ASTRONOMICAL MOTIFS IN SERBIAN MEDIEVAL
NUMISMATICS

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Abstract.
Cosmical symbols and motifs in Serbian medieval numismatics are analyzed and presented. The accent has been put on the appearance of stars, Sun and crescent, and the basis for this research, was Catalog of Serbian medieval coins by Sergije Dimitrijević (2001) and his other numismatic works.

Key words: astronomy in culture – astronomical symbols – medieval Serbian coins.

1. INTRODUCTION

One of the areas where cosmic motifs are present is also numismatics, which additionally indicates the multiple interdisciplinary significance of astronomy, which, with its beauty and attractiveness influences and inspires many fields of human activity, not only in science but also in culture, art, music, architecture and even the coinage. So for example, on the coins of ancient Greece (Ambrosoli and Gnecchi, 1922; Rovithis-Livaniou and Rovithis, 2011, 2012) and of Roman empire (Rovithis-Livaniou and Rovithis, 2014) occur Sun, Moon, stars, and other celestial signs and symbols.

For example on the Roman denarius of Octavian Augustus, coined in the membr
ory of his great predecessor Julius Caesar, is presented the comet (Fig. 1), which appeared on the sky after he was killed, and according to legend, it was the soul of Caesar on his way to the stars. Stars and crescent Moon are common on Roman coins. A single star, like the one presented on the coin of Faustina Senior in Fig. 2, is often present, and one of the later examples are the silver coins of the emperor Julian the Apostate (Sears, 1970). Heavenly meaning is not always obvious. So, in order to denote the double value of a coin, in Rome were used symbols of the Sun and crescent Moon. Emperor on the coin with a double value has a crown with radial rays like the god Sun, Helios, and if on the money is Empress, her bust is lying on the crescent Moon. The Empress is in fact, like the Moon, without its own light and is only a reflection of his husband, whose brightness spreads.

And in the Serbian medieval numismatics, cultural and historical heritage of the Serbian people, cosmic symbolism is present. Its analysis makes easier the Catalog of collection of Serbian medieval coins of Sergije Dimitrijević (Dimitrijević, 2001), the largest private collection of this money, which is now, as his legate, located in Belgrade, in Serbian Academy of Sciences and Arts. It will serve us here as a basis, together with a selection of his books and articles on Serbian medieval numismatics (Dimitrijević, 1957, 1997, 2001, 2005, 2006a,b).

2. SERBIAN MEDIEVAL COINS

By diversity, beauty and elegance, as well as by interesting and imaginative representations, and number of species and variants, Serbian medieval numismatics, has a prominent position in the world medieval numismatics. During around 230 years, from the appearance of the first Serbian coins during the reign of King Radoslav (1228-1234), until the last ones, coined in Smederevo during the reign of Lazar Djurdjević (1456-1458), a large number of rulers, magnates and cities coined
The oldest known metal Serbian money was copper and silver cup-shape coins (scyphate) with Greek inscriptions, minted by King Radoslav (1227-1234) the son of the first wife of Stefan Prvovenčani (the First Crowned) Eudokia, daughter of the Byzantine Emperor Alexios III Angelos (1195-1203). Radoslav was the husband of Anna Angelina Komnene Doukaina, daughter of Theodore Komnenos Doukas, the despot of Epirus (1215-1230) and Emperor of Thessaloniki (1224-1230). These coins, similar to the Byzantine ones, were probably coined in the mint of his father in law Theodore Komnenos in Thessaloniki. They are different from later coins of Serbian state, by they shape (scyphate), dimensions and Greek inscriptions. Moreover, on coins minted after King Radoslav, except of Jesus appears St. Stephan, protector of the Serbian throne, while on his coins are, apart of Christ, present Virgin Merry, St. Constantin and Archangel Michael (Dimitrijević, 2005).

After King Radoslav, there are no found traces of the existence of Serbian money for almost half a century. According to opinion of majority of authors, first Serbian coins after King Radoslav were minted by King Uroš I (1243-1276), probably at the end of his reign (Dimitrijević, 1957, 1997, 2001, 2006a,b). Uroš I was the son of the third wife of King Stefan the First Crowned (Prvovenčani), Anne, grand daughter of Enrico Dandolo, Doge of Venice, and was married with Helen of Anjou, relative of Charles I of Anjou, King of Naples and Sicily.

