Researchers have different methods of approaching the treasures of Russian folk art of the eighteenth through twentieth centuries which have been collected in our ethnographic museums. Some scholars attempt to discover the original meaning of the elements and of the composition of folk art, to decipher the long-forgotten symbolism, to determine the chronological order of the various ancient stratifications which have been preserved in the traditional peasant environment. Others base their arguments on the supposition that contemporary embroideresses and craftsmen, having completely forgotten whatever symbolism there has been, unconsciously reproduce these elements and subjects; this school rejects the semantics of folk art in general, and reckons it necessary to limit its study to esthetic categories, stopping short of investigating its historical sources. This second method of studying folk art is, of course, simpler and does not demand any special knowledge or familiarity from the researcher, while the first method requires a broad, detailed study of the entire history of the culture as well as a

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study of the entire evolution of human thought in an extremely broad historical range—from its distant prehistoric origins through the Middle Ages and on up to contemporary times. Ethnography, art history, archaeology, and religious and semiotic history should be combined in this study. Only such an investigation will reveal to us that rich world of vanishing ideas, a world so carefully preserved by folk art, unchanging and deep in its contents.

Only through such an historical approach are we able to get to know the inner world of the toiling masses of the Russian countryside of the pre-socialist regime, the world of the peasants, who were deprived of many of the blessings of feudal or capitalist culture but who possessed their inherited treasurehouses of songs, stories, byliny, embroideries, and carvings, treasure houses which enriched the ruling classes as well.

It is dangerous to embark on interpretation of the symbols of folk art or an investigation of its components with any individual element. It is necessary to exclude the insignificant, the fortuitous, and the subjective, and to examine the strongest category—the representation of the universe, the picture of the world in those forms in which it took shape and was modified in the minds of the people.

Feeling himself a part of the universe and imagining the world populated by both benign and evil spirits (beregini and upyri in twelfth-century terminology), in addition to human beings, man long ago created side by side with himself, as it were, a model of the world he knew. The whole macrocosm was consciously reflected in his daily microcosm, joining him to the universe for magical purposes. A time-honored folk dress may
may serve as a very simple example of such a reflection of the macrocosm in a microcosm. The hems of women's clothing are often decorated with a woven and embroidered pattern which preserves the ancient ideogram of the land: that is, the sown field (squares with dots in the middle). Together with this symbol, organic subjects (twigs, flowers, conventional representations of plants) appear on the shirt above the belt. All of this expresses the idea of the earth and of fertile soil.

The headdress, the crowning touch to the entire costume, is always connected with the sky. In the first place, many Russian names for hats can be traced back to appellations of birds: the kokošnik from kokoš, ("chicken"), the kička ("duck"), the soroka ("magpie"), and so on. In the second place, a sun symbol and a composition connected with the heavenly circle of the world very often appears on the brow of the headdress. Puški, beads made of bird down, hanging at the temples or over the shoulders, are fastened by ribbons to the kokošnik. The birds connect the sky with the earth, while the hanging ribbons, sometimes entirely interwoven with beads, might express the idea of rain, that heavenly blessing so essential to the tillers of the soil. This idea is strongly supported by the fact that the medieval kokošnik (also furnished with heavenly symbols) is adorned with chains that bear images of birds or of fantastic winged beings associated particularly with rain (sirens or rusalki). The silver chain riasny themselves often imitate large raindrops. Silver braided belts of old Russian women were decorated at the ends (which hung down to their knees) with the heads of pangolins, symbolizing the lower underground world.
Dressed in her traditional costume, the Old Russian princess or nineteenth-century South Russian peasant girl presented, so to speak, a model of the universe. The lower, earthly layer of clothing was covered with symbols of the earth, of seeds, and of plant life. At the upper edge of the outfit we see personifications of birds and of rain, while at the very top all of this is crowned by clear and indisputable symbols of heaven—the sun, stars, seven figures designating constellations, birds, "sun-horses," and so forth.

