### POSSIBLE REPRESENTATIONS OF COMETS IN SERBIAN RELIGIOUS MEDIEVAL ART

Igor Stojić<sup>1</sup>, Milan S. Dimitrijević<sup>2\*,</sup> Edi Bon<sup>2</sup> and Vesna Mijatović<sup>2</sup>

<sup>1</sup> Historical Insitute, Kneza Mihaila 36/II, 11000 Belgrade, Serbia <sup>2</sup> Astronomical Observatory, Volgina 7, 11060 Belgrade, Serbia

(Received 11 June 2015, revised 8 February 2016)

#### Abstract

There are a number of motifs in medieval art that indicate the astronomical origin. In Serbian medieval art representations of the Sun and the Moon on the fresco the Crucifixion from the monastery Visoki Dečani is certainly the most considered motif. Representation of these two celestial bodies are a part of the dogmatic solution of the composition of the Crucifixion, but what particularly single out them is a special way, namely the form in which they are presented. In both cases painted celestial bodies are presented so, that they are in movement by the addition to the existing 'teardrop' envelope radiating elements that strongly emphasize the movement. Just their shape suggests the explanation of the artist's idea during the work on this fresco, as well as whether he had as model for such an approach contemporary astronomical phenomena. The paper discusses the assumption that the artist found inspiration in similar presentations in the church Bogorodica Ljeviška in Prizren, which was painted between 1308 and 1314 at the time when as the motivation for such representation could serve the appearance of Halley's comet in 1307.

Keywords: astronomy, culture, archaeoastronomy, comets, frescos

### 1. Introduction

There are a number of motifs in medieval art that indicate their previous astronomical origin [1]. It is often the case that they change over time, so that some of them obtain later other properties, but are stored in the same place in the composition of the picture, and even with the shape reminding on the original astronomical motif (a star, a comet, etc.). Certainly, the most common astronomically inspired motifs are the Sun, the Moon and stars. This is clear, since in beliefs of many nations the Sun is the universal father, and in the Christian tradition symbolizes the Jesus Christ "the Sun of justice, God the Father, the ruler of the Universe that radiates light and love" [2]. On one side, the Moon is illuminated by the reflection of sunshine and pass through phases, which symbolizes not only the periodicity and renewal, but also the dependence and the feminine principle, and often is seen as the universal mother. On the

<sup>&</sup>lt;sup>\*</sup>Corresponding author, e-mail: mdimitrijevic@aob.bg.ac.rs, tel.: +381-11-3089-072, fax: +381-11-2419-553

other side, in medieval tradition stars are a source of light. Displayed on the church vault they give it the celestial meaning and "symbolize the conflict between the spiritual forces or Light and of the material forces or Darkness" [3]. Comets, with their sudden appearance, and often spectacular size and shape caused great fear, sometimes 'predicted' the death of a ruler or a major accident, and leaved an unforgettable impression. For example, the Romans assumed that the comet that appeared after Caesar's murder was his soul on the way to the stars, and is represented at the coin that Augustus minted in his honour. It is also known that a lot of motifs in Christianity have been taken from older religions, as for example Mithraism [1, 4-7]. The motif of comet can often be noticed on icons [8, 9]. As one example we could single out the icons of the Archangel Michael and Saint Elias [1]. Particularly nice and detailed description of the fall of a comet or asteroid is described in the Bible, in the description of 'Armageddon' [8, p. 212-216; 9, p. 48].

Here we will consider the possibility that the 'droplet' capsules with rays around the representations of the Sun and of the Moon on the frescoes in the Bogorodica Ljeviška (Our Lady of Ljeviš) and Visoki Dečani have been formed under the influence of the passage of Halley's Comet in 1301.

