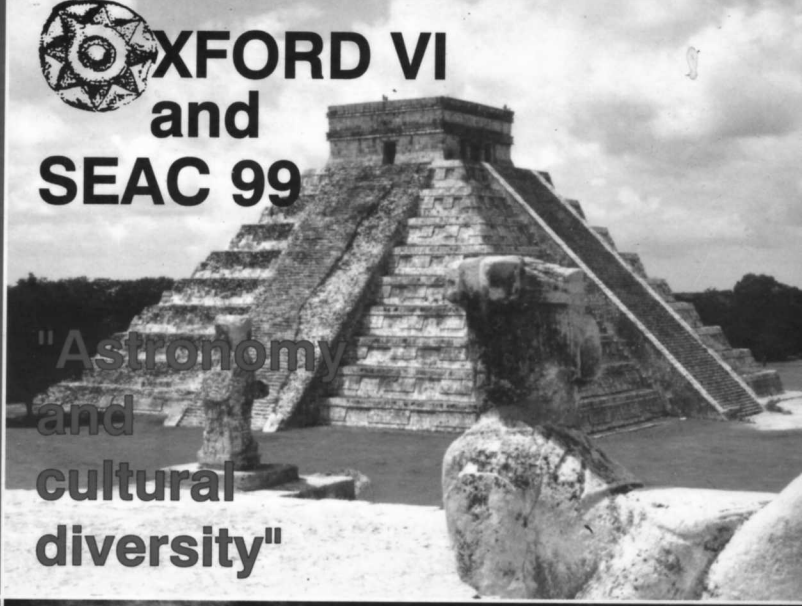


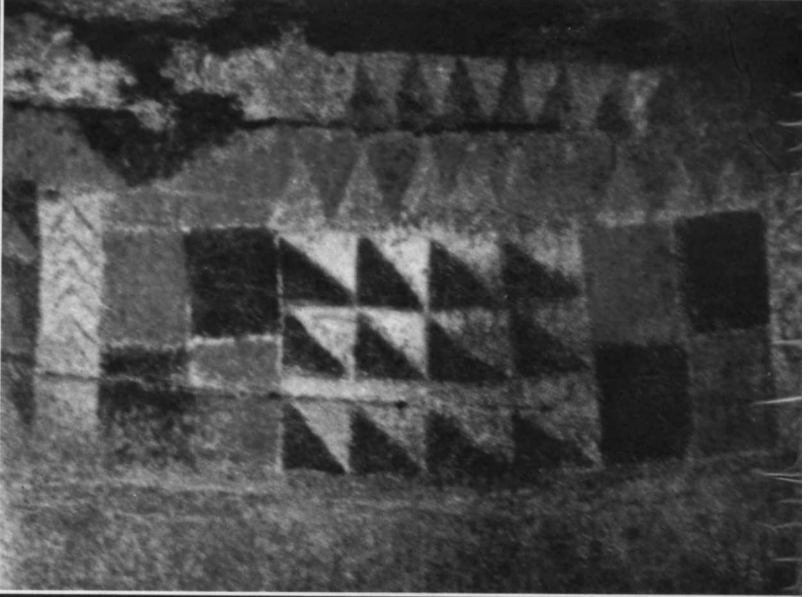
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**"Astronomy
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**"Astronomía
y diversidad
cultural"**

César Esteban
Juan Antonio Belmonte
Editores



OXFORD VI AND SEAC 99
«Astronomy and cultural diversity»

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CARLOS JASCHEK

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DID THERE EXIST THE BALTIC ZODIAC?

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INTRODUCTION: ABOUT THE LITHUANIAN ZODIAC IN THE HISTORICAL SOURCES

We don't find direct information about the Zodiac signs neither in the Lithuanian nor in the Latvian ethnoastronomical materials. But some historical sources give us reason to presume that Zodiac was familiar in pre-Christian Lithuania.

This presumption is based on the information of two historical sources and analysis of ethnographic and folklore materials. The first trace was noticed in the book by E. S. Piccolomini «*Description Of Various Events And Places*» published in 1477. The author of the book conveyed the story by J. Prahensis (1431) - *'Going further he found a tribe which worshipped the sun and kept an enormous iron hammer very respectfully. The prophets were asked what they meant by this worshipping and they answered that very long ago the sun wasn't seen for long months, because the mighty king had caught it and locked in the toughest tower. Then the signs of Zodiac came to help. They took a huge hammer and destroyed the tower. They released the sun and gave it back to people. So such tool is worth respect with the help of which people got back light.'* (Manhardt 1936, 545).