It is apparent that the ethnographic microcosm reflects in some measure a conception of the universe. The art of the decorators in particular adds deeper meaning to simple everyday things. However, it must be remembered that ethnographic and folkloric materials contain, within a compressed frame, the fragments of ideas from the most diverse epochs, from different stages of the evolution of human thought and Weltanschauung. Thus folk art contains dozens of riddles which, taken by themselves, do not lend themselves to solution. I shall present only two examples, taken from different areas.

The following complex composition is encountered in Easter eggs (pisanki) from the Huzul region of Carpathia. Along a broad middle band run rhombic earth ideograms; above them is a circle of spirals, and on the very top of the egg, in the upper heavenly circle within a frame composed of twelve triangles, appear two reindeer. Is this a whimsy of the artist, a happenstance, or the transmission of some legend? Examining only pisanki, we are helpless to answer these questions. We can only note that the pisanki are ritual subjects, and because of this we can suspect here some sort of sacred archaism, but that is all.
On embroidery from the Novgorod district we see the highly stylized depiction of a woman with reindeer horns on her head, in a strange position as though on her knees with bent legs. Along the sides of the embroidery run reindeer. Folkloric notes of the nineteenth and twentieth centuries mention that reindeer in these places were once sacred sacrificial animals, but we can deduce no more than this.

Is it then the case that an attempt at interpreting these confused and disjointed fragments with half-forgotten meanings is useless and an attempt at dissecting the ethnographic material at this stage even more rash? First of all, it is necessary to resolve the question: to what remote time, to what stage of development of human culture is it possible to trace back ethnographic material, fragments of which remain in folk art? We must examine the fragments in strict sequence with the aid of archaeology, comparing them with the unexplained elements of folk art.

Analysis of the widespread rhombic ornament (the system of engraved rhombuses and "rhombic meander") shows that the sources of this pattern lead us into the Paleolithic era, to the art of the mammoth hunters. The paleontologist V. I. Bibikova has proven that the complicated rhombic ornament, which was already known in the paleolithic age, is a representation of the osseous structure of mammoth tusks.

Without Procrustean interpretation, we can affirm that the ornament, which reproduced the outer appearance of the bone of the mammoth (the original objective of the hunt), had magical, invocational meaning for the hunter. The natural rhombic pattern appeared on all sacred objects prepared from mammoth tusk, including the bases of statuettes depicting female ancestors. There is
evidence for the assumption that prehistoric women also tattooed themselves with a similar rhombic pattern; and from that time, from that paleolithic remoteness, the rhombic ornament passed on into all succeeding epochs. Of course, at some stage it lost its original significance relating to the hunt. Agricultural variations of the rhombus appeared, but by force of tradition, this ancient ornament persisted among all peoples of the world right up to our own time, despite the technical difficulty of its reproduction. Consequently, in order to understand ethnographic folk art we must begin our survey (or rather, our series of reconstructions) of pictures of the world, of conceptions of the microcosm, from deepest prehistory— from the Paleolithic era.

The rich and original art of the Paleolithic era has not transmitted to us the conceptions of the universe prevalent at that time. The world of the Ice-Age hunter was simple and clear: the tundra with its copses; mammoths, bison, and reindeer; the common hunt; the fire of the hearth; the women who prepared food and clothing and who bore new hunters; the plunderers from whom they had to defend themselves and their booty; the heavens with their luminous bodies and stars; the solar phases (the annual cycles still had not entered completely into the life of man— perhaps only the bright and clearly determined lunar phases were noted at the time). The world of the mammoth hunter was in all probability flat and single-centered. There had probably been no similar macrocosm within the consciousness of Cro-Magnon man. From this distant epoch, folk art and folklore preserve intact the following: the rhombic pattern mentioned above; tales of battles to the death with beasts waving huge, fantastic trunks; ritual masquerades
of animal hunts which go back to the time when hunters disguised themselves in wild animal hides; the "horn of plenty" in the capacity of a sacred ritual.

