Domuztepe settlement recalls the four-membered calyx of the forming fruit of the Caucasian persimmon [5]. While the number of petals of a persimmon flower may vary between cultivars, the sepals are always four-bladed (Fig. 1) [6]. The fruit of the Caucasian persimmon is edible and very nutritious. It can be dried and stored for a long time. The seals found at Domuztepe probably belonged to persimmon traders. It has been established that the Halaf culture had extensive trade links. One of the foremost archaeologists of West Asia, J. Mellart wrote of the Halaf culture: "Never before had any culture carried out such widespread trade expansion" [7].

The quatrefoil motif later appeared in ancient Egypt and Greece, but apparently as a decorative element and was not very popular. This motif became most popular in Europe during the Gothic and Renaissance periods (Fig. 2). 900-400 years BC the quatrefoil motif appeared in Mayan culture [11]. Researchers believe that in Mayan culture this motif represented the entrance to the underworld.

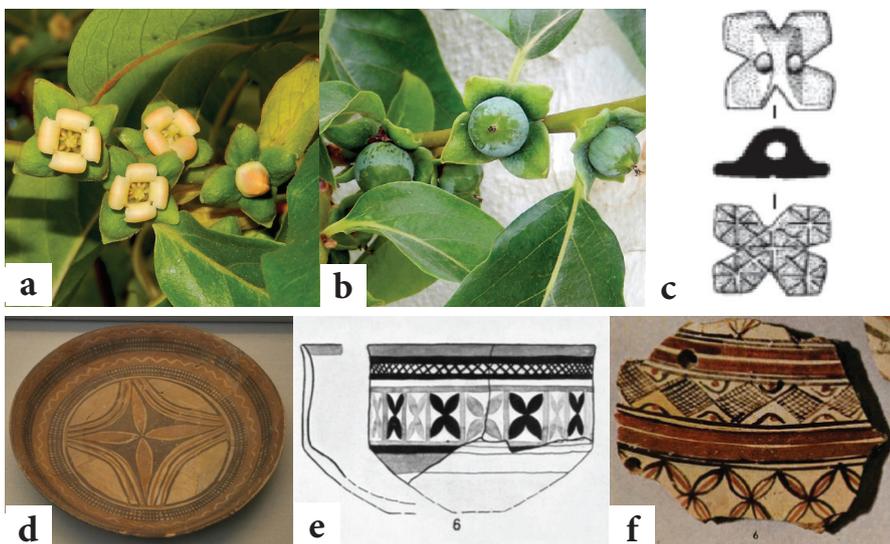


Fig. 1: Flowers and the forming fruit of *Diospyros lotus* L. and artifacts from the Halaf culture with a quatrefoil motif:

- a) Flowers of the Caucasian persimmon (*Diospyros lotus* L.) photo by A.G. Malykhina [5]; b) Forming fruit. Photo by A.G. Malykhina [5]; c) Seal found at the Domuztepe settlement in three projections (5755-5450 BC) [3]; d) hand-painted ceramic plate, Halaf culture, Tall Arpachiyah, age 6000-5000 BC, archaeologist M.E.L. Mallowan, British Museum, Inv. No. 127585; e) Bowl with polychrome quatrefoil pattern in red and black paint on pinkish clay, Late Halaf (5500-5300 BC), Tall Chagar Bazar [8]; f) Fragment of thick-walled cauldron with quatrefoil ornament, Late Halaf culture [9].



Fig. 2: Elements of the quatrefoil decoration of St Peter's Cathedral (center), Exeter, UK, reconstructed between 1270–1369 [10]. On the left, the quatrefoil clover (very rare in nature) is popularly believed to bring good luck, which seems to be the reason for the popularity of the quatrefoil clover motif in European ornaments. The quatrefoil motif in the ornamental decoration of a bronze ritual vessel (right).

The quatrefoil motif was particularly popular in ancient China. An artifact more than 1,300 years old, a bronze ritual vessel of the *gui* type decorated with a quatrefoil motif, is in the collections of the British Museum (Inventory No. 1977.0404.1, date of manufacture 11th century B.C.) (Fig. 2).

The quatrefoil motif in the ornaments of ancient Chinese artifacts is known in Chinese literature as the 'persimmon stem' [13]. The ori-

ental wild persimmon (*Diöspyros kākī*) has been known in China for over 11,000 years. It saved the nation in famine years. Domestication of the culture occurred from 1000 B.C. to 500 A.D. [14]. According to the author, the ornaments began to use the image of persimmons at that time (Fig. 3). Archaeologist N.V. Polosmak notes that almost all Xiongnu burials in which she participated were decorated with quatrefoil elements made of various materials and covered with gold foil (Fig. 5). She writes that the symbol was borrowed from China and was meant to "...protect the body from hostile supernatural forces and contribute to its resurrection" [13]. This ornamental motif was probably borrowed by the Xiongnu from the Turkic peoples of Siberia — the Tatars, Tuvinians, Altaians, Khakasses, and Sakha.