The second trace is from the compiled chronicle by a German author Johannes Friedrich Rivijus. He stated that in Vilnius there was **Perkūnas** sanctuary with a square altar. The altar was made of 12 steps each of them was devoted for one zodiac sign. *«Every month when the rising or setting sun entered a sign, fires of sacrifice were lit on that step. The highest step belonged to Cancer and the lowest to Capricorn. But the real sacrifice was not being burnt, it was supposed that only imitations made of wax were being burnt...»* (Velius 1997, 357). J. F. Rivijus copied this information from the 16th century Lithuanian history by Augustinas Rotundas.

THE SIGNS OF ZODIAC IN CALENDAR RITES

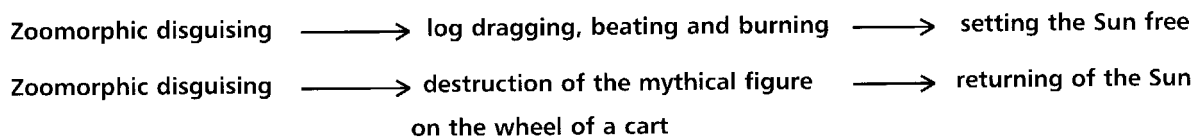
As the historical sources stressed upon the ritual and calendar role of the zodiac signs it was tried to find the traces of 'zodiac rituals' in the known ethnic calendar rituals of the 19th - 20th centuries. The motivation of research is based on the typical mythological thinking, where all the main cosmogonic acts should be repeated ritually during certain calendar festivals. Presuming that the zodiacal constellations familiar to the Lithuanians might have been mostly zoomorphic, attention was paid to the survived rituals with animals and some folklore texts.

The carnival rituals on Christmas and Shrove Tuesday can undoubtedly be treated as annual cosmic rituals of releasing the Sun. The Lithuanians have Christmas ritual of dragging a log through the village having disguised as animals and beating that log. Later they burn it. This ritual might be related to the ritual of setting the Sun free. In the opinion of the Lithuanian ethnologist P. Dundulienė, the burning of a log could symbolize the victory of the Sun against the chthonic

powers (Dunduliene' 1991, 53).

Disguising as animals is similar for the Shrove Tuesday when the same procession follows not the log but a peculiar «Cart of the Sun». A wheel of a cart was fixed horizontally on a two-wheeled cart or on runner of sleigh, and a stuffing of some mythical figure was attached to it. Flails were in the place of hands. And when the figure rotated, the flails tossed about and protected itself from the participants of the carnival who attacked it. The wheel might symbolize the sun. And the stuffed figure could be explained as a mythical creature, which made harm to the Sun. Later the stuffed figure was being burnt or drowned.

It is important to mention the fact that on the next day after Shrove Tuesday, there was a tradition to drag a log round the village (like on Christmas). There is evidence that 12 masked men used to drag the log (Balys 1993, 106). The sameness of rituals of disguising as animals and dragging a log on Christmas and Shrove Tuesday let us integrate the distinctive details of these festivals into one common plot:



Admitting this hypothesis, the masks of Christmas and Shrove Tuesday festivals could be assumed as potential signs of Zodiac. These masks of animals were characteristic to the Lithuanian and Latvian carnival: a goat, a horse, a rider on a horse, a crane, a bear, a bull. The most popular masks in Lithuania were the masks of **a goat, horse or a rider** and **a crane**. And they could be assumed as pretenders to the signs of the Lithuanian zodiac.¹ Analysis of some shepherds' calendar ritual songs even strengthens the chances of a goat to be a sign of Zodiac. It also reveals another personage of zodiac - **an armed man**. The content of a traditional Lithuanian Christmas song «*A Nine-horned Deer Is Coming*» made it possible to include the **deer** into the group of mentioned personages. The ethnologist N. Laurinkienė analyzed the semantics of the archaic Lithuanian calendar songs and distinguished the most characteristic motives and symbols of the cosmogonical myths and cosmological images. There are three zoomorphical characters among them. They are: **a deer, a horse and a peacock** (Laurinkienė 1990, 71-83).