With the thaw of the Ice Age in the Mesolithic and early Neolithic epoch, man found himself in different living conditions which completely transformed his way of life, placing him in a different position in relation to nature, and he developed a new type of worldview. The unusual abundance of water, of swift rivers, countless lakes and swamps, and the luxuriant growth of forests and plant life became a new factor. Armed with the bow and knowing how to hollow boats, catch fish, shoot birds, and hunt the countless elk and reindeer, man became a nomadic hunter who alone or in small groups traversed on foot and on skis the great distances through the taiga thickets in pursuit of the elk and herds of northern reindeer, entering into single combat with wolves, bears, and lynx. The necessity of situating himself in the forest forced man to gaze at the sky and to employ the stars for orientation. The world of primitive man became double-centered: below was the earth with her taiga, her herds of wild reindeer, her intimidating confusion of trackless forest in which lost people were overwhelmed by the abundance of growth; above was the sky with the sun and moon moving across its face, and the stars, both wandering and fixed.

The woodland hunter carried over to the heavens his earthly activity. The little-studied mythology of the Siberian hunting tribes shows us that according to their ideas reindeer also grazed in the heavens, and a heavenly hunt also took place. The Milky Way signified a road, while the constellations represented wild animals. In the Northern Hemisphere there is one fixed star--
Polaris. All the other stars rotate around it. Thus the constellation Ursa Minor (which includes the pole star) and its neighbor Ursa Major became in hunter's mythology the center of the heavenly circle, the place in the universe to which myths about the two sovereigns of the world attached themselves. In accordance with the great significance of reindeer and elk in the ancient hunting way of life, two female elk or two female northern reindeer became representatives of the world in the eyes of the hunter. The constellation Ursa Major had apparently already received the appellation of Los' or Losixa ("Elk"), while Ursa Minor received the name Losenok ("Little Elk") in the remote past of many peoples. Even the Russians and the Poles, having passed the hunting stage long ago, called the large constellation Los' or Soxatyj ("Antlered One"), while they named Polaris Losinaja zvezda ("Elk star"). Afanasij Nikitin of Tver, observing the stars in India, wrote, "the Elk stands on its head in the East."

In many Siberian myths a story is told of the two heavenly sovereigns of the world who were half women and half horned reindeer; one was the mother, the other the daughter. The sovereigns gave birth to reindeer, satisfying the needs of people and of wild beasts.

At the beginning of the eleventh century a Novgorod scribe recorded a myth concerning the heavenly birth of reindeer: "Old men were going beyond Ugria and beyond Samojad (the lands of the Xanty, the Mansy and the Nency) after seeing those lands of half-night. A cloud came down . . . and female reindeer dropped their young, and they grew up and spread across the earth."

Thus, in light of these very ancient hunters' ideas about the universe, those ob-
jects inexplicable at first glance and referred to above as examples of subjects of ethnographic riddles can now be understood. Novgorod embroidery work, which depicts reindeer-women surrounded by birds and running reindeer, is directly related not only to a story told by old men about the female reindeer but also to the more complete hunting myths of the Evenki, Giljaki, and Ngasasany about the heavenly reindeer-women who gave birth to the entire stock of earthly reindeer.

A trustworthy interpretation can also be given to a Huzul Easter egg, the upper part of which is allotted to two white reindeer amid the stars who are high above the earth and, as we shall see later, over the sun as well. This is a survival, in the remote regions of the Carpathians, of the same ancient myth, common among the men of that time, about the heavenly reindeer who ruled over the universe. Simultaneously with the "doubled world," with the formulation of the unbounded heavenly circle, among the people at the hunting and fishing level there developed a vague concept about the lower world, which was neither the vast realm of Hades nor that underground ocean across which the sun swam each night from west to east. This was the world, inaccessible to humans, of subterranean expanses where snakes and lizards crept away, where wild beasts burrowed their holes, and where people buried their dead. For many people the amphibious pangolin became the personification of this underwater-underground world.

At the time when the Novgorod scribe recorded the Ugrian legend about female reindeer there was widespread distribution among the Ugrians themselves of shaman badges, on which were portrayed a world picture which had been developed long ago...
by northern peoples. In the center stands a man in a costume adorned with the head of a losixa (these were known from the second millennium B.C. up until the Christian era). The man stands on an enormous pangolin, the symbol of the lower world.