The quatrefoil motif is a very popular one among Sakha people. There are a variety of options of the motif and its geometricization, which characterizes its existence in Sakha folk arts and crafts for a long time. In the Sakha ornaments collected by B.F. Neustroev (Mandar Uus) we counted 60 variants of the motif [14]. Fig. 5 shows the possible

geometric variants of the quatrefoil motif and its transformation from the main ornamental element into an auxiliary one. Fig. 6 b) shows an arched *choron* ornament, with an additional element in the form of a geometric shape of a quatrefoil clover. According to S.V. Ivanov, the arched *choron* ornamentation is

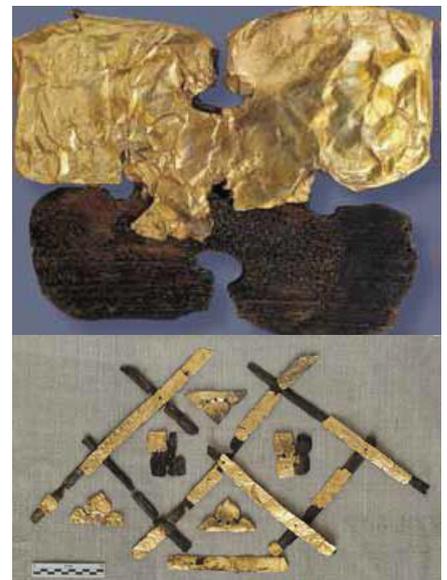


Fig. 5: A quatrefoil decoration on the coffins of elite Xiongnu burials. Images from the article by N.V. Polosmak [13]. The shape of the quatrefoil is undoubtedly similar to that of the Chinese.



Рис. 3. Мотив четырехлистника в бронзовых зеркалах Китая

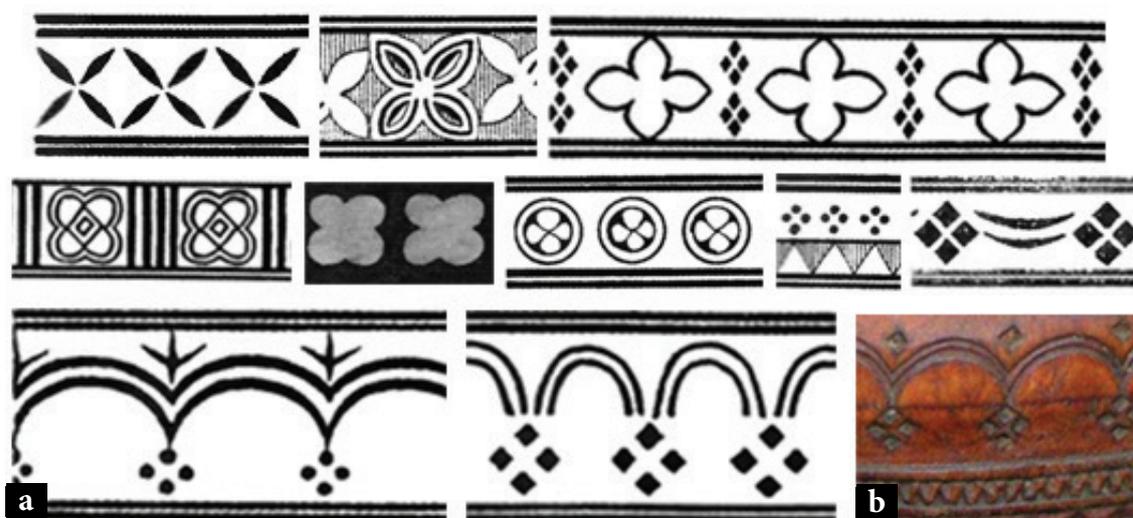


Fig. 6: The quatrefoil motif in the ornaments of Sakha folk applied art, its geometricization and transformation from the main element of the ornament into an auxiliary one: (a) ornamental motifs from B.F. Neustroyev[16]; b) The original ancient ornament of the choron.

borrowed by the Xiongnu from the Sakha[15].

The oldest artifact with an ornamental quatrefoil motif on the territory of Yakutia was published by archaeologists R.I. Bravinna et al. (2010) [17](Fig. 7).

According to L.R. Kyzlasov, the Xiongnu led by Maodun in 201 BC subdued the northern Dinlins, who lived at that time in the territory of the Khakass-Minusinsk Basin. Traces of the latter, in the author's opinion, are represented by artifacts of the Tagar culture[18]. The

Xiongnu moved their conquered Turkic-speaking Ge Kun (鬲昆) to the area and placed their viceroy. Unlike the Xiongnu and Dinglin, the Ge Kuns buried their dead by a corpse-burial ceremony. According to L.R. Kyzlasov, the Tashtyk culture was formed as a result of the mixing of the Ge Kuns and the Dinlins. From the 6th century onwards, the Ge Kuns were no longer mentioned in Chinese sources and were identified with the Khakas[18]. Cremation burials were characteristic of the Chaatas and Tyukhtyat cultures in

the Minusinsk Basin of the Yenisei. The ornamental motifs in the form of a quatrefoil. The motifs remind of the birch bark ornament of At Byraan III burial (Fig. 8) [19].

