Sanctuary of Eneolithic and Bronze Age in Western Siberia, as a Source of Astronomical Knowledge and Cosmological Ideas in Antiquity

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Abstract

In this article, on the basis of excavated materials from ritual places [sanctuaries] of the Eneolithic (Savin 1, Slobodchiki 1, Velizhany 2) and the Bronze Age (Suzgun 2, Chudsky Mountain), consideration is given to astronomical knowledge and cosmological representations by ancient populations inhabiting forest-steppe and southern taiga biomes within the Tobol and Irtysh river basins. The sources for this reconstruction are found in features of the organization of sacred spaces, associated with the landscape-bound layout and architecture of sanctuaries as whole sites, and by their individual archaeological objects - in the character of their function, the specificity of cult-ceremonial activities, the semantics conveyed by distinctive objects of ritual purpose, and in the territorial and cultural attributes of the investigated monuments. Using available archaeological evidence integrated into a unified system promulgated to serve for comparison between data from archaeoastronomy and ethnology, the author attempts to reveal relationships, established during the course of research, that bind a set of common features present at places of cult practice by these ancient populations with concrete representations of the Universe. According to reported data, the basis of astronomical knowledge and related cosmological ideas was shaped at the end of Neolithic-Eneolithic by a tripartite model of the world in its horizontal and vertical projections. Leading forms of worship by local cults are concomitant with collective sacrifices closely connected with calendar ceremonialism. According to astronomical correlations, the greatest sacrifices were made during the autumnal equinox, at the time mass hunting for ungulates was conducted. The observed association of high ceremonies with sunrise and to lunar cycles attests to the existence of solar and lunar cults. The basic schema and elements that comprise the given model of the Universe and its display in ritual-ceremonial practice were retained by the local aboriginal population of the territory under consideration (Mansi, Khanty) into the ethnographic present. This diachronic similarity attests to the continuity of cultural traditions and to the affinity within the ethnic composition of the population, conditioned by specific habitation in a forested zone.

Keywords: sanctuary, cult place, sacral space, ritual, outlook, world model, reference point, astronomical knowledge, cosmological representations, archaeoastronomy, archaeological sources, ceramics, sacrifices.
Introduction

In terrain of the Ural-West Siberian region, including the primordial earths of the people Mansi, tens ancient sanctuaries of various phylums from paleolith before the Middle Ages are known. Each of them has the unique features bound to landscape binding, specificity of lay-out, an epoch-making and territorial accessory, character made their cult-ceremonial actions. Simultaneously at all kinds of sanctuaries there are general signs, characteristic for the cult places, fixed archaeological and that is especially important, meeting in aggregate and by that testifying to sacral load of monument.

Presence of these signs taking into account features of separate sanctuaries allow to compound the general concept about level of world outlook representations and the ritual actions bound to them for the ancient population as whole and for concrete epoch and terrains in particular. Researches of last years with use of methods archaeoastronomy show that almost all kinds of archaeological monuments of an epoch Eneolithic and Bronze age of the Ural-West Siberian region (settlement, soil burial grounds, the barrows, different phylum cult objects) contain in different degree of the certificate of astronomical knowledge and the certain notions based on them of the Universe [1-6].

Visual overseeing by locomotion of the basic stars was basic principle of ancient knowledge of the Sky. Are most informative for reconstruction of ancient astronomical knowledge and cosmological representations Eneolithic round sanctuaries with pillars designs forming system of astronomical reference points [7, 8]. It allows involving the data of an astronomical science for the conclusions bound to ancient and traditional outlook. Using all available certificates in uniform system of comparison archaeological, archaeoastronomical, ethnological, mythological and other stuffs there is possibility, on the one hand, to establish connection of lay-out and architectural elements of sanctuaries, and also variety of the finds found there, with concrete representations of the ancient population about the Universe; with another - to try to tap paths of the further development, arisen and issued during an epoch Eneolit world outlook schemas and models, up to the ethnographic present.

Proceeding from the yielded thesis, the author does attempt to show: as the theme of the Sky reflecting rhythm of existence all alive in nature, has received display in objects of material culture of primitive society of Tobol-Irtysly, first of all in its world outlook part; as this theme found reflectance in seasonal cult-ceremonial, pagan on character, the festivals which echoes were conserved up to now in national memory and culture of the indigenous population of the yielded terrain - Khanty and Mansi[9, 10].

Basis of world outlook representations of the ancient population of North forest-steppe and South taiga regions of Western Siberia bound to understanding of the Universe, features of geographical and historical conditions of region in many respects defined.

Throughout last 6-7 thousand years there were almost invariable natural-environmental conditions and the economic employment of the population bound to the hunting and fishing craft that promoted existence of similar life-support system and similar manner of acclimatization to environment from neolith to the ethnographic present.

Specific feature of the yielded region are annual seasonal migrations of hoofs (a moose, deer, roe deer) from the western slopes of Ural Mountains on east (autumn) and in back (spring). It caused relative reliability of principal view of craft on which well-being of people within round year [11] depended.
Feature of historical and cultural situation of this terrain is intimately connected to specificity of environment, based on long continuity of cultural traditions and affinity of ethnic composition of the population also. Number of important historical and cultural factors of the Ural-West Siberian region concern both continuous communications and interactions with the population of steppe region among which throughout many epoch the southwest impulses periodically strengthening or decaying, but abandoning an appreciable trace in the history and culture of the population of forest-steppe and South wood region of Western Siberia prevailed. [12, 13]. In formation of world outlook complex of the ancient people of Ural Mountains and Siberia, especially Ob Ugrics, have taken part also elements inpouring here Vedic - Zoroastrian beliefs.

Noted natural-geographical and historical and cultural features which have compounded basis of outlook of the ancient population, remained in the Ural-West Siberian region almost invariable throughout last five millennia.

Sanctuaries of Epoch Eneolit

Slobodchiki concern number of the most investigated sanctuaries of an epoch eneolit in terrain of North forest-steppe and South taiga Tobol-Irtysh 1 in Belozersky district of Kurgan region (55,4 ° N Savin 1.) and Velizhany 2 in 40 km to the north from Tyumen (57,4º N). Feature of layout of all three cult complexes is round architecture issued by ring ditches and pillars by designs.

The sanctuary Savin 1 is located in wide floodplain on coastal ostanets by height 2-3 m (fig. 1, 1).

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**Fig. 1.** The sanctuary Savin 1. 1 - habit view of sanctuary Savin 1 from the south in reconstruction (1997); 2 - ring ditch of the second circle in 12 years after pipettings ; 3 - observation of sunset in monument reconstruction (on July, 27th 1997).
On the dissected area of 1100 sq. m constructions from two adjoining circles outlined by ditches, with bore diameter of 14 m and 16 m (fig. 1, 2 are investigated; 2, 1, 2; 3, 2, 3). In the first circle from east and western sides were available corridor orifices in length to 4 m (fig. 2, 1; 2-1).

