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KNOTS IN TRADITIONAL SPIRITUAL CULTURES OF MANKIND

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The use and role of the symbolic language of knots among the peoples of different cultures and epochs is considered. . The deep connection of knots, knot writing and knot ornamentation with the cosmogonic picture of the world of different peoples is studied.

Key words: symbolic language of knots, knot writing, wicker ornament, labyrinth ornament, ritual knots, antique ceramic, Kalachakra mandala, Tibetan Buddhism, cosmological and metaphysical representations

Introduction. From previous research, it appears that the same knots were used in antiquity that are still used today. The symbolic language of knots. has been used by peoples of many different cultures. For example, knotted cane stalks and strips of bark, symbolized the conclusion of peace between the two tribes of New Caledonia. Eskimos tell their tales, making knots on several parallel ropes, depicting scenes of hunting and various animals. The same technique of telling ancient myths with the help of rope figures is used by the Easter Islanders. Islanders of the Pacific Ocean use a peculiar kind of knot writing, making woven from palm leaves and pandanus fibers maps of ocean currents and prevailing winds, weaving in them shells of kauri, representing islands and reefs.

Result. In ancient Greece and Rome the straight or Hercules knot was widely spread, the images of which are often found on fragments of ancient ceramics. To the times of antiquity belong and the first written information about knots. The most famous evidence of the special role played by some knots in ancient culture is the legend of the Gordian knot, preserved in many literary monuments. The Greek physician Herakles (1st century A.D.) wrote an essay on surgical pendants, in which he also mentions knots and loops.

For the manufacture of wicker products were necessary knots with a regular structure, which contributed to the emergence of interest in the symmetry of knots. Flat weaving led to the basic principles of construction of geometric ornaments, knots with a periodic structure were distinguished, combinatorial combinations of which could fill the plane in a regular way. Braided ornament of continuous lines forming structures of knots, were engaged in the world-famous artists of the Renaissance: Leonardo da Vinci and Albrecht Durer. In the painting of the Heraldic Hall of the Sforza Palace in Milan, Leonardo depicted tree branches intertwined with decorative cord, forming complex knots and loops. The only ornamental motif of the portrait of Gioconda is located on the edge of the neckline of her dress pattern of four-petal knots passing into each other, successively tied one after another on a continuous cord. Leonardo also created a drawing of a centric ornamental composition of a continuous interwoven cord, forming a multitude of knots passing into each other, which inspired Dürer to create a series of similar woodcuts, which he himself called "Knots".

Researchers of braided ornaments distinguish only four basic knots, and considers the rest as their derivatives, which are obtained by complicating these four. These knots include a straight or Hercules knot, "eternal" knot, knot "tree of life", as well as "flat" or "Turkish" knot.

Braided ornaments and knots were usually made of materials of vegetable and animal origin and were short-lived. Perhaps this was the stimulus for the search for other forms of their artistic representation, such as graphic images, carving, chasing, casting, etc., which led to the emergence of braided ornaments, known in virtually all human cultures since antiquity. Among the various forms of braided ornament widespread structures made of a continuous line, the beginning and end of which are connected to each other. These include, in particular, many Celtic knots, Tamil ornaments, drawings of the African people Chokwe and others.



Some types of centric woven ornaments could be initially associated with the idea of transformation of planar structures into spatial ones. The Kalachakra mandala, which is one of the central symbols of Tibetan Buddhism, is an example of such an ornament.

According to Kalachakra, the cosmos is formed around Mount Meru, in the central part of which are located the so-called "twelve paths of wind" - intertwined ring orbits, forming a hemispherical shape, on which the planets move. Usually in traditional Tibetan mandalas, the wind paths are depicted in a flat form and geometrically represent twelve interlocked and intertwined rings.

In the Baltics, knot writing with multicolored threads and knots was a means of expressing special feelings and wishes at their gift - reverence, respect, love. Japanese ritual knots mitsuhi are a part of traditional Japanese etiquette in presenting gifts. They are made of compressed paper cords, have a clear sequence of the process of tying, which is the ritual itself.

A rope with twelve knots tied on it at equal intervals was used as a tool for marking right angles on the ground, pulling which, they formed an Egyptian or Sacred triangle with sides related to each other as 3, 4 and 5. The rope with its successive knots - eights gradually acquired a symbolic meaning as one of the attributes of the art of building and was often depicted as a symbol of the so-called "chain of unity" surrounding the premises of Masonic lodges in their upper part. According to R. Guénon, traditionally any building was built according to the cosmic model, and the lodge as an image of the Cosmos should have a frame in the form of a cord with twelve knots, as well as the Cosmos itself is limited by a circle of twelve constellations of the Zodiac. Traditional worldview sees in a closed continuous thread is not only a means of limiting and organizing the various elements that make up the Cosmos, but also the connection of all the elements among themselves, which is its function as a "chain of unity". R. Guénon studying the symbolism of woven ornaments, in which figures are depicted by a continuous line, in particular the works of Leonardo and Durer, noted that the continuous nature of the line brings them closer in its form with labyrinths.

Ornament-labyrinth from a continuous thread or its stylized depiction in the form of geometric figures, in parallel with its symbolic meaning of the sacred frame, carrying the cosmogonic meaning, had a number of auxiliary derivative functions, such as protective, protective and magical. Gradual degeneration of understanding of the depth of the original tradition reduced the meaning of ornament only to these secondary functions, bringing to the forefront of the magical meaning. Magical and witchcraft properties from antiquity attributed to knots and rings by various peoples, when the properties of knots, understood as something binding, tightening and entangling, that is, imposing bonds on the object of magical influence, transferred to external objects and people physically with magical knots do not touch, but are in sympathetic connection with them.

Conclusion. From the above-mentioned it is possible to sum up that knots occupied a special place in traditional spiritual culture of many peoples, performing a role of symbolic and model objects used for description of cosmological and metaphysical representations which became prototypes of modern mathematical models.

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