It should be noted that the quatrefoil motif has been continuously observed in ornamental art since the Xiongnu, Turkic khanates, Golden Horde and modern Turkic peoples of Russia.

According to folklore data, in times immemorial, the Kyrgys lived on the territory of Yakutia[20]. According to A.N. Bernshtam, Tur-

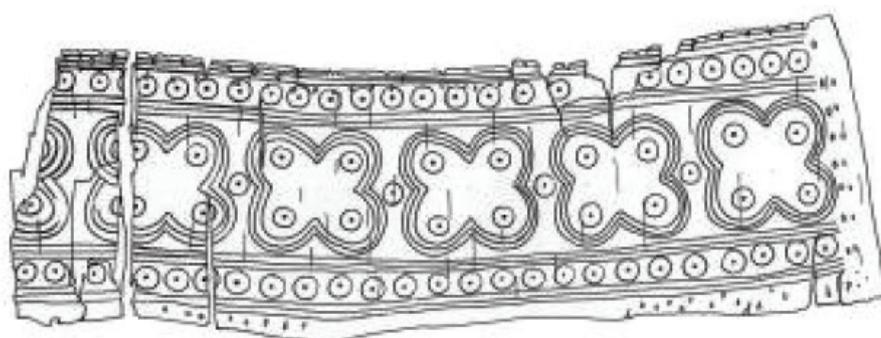


Fig. 7: A fragment of a birch basket ornamented with a quatrefoil motif from the cremation of At Byraan III (radiocarbon dating from 1280-1490) [17].

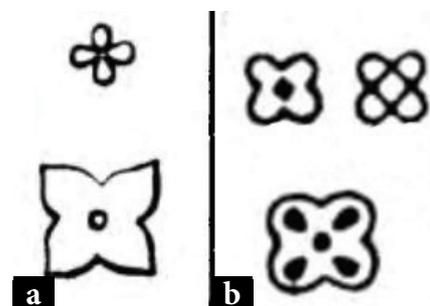


Fig. 8: The ornamental motifs of ironwork from the Chaatas culture of the 6th - mid-9th centuries. (a) and Tyukhtyat of the middle IX-X centuries. (b)[19].



Fig. 9: "Pokrovsky warrior" a warrior's skeleton with bone armor dated 360–110 BC¹. Exhibit of the Khangalassky Ulus Museum of Local Lore named after G. V. Ksenofontova. The mt DNA haplotype of the skeleton matched the DNA of the Hunnish burial of Egiin Gol[24]. Photo provided by the museum. 2021

kic-speaking tribes left the northernmost runic record on the rocks of the Lena River around the 9th century[21]. Yakut historian V.V. Ushnitsky believes that the Yenisei Kyr-gyz participated in the ethnogenesis of the Sakha[22]. But it should be noted that the Xiongnu probably entered the territory of Yakutia at the same time when they subdued the Yenisei Dinlins. It cannot be excluded that Turkic-speaking people were among them (Fig. 9)[23].

Mt DNA haplogroup assignment using EMPOP tools of the 'Pokrovsky Warrior' mitotype

yielded haplogroup D4I. The HVSI mtDNA of this ancient skeleton matched the data of three modern Sakha whose haplogroup D4I2 was determined. It should be noted that the same haplogroup is found in a female skeleton recovered from a Turkic burial site in the Province of Wulgan in Mongolia, age of 1280 ybp [25].

Conclusion. The quatrefoil-shaped motif in ornamental and decorative art thus emerged as early as the Neolithic period, around 5765 BC. A number of researchers believe that this motif was a symbol

of male fertility. We hypothesized that the quatrefoil motif appeared in the stamps of Caucasian persimmon merchants and depicted its calyx. Thanks to the growing influence of trade, this motif has spread around the world. The oriental persimmon, as an important product for the well-being of the ancient Chinese population, became an image of the quatrefoil-shaped motif, which was adopted by the Xiongnu as a symbol of protection and resurrection. From them, the motif probably spread widely among the Turkic peoples. The Sakha apparently borrowed this motif from the Xiongnu, as indicated by the abundance of ornamental forms and the presence of archaeological, anthropological, and genetic data, which show the existence of sufficiently close links with the Xiongnu culture. The quatrefoil motif similar to the decorative forms of Gothic cathedrals was probably introduced to the Middle Lena by representatives of the Chaatas and Tyukhtyat cultures in Khakassia.

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¹ Date of burial: 2160±20 years ago (IAAA- 170062). Calibrated date in yy. (±2σ), 95.4% probability = 360-110 BC The radiocarbon date was obtained from the Institute of Accelerator Analysis Ltd. in Japan by Accelerator Mass Spectrometry (AMS) under Katsunori Takase's grant (Sapporo, Japan) JSPS KAKENHI (15H01899).

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