Fig. 2. The sanctuary Savin 1.
1 - graphic reconstruction of sanctuary (on Potemkina T.M.);
2 - the plan excavation: 1 - lineaments of ditches, holes and pillars fossas with number indicating on depth of 100 cm; 2 - indistinct lineaments; 3 - carbonaceous layer with coals; 4 - the
incinerated layer; 5 - the holes filled with bones of animals; 6 clump of bones at level of ancient horizon and in holes; 7 - maculae ochre; 8 - disorders of pots; 9 - ceramics clump; 10 - hole with skulls of the adult and the child; 11 - borders of "a small shaft" in limens excavation; 12 - Sun; 13 - Moon; 14 - rising; 15 - call.

In the circle centre there was squared shape excavation (7.5 x 6) extended on line the West - the east. In the second circle there was one passage from the northeast side in the form of breakage in ditch in width about 3 m; in the centre - rectangular an excavation (9 x 5.6) in the form of the trampled down carbonaceous areola [14].

Fig. 2-1. Reconstruction of sanctuary Savin 1 in color (on Potemkina T.M.).

Probably, even basic design feature of constructions of sanctuary the poles positioned in the centre of the circular areolas, on bottom of ring ditches and round them from outer side (fig. 2, 1, 2 were essential; 3, 3), 1,5-2,5 m located with an interval (more than 120). Among them there are also holes with traces of delution of fire (about thirty) (fig. 5, 5). Many of poles in relation to the centres of the circles outlined by ditches are oriented on the significant astronomical directions bound to risings and sunsets in days of equinoxes and solstices, and also the moon in its extreme positions [15, 16]. The most powerful clumps of finds are dated For astronomically oriented poles - bones of animals, ceramics, instruments of labour (fig. 5, 1, 2, 6-8).

The important part of architecture of sanctuary bound to its dimensional and time organisation, two shaft located strictly to the east from the centres of circular constructions were.

The first shaft in length of 30 m began in 8-10 m from east entrance corridor of the first circle, in 16-18 m from its centre (fig. 1, 1; 2, 1, 2). The shaft axis compounded one line the West - the east with the central pole of the first circle (№ 3), two others in ditch (№№ 51, 52) and behind its limens (№ 62) (fig. 2, 1; 2A, 1). Near to these poles are found powerful by clumps of bones of
animals, ceramics, the stone tools which are lying down on carbonaceous or incinerated layer (fig. 5, 4, 6-8).

Fig. 2A. The sanctuary Savin 1.
1 - kind from the centre of the first circle on small and big shaft in the course of reconstruction; 2 - east side of cut of small shaft, kind from the northwest. In profile of side the light lens excretes an epoch shaft eneolit, above - traces of stratifications of the subsequent time, bound basically with periodic overflows of the river Tobol.
Fig. 3. The sanctuary Savin 1.

1 - reconstruction of character of functioning of poles in northern the half first circle of sanctuary; 2 - northern part of ring ditch of the first circle after deflating on depth-120sm (from right to left sq. Mrs. / I-2, hulls - pillars holes №№ 15-20, 25); 3 - bottom of ditch of the first circle with pillars holes and clumps of finds nearby on depth-150 cm (sq. Ж-И / 1-2, pillars holes - №№ 17-22)
Fig. 4. The sanctuary Savin 1.
1 - the big shaft, kind from the northwest; 2 - kind on the big shaft from the centre of the second circle.
Fig. 4A. The sanctuary Savin 1.
1 - big shaft, kind from the northwest; 2, 3 - cut of the big shaft: 2 - east side, kind from the northwest, 3 - east side, kind with southwest.
The second shaft in length of 100 m, height 0.9-0.4 m was in 150 m to the east from the centre of the second circle (fig. 4, 1, 2). Its axis also compounded one line the West-east with the centre of this circle and two poles in ditches from the opposite sides (№№ 35, 90) and pole outside of ditch (№ 118) (fig. 4, 2). Under an embankment of both shaft the arboreal decay, traces hearth (fig. 2A, 2 are taped pillars holes; 4A, 2,3).

Fig. 5. The Savin 1. Archaeological certificates of cult-ceremonial actions.
1 - clump of preparations of stone tools, sq. М-10 at pole № 72; 2 - subjects from clay, sq. В-3, hole 11; 3 - burial 3 in ditch, the top layer; 4 - bottom of ditch of the second circle with traces of strong burning of fire (sq. H-Π/4, 5); 5 - cult hole 28, sq. М-1; 6-8 - clump of bones: sq. H, O/4, hole 55; About, P/5, holes №№ 57, 58; M-4, holes №№ 49, 53.
Fig. 6. The Savin 1. Ceramics.
1, 3, 4, 6 - from filling of ditch, sq. E-K/1, 2; 7, 8 - from the central excavation.
Fig. 7. The sanctuary Savin 1. Subjects with lunar symbolic.
1 - bone plate with carved daggers, the central excavation; 2-5 - the pot and clay subjects, sq. B-3, hole 11.

The stuff received in the course of pipettings, first of all ceramics, allows to carry sanctuary Savin 1 to sosnovoostrovsky culture of the Ural-Kazakhstan cultural-historical generality edge geometrism epoch eneolit (fig. 6; 7). Carriers of cultures of the yielded generality in the ethnic
plan are bound by the majority of explorers with Ugrian (or Finno-Ugric) the population [17]. The monument is dated within the limits of first half III millennium BC [18].

**Fig. 8.** The Slobodchiki 1. material stuff.
1, 2 - clay subjects; 3-10 - ceramics. 1-10 - on Vohmentsev 2000: 251-260, fig. 83, 1, 3; 84, 1; 85, 1-3; 86; 87, 3.
The sanctuary of Slobodchiki 1 is also on coastal ostanets, on distance of 0,8 km to the West from Savin 1, is investigated particulate (288 sq.m). Here are taped part of ring ditch in diameter about 14 m with passage to southern part and rectangular excavation (7 x 8 m) in the centre of circle [19-21].

Within circular design the rests fireplaces have been fixed pillars holes. In the central excavation and ditch clumps of bones of animals among which fragments of ceramics, products from stone, clay and bone (fig. 8 are found) are met. At the bottom of an excavation powerful enough stratification of carbonaceous sandy loam and the incinerated ground are noted.

On sanctuary of Velizhany 2 (excavation 527 sq.m.) two concentric circles entered each other, outlined by ditches (fig. 9) are found. The chorionic ditch had diameter of 19,2 m with three passages to northeast, western and southern sectors.