SIGNS OF THE ZODIAC ON ANCIENT SCOOP

Presumptions based on the analysis of historical sources and ethnographic materials were confirmed unexpectedly after the research of an ancient ritual scoop from Grodno (Gardinas) with the reflections of 12 signs of zodiac. Precise circumstances of finding that scoop are not known. All that is known about it is that it was found in the basement of some church during the World War II and appeared in the exposition of the museum of history and archaeology. In November of 1956 the scoop was sent to Moscow for restoration. Since 1978 the scoop has been kept in the main exposition of the Byelorussian folk creation museum in Raubichi.

The scoop was covered with polychrome. Before the restoration of the scoop some even older pictures were noticed on it. There were burned narrow lines, which made pictures. The polychromatic painting on the outer side could hardly be seen. According to the style of painting it was ascribed to the local tradition of the Grand Duchy of Lithuania of the 17th century. The scoop was dated back to the 15th century. Still it is not known who and when dated it. The inner side of the scoop has preserved the polychromatic paintings. Though they are not informative, they are only humble ornaments. Ancient pictures are laid out on the outer surface of the scoop in the line of 10-cm height. There are 12 pictures each of them is framed by a geometric ornament.

The survival of the scoop shouldn't be surprising because it was made of a knob of a birch. The wood of a birch knob is especially thick and it doesn't absorb water. Also the scoop was covered with wax.

It seems that the scoop was being regularly used according to its direct purpose, i.e. it was used for drinking. That's why the first picture closest to the handle has nearly been abraded. The scoop had to be rather heavy because its diameter is about 0.5 m.

The signs on the surface of the scoop are laid in the consecutive order. The reflections of the sun on every sign suggest us the idea that these reflections are closely related to the way of the sun among stars, i.e. zodiac. Reflections 10, 11 and 4 counting clockwise from the handle of the scoop are directly associated with the traditional signs of zodiac such as Sagittarius, Capricorn and Gemini. And the location of these signs among all the other reflections lets us assume that it is not just a coincidence. There should be 5 signs between Gemini and Sagittarius. We find exactly the same number of signs on the scoop. The dislocation of the signs in the clockwise direction and their association with the zodiac signs prove that the sign that follows Sagittarius is the 12th sign Capricorn. Such dislocation of three identified signs permits us to assert that the pictures on the scoop are undoubtedly the signs of zodiac. Starting clockwise from the handle of the scoop we have these signs:

1. (The reflection of the sign is difficult to discern) - 'Pisces'.
2. A fur-coated figure - 'Aries'.
3. A rider (riding from the right to the left) - 'Taurus'.
4. Two human beings holding each other by the hands, the one on the right keeps an arrow or a bludgeon above his head and we can see the sun and its rays between their heads and legs - 'Gemini'.
5. A bird that reminds a peacock (orientated to the left) with a disc of the sun above its back - 'Cancer'.
6. A bird that reminds a peacock similar to the mentioned one in 5, only it is orientated to the right with a disc of the Sun above its back - 'Leo'.
7. A bird that reminds a crane or a stork (orientated to the right) with a disc of the Sun above its back - 'Virgo'.
8. Two Suns (one in the left bottom corner of the frame with the rays like swastika and the other with the straight rays in the right top corner) - 'Libra'.
9. A big and a small deer - 'Scorpio'.
10. A warrior with a pike in his right hand above the head and a disc of the Sun with straight rays under his hand - 'Sagittarius'.
11. A galloping goat (from the right to the left) and a disc of the Sun with straight rays above its back - 'Capricorn'.
12. A galloping horse (from the right to the left) and a disc of the Sun with straight rays above its back - 'Aquarius'.

These signs confirm the reality of the previously reconstructed signs of zodiac and let them correlate with particular constellations. At the same time 6 other signs out of 7 unrecognized signs are identified. The contours of the signs let us relate these figures with particular star groups. As the starting point of the reconstructed zodiac coincides with the 'Pisces' constellation we can assume that we have things to do with the system of the zodiac signs of our era. This fact is one more important argument, which proves that the Zodiac on the scoop is not an elementary import from the Roman Empire. The starting point in the Pisces shows that this system had to be used actively and based on the local practice of astronomical observations.

SEMANTIC OF THE RECONSTRUCTED SIGNS AND THEIR RELATION WITH CELESTIAL BODIES

An important argument strengthening the hypothesis that the Lithuanians used to relate the above mentioned symbols with the signs of Zodiac since ancient times, might be the information proving direct association of these symbols with the dome of heaven and celestial bodies. There is such information in the Lithuanian ethnological material. Let's discuss more characteristic symbols of zodiac.