## 2. The representations of the Sun and the Moon on the frescoes in Monastery Visoki Dečani

The Visoki Dečani Monastery (Figure 1) is situated in a valley near the river Dečanska Bistrica southwest of Peć, below the mountain massif Prokletije. The church is dedicated to Christ Pantocrator. Construction began in 1327 under the ktetorship of the Serbian King Stefan Uros Dečanski. Master of the Temple was friar Vita from Kotor and the works were supervised by the Archbishop Danilo II who tried to build a representative temple, having gathered a lot of artists and skilled craftsmen. Stefan Dečanski himself built the cornerstone of this church and in 1330 issued a charter for the rich donation to his foundation. After the death of the king, the construction is continued by his son Stefan Uroš IV Dušan who finished it in 1335. The church was painted in the period from 1347 to 1348. Works on the frescoes were performed by a large group of painters divided into smaller groups. It is known one of them, who left his signature on one of the church capitals, Srdj the Sinful [10].

We paid the greatest attention to the fresco of the Christ's Crucifixion (Figure 2), namely to the representations of the Sun and of the Moon. To them have addressed several scientists and a large part of parascientific community but an interpretation has been quite arguably given by Srdjan Djurić [11]. The author clearly explains the drawings as the representations of the Sun and of the Moon. Besides the fresco with the Crucifixion representations of the Sun and Moon are also on the fresco of the Last Judgment (Figure 3). The representation of the Christ's crucifixion is located on the north wall, in the lower parts, while the fresco of the Last Judgment is in the western nave and is in direct relation with the grave sites in that area.

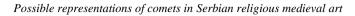




Figure 1. Monastery Visoki Dečani.



Figure 2. The fresco of Christ's Crucifixion in Monastery Visoki Dečani and representations of Sun and Moon.

The representation of Christ's crucifixion has the usual pattern. The main segment is a crucifix in the central part of the composition. Women with the Virgin Mary and the apostle John are on the left side, and citizens and soldiers on the right. The enlarged group of soldiers gambling for Christ's clothing is on the left side, while the mourning people are on the right. All figures are surrounded by walls of Jerusalem, which are in the background. Above the walls on the left and right side are the representations of the Sun and Moon.

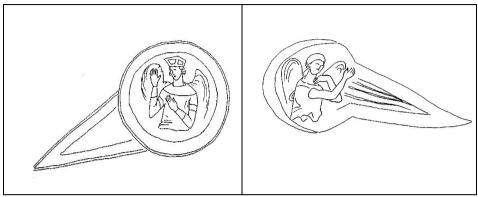


Figure 3. The representations of the Sun and Moon on the fresco Last Judgment in the monastery Visoki Dečani.

The strangeness of these representations is reflected in how S. Djurić called this, droplet capsules around these two celestial bodies [11]. The representation of the Sun is with its rounded side facing the central axis of the frescoes, which with its six rays in the sharp part of the figure, gives the impression of movement to the central axis. In the similar way is represented the Moon with three rays on the rounded part, giving the impression of moving away from the central part. Both representations are opposite to each other, but because of the rays that evoke movement, they are actually put in a position to move in the same direction, from left to right. Djurić connects the figures positioned in such a way with the expulsion of darkness by the light of the Sun. In the representation of the Sun sits young Helios with naked torso, wearing a chiton and slightly turning his back to the viewer. Inside the Moon is young Selena, with naked torso, turning her back to the central axis of the representation, with his head towards the Sun and, looking at him.

On the rounded as well as on the sharp side of the representation of the Moon are eight-pointed stars. The fresco of the Last Judgment is situated in the west nave. Christ is in the mandorla, seating on a throne in the form of funeral coffin carried by two angels. The representations of the Sun and of the Moon on this scene are similar, but not exactly the same as in the Crucifixion. Their form is static and clearly are separated circular medallions containing the figures of Helios and Selene, which are elongated at a sharp angle. These two celestial bodies, in the so-called 'droplet' form, appear for the first time on the frescoes in the Our Lady of Ljeviš (Bogorodica Ljeviška) in Prizren and can be considered as a direct analogy with those in Dečani.