At the bottom of ditch, except fossas from poles and fireplaces, four penetrating holes located in northeast, east, northwest and southwest directions (fig. 9, A-Г) are taped. Holes had the big dimensions, in their fillings was traced on several (to ten) alternating stratifications from carbonaceous sandy loam and grey sand, on occasion ochres. Each layer represented burnt down executioner's blocks on which there were pots.

The intrinsic circle in diameter of 5,2 m represented itself the profound, strongly trampled down areola in which centre there was the powerful pole defining the centre of all sanctuary [22, 23]. To the West and the east from it within intrinsic trench eight fossas with ochre are found. On bottom of trench 13 poles - met have been supplied. Around fireplaces, fossas with ochre and poles there was set of pots (the majority - upside down). In some of them there was soot, others contained ochre. Almost all space in circle has been filled by pots, their fragments, clay hand-made articles (fig. 9).

On sanctuary of Velizhany 2, as well as on Savin 1, the appreciable part pillars and sacrificial holes with pots, ochre and carbonaceous sandy loam is dated for the significant astronomical directions bound to points of risings and sunsets and the moon on horizon in days of solstices and equinoxes.

On the cultural accessory the sanctuary of Velizhany 2 is close Eneolithic to the sanctuaries described above.

Thus, basic design feature of architecture of all three investigated circular sanctuaries of forest-steppe-South wood Pritobolja were the poles positioned in the centre of the circular areolas, on bottom of ring ditches and round them from outer side (126 pillars holes - on Savin 1, 74 - on Velizhanah 2). Many of poles have been oriented on significant astronomical directions (fig. 1, 3; 2, 2; 4; 9), bound to risings and sunsets in days of equinoxes and solstices, and also the moon in its extreme positions [24, 25]. The most powerful clumps of finds and traces have been dated For these poles fireplaces. Some of poles - result of specification of the necessary directions, rearrangements, changings become unfit for use. Many of them could have purely ritual value: carried out functions of idols or sacrificial poles.
Fig. 9. Velizhany 2. The sanctuary plan.

It is executed under field drawings by L.A. Drjabinoj pitched the author of the publication in 1993 Astronomical reference points - on T.M. Potemkina.

1 - lineaments of ditches and holes on depth-90 – 100 cm; 2 - pillars hole; 3 - the pot; 4 - fireplace; 5 - holes with ochre; 6 - holes with carbonaceous layer and separate coals; 7 - field with high pines; 8 - Sun; 9 - Moon.
Fig. 10. Velizhany 2. Ceramics.
L.A. Drjabinj's drawings, are pitched the author of the publication in 1994.
General characteristic of Eneolithic sanctuaries

On all three sanctuaries the mass archaeological stuff is found. On Savin 1 - 5400 fragments of ceramics from 380 pots, 1800 tools from stone and clay, 3900 bones of animals (V.P. Danilchenko's definition), belonging to horse (160 individuals), roe deer (72), to moose (25), wild boar (9), bear (1), wolf (1). On sanctuary of Slobodchiki 1 [Vohmentsev 2000: 87 - 90] bones, clay, numerous bones of animals (a moose-37 individuals, bear - 14, wild boar - 12, roe deer - 10, horses-5, jackrabbit, an otter, marten - on 2 individuals, wolf - 1), fishes (P.A. Kosintseva's definition) are found about 1000 fragments of ceramics, more than 50 products from stone. In collection of Velizhan 2 - more than 60 whole and crushed pots, bones of animals are absent.

On sanctuaries Savin 1 and Slobodchiki 1 are found also ritual burials of people [26, 27]. In case of the former - burial places of two skulls (the adult and the child) in southern part of the first circle and three adult people (two men of mature age and the girl) in southeast sector of the second circle (fig. 5, 3) in sunrise direction in winter solstice (G.V. Rykushinoj's definition); in the second case, also in southeast sector of ditch, the incomplete atomy of the woman at the age of 50-60 years (A.N. Bagasheva's definition) is found.

Finds on the area of sanctuaries outlined by ditches concentrated basically the big and small clumps. The most powerful clumps of all kinds of finds are met in the central excavations and in ring ditches around pillars the holes fixing astronomically significant directions.

So, on sanctuary Savin 1 in the central excavation of the first circle 1290 bones of animals from 49 individuals belonging mainly horse (about 70 %), the basic part of the whole and crushed pots, tools and the weapon are found.

Separate bones of the person are found in the centre of sanctuary of Slobodchiki 1 in clumps of bones of animals and ceramics. Feature of an osteological collection of this monument is presence of rather great number of individuals of bear (14) that, probably, is bound to the special status of monument in system of cult-ceremonial actions Eneolithic the population of Tobol.

To sanctuary of Velizhany 2 within an intrinsic circle have been concentrated half of disorders of pots (more than 30) and the basic part of fossas with ochre from among found on monument. The majority of pots here have been supplied upside down, many contained ochre.

In the central excavations of sanctuaries subjects of cult character are found also. On sanctuary Savin 1 is found lunar calendar for the bone plate parted on four sections, in each of which the ornament from seven daggers (fig. 6, 1) is put. In sacrificial hole 11 within the western entrance corridor of the first circle oriented in direction of appearance of the young moon in days of equinoxes, the complex of subjects with lunar symbolic is found: the pot with an ornament symbolizing model of the Universe and sanctuary, and simultaneously being lunar calendar (fig. 6, 3); two clay (in the form of a pie) subject in fosse with ochre in position in situ, combined together (fig. 4, 2; 6, 2, 4, 5).

Situation of clay subjects and condition of their placement allow considering as their models of halves of disks of the moon symbolizing its phases [28, 29]. This position of clay products and their form is simultaneous could symbolize feminine, especially considering the coincidence fact on time of lunar and female cycles. Probably, it was one of the causes of that the moon at the majority of ancient nations of the world was considered as female deity. In total on sanctuary Savin it is revealed about 40 similar clay products which basic part is found in the western half of central excavation of the first circle. The similar products only ornamented, are found also in the central excavation of sanctuary of Slobodchiki 1 (fig. 8, 1, 2).
In the centre of the second circle in fosse in diameter of 25 cm the complex of preparations of handpieces of spears, arrows and scrapers - only 28 copies from the light jasper, imbued by ochre (fig. 4, 1) is taped. The complex, undoubtedly, is sacrificial.