▪ **Horse.** 1) A constellation by this name is noticed in the Lithuanian, Latvian and Byelorussian ethnoastronomical materials: in Lithuanian - **Arklys**; Latvian - **Kumel'š**; Byelorussian - **Konj** 'Horse'. Moreover, the information from Latvia enables to identify this constellation rather reliably. The constellations of **Wolf** and **Horse** were known in Latvia. They said that «when one of the constellation appears, another disappears.» The Latvian researcher of culture A. Goba identifies Wolf with Leo and horse with Pegasus (Goba 1990, 285-286). Our material makes this identification even more precise when relating the constellation of Horse with the constellation of Aquarius (Aquarius and a part of Pisces to be more precise) which is below the constellation of Pegasus. It is known that a group of stars that is to the right above the square of Pegasus was called by the name of Horse by the Babylonians (Rogers 1998, 22-24). The Lithuanian tradition to depict Horse below the Greek Horse - Pegasus is rather suited to show the figure of a horse in this part of the firmament. 2) In the Lithuanian fairy-tales we can find the plot about the horse emerging from the sea or flying horses. A cosmic horse is depicted in calendar songs. He leans upon the sky with his ears, he counts stars with his eyes, he sweeps the estate and all the roads with his tail, and he breaks up pits with his legs. In the Latvian songs it is mentioned that the Sun rises at the saddle, the Moon rises at the bridle, and **Auseklytis** (Venus) rolls at the end of the bridle-rein (Laurinkienė 1990, 77-78). We can guess from this description that this star horse is in the sky ecliptic, i.e. in the belt of Zodiac. This is how it could be explained why the sun, the Moon and Venus appear in it. 3) The Lithuanians had a calendar festival called **Kumeliuko krikštynos** 'Foal's christening' or **Krikštai** 'Christening'. It was celebrated all night through at the end of January or at the beginning of February. The time of this festival coincides with the heliacal setting of Horse (Aquarius) constellation. The semiotic A. J. Greimas assumes this festival to be of lunar character at it is considered to be an ancient Lithuanian New Year festival (Greimas 1990, 320-322).



▪ **Deer.** There is a Christmas song "A Nine-horned Deer is Coming" about an unusual deer with nine horns. Fire is burning and smiths make a golden goblet, a golden ring or a wreath made of pearls. All those objects made of noble material symbolize the Sun (Greimas 1990, 468). There is a fragment of a legend recorded in south Lithuania (1984) about a white deer with a nice wreath fallen from the sky. This is it: "<...> children, wait and look through the windows - a deer will come. <...> he will be very nice <...> white white <...> with a wonderful wreath <...> his feet will be white, so distinguish him... They say, he fell from the sky, so the clouds washed his tail and coloured his hoofs. And when deer appears from the forest then Christmas come" (Ragevičiūtė 1996, 9). Deer is identified with Scorpio and

his appearance before Christmas correspond with the heliacal rise of Scorpio constellation.

▪ **Crane.** On the first days of April Virgo constellation sets in west before the sunrise. After the Sun set it rises in the east (cosmic setting and rising). According to ornitologists this is the time (end of March and beginning of April) when cranes return to Lithuania. At that time they start their so called "dances". Birds choose a dry place where they gather in the daybreak or evening - glow.

▪ **A rider on a horse.** 1) In the Lithuanian ethnoastronomical material there is noticed a constellation of *Jojikėlis 'Rider'*, but it is identified with Cassiopeia not with Taurus. 2) In Samogitia the stars of Taurus were linked with a horse and called *Kybelka Jade'* (Vaiškūnas 1996, 141-142). 3) In the 1249 contract of the German Order with Prussian it is mentioned that the Prussian prophets during burial ceremony raised their eyes to the sky asserted that they saw the deceased flying on the his horse in the middle of the sky to the other world (Velius 1996, 238-239, 240-241). 4) At the end of April (round St. George's day) at the time of the heliacal setting of the Pleiades the Lithuanians say: "*The Pleiades in the glow, the horse in the furrow*". This could be linked with the imagination that a part of Taurus constellation hiding behind the horizon together with the Pleiades is imagined to be a horse. By the way, St. George is supposed to be the guardian of horses and depicted as a rider on a horse. In the Latvian tradition besides St. George there is an old personage *Ūsin's*, who is also considered to be the guardian of horses and is depicted as a rider on a horse. *Ūsin's* is identified with the ancient Indian deity of dawn *Usas*, ancient Greek *Eos*, Romanian *Aurora* and other.