The unit of money was dinar named according to the Italian money unit denarius grossus. Besides dinar, in Serbia existed, only as a money of account, also hyperpyron, equal to 12 dinars.

The first Serbian dinars were of silver, modeled as Venetian matapans, a type of coins with two figures on obverse, the ruler on the left, and Saint protector of the...
Fig. 4 – Dinars of King Dragutin (1276-1316) and King Milutin (1282-1321) (Dimitrijević, 2001, left D 12/2,49, right D 20/5,18). Left: King Dragutin sitting on the throne. In right hand holds scepter with cross on the top and in left hand a sword set on his lap. Above the sword, at the right elbow a six-pointed star. The inscription is MONETA REGI(S) STEF(AII). Right: Left King Milutin and right St. Stephan, standing. King receives from Saint a banner with cross. Besides the handle of banner, on the bottom, on the King’s side, five-pointed star. The inscription is SSTEFAN VROSIV REX.

Fig. 5 – Coins of King Dušan (1331-1345) (Dimitrijević, 2001, on the left D 36,1, on the right D 37,3). Left: The helmet turned to left. On the both sides of the helmet, one six-pointed star. The inscription STE(FAII).+.RE.X. Right: King Dušan on the left and St. Stephan on the right, standing. King receives a high double cross from the Saint. Below the cross is reversed five-pointed star. The inscription is STEPAN REX SSTEFAN.

House of the Ruler (St. Stephan on Serbian dinars) on the right, holding between them a banner with a cross. They had design, weight and value as the venetian matapan, and inscription in Latin: the name of the king, his title and the name of Saint.

From King Dragutin (King of Serbia 1276-1282, King of Srem 1282-1316) on coins appear also Cyrillic letters and inscriptions, which are later dominant.

Even at the time of the Empire, especially in the time of its fall, appears and the money of magnates and feudal rulers of the lesser rank. Many cities had their own silver coins, minted or as a purely municipal money or on the reverse was the name or emblem or feudal rulers (Dimitrijević, 2001, 2006b). Up to now have been found for example coins of Skopje, Prizren. Smederevo, Novo Brdo, Kotor, Drivast...

The obverse of coins, with the name of ruler, have had a number of changes already in the period of the Kingdom. Each of the monarchs added some new representations. On the contrary, on the reverse of the money, during the entire existence of Kingdom, and partly during the Empire, remained traditional image - Jesus, who
Fig. 6 – Coins of Stefan Dušan (Dimitrijević, 2001, on the left D 41/KM, 106, on the right D 52/1,25).
Left: The helmet turned to left. Under the helmet the shield with six-pointed star. The inscription is STEFANUS DEIGRA:RX. Right: Jesus Christ standing in mandorla. In mandorla four six-pointed stars on the left and five on the right. The inscription IC XC. Left of mandorla character L, right character A.

Fig. 7 – Coins of Emperor Dušan (Dimitrijević, 2001, on the left D 72/7,157, on the right D 81/5,277).
Left: Emperor Dušan on the left and Empress Helena on the right, standing. Both among them hold with one hand a high double cross, and with other a scepter with a cross on the top. In the bottom of the cross big eight-pointed star, or maybe Sun. The inscription is SF Ž[P] (SteFan ZaR). Right: Left Emperor Dušan, right Empress Helena (?) sitting on the throne. Between them, on the top, a crescent.

Fig. 8 – Coins of Emperor Dušan (Dimitrijević, 2001, on the left D 82/2,283, on the right D 83/5,309).
Left: Emperor Dušan sitting on the throne. Right from Emperor the crescent. Right: Left Emperor Dušan and right Empress Helena, sitting on the throne. Between the Emperor and Empress, up, a crescent.
sits on the throne, holding the Gospel decorated with five jewels, and on both sides of the nimbus are parts of the inscription “IS-HS” (IisuS HristoS).

Dimitrijević (2001) found 420 species of Serbian medieval coins, as well as a significantly higher number of subspecies and a large number of variants, significant for historical and numismatic studies.