# 3. The representations of the Sun and of the Moon on the frescoes in the Bogorodica Ljeviška (Our Lady of Ljeviš)

Our Lady of Ljeviš (Bogorodica Ljeviška) is a five-domed cathedral, located in the old part of Prizren (Figure 4). The church was built in 1306-1307, on the ruins of an older one from the 11<sup>th</sup> century. The church was fundamentally reconstructed by King Milutin with the help of bishops Damian and Sava. It is dedicated to the Assumption of the Virgin. Shortly after its construction, it was painted from 1308 to 1314. As major painters of the temple were signed Michael and Eutychius from the family Astrapa, while in the painting have been included more masters [12]. From the rich iconographic works, we would single out the representations of the Sun (Figure 5) and Moon, situated in the exonarthex. The way how they are painted irresistibly recalls on the representations from the fresco of Christ's crucifixion in Dečani. By their shape, and painted rays on the droplet capsule, the movement is evoked. One can notice a great similarity with the forms in Dečani, to which the frescoes in Bogorodica Ljeviška precede.

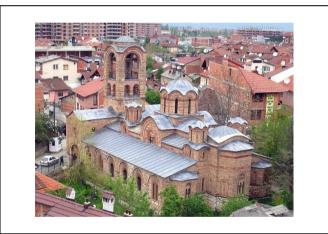


Figure 4. Our Lady of Ljeviš – Bogorodica Ljeviška.



Figure 5. The representation of the Sun in Bogorodica Ljeviška.

The frescoes from the Church of Bogorodica Ljeviška in Prizren are not the only analogy. As similar representations of celestial bodies Djurić [11] mentions and scenes from the church of Saint Clement in Ohrid, where in the fresco of the Dormition of Holy Virgin, Apostles are in droplet nebulas hovering above the scene. Icon painters Michael and Eutychius are here the major painters as also of the church in Prizren. As another analogy Djurić also mentions the frescoes of Psalm 148 from Lesnovo monastery, built in 1341.

The Sun and the Moon are present in the representations of the crucifixion since the sixth century in Eastern iconography and have been differently interpreted. What deserves special attention in the studied case is just the 'droplet' envelope in which these celestial bodies are located. The Sun and the Moon are usually painted in the round medallions without radiating elements, statically. At the beginning of the 14<sup>th</sup> century, things have changed somewhat. These changes are connected to the transformations during the era of Palaiologoi when representations are illustrated and become more complex. The middle of the 14<sup>th</sup> century is a period of flourishing of Science and of the influence of Astronomy on Byzantine iconography. According to some interpretations [11] the 'droplet' shape which includes representations of these two celestial bodies comes from the Byzantine and ancient Greek astronomical abbreviations for the Sun. Indeed, until the beginning of the Renaissance, in astronomical and astrological writings the Sun was denoted as a closed circle with one ray, which actually resembles to a drop, similarly to the representation in the fresco of the Last Judgment in Dečani. As noted by Djurić, until the early 14<sup>th</sup> century and frescoes from Bogorodica Ljeviška, the representations of the Sun and the Moon in 'droplet' ornament are not known. On the other hand, according to its shape and the existence of the radiating elements, among the above analogies we can single out characters from the exonarthex in Lieviška and the fresco of the Crucifixion from Dečani. In both cases, the painted celestial bodies are presented in movement since the addition of radiating elements to the existing 'droplet' envelope, strongly emphasize movement.

It seems that the artist of Dečani had a strong model in the frescoes of Prizren church. The question that arises is what could be an inspiration to painters of Bogorodica Ljeviška?