In medieval Novgorod there was a legend about a pangolin goddess who lived in Lake Il'men (the prototype of the sea king whom Sadko amused by playing on his gusli), and in Novgorod applied art of the eleventh through the thirteenth centuries there are many representations of pangolins on the rafters of houses, on the handles of ladles, on oars, and on gusli.

S. Gerbershtein noted a cult honoring the pangolin in Lithuania, in the neighborhood of Novgorod in the sixteenth century. The animals described to him measured about 75 centimeters long. An echo of this ancient cult of the pangolin manifested itself in the nineteenth-century children's game song, "Sit down, sit down, pangolin, under the nut tree. . . ." Ukrainian folk art demonstrates to us the role of the pangolin in the cosmogonic picture. The bandury, semi-ceremonial archaic instruments, are decorated with signs of the sun, water, and representations of the pangolin. When the bandurist plays on the instrument, the sun is on top, the waves of water are below the sun, and under the waves is the pangolin.

The most radical transformation in the relations of man and nature—the transition from the appropriative hunting economy to the productive agricultural economy—led to a new view of the world. Rain, the heavenly water without which the crop could not ripen, became of primary importance in the consciousness of the ancient farmers. A most interesting picture of the world is presented us by paintings on grain vessels of the so-
called Tripol'e culture of the third millenium B.C., which was located in a region bounded by the Carpathians, the Danube, and the Dnepr. The painting on the well-polished surfaces of these vessels is always divided into three horizontal zones. The first zone is a narrow strip of the earth, especially of soil, with seeds and plants (there is no underworld). Above this zone is the sky with the clearly marked path of the sun, and crowning the whole composition is a third layer, an "upper heaven," with reserves of heavenly water. From this upper heaven oblique strips of rain were often drawn descending across the middle.  

The Rig Veda, the book of ancient hymns, describes this segmentation exactly. The early hymns of the Rig Veda belong to the same period as the Tripol'e cultures painting and reflect one and the same stage of perception of the world. The Tripol'e artists solved a most difficult problem—the representation of continuous passage of time—by means of a fourfold depiction of sunrise and sunset, describing, as it were, the line of the sun's path. Thus, Tripol'e dishware bears a pattern consisting of a broad, closed ribbon of spirals which allows the expression not only of the daily course of the sun but also of its endlessness and continuity.  

Preserving all elements of the three-layered world picture, the Tripol'e artists often transformed their paintings of the universe into the faces of two gigantic women, in which four suns appear as the eyes of the two female sovereigns of the world. This leads us to a past which is not too far distant for the Tripol'e people, when their ancestors led hunters' lives, and like all ancient hunters believed in the two mothers of the world. The Tripol'e people also had
cups depicting two heavenly reindeer, highly stylized. Representations of the two female reindeer still remained, but already they were being replaced by images of the two mothers of the world. The Rig Veda represents a still later stage, for instead of two goddesses, reflecting the dual organization of the matriarchal race of hunters and early farmers, we see here the single Aditi the Endless, mother of the world and of the gods.

Now we should again recall the Huzul pisanka (Easter egg) with its heavenly reindeer. There, between the earth and the zenith of heaven with its reindeer, exists a zone corresponding to the Indic "middle heaven," so well represented by the solar spirals on Tripol'e ceramics. On the pisanka the path of the sun is indicated by the spirals, creating sun-circles. Consequently, the Huzul pisanka shows us a merging of the two ancient cults of the two reindeer and of agricultural solar revolutions. We should note that the northwestern borders of the Tripol'e culture extended to that region of the Carpathians where the archaic pisanki is preserved.

In the popular conception, the agricultural economy evoked not only the idea of "heavenly waters," but also that of agrarian magic in general, which was expressed in various vegetable ornaments—personifications of life, the crop, and well-being. The agrarian cycle of land, seed, and new fruit is comparable with the cycle of woman, pregnancy, and new-born man.