3. STARS ON SERBIAN MEDIEVAL COINS

The stars are a cosmic symbol the most common on Serbian medieval coins, by the number and diversity of representation in complete disproportion in comparison to all other such motives, such as the Sun and the Moon. Stars appear one or several, and the number of arms on a star vary from four to eight.

In medieval tradition, the stars are primarily a source of light. They provide a heavenly meaning to the church on whose vault are represented and symbolize the conflict between the spiritual forces or light and of material forces or darkness.

Chevalier and Gheerbrant (1987) (p. 813) reported that the five-pointed star is a symbol of the human microcosm. It is blessed, when the upper arm shows up, and otherwise is a symbol of black magic. Six-pointed star symbolizes inclusion of spirit and matter, active and passive principles, the law of evolution. It is a magical seal of King Solomon and the shield of David (Biderman, 2004). Seven-pointed is related to the symbolism of the number seven, unites rectangle and triangle, represents the "cosmic lyre, music of the spheres, the harmony of the world, rainbow of seven colors, seven planetary zones ..."

In the Bible, Daniel (12: 3) denotes with the symbol of the star the eternal life of the righteous, and their ascension into a state of heavenly stars. In the Apocalypse, Christ holds the seven stars in the hand (1: 16 to 20.2: 1.3: 1) and are mentioned also the seven churches, which all points to the seven "planets" (five planets known in ancient world, Sun and Moon). The star is considered as well as representation of the image and name of the expected Messiah. Symbol of Christ is a great morning star Venus, and the star of Bethlehem is usually presented with eight arms.

In the Catalog of Serbian medieval coins (Dimitrijević, 2001), a single star first appeared on the species D 5 of King Uroš I. On these dinars, appear various letter codes and signs, including the six-pointed star. Marić (1956, p. 261) notes that the tenant of the mint is "marked with a six-pointed star below the left elbow of Jesus", and Dimitrijević (1957, p.113) points out that such a label is "linked to the tenants of mint, mint supervisors, molding cutters and goldsmiths which coined money".

Six-pointed star first appears next to Christ (Fig. 3, D 5, 54) and when on the front side of the coin (obverse), then it is next to St. Stephan (Fig. 3, D 5, 62). Later, we find it, besides the ruler (Fig. 4, D 12/2, 49). On dinars of King Milutin, for the
Fig. 9 – Joint coin of Despot Jovan Oliver (mid-fourteenth century) and Vukašin Mrnjavčević from the collection of Cabinet de Médailles in Paris (Dimitrijević, 2001, D 93, 1 photo). On the obverse side cross with the arms ending in short thick cross lines. From them depart two leaves ending in three parts. The leaves are twisted in opposite directions. Between the arms the inscription ΔΕΣ/ΠΟΤ ΙΟ/ΑΝ ΒΛΡ/ΚΑ ΙΙΠ. In the middle of the Cross a five-pointed star. Dimitrijević (2005, p. 14) underlines the exceptional perspective in four plans that is observed on this coin (background, raised horizontal part of the cross, over them is vertical part, and finally a star). On the reverse, the Emperor (Dušan?). Left and right from the ruler, five-pointed star The inscription is ΦΡ ΖΡ.

Fig. 10 – Coins of Marko Vukašinović and Despot Stefan Lazarević (1402-1427) from the collection of S. Dimitrijević (Dimitrijević, 2001, on the left D 153.1, on the right D 247.8). Left: Christ standing in front of supedaneum. In the supedaneum, left and right a five-pointed star. Left from Christ three and right, four such stars, forming a part of a mandorla. The inscription ΙϹ ΧϹ. Right: Christ with a granulated nimbus, sitting on a throne with a high back. On the left and right, two details that look like clouds. The inscription ΙϹ ΧϹ.

