

# TRADITIONAL ASTRONOMICAL KNOWLEDGE IN THE WORLD-VIEW OF BELARUSSIANS IN 1994–2005

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## Abstract

I use methods of systems analysis to build a model of the traditional world-view among present-day Belarusians. Ethnographic observations and interviews served mostly as sources for my research on Belarusian traditional astronomical knowledge. I corroborate the assertion that today's informants' knowledge is traditional by a comparison with records from earlier periods.

Traditional astronomical conceptions are common among present-day Belarusians. They influence not only people's orientation in space and management of nature, but also social relations, including the way in which calendrical, family, medical and other rituals are conducted. Traditional astronomical conceptions form part of a hierarchically arranged traditional world-view. Since these archaic myths and rituals are on the brink of extinction, it is urgent that we record them as soon as possible and take special steps to protect them.

Key words: traditional world-view, traditional knowledge, Belarusians, the sky, stars, the sun, the moon.

## Introduction

I define ethnocosmology, or in other words a traditional world-view, as a system of well-ordered ethnic knowledge about the world. I have used systems analysis to build a model of the traditional world-view of Belarusians (Novikava and Zhybul 1998; Kanaplianikaŭ). For the most part, the research model is built upon my own ethnographic observations, interviews I have conducted since 1994, and on investigations of archival records. I have based my research largely on the opinions of informants. Traditional representations of the world arose during the historical development of ethnos so they are the most stable mental representations. The processing of information by humans has specific characteristics, according to which I distinguish linguistic and pictorial representations (pictorial representations can be dynamic). I paid particular attention to phenomena that reside explicitly within the Belarussian cultural tradition: folklore, sacred sites and objects, and ritual activities. I used various techniques (direct explanations of words by informants, indirect explorations of semantics, the discovery of classifications and mental maps) to reveal representations. I asked the informants to describe the contents and scope of the meaning of the words I presented to them and to correlate different objects with conceptions or to draw pictures of them. I asked the informants to explain how they imagine certain objects and rituals. Simultaneously I focused upon the linguistic categories the informants used for descriptions of space, objects, their own actions, and the interconnections between objects; and what myths,

legends, and tokens refer to the representations, including why people refer to them as they do, how they appear, and how they are used for household, economic and ritual activities. These methods are very efficient for revealing the structure and dynamics of the traditional world-view system (the number of main levels in the system, the types of connection between the levels, and the presence of knowledge about the system in the system itself). I paid particular attention to orientation in space and time with respect to the Earth and to astronomical bodies referred to in everyday life and during rituals. Also I recorded mythological conceptions about the sun, moon and stars.

I corroborate the assertion that today's informants' knowledge is traditional by a comparison with records from earlier periods. A problem is that these records were published under strict censorship, at first by the Orthodox church in the Russian Empire and then during atheism in the USSR, and so they do not show all the clearly recognizable pagan conceptions: contemporary ethnographic records show us undoubtedly archaic conceptions in which natural phenomena are explicitly identified as god-like (though not related to the Christian God), and in this way many common rituals can be explained. For example, I have recorded a conception that the sun is a god and that because of this the deceased are buried facing the sun.

It is important to bear in mind that: literacy in Belarus stands at 99 % and that in Belarus the private ownership of land was banned, so that the traditional way of farming was completely destroyed: as a result, there

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are no classical peasants in Belarus. Urban residents of all ages proved to possess the traditional world-view (i.e. the principles of organization of that world-view), although they have less extant traditional knowledge (i.e. they know less of folklore and rituals) than that of the rural residents. Religious education is not well developed in Belarus. The majority of Belarusians suppose themselves to be Christians, but they do not ever read the Bible, go to church, know the Catechism, or believe in resurrection (they cannot imagine it). All the informants cited below (AIMEF, AGGKA, PEAK), on the other hand, are church-goers; they were educated in school, watch TV and listen to radio, and are or were agricultural workers on big state-owned farms.