The following stage of development of the world picture, a stage which lasted until the late Middle Ages and which has demonstrated substantial influence on the most recent folk art as well, was connected with the blossoming of the Bronze Age, when, to-
gether with agriculture, horsebreeding and cattle raising made their appearance. Many tribes began to migrate across extensive pastures, overcoming the vast distances of the steppes. This life differed substantially from that of the roaming Mesolithic hunters in the semi-darkness of the taiga forests with their shifting pathways and formless swamps. Knowledge of geographical orientation now developed among the tribes. The people sometimes rode very far along the coasts and open expanses of the steppes with constant and sure orientation. Horsemen and seafarers became aware of the circumference of the horizon and the convexity of the earth's surface, which was also reflected in their microcosm. They began to give the graves of their relatives the appearance of segments of spheres, mounding the barrows in imitation of the visible world as outlined by the circle of the horizon.

Simultaneously with these people the tribes of central and eastern Europe also took two steps forward in their perception of the world. First, the annual cycle of twelve moons was firmly established and the four solar phases were observed (the Tripol'e people, who had drawn the four suns, may have already known this). Secondly, the perceptions of the sun's movement around the earth were substantially changed.

In Tripol'e painting the sun never intersected the line defining the zone of the earth. Clearly the daily solar circle in the worldview of the Neolithic tillers of the soil must be reconstructed in this manner. After completing its wide arc through "middle heaven" in the day and reaching the place of its setting, the sun somehow crossed a region of the flat earth beyond the mountains, unseen by man, in the night, and toward morning reached the point of its rising,
whence it again described its daily arc. This ancient idea of the motion of the sun was refuted in great detail in the sixth century by Koz'ma Indikoplov in his *Christian Topography* in which he attempted to disprove the ancient theory of the earth's sphericity and of the motion of the sun under the earth.

Among the Bronze Age cattle drivers of eastern Europe there appeared the idea of the nightly movement of the sun under the earth from west to east. In the burial grounds of the Fat'janovskij culture of the Upper Volga, there are vessels which apparently had been filled with some sort of drink for the deceased in the graves. Wavy lines on these vessels represent both the "upper heaven" with its store of water, and streams of rain. But the sun was represented on the very bottom of the vessels--under the world as it were, in the land of darkness, the underground realms of death. Four thousand years later in northern Russian cemeteries we encounter crosses on which a plant (the tree of life?) is represented in a prominent position, but the sun is placed not over the plant, but under it, that is, in the land of the dead, which is completely logical for a gravestone's iconography.

A.A. Bobrinskij has drawn attention to the fact that Russian carved wooden kovši ("buckets or scoops"), furnished with a distinct sun symbol (a cross within a circle) on their handles, frequently have either a horse or a duck as an addition to the sun symbol. The horse was connected with the ancient path of the sun across the sky (horses of Feb) while the waterfowl was tied to the nocturnal journey of the sun across the ocean which surrounded the earth. Still greater interest is aroused by the carved wooden švejka, described by V.M.
Vasilenko, on which a horse and a duck are found on the same artifact, the horse in the upper layer and the duck in the lower. In the middle layer, between the diurnal horse and the nocturnal duck, are depicted sun-spirals, arranged not horizontally, as in the Tripol'e culture, but vertically, as this was necessitated by the new idea of the sun's revolution around the earth.  

In Russian folk art of the ninth century we are met with a curious synthetic expression of this idea. In pagan barrows of the Radimići are pendant-amulets in the appearance of peculiar duck-horses, creatures with duck bodies and horse heads and necks with decorated manes. Such a synthesis of the two creatures, seemingly incompatible yet both connected with the sun, speaks of the great antiquity of the very idea. Having originated among primeval tribes sometime in the middle of the Bronze Age, this geocentric hypothesis of the explanation of the dynamic of the universe endured until Nicholas Copernicus demonstrated the counter theory of heliocentricity.

This picture of the world, based upon the immobility of the earth and the circular motion of the sun over and under the flat earth, lasted for four millennia and left a deep imprint on medieval art as a whole and on nineteenth and twentieth century folk art in particular. Without an account of this old and durable tradition it would be hard for us to accurately interpret many phenomena in the history of Russian artistic culture.
NOTES


5. Petr Bessonov, Beloruskie pesni 17 (Saint Petersburg, 1871).


7. A. A. Bobrinskij, Narodnye russkie derevjannye izdelija (Moscow, 1911).