Fig. 11 – Coin of Despot Stefan Lazarević from the collection of S. Dimitrijević (Dimitrijević, 2001, D 243.7). On the obverse side, Despot Stefan Lazarević stands. Near left elbow a six-pointed star. The inscription ΔΕΣΠΟΤϹ/ΤΕΦΑΝ. On the reverse Jesus Christ stands in mandorla. On both sides of Christ, inside mandorla, three six-pointed stars. The inscription ΙϹ ΧϹ.
Fig. 12 – Coins of Despot Stefan Lazarević from the collection of S. Dimitrijević (Dimitrijević, 2001, on the left D 256.19, on the right 265.31). Left: An inscription in four rows ГНЬ/ДЕСПО/ТСТЕФ/АНЬ. On the left and right sides of the word Г[ОСПОДИ]НЬ, one six-pointed star. Right: An inscription in three rows ДЕ/СПО/ТЪ. As decoration, in the first and the last row before the start and the end of the text, one six-pointed star (the first on the left is not visible).

Fig. 13 – Coin of Despot Stefan Lazarević (Dimitrijević, 2001, photo 272.2). On the obverse six-pointed star with the inscription ДЕСПОТ (Despot) in arms. On the reverse, a helmet with horns turned to the right. Left from the helmet Д, right Е. Left of the left horn, right of the right horn and under the letter Д one five-pointed star; down the Sun.

Fig. 14 – Coins of Despot Stefan Lazarević (left D 281, 2 photo, right D 283, 1 photo). Left: Six-pointed star (Dimitrijević, 2005, p. 315). Right: The cross with equal arms over the square-structure. In each of four sections between two arms there are two groups of three points and between them a six-pointed star.
Fig. 15 – Coins of Despot Stefan Lazarević from the collection of S. Dimitrijević (Dimitrijević, 2001, on the left D 283.51, on the right D 284.53). Left: Cross; between arms four six-pointed stars (one between each two arms). Right: Three five-pointed stars arranged in the form of a triangle.

Fig. 16 – Coins of Despot Djuradj Branković (1427-1456) from the collection of S. Dimitrijević (Dimitrijević, 2001, on the left D 294.1, on the right D 300.14). Left: Face of Despot Djuradj; around the inscription Г*Ρ*Г*, with four six-pointed stars. Right: The lion walks, facing to the left. Left from the lion a five-pointed star. The inscription +ГНД[Є]СПОТОГОРЫГГ.*

Fig. 17 – Coins of Despot Djuradj Branković (1427-1456) from the collection of S. Dimitrijević (Dimitrijević, 2001, on the left D 308.21, on the right D 315 / 1.54). Left: The lion walking facing to the left. Around, within the ring bordered with points, six-pointed stars and flowers. Right: An inscription in three rows ГНГ*, ДЕСПОГ, ГГ. At the beginning and the end of the first and third rows a six-pointed star in the six-pointed star.
first time, on the coins where St. Stephan is handling the banner to King, the star appears on the king side, but as a five-pointed star (Fig. 4, D 20/5, 18), the symbol of the human microcosm.

In the later period, the number of stars starts to increase. On the coin D 32/16, 28 of Stefan Dečanski, for the first time appear two six-pointed stars, in Jesus’ throne, left and right. On the coin D 36, 1 of Dušan, instead of the God-fearing use of the symbol, stars become a decorative element on both sides of the helmet (Fig. 5). An interesting and distinctive coin of King Dušan is D 37.3 (Fig. 5), where at the foot of the large double cross, whom St. Stephan gives to the sovereign, is upside-down turned five-pointed stars, placed as a symbol of black magic. Is the cutter of mold wanted to depict how St. Stephan destroys with a cross the forces of darkness, or is this made to express some of his personal dissatisfaction, putting a sign of demonic forces on the coin, we can only assume, looking at this unique specimen among Serbian medieval coins.

It is also remarkable the coin D 41 / KM 106 (Fig. 6) from the collection of Sergije Dimitrijević, where the six-pointed star is present as a heraldic sign, on the shield.