### Analysis of Belarusian Traditional Astronomical Knowledge

**The SKY.** In everyday life, Belarusians use only the traditional concept of the sky. The common understanding of the concept of “the sky” is that this is the blue space above the ground. Belarusians suggest that the sky is situated above the clouds. Some Belarusians suppose that the sun, moon, stars, god, and souls of the dead are in or above the sky (*Informants*: “In the sky there are souls of the dead, the moon, and stars. Birds fly near the sky and cannot reach it”; “The soul came to the sky – to God”; “The sky is in outer space [note: the informant simultaneously uses a scientific term and a traditional word]”; There is the sun and God in the sky“; “During Ascension we see God go up to the sky“; “The sun goes above the clouds, above the sky“; “The sun is in the sky, the sky is blue, clouds are under the sky” (AIMEF 116, p.90; AIMEF 125, p.16; PEAK 1). Some people suppose that the sky we can see is not real, and the real sky – where God is – is above, next to the sky we see (*Informant*: “The sky is so high that nobody sees it. It is so many miles to the sky that nobody can walk there. The sky is very bright, golden. The black, blue, white – all of this is clouds. On the holiday of the Exaltation of the Cross in the winter, the spot around the sun opens and you can see the sky” (PEAK 1). Similar conceptions about the invisible real sky were held at the end of the nineteenth and the beginning of the twentieth centuries: “God opens the curtain and shows the real sky” (Serzhputoŭski 1998, p.28); “How many hairs are there on the cow – that is how many miles there are to the sky where God is” (Vasilevich 1998, p.33).

**STARS.** Informants speak about the constellations of “the Haymakers”, “the Bear”, “the Sieve”, “the Hen”, “the Cup” and “the Cart”. Some of these exist only in folk astronomy and are not found in scientific astronomy. The Milky Way also is called “the Way of the

Birds” and “the Way of the Geese”, though today these names are quite rare (Arashonkava *et al.* 1996: maps 8, 12, p.86–87, 398, 467; Czurak *et al.* 2002, p. 314, 316, 318, 320; AIMEF 129, p.26–27).

I have noticed that Belarusians refer to constellations as “a star“ (Fig. 1).



Fig. 1. “Bear star” according to the informant (PEAK 1: file Czurlova 15.01.05).

In most cases stars are not personified. I have recorded suggestions that stars and meteors are souls of the dead: “The star in the sky is out – somebody died”, “However many stars there are, there are that many souls” (PEAK 1; AIMEF 116, p.114); that meteors are dragons bringing money (PEAK 1, file Garad, Viетка). One informant spoke of “Snake stars” – groups of stars that look like coiling snakes with eyes, which are more plentiful around midnight. If many groups of those stars are seen at Christmas then in summer there will be many grass-snakes (AIMEF 118, p.108 –109) (Fig. 2).

There is knowledge about the defining time according to the stars: for example, when to get up in winter (“When the weather is frosty and ‘the Haymakers’ are seen, it is time to get up” (AIMEF 129, p.19, 390) and when to begin supper on Christmas Eve (“when a star rises” AIMEF 121, p.67). The same beliefs about stars were recorded in the end of the nineteenth century (Vasilevich 1996, p. 53–55; Piatkevich 2004, p. 282).

**The SUN.** In the traditional world-view the sun of great importance. Knowledge about the sun serves to orient people in space and time. The basic direction for Belarusians is an east-west line, which is drawn using the movement of the sun. East and west are not usually

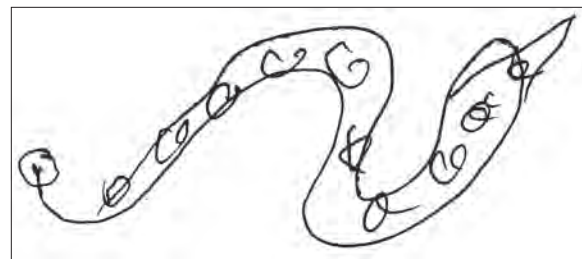


Fig. 2. “Snake star” (PEAK 1: file Rudakova 14.01.05).

used for orientation in the landscape and on the farm, but are generally used in rituals and for situating sacred images. For example, in the Petrykaw district sacred images are situated in the eastern part of the house: the bride's place is near to this sacred image, and informants say that the bride and bridegroom must walk around the table during the wedding according to the movement of the sun or to sunrise, which means with the sun, clockwise (PEAK 1).

Everywhere in Belarus the dead are traditionally buried according to the sun, with their heads to the west and feet to the east; the cross or tombstone is put either at the foot or at the head of the grave (see, for example, the text of the song (Gaiduk 1997, p. 158–159, p. 340–341)).

I have recorded suggestions that the easterly direction contains the god and that the sun is the god. Another informant speaks of a legend where the god, whom the informant supposes to be the sun, gave children to a childless couple with the help of almsmen (beggars). She says: “The sun is the god, it feeds us and warms, and lights and gives rain and everything”. The dead are buried facing the sun because god raises them and they pray (PEAK 1).

The other informants from different regions say that: “Svietavit [a name derived from the word ‘light’] is the god of the sun and he is the main god” (Matskevich *et al.* 1984, p.388–389).

Belarusians suppose that the sun has a sacred quality: they say that at Eastertime the sun shining on Easter eggs sanctifies them (AIMEF 128, p.142). Informants suppose that the sun looks unusual at sunrise on St. John's day (Midsummer Day), Easter (AIMEF 128, p.98).