On each of made mention sanctuaries there are the features bound to presence of those or other significant astronomical reference points, specifying in time of fulfilment of the big sacrifices. On sanctuary Savin 1 greatest concentration of finds was observed at pillars holes in the ring ditches fixating directions on sunrises in days of equinoxes (on March, 21st and on September, 23rd). These poles settled down on one axial line with the central poles and shaft. Only in holes at east entrance corridor of the first circle it was revealed more than thousand bones of animals from 50 individuals, mainly to horse, together with ceramics, silicon tools, powerful carbonaceous layers (fig. 5, 4, 6-8).

On sanctuary Savin 1 interesting feature of allocation of the bones, bound to horse is tracked also: in the top filling pillars the holes located with certain interval in northern half of ring ditch of the first circle (fig. 2; 3, 1, 3), bones of skull and bottom of extremities on one individual of horse (9 cases) and moose (1 case) are met exclusively. All these poles as it has been positioned in the course of sanctuary reconstruction, fixed on shade of the central pole-gnomon sun position in firmament within light day (fig. 3, 1), as though noting stages of diurnal path of the sun (some kind of sundial).

By calculations of astronomer V.A. Jurevich, sundial on the flat areola of sanctuary Savin 1 divided time for different intervals in different days of year and into different parts in day. But for time slices near to midday as it took place in northern sector of the first circle (fig. 2, 1; 2; 3, 1), it was imperceptible. By calculations for days of equinoxes it was received that the shade from the central pole was displaced from pole 14 to 16 for 39 minutes, from 16 to 18 (midday) - for 36 minutes, from 18 to 19 - for 31 minutes, from 19 to 20 - for 36 minutes, from 20 to 21 - for 31 minutes, from 21 to 22 - for 31 minutes On the average the time slice compounded 34 ± 3.5 minutes In days of summer solstice when the sun azimuth changes faster, time of shift of shade from one pole to another compounded 25 ± 3 min. [30].

In our opinion, the poles noted only by skulls and extremities of one individual of horse (the rests of skins with head and part of feet?), could serve as the original markers fixativing concrete intervals of time by which managers of cult ceremonies in the course of carrying out of rituals were guided. Simultaneously this data can testify to the special role of horse in cosmological representations Eneolithic the population [31].

At the sanctuary Velizhany 2 main cultic ritual actions associated with three large holes in the outer reusable ditch with traces of burnt timbers (from decking?). In holes there were the pots much with ochre, stone tools, maculae ochre, coals, small calcified bones [32, 33]. Poles in holes fixed directions of risings and sunsets, the high and low moon in extreme positions, mainly in days of summer solstice and equinoxes (fig. 9).

But the central areola surrounded trench, with the big central pole in the middle was the most esteemed place on sanctuary, judging by character of finds. At the same time reveals an interesting pattern: in the outer moat all major sacrificial complexes are confined to the rising and setting sun and the moon during the solstices; in inner trench and the central area - to sunrise and sunset and moon equinoctial days. To explain it it is possible, in my opinion, not only features of rituals at various times year, but also conditions in which they were made. In ceramic collections Eneolithic sanctuaries cultural phylums of pots (sosnovoostrovsky, postosnovoostrovsky, shapkulsky, lipchinsky, andreevsky), bound with North forest-steppe and South wood circle of monuments of an epoch Eneolit (fig. 6, 8, 10) are excreted some. In an occupation layer of each monument the
named phylums of pots lay down collaterally. However, quantitative interrelation of ceramics of various traditions in complexes miscellaneous.

On Savin 1 prevailing (64-68 %) are ceramics postsosnovoostrovsky phylum (fig. 6, 2 - 4, 6). In ceramic complex of Slobodchiki 1 the ceramics with an edge ornament sosnovoostrovsky (fig. 8, 3, 7, 8) phylum (60 %) and shapkulsky appearance (34 %), ornamented with figured die (fig. 8, 10) is most numerous. Despite noted by the author of pipettings resemblance of two nearby monuments [34], ware of sanctuary of Slobodchiki 1, as well as character of stone stock, species composition of the osteal rests concerning in basic to the feral fauna, abandons impression of an accessory of monument by earlier time. It proves to be true presence at collection of monument of pots (fig. 8, 4-6, 9), having analogies in monuments serotinal neolith tenteksorskoy and the oryol cultures of Northern Caspian [35, fig. 3, 1; 4, 1; 6, 1; 8, 1; 10, 1]. The available yielded stratigraphies of sanctuary allow assuming that presence of the specified pots can be bound to existence in the northwest depressed part of monument of earlier settlement.

The collection of ceramics of Velizhany 2 along with postsosnovoostrovsky ceramics (fig. 10, 1, 2, 7, 8) contains basically pots andreevsky (fig. 10, 9) and lipchinsky (fig. 10, 3-6) cultures in Tobol variant [36]. Noted differences of ceramic collections can speak both territorial, and chronological features of sanctuaries.

Available stuffs allow dating Savin 1 and Velizhany 2 within the limits of first half III millennium BC [37]. The beginning of functioning of sanctuary of Slobodchiki 1 on series specified above signs can be dated earlier time.

Stuffs of archeological excavations and data archaeoastronomy testify that Trans-Ural circular sanctuaries were comprehended by their founders as model of the World [38]. They were large enough calendar constructions serving by place of regular cult actions. The basic ceremonies accompanied by the big sacrifices, were made in the significant days of year bound to seasonal changes, but in each separate case there were features.

Sacrificial gifts have been presented on one sanctuaries by animals who esteemed and on which hunted, pots with nutrition, instruments of labour, cult subjects (Savin 1, Slobodchiki 1); on others (Velizhany 2) - only pots with nutrition or ochre, instruments of labour. The gifts designed deities were put at fire or rushed to fire planted in the big holes in ditches and at astronomically oriented poles, fixativing seasonal changes. Sanctuaries were equally esteemed by surrounding population of different cultural bunches.

**Sanctuaries of an epoch of bronze**

The most studied sanctuaries of an epoch of bronze are Suzgun 2 and Chudsky Mountain suzgunskaya the cultures dated second half II - the beginning of I millenia BC

**The cult place of Suzgun 2** is on high ostanets the right coast of Irtysh below mouth of Tobol (58,2º N). Pipettings (125 sq.m.) find powerful occupation layer with traces fireplaces, carbonaceous layers, maculae ochre, the mass rests of fragments of ceramics and the whole pots, separate subjects of different function. Their number concern foundry core for the celt seima phylum, head of an animal from the clay, two silicon handpieces of arrows, etc. On rather small area are found fragments more than 700 pots, among which lot of small-type [39].

The planigraphy of monument and attraction of the data archaeoastronomy testifies to presence here directions at least on four parts of the world which were considered at the organisation of sacral space and fulfilment of cult-ceremonial actions (fig. 11). Sacrifices in the form of pots with
the vegetative nutrition, covered birch bark, were put on expressly arranged earthen eminences - the ledges located on line the West-east between pole (an idol?), driven on the most raised northern part of sanctuary, and central extensive fireplace it is exact to the south from pole.