On the Serbian medieval money, Christ is often presented not only with an aureole around his head (nimbus) but also with one around the entire body (mandorla). On the early imperial coins of Dušan, in addition to the external one, there is also an internal mandorla, consisting of the six-pointed stars on both sides (see Fig. 6, D 52/1, 25), which later became a frequently used motif (see, e.g., Fig. 11, D 243.7), which describes and Jovanović (2001). In the Catholic Church, the Virgin is sometimes represented with an aureole - a nimbus of stars, which adorn her here like with a starry crown. The five-pointed stars that surround Christ as an aureole - mandorla can be seen also on coins of Marko Vukašinović - Prince Marko, from folk songs (Fig. 10, D 153, 1) and on the coin D372 / 1, 17 of Kotor under the rule of the Hungarian king Ludovik I, holy Tryphon has a starry mandorla (Fig. 19).
After Emperor Dušan, a six-pointed star on the coins more and more often replaces a five-pointed star. So, the stars on coins of Emperor Uroš in the beginning, on the types D 95, 1; D 95, D 2 and 97, 1 photo, are six-pointed and later (D 115, D 119 and D 122 to 126), in majority are five-pointed stars. On particularly beautiful, unique common dinar of Despot Jovan Oliver and King Vukašin (Fig. 9), whose perspective in the four levels has been underlined by Dimitrijević (2005) (p. 14), a five-pointed star decorates the center of the "blossoming" cross, while on the other side (reverse) is located on both sides of the ruler.

After the fall of the empire, on the coins of rulers and magnates, are prevailing five-pointed stars. It is just so, on dinars of King Vukašin Mrnjavčević, his widow, Queen Helen, Marko Vukašinović, sevast Stevan, Nikola Altomanović, Dragaš Dejanović, Prince Lazar and Vuk Branković.

The eight-pointed "star of Bethlehem" appears in the throne, left and right of Christ on the coins of Queen Helen (D 152, 1 photo), and on the coins of Andreaš Vukašinović (D 157), mandorla of Christ is made of seven-pointed and eight-pointed stars. In the case of D 296, 4 species of Djuradj Branković, stars are four-pointed, five-pointed and six-pointed. Six-pointed star appear and on the coins of Despot Stefan Lazarević (Fig. 11, D 243, 7; Fig. 13, D 272, 2 photos), where, they are often only decorative motif (Fig. 12, D 256, 19, D 265, 31), as well as on the D 294, 1 coin of Despot Djuradj Branković (Fig. 16). The decorative purpose of the stars on coins is particularly highlighted on the coin D 315/1, 54 of Djuradj Branković (Fig. 18) and the coin D 420, 3 of Bosnian King Stevan Tomašević (Fig. 19).

Particular attention deserve three coins of Despot Stefan Lazarević, where, on the obverse, the main motive is the star. On D 284, 53 (Fig. 15) are three five-pointed stars, and on D 272, 2 photo (Fig. 13) and D 281, 2 photo (Fig. 14) is a big six-pointed star. To some extent, with its size and dominating central appearance, it remind the coin of Octavian Augustus in Fig. 1, which shows the comet. Because of this, my father, Sergije considered that the cause of such design might be some unusual event on the heaven, so that he studied carefully the work of Nenad Janković about comets and other astronomical phenomena at that time (Janković, 1955).

4. OTHER ASTRONOMICAL SYMBOLS

It is noticeable that the appearances of the Sun are very rare on Serbian medieval coins compared to the figures of stars, despite the fact that in the Christian tradition Sun symbolizes Christ "Sun of justice, God the Father, the ruler of the universe that radiates love and light" (Cooper, 1986) (p. 160), "the supreme power of the Universe, all-seeing God and his power, the heart of the Cosmos, the eye of the World, and the eye of the day" (Milovanović and Gavrić, 1994) (p. 456).
The coin of Despot Stefan Lazarević, with a big star (Fig. 13) attracted particular attention because on its reverse, except the two five-pointed stars, below the helmet with ox horns, is the Sun. It is maybe present as decoration and on the coin D 309.27 of Despot Djuradj Branković (Fig. 18). There, on the obverse as well as on the reverse, above a stylized inscription, there are two six-pointed stars, and below a seven-pointed, a little bit more larger, star-like shape, maybe the Sun. It is possible that the motive of the Sun occurs even in the age of Empire. Namely, at the foot of the large double cross, which hold the Emperor Dušan and Empress, on the coin D 72/7, 157 (Fig. 7), there is an eight-pointed star or sun. Maybe this is a symbol of Christ, the bright morning star - Venus, from which "grows" a cross?

It is possible that the Sun appears and on the species D 202 and D 204 of Vuk Branković, where the big point is surrounded by a small circle, as the Sun was represented in prehistoric time, on the cave drawings. In support to this, is the species D 202, 40, on which from a circle of small dots depart radial rays, and such motif is also present on the coins of Vlatko Hranotić.