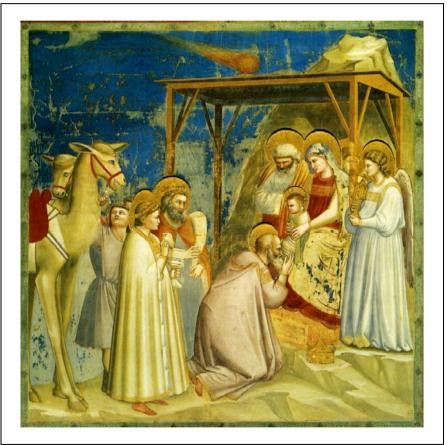
### 4. Halley comet as a possible inspiration for Bogorodica Ljeviška's painters

In 1301 over Europe was visible the bright Halley's Comet, which left a big impression on the contemporaries. Thus, Giotto, who painted the Degli Scrovegni in Padua, from 1303 to 1306, on the famous fresco 'Adoration of the Magi,' painted the star of Bethlehem like a comet (Figure 6).

The frescoes from Bogorodica Ljeviška in Prizren, were created between 1308 and 1314, and it is obvious that the memory of the passage of bright Halley's Comet in 1301 was at that time in living memory. This might be the cause to add rays to the droplet envelope of the Sun and the Moon, so that by its appearance resembles a comet and evokes the movement?

#### Possible representations of comets in Serbian religious medieval art

The frescoes in the Dečani were painted from 1347 to 1348. It is possible that the model was Bogorodica Ljeviška. On the other hand, events such as the appearance of a bright comet remain in the memory of a child who has watched such phenomenon. In the larger group of masters who painted the monastery church, those who have had 54-64 years have seen Halley's comet in 1301, when they were 7-14 years old and in the time of the construction of Dečani, because of their age they certainly had authority, and their opinions were valued. Together with the model from the church of Our Lady, possibly also inspired by Haley's Comet, they certainly could have had a motive and inspiration to give to the 'droplet' envelopes to the Sun and Moon in Visoki Decani a 'cometary' form.



Figue 6. The fresco of Gioto 'Adoration of the magi' in Capella Degli Scrovegni in Padova, with Halley's Comet from 1301.

### References

 E. Bon, M. Ćirković and I. Stojić, Publications of Astronomical Society 'Rudjer Bošković', 10 (2011) 555- 565.

- [2] D.F. Kuper, *Illustrated Encyclopaedia of tradicional symbols*, in Serbian, Prosveta, Nolit, Belgrade, 1986, 160.
- [3] M.S. Dimitrijević, Publications of Astronomical Society 'Rudjer Bošković', 7 (2007) 461-476.
- [4] E. Bon, V. Mijatović and M.M. Ćirković, Publications of Astronomical Society 'Rudjer Bošković', **65** (1999) 159.
- [5] E. Bon, M.M. Ćirković and I. Milosavljević, Astron. Nachr., 323 (2002) 579-580.
- [6] E. Bon, M. Ćirković, I. Stojić and N. Gavrilović, Memorie della Societa Astronomica Italiana Supplementi, **15** (2010) 219-223.
- [7] E. Bon, M.S. Dimitrijević, I. Stojić and V. Mijatović, Publications of Astronomical Society 'Rudjer Bošković', **10** (2011) 931-939.
- [8] V. Clube and B. Napier, *The cosmic winter*, Blackwell, Oxford, 1990.
- [9] D. Steel, Rogue Asteroids and Doomsday Comets, Wiley, New York, 1993.
- [10] B. Todić and B. Čanak-Medić, *Monastery Dečani*, Serbian, Center for Consevation of Heritage of Kosovo and Metohija, Mnemosyine, Belgrade, 2005.
- [11] S. Djurić, *The Representations of Sun and Moon at Dečani*, Proc. of the International Scientific Conference on the occasion of 650 years of Monastery Dečani: Dečani and Byzantine Art in the middle of XIV Century, SANU, NIRO 'Jedinstvo', Belgrade 1989, 339- 346.
- [12] D. Panić and G. Babić, Our Lady of Ljeviš (Bogorodica Ljeviška), SKZ, Belgrade, 2007.