Does not raise the doubts that the cult areola in monument functioning has been accurately planned also all ceremonies were made under the certain schema. On it specifies as well allocation of the most interesting finds from the point of view of symbolics in the sanctuary areas: pieces of ochre and small groups brought from yellow sand to the south from fireplace; the sculptural plotting of head of horse from clay in sunset direction in days of summer solstice (328 °) in relation to the sanctuary centre (fireplace); two spindles to the east from fireplace (fig. 9).

Site of ancient settlement Chudsky Mountain in Znamensky district of the Omsk region (57,1 ° N) occupies ostanets continental coast of Irtysh in height of 10-12 m (fig. 12). The settlement suzgunskaya culture (the dissected area 640 sq. is in the central part of mountain (the areola 4), is strengthened by shaft and ditches. The cult part of monument (530 sq. m.) settled down in southwest part of mountain (the areola 3), from an inhabited part of settlement has been unbound by ditch [40]. The Southwest extremity of mountain (the areola 1, 2) also was used for any fulfilment of ritual actions: the occupation layer here entirely consists of leach, the coals, the incinerated ground and suzgunskaya ceramics.

The sacral part of monument included four constructions semi-dugout phylum with frame - pillar designs and shaped corridor orifices from river bank [41, fig. 7-9].
Fig. 11. The sacrificial place of Suzgun 2.

The plan of excavation (on Moshinsky [42, fig. 2]).

Solid line - border ancient spoon. 1 - grinding bar; 2 - the sculptural plotting of head of an animal; 3 - silicon drill; 4, 10 - silicon handpieces of arrows; 5 - ochre pieces; 6 - stones; 7 bulk sand; 8 - the burnt stones; 9 - fireplace; 11 - burnt arbour; 12 - maculae from pole; 13 - spindle from crock; 14 - clay spindle; 15 - foundry core for mould piece of the Celt.
Fig. 12. Chudsky mountain.

A - the Habit view of monument from South side. Drawing of artist N.S.Safronovoj.

B - the monument Plan: 1 - the plan excavation; 2 - drawing of bottom of the pot №63 position in situ; 3 - bronze anthropomorphic figure с the site indicating;

а - excavation with number indicating; б - barrow; в - recesses from dugouts; 4 - arbours; 5 - bronze figure.
Along northeast sides of constructions the rests of wooden floorings near to which there was basic part of the loci, holes, small groups of leach and calcified bones, the rests of sacrifices in the form of clumps of pots, bones of animals and the fish, separate subjects are tracked.

Within cult constructions it is revealed more than 120 whole and crushed richly ornamented pots and 17 thousand fragments of ceramics. Along with large pots are found whole and crushed small-type vessels (61 copies) [43]. 25 types of other finds (more than 100 units), among which such subject of cult appointment as anthropomorphic figure from bronze (fig. 12, 3 Are revealed also; 14, 2).

Many pots (16 copies) have been supplied in position upside down. They settled down as in clumps with other pots, basically around fireplaces, and one by one. Almost in all cases bottoms of the pots inverted upside down are ornamented. [44, fig. 15,2; 25; 30; 32].

The pots supplied upside down are one of characteristic signs of cult monuments of Ural Mountains and Western Siberia - Velizhany 2, the Hill 2 [45], Glijadenovsky cluster of bones [46], and also sacrificial complexes of burial grounds of different epoch, since Eneolit.

From the pots inverted upside down on the Chudsky Mountain it is especially interesting №63, found in northwest angle of the cult areola in sacrificial hole №18 (fig. 12, 2). The hole of the roundish form, diameter 1,4 m, depth of 0,4 m has been filled by carbonaceous layer with maculae incinerated earth and coals. East edge of hole had clump from bones of extremities and dens of horse, moose and dog (V.P. Danilchenko definition).

In the hole centre at level of floor of construction 2 over the incinerated layer of the earth there were two pots inverted upside down. One of them had the ornamented bottom. The drawing consisted of eight lines (beams) departing from the centre of bottom and formed by penetrating notches (fig. 13, 1-4).

The locating of pattern units on bottom surface has been fixed in field conditions taking into account situation of the pot and orientation of fields excavation.

In the course of the further studying of an ornament on the pot, taking into account its position in situ and orientations of the cult areola, it has been positioned that the solid line in drawing from seven notches has been referred on line the north-south (fig. 12, 2; 13, 1, 3, 5). It adjoined with western and East side on three lines consisting of three (2), four (3) and six (1) notches. Considering character of monument and site of the pot on the brink of high (10) slopes with far looked through horizon, the drawing has been checked on probable conformity of direction of lines-beams to significant solar and lunar azimuths.

It was found out that in relation to the centre of choronomic surface of bottom of the pot located on the middle of line the north-south, all other six lines precisely enough if to consider character and conditions of drawing of drawing, coincide with significant lunar azimuths for geographical width of locating of monument (fig. 12, 2; 13, 5). Here have appeared, call the directions corresponding to azimuths of rising (27º) and call (334º) of the High full moon in winter solstice are presented to days of equinoxes (285º), and also risings of the full Low moon in days winter (54º) and summer (126º) solstices. Orientation of one of lines has double value: in relation to the bottom centre it has been referred by the choronomic extremity towards sunset in winter solstice (222º), and in relation to northern extremity of centre line - on call of the High moon in summer solstice (203º).
Fig. 13. Chudsky mountain.

1 - the pot № 63 after clearing (in situ); 2 - hole 18 with pots №№ 62, 63 after clearing of the top filling; 3 - the pot № 63; 4 - drawing at the bottom of the pot № 63 with the indicating of orientation of details: in brackets of an indicated value of azimuths of risings and sunsets and the moon for width of locating of monument, out of brackets - observable directions.

The similar locating of details of drawing at the bottom of the pot inverted upside down on surface of the cult hole located on the brink of high slope of sanctuary from the floor side, in our
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opinion, can testify to the calendar maintenance of the ornament bound to lunar cycles. The pot could be used as lunar calendar in ceremonial practice or as symbol of such calendar.

The ornament on all surface of this pot very elegant and by the most fluent inventories carries in itself the certain calendar account that demands special research. Undoubtedly one: this ornament on the pot inverted upside down, was reflectance of solar or heavenly symbolics (fig. 13, 3).