▪ **Twins.** 1) D. Poška (1823) refers to the constellation *Dwynaytey 'Twins'* which was known in Samogitia and he draws a link among this constellation and two idols Lelum and Polelum who were supposed to be known in Poland and

Lithuania (Poška 1959, 362-363). 2) Archaic personages closely related with the Indo-European cult of divine twins are characteristic to the Baltic mythology. The Lithuanian mythical characters *Dievo sunėliai*, Latvian *Dieva deli* 'sons of God' correspond to the ancient Greek *Dioskurs* and Indian *Ašvins*. In the plots of Latvian songs *Dieva deli* 'sons of God' are related with the dome of heaven, the Sun, the Sun's daughters and the Moon.

▪ **Sheepskin.** A sheepskin plays a very important role in various Lithuanian traditions and rituals. One of the most characteristic Christmas masks is called "*Black Hirsute*". It is a man wearing an inside out sheepskin. Hair and shags are supposed to be symbols of sexual energy, fecundity and





wealth. Such primitive way of carnival masking is known nearly in all European nations.

▪ **Goat.** In the Lithuanian folklore the Goat is linked with the sky, *Perkūnas* 'God of Thunder' and atmospheric phenomena. Not so long ago the Lithuanian and Latvian shepherds performed a ritual with a goat before All Saints Day. The intention of such ritual is a wish to expect snow as soon as possible and that would mean the end of cattle pasture. For this purpose shepherds used to lead a goat 3 times round a birch. During the ritual it was necessary to lift a goat a bit. Sometimes they even used to bend a birch, to tie a goat and to lift it. It is supposed that during this ritual shepherds sang a song "Go goat for water". The story of the song is about a goat, which goes for water and meets an armed man.

The man hurts the goat's leg. Lifting a goat on the tree might be related with the evening culmination of Capricorn constellation, which happens in November. It seems that shepherds try to hasten the culmination of Goat and to call winter's snow at the same time. 2) Historical sources say that the Prussians used to sacrifice a goat at the end of a year. That would correspond to the phenomenon of the Sagittarius heliacal setting. It is known that analogical tradition was familiar for the Babilonians. When the Sun entered Saggitarius constellation, Babylonian prophets put on festive clothes made of goat skins and sacrificed a goat for gods.

▪ **Peacock.** In the songs of Lithuanian and other European nations a peacock plays the role of cosmological and astral image (Laurinkiene 1990, 81-83); Tokarev 1988, 273-274). In the Lithuanian fairy tales there is also a miracle bird with shining golden feathers. This bird is mentioned in the plots together with a horse and a very pretty girl, who can be related to *Aušrinė* 'Morning Star' - Venus. The hero of the tales releases the girl, the horse and the bird from the captivity of some chthonic creature (Vėlius, 1994, 116-129). That could correspond to the appearance of Venus after a period when it was temporary invisible and also heliacal rise of Horse and Peacock constellations. This situation is possible at the time of spring and autumn equinoxes.

CONCLUSIONS

The reality of mythical zoomorphic personages reconstructed on the basis of historical sources, ethnographical and folklore materials, the same with Zodiac signs is confirmed by respective pictures on the ritual scoop from the Middle Ages. The semantic analysis of the signs based on the folklore, ethnographical and ethnoastronomical data permits us assert that they were closely related to the calendar practice and astronomical observations. So we can come to a conclusion that a peculiar zodiac might be known and used for practical purposes at least among the prophets in pre-Christian Lithuania. The possibility that the information about Zodiac might have come from the countries of the Mediterranean does not deny the originality of this zodiac and possible original adaptation to the local traditions. If such interception ever happened that had to be very long ago. Otherwise, the new information wouldn't have had time to modify and join local mythical and ritual structures. On the other hand not only the Baltic but also all European nations have a tradition of arranging carnivals to celebrate the Solstice of the Sun and that gives ground to assume, that Zodiac, as animals circle system, might have been known to various European nations. The stimulus of its formation had to be the need for precise calendar calculation, and its theoretical basis was the Indo-European mythology. We suppose, that the research of the culture heritage of the old European nations. Has big perspectives and can reveal new and important information for the history of astronomy and to the whole history of culture at the same time.

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NOTES

1. It is interesting to notice that in some places of Lithuania the people with masks were called «zodijai». This might be an allusion to the Greek «zodiakos».