Traditionally, Belarusians define the daily cycle according to the movement of the sun. The day is supposed to begin when the sun rises, and it is universally presumed that the day comes first, followed by the night. Dividing the day in this way is different from defining time with the help of a clock (where the day is presumed to begin at midnight—a method that is used in parallel with the traditional method) and also different from the Christian division of the day (where the day is supposed to begin at 6 p.m. – a method that is used by the Church).

There are many beliefs connected to sunrise and sunset: for example, it is supposed that some rituals and magic spells are most effective when performed before, during or after sunrise. It is sometimes believed that a person should not go to sleep at sunset. The timing of the beginning of some celebrations depends on sunset (PEAK 1; AIMEF 129, p.19; AGGKA 1998, p.20).

Similar suggestions about astronomical bodies, orientation in time and space, the year and the daily cycle, determined by the movement of the sun, were recorded in Belarus centuries ago (Bartashevich 1992, p.181, 399, 402, 408, 412, 415, 425, 436, 452, 473, 478; Vasilevich 1996, p.51–53; Serzhputouski 1998, p.28–29; Piatkevich 2004, p.273, 279–281, 284–285).

The MOON. Belarusians not only use a solar calendar but also a lunar one. Agricultural activities are especially dependent upon the shape of the illuminated part of the moon: what plants to grow and when, when to bring in the harvest, when to butcher cattle, and when to collect medical herbs. Informants often say that when they did not follow these beliefs connected to the moon, their crops failed or the harvest rotted. Such beliefs are drawn from analogies holding between the shape and state of the moon (or words defining them) and the shape of plants, cattle etc. Metaphors connected to the moon are commonly used in spells against toothache (examples: AIMEF 128, p. 98; AIMEF 121, p.67; Valentsova 2001, p.369).

Conceptions about the attributes of the moon and the sun are used in a figurative sense to describe people (“He is as clear, light as the moon, the sun”). (PEAK 1).

Similar conceptions were recorded centuries ago in Belarus (Vasilevich 1996, p.48–50; Tsvirka 1978, p.420; Serzhputouski 1998, p.30; Piatkevich 2004, p.280, 283–284; Gurski 2003, p.181–189, 342, 383, 399, 577, 578, 583).

Traditional astronomical conceptions are common among present-day Belarusians. They influence not only their orientation in space and time and the way they manage nature, but also social relations, including the conduct of rituals – calendrical, family, medical and other rituals. The knowledge informants acquire at school and from the mass media is processed according to the traditional world-view and is either compared to and mixed with traditional knowledge or else has a separate existence from it.

Archaic myths and rituals are faced with extinction; this fact makes it urgent that they be recorded as soon as possible and that the necessary steps are taken to protect them.

#### Abbreviations

AIMEF – Arkhiŭ Instytuta mastactvaznaŭstva, etnagrafii i fal'kloru Nacyianal'nai akademii navuk Belarusi.

AGGKA – Arkhiŭ Gomel'skai garadskoi kraviaznaŭchaj arganizacyi „Talaka“.

PEAK – Dz. Kanaplianikau's personal ethnological archive.

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- AIMEF 125. Fond № 6. – sprava № 14. – Adzinka zakhavannia № 125.
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## TRADICINĖS ASTRONOMIJOS ŽINIOS BALTARUSIŲ PASAULĖŽIŪROJE 1994–2005 METAIS

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### Santrauka

Taikydamas sisteminės analizės metodą autorius bando sukurti tradicinės baltarusių pasaulėžiūros modelį. Pasielkiant įvairias technologijas (tiesioginį informatoriaus žodžių aiškinimą, netiesioginį semantinį tyrimą, klasifikacijos, mentalinių žemėlapių metodą) bandoma atskleisti pateikėjų supratimą apie pasaulį. Pateikėjų žinių tradiciškumas nustatomas lyginant pastaruoju metu surinktas žinias su užrašytais ankstesniais laikotarpiais.

Konstatuojama, kad tradicinės astronominės žinios iki šiol daro įtaką ne tik žmonių orientacijai erdvėje ir naudojimusi gamtiniais išteklių, bet ir socialiniams santykiams, įskaitant kalendorinių, šeimos, medicininių ir kitų ritualų organizavimą. Tačiau šios žinios jau yra ant išnykimo ribos, todėl būtina jas kuo skubiau fiksuoti ir pagal galimybes stengtis apsaugoti nuo išnykimo ir užmaršties.

Vertė Algirdas Girininkas, Jonas Vaiškūnas