The second pot (№89) with an eight-radial drawing from fossas at bottom (fig. 14, 3) has been found by M.F. Kosarev in the first year of pipettings on the Chudsky Mountain in southern edge of the cult areola (fig. 12, 3) in construction 1 on field A-4 [47, fig. 7]. The similar plotting from two crossing direct crosses is traditionally surveyed as solar and heavenly signs. Nearby at the locus from the burnt clay four more pots have been found. In one and half metres to the south in an entrance corridor from the river was big fireplace №18, round which seven pots settled down (fig. 14, 1, 5, 6), two of which have been inverted upside down. Here has been found bronze small idol (fig. 12, 3; 14, 2), lying flatwise head on the north [48, fig. 53, 1, 3, 4, 8, 9].

The faunistic stuff, mainly to bone of skulls and extremities different animal (329 units of bones from 83 individuals, V.P. Danilchenko's definition), half belongs to horse as on number of bones (159), and individuals (34). Further follow horned cattle (82 units of bones from 23 individuals), dog (41 / 10), moose (20 / 8), roe deer (18 / 6), on one individual of an otter and marten. This data testifies that the special status of horse as the sacrificial animal, issued in Tobol-Irtysh still in Eneolit (Savin 1), has had the further development during the subsequent epoch, up to the ethnographic present [49].

Feature of an osteological collection of cult place of Chudsky Mountain is large number of bones of dog and presence of human remains (5 cases of incomplete composition of bones of atomies) that can testify to use of dogs and people in rituals of sacrifices suzgunsky the population.

During fulfilment of ceremonial actions the appreciable part of the osteal rests was burnt, on what the big and small heaps of leach found both in premises, and behind their limens, containing set of the burnt through or carbonized bones specify.

Thus, the mean of the organisation of sacral space and the form of implication of ritual activity on the Chudsky Mountain in suzgunsky time have the specificity. Cult constructions compound the sacral complex isolated on expressly shunted place and definitely issued, where any ceremonies were made. Simultaneously cult constructions were an integral part of the strengthened settlement.

In the present state of affairs really to assume that in settlement terrain the people who were responsible for maintenance as objects of sacral complex lived, observance of calendar terms of ceremonies, preparation and carrying out of public rituals of sacrifices and other ceremonial actions. The high status of sanctuary caused high position of these attendants of cult in society. Formation of bases West Siberian shamanism is supposed during an epoch of the educed bronze [50]. However stuffs Eneolithic sanctuaries of Tobol testify that the beginning of this process falls into to earlier time.
Fig. 14. Chudsky mountain. Material stuff.

1-6 - pots and bronze small idol (construction 1, sq. And, B/4, the locus 18). 1-6 - on M.F. Kosarev [51, fig. 53, 1, 3, 4, 7-9].

Thus, all archaeological fixed implications of cult-ceremonial actions suzgunsky the bronze age population on monuments of Suzgun 2 and Chudsky Mountain testify that sanctuaries were visited by people from adjoining neighborhood enough big territorial coverage with this or that frequency throughout long time. It proves to be true not only power of cultural stratifications, but also presence at ceramic collections of ware both early, and serotinal appearance.
Conclusions

So, the stated stuffs testify to resemblance of the ritual ceremonialism made on sanctuaries Eneolit and bronze age in surveyed terrain of Western Siberia. Simultaneously on each of them there are the features bound to lay-out and the device of places of fulfilment of sacrifices, and also with specificity of sacrifices. On one (Velizhany 2, Suzgun 2) as sacrificial gifts to deities acted only pots with nutrition and separate sacrally significant subjects; on others (Savin 1, Slobodchiki 1, Chudsky Mountain) - along with pots the great value was attached sacrifices of animals. These features, most likely, are bound to specificity of natural-climatic and historical conditions, and also direction and character of communications of the population.

At the same time on all surveyed sanctuaries there are general signs, characteristic for the cult places, fixed archaeological and that is especially important, meeting in aggregate and by that testifying to sacral load of monument. The basic gel-forming signs of ancient sanctuaries were conserved at the population taiga Tobol - Irtysh up to the ethnographic present.

Are most informative for reconstruction cosmological representations of the ancient population Eneolithic round sanctuaries with pillars the designs forming accurate system of astronomical reference points. Attraction of the data of astronomy as the science based on exact methods of research, attaches the conclusions bound to ancient and traditional outlook, the certain evidential effect verified by system of calculations, as rule, not inherent humanities.

In questions of modelling of ancient astronomical knowledge and cosmological the representations bound to space and time, archaeoastronomical researches have the special value [52]. Thus it is important to emphasise that the data archaeoastronomy should be used not as end in itself, and as one of methods of work with archaeological sources at interdisciplinary level. Comparison archaeological and archaeoastronomical the data with ethnographic, mythological, folklore, natural-climatic and other certificates considerably dilates circle of our representations about cosmological representations of the ancient population and fills with their more concrete maintenance.

It is convincingly proved by that fact that taped on series Eneolithic round sanctuaries of Western Siberia astronomical reference points (fig. 2; 9) are dated for sun and moon original positions. The overwhelming part of the azimuths of the main stars fixed in the ancient time corresponds to their most significant cycles - to calls and sunrises in days of equinoxes and solstices, to extreme positions and the phases of the moon fixating thus change of certain intervals of time (seasons of year, day and night, etc.). As show researches, overseeing by the astronomical phenomena have been intimately connected to economic activities, life and calendar ceremonialism of ancient societies.

On cult objects the reference points bound to azimuths of the High and Low moon in extreme positions, concerning 18,6 summer cycle (to so-called Metonovu to cycle) had the special value. At this time, mainly in days of solstices and equinoxes or close to them, the moon, the earth and the sun are built in one series therefore one or the other stars it appears in shade and depending on situation there is solar or lunar eclipse. Knowledge of these space phenomena already took place in priestly medium of the population of an epoch Eneolit and bronzes of Uralo-Siberian region and was widely used by attendants of cult in ritualno-ceremonial practice. This conclusion is based on results of researches of the author of the yielded publication on series of cult monuments of surveyed region [53-55] and adjoining terrain of the North of the Eastern Europe [56, fig. 11], [57]. Here it would be desirable emphasizes that the ancient astronomical knowledge specified above concerning eclipses of the sun and the moon, Identified for population III-II of millenia BC
for the first time and is not known for the author of yielded article to us in other publications on archaeoastronomy, at least in Russia. Proofs of the yielded thesis is any bracing marks azimuths of the sun, the High and Low moon and other artefacts received on monuments investigated by pipettings.

The results of researches resulted in article show that the basic demands to sacral veneering of circular sanctuaries included series of the signs bound to landscape binding, lay-out and architecture of constructions: ring ditches; rectangular excavations in the centre; any pillars designs; shaft ring and extended in direction the West-east on line of the central axis of circular constructions (fig. 1; 2; 2A, I; 3; 4; 4A, 2; 9; 12). The similar lay-out and architecture of cult constructions with astronomical reference points is presented on circular sanctuaries of Europe [58, 59], in barrows-sanctuaries of Northern Black Sea Coast [60-62].

It is necessary to notice that each kind enough the sanctuaries investigated by pipettings and cult objects on which the astronomical reference points testifying to certain astronomical knowledge of the ancient population are accurately presented, have the specificity of bracing of azimuths of stars, features of functioning and character of ritually-ceremonial actions. For example, on ritual complexes of soil burial grounds of an early bronze age places significant solar and lunar azimuths, along with poles, ditches and holes where any sacrifices [63, 64] were brought also were such. In circular settlements-sanctuaries of Zauralye of this time orientation of the basic stars along with pillars designs and holes for sacrifices was reflected also by lay-out and architecture of housing constructions and all settlement as whole [65]. On megalytic monuments of Ural Mountains bronze epoch such reference points were rows of the menhirs, separate menhirs, cromlechs, dolmens, tunnels, etc. [66, 67]. On rocky sanctuaries of Onega in concrete solar and lunar azimuths specified specific solar and lunar signs combined with the plotting of animals, beaten out on rocks [68, 69].

Reflectance of concrete representations about space on the specified kinds of cult monuments with astronomical reference points are also traces of various ritual actions: delution of numerous fires; gift in victim of animals, pots with nutrition, instruments of labour and the weapon; separate ritual burial places of people and human skulls (fig. 5, I - 8; 13, I-3). Not less significant information separate subjects (carry also fig. 5, 2; 7, I, 2 - 5) and ornaments on pots (fig. 7, 3; 13, 3, 4; 14, 2). The Great value for completeness and reliability of reconstruction has planigraphy allocation of finds to the outlined sacral areola, confinement clumps to the taped astronomical reference points.

The general architecture of surveyed cult objects (fig. 2; 2-1; 2a-1; 9; 11; 12), presence on them of astronomical reference points, character of taped ritually-ceremonial actions (fig. 5, I - 8), dated basically to risings and calls of the basic stars in significant days of year (fig. 1, 3; 4, 2), features of separate finds (fig. 7, I-5; 13; 14, 2, 3) testify about accurate formed cosmological representations. The stuffs presented in article allow to assume that is more narrow in the end of neolith – Eneolit at the population of Western Siberia, as well as in Europe, the three-private model of the world in its horizontal and vertical projections with division of the Universe into three basic spheres (top, centre and inferior) [70 - 78] was issued.

Everywhere the horizontal model on all kinds of cult objects is accurately traced on an example of the general lay-out and architecture, and also their basic architectural elements: ring and direct ditches, shaft, cromlechs, entrance corridors and passages, pillars designs, sacrificial holes, fireplaces, rows and the separate menhirs dated for them of artefacts, etc. As rule, the majority of these objects are oriented on azimuths of risings - sunsets and the moon in extreme positions in days of equinoxes and solstices (fig. 1, 3; 2, I, 2; 4, 2; 4A, I; 9). Communication of these designs
with Top (light) and Inferior (dark) the worlds has been based in representation ancient on appearance of disk of rising sun or the moon and their disappearance in fixed mark directions during different seasons of year.

The centre world associated with constructions in the centre outlined by ring ditches, shaft, pillars designs, cromlechs, etc. the areolas where as the semantic centre it is necessary to assume the central poles-gnomony or large menhirs, more often.

The vertical three-private model of the Universe also is taped on stuffs Eneolithic sanctuaries and barrows where each of three worlds of this model carries the almost same semantic load, as in the horizontal projection. Possibility by means of poles and large menhirs to note significant positions and shift of the basic stars in the sky has played here paramount role (fig. 1, 3; 2, 1; 2А, 1; 3, 1). Such first and most simple astronomical instrument was gnomon - the vertical pole placed into the square where positions of its shade in different days and hours (fig. 3, 1 were scribed).

By analogy to stuffs of sanctuaries of Gorbunovsky and Shigirsky peatbogs in Ural Mountains where wooden designs and products were well conserved, it is possible to assume that separate poles on sanctuaries Savin 1, Velizhany 2 and other cult objects, also could be issued in the form of idols and are noted by any signs, the plotting [79, fig. 8, And; 171, fig. 12, 1]. Separate poles-mety on sanctuaries could designate also world or space arbour for which different parts the certain worlds have been dated. The part of poles could to be simultaneously «sacrificial poles» on which were hung out and to which fastened (or any sacrifices were seated by their foot) that proves to be true character and conditions occurrence finds in filling of many pillars holes (rice 2; 2-1; 3, 2, 3; 5, 1-8; 9; 11; 13; 14). On representations ancient, poles-reference points, as well as world arbour, and «sacrificial poles», bridged the Sky and the Earth, were link between the worlds. In folklore of many nations of the world including Siberian, representations about fastigium of tree of life as place of stay (rest) of the sun were conserved during diurnal travel on the sky [80].

Attraction of the data archaeoastronomy at research of the sanctuaries presented in the yielded publication, first of all with any pillars designs, allows to draw the following conclusions concerning cosmological of representations of the population during an epoch Eneolit and bronze age which cannot be received only by treating of archaeological, ethnological and other humanitarian sources.

1. The general architecture of sanctuaries, specificity of separate constructive details, also as communication of the basic ceremonies with risings and sunsets and the moon in astronomically significant days of year, testify to existence at the ancient population of Western Siberia, as well as in other terrains of Eurasia at this time, cosmological the representations bound with solar and lunar cults. The sun here represented itself as main or one of the main deities. The moon in this pantheon took not less significant place.

2. The big sacrifices, depending on terrain of locating of monument and population employment, were made or in days of solstices (Velizhany 2, Suzgun 2), or in days of equinoxes (Savin 1, Chudsky Mountain). In the latter case there are more than data in favour of days of an autumn equinox (September - October) when mass hunting for the hoofs, based on seasonal prevalence of migrations of these animals began.

3. Judging by stuffs of research of sanctuary Savin 1, existed certain ritual in circulation with sacrificial animals, seasonally, scale of sacrifices, position of the basic stars in firmament (rising-calling, etc.), the status of deities which designed victim [81]. In days of mass sacrifices part of meat of sacrificial animals, most likely, ate present on ceremony; part - together with tools and pots with nutrition "were presented" to esteemed deities, to associates first of all with the sun and
the moon for what developed mainly at the poles marking azimuths of risings and calls of these stars, and rushed to fire burning in ditch and separate holes near to poles.

The basic sacrifices on the sanctuaries, having an exact astronomical binding to days of solstices and equinoxes, most likely, have been bound to the calendar ceremonialism dated for the significant seasons in life of the ancient population.

4. series of the facts positioned by correlation, first of all taped on sanctuary Savin 1 communication of the location of remains of bones of horse as numerically prevailing trade and sacrificial animal, with sunrise azimuths in significant days of year allow to assume that representations about communication of mode of horse with the sun were issued already in Eneolit. Most likely, it should be co-ordinated to the process beginning domestication horses in the Volga-Ural and West Siberian -Kazakhstan regions on boundary IV-III of millenia BC

In the light of surveyed problematics us, first of all, interests, what historical conditions promoted formation cosmological models in Eneolit and Bronze Age of forest-steppe and South taiga districts of Western Siberia. Received on the basis of archaeological stuffs and the data archaeoastronomy reconstruction of world outlook representations and the ceremonialism bound to them, have allowed to draw conclusion that philosophy of understanding of the Universe were issued in surveyed terrain in Eneolit as result of active communications of aboriginal hunters and fishers with early cattlemen of the western and southern terrains. Available archaeological stuffs testify to prevalence during an epoch Eneolit southern and southwest direction of contacts [82].

For Eneolithic the population of forest-steppe and South wood Tobolo-Irtyshta one of such consequences was the mediated many-stage and stage-by-stage perception cosmological models early farming the population, expressed in construction of circular sanctuaries with astronomical reference points. They most corresponded to the further progress of society bound to formation of the effecting economy, based mainly on horse breeding - Savin 1, Botaj, Kozhaj [83, 84].

The following wider and powerful migratory wave steppe Indo-Iranian population bunches in wood region descends during an epoch of centre bronze (XVI-XIV centuries to. D.C.) also it is bound to carriers of cultures andronov generality. With androns cultures radical changes in material and spiritual culture of the taiga people which have conserved specific andronov colour to the ethnographic present are bound. androns traditions have abandoned especially appreciable trace in culture Khanty and Mansi.

The important certificate of ancient contacts Trans-Ural the Ugrian population with Indo-Europeans (Indo-Iranians) are results of ethnological researches in Western Siberia which appreciably supplement available archaeological and anthropological certificates.

In appearance of culture Khanty and Mansi ethnologists note, along with common Siberian, it is lot of lines of southern character, in which number horse breeding traces in the past, cult of horse, original forms of dwellings, clothes, utensils, geometrical ornaments, religious beliefs, ceremonies, folklore, works of art, presence similar with Indian the terms. Are close Indian and representations about fire. Culture distinctive features Ob-Ugric peoples, excreting them from series of all other Siberian people, are closely connected with Indo-Iranians component (one of three cores) their parentages [85].

In conclusions about especially intensive interaction Khanty and Mansi with the Iranian elements in comparison with adjacent terrains results studying of mythology of the people of Siberia [86]. Thus explorers pay attention not only to separate elements, but also the whole schemas uniting to traces of the Iranian influence. The penetrating and extensive Iranian layer of Ugrian religious-language consciousness [87] is traced.
Observable features of physical phylum western Mansi, distinguishing them from other obsko-Ugrian bunches, speak presence in their composition caucasoid component. It, in aggregate with the ethnography and archeology data, brings an attention to the question on the special paths of formation Khanty and Mansi[88].

Modelled on stuffs of pipettings described above sanctuaries Eneolit and bronze age world outlook representations and cult-ceremonial practice find amazing parallels in beliefs and cults Ob-Ugric peoples. Simultaneously the structure of sanctuaries and character of ceremonies made there corresponded to level of world outlook representations in wide terrain of habitation of the people of Indo-European monogynopaedium, including Indo-Iranian. It allows to assume the beginning of addition of the Iranian layer of Ugrian religious consciousness already on boundary IV-III of millenia BC by this time, in the light of the stuff set forth above, infiltration Indo-European (Indo-Iranian) substrate on Ugrian medium of carriers of cultures edge geometrism forest-steppe Zauralye [89] concerns.

Most brightly ancient sources of cosmogonic representations with Indo-European (Indo-Iranian) loans show in following aspects of outlook Ob-Ugric peoples [90, 91]:

- Features of landscape binding of the cult objects dated for raised fields of surface with well surveyed horizon;
- Resemblance of gel-forming elements sacralized spaces which special places for storage of cult subjects (barns), as rule, were, the loci-kostrishcha, wooden anthropomorphic the sculpture (idols), poles or arbours to which adhered butts and hung up skins of animals together with head and extremities, etc.
- Existence of representations about three-private vertical and horizontal model of the Universe based on concepts about the Top, Center and Inferior worlds;
- Design features special (for fulfilment of especially significant rituals) shaman's tents, on architectural features of lay-out and ceremonial actions made their close circular Eneolithic to sanctuaries [92, fig. 11].
- Resemblance of the religious sculpture which few have variated since Eneolit and Bronze Age on character of the plotting and manner of execution;
- Presence in cosmological representations as the basic cults of the sun, the moon, fire;
- Important place of cult role of horse in religion, folklore, the fine arts and shaman's ritual;
- Specificity of the ceremonies, falling into to cult of world (sacred) arbour in which basis the concept of three-private model of the Universe lies;
- Affinity of "scenario" of sacrifices and other ceremonies, first of all, devoted to the main deities of the Top world - to the sky, the sun, the moon;
- Communication of ceremonialism with the calendar system caused by seasonal changes and economic cycles bound to them and traditions; conformity of the basic holidays to spring and autumn as to the beginning of the most important in the trade attitude of the seasons and the association of them in most cases by days of equinoxes [93, 94].

Hence, under the archaeological data early implications of the world outlook representations known from Ugrian ethnography, meet already during an epoch of serotinal neolith and Eneolit. It allows to assert that all basic signs of traditional attributes of cult places surveyed above and ritual practice Ob-Ugric peoples, are known in terrain of their moving since more ancient time, than it was supposed explorers earlier. In the light of the new data the inferior border of Ugrian cult tradition can be defined not ust-polujskim time (III century to n.e. - IV-V centuries AD) [95, 96], and the season of existence Ural-Kazakhstan Eneolithic generality of grebenchato-geometrical ceramics (last quarter IV - the extremity of the third quarter of III millenium BC).
Fastness of basic elements of cult places taped throughout several millennia in whole and rituals made their undoubtedly testifies to fastness of cult practice. Possibly, those signs which are inherent in an antiquity and the ethnographic present, carried the most significant functional load and were its gel-forming elements. Among them those from them which have arisen in Ugrian indigenous medium under influence Indo-Iranian the population, were transformed according to aboriginal conditions and conserved in wood region thanks to continuity of cultural traditions, affinity of ethnic composition of the population and specificity of inhabitancy practically to the ethnographic present. These rituals are bound to all aspects of social being of the ancient person.

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