On imperial coins of Dušan, for the first time in our medieval numismatics, appears a crescent Moon (see Figs. D 82/2, 283, D 83/5, 309). In most traditions, the Sun is the universal Father, and the Moon, who, deprived of its own light, shines reflecting the Solar light, universal Mother. The passing by through phases symbolizes the periodicity and reconstruction, but also the dependence and the feminine principle.

Does on the occurrence of this symbol on Dušan’s coins influenced the emergence of the Turks, who in 1352, at the invitation of John VI Kantakuzen, came to the Balkan Peninsula to help him in his fight against John V Palaeologus and remained there, bringing the half-moon as a symbol? Ćorović (1993) (p. 210) writes that "Dušan thoughts or to lure the Turkish troops to his side or to turn away them from helping Byzantium. Therefore, he sends its mission to Bursa and, following the example of Kantakuzen, offers to Sultan nothing less than his daughter for a wife".

In any case, after Dušan, crescent Moon appears just once, on a small coin of Despot Stefan Lazarević, in the collection of the National Bank of Serbia, described by Dimitrijević (2005) ( p. 216), where it appears the cross with equal arms, and in four fields beween arms are four crescents externally facing. Dimitrijević (2005) (p. 220) notes "that such ornamental combination was common in medieval Serbian state and even was considered as some sort of Serbian coat of arms." In his collection there is also a coin of Stevan Lazarević, where, instead of crescent, in four fields of the Cross with equal arms are six-pointed stars (Fig. 15, D 283, 51), and this motif is even more flamboyantly worked out on the coin in Fig. 14 (D283, 1 photo). Dimitrijević (2005) (p. 219), underlined that the motive of the cross with four stars appears and on small coins of Valachian Duke Radu I (1377-1383).

Our attention is drawn and by the dinar of Despot Stefan Lazarević (Fig. 10),
Fig. 19 – On the left, the coin of Kotor, under Hungarian rule of Ludovik the First (1370-1382), on the right, the coin of Bosnian King Stevan Tomašević (1461-1463) from the collection of S. Dimitrijević (Dimitrijević, 2001, left D 372 / 1.17, right D 420.3). Left: Saint Tryphon standing. In his right hand he holds a palm branch. The inscription is S.TRIPON.CATAREN. Around the Saint, left three, right four five-pointed stars, forming a part of the starry mandorla. Under the legs, a flower or the Sun.

Right: Helmet facing to the left. To the right side of the helmet five-pointed star inscribed in a five-pointed star. The inscription is +STEFAN•KRAGL

in which details on both sides of the throne of Christ and his handrails remind us on the clouds, so that it seems as if Jesus is in heaven.

5. CONCLUSION

From the presented examples of cosmic symbolism in Serbian medieval numismatics, it can be noticed that with the increasing level of danger and the oncoming final fall, the number of motifs and their artistic elaboration increases. In support of this, testifies the beautiful realistic portrait of Despot Djuradj Branković (Fig. 16) and the ornate inscriptions, often in the form of a rebus on his coins (Fig. 18).

The basis for this research was the catalog of the collection of Sergije Dimitrijević (2001) and his other works on this topic (Dimitrijević, 1997, 2005, 2006a,b), which make closer to all the beauty and artistic quality of Serbian medieval coins, to which studying and collecting was devoted the whole his life.

During the work, for which it was necessary to examine the small details on over three thousand photos, we took into account and used the expressive descriptions of coins of Serbian medieval rulers, formulated with a creative sense by our predecessor, adapting the descriptive elements in order to emphasize cosmic symbols. This was facilitated to us especially due to the work on the preparation and editing of several volumes of numismatic works of Sergije Dimitrijević, and of individual articles from his legacy of numismatic manuscripts.

In this paper, we made an attempt to draw attention to astronomical public and other interested researchers to the aspects of cosmic symbolism on the Serbian medieval coins, with the intention to point to the open possibilities of research and comparative interdisciplinary consideration of similar literary-artistic, historical, natural-scientific and other aspects on the appropriate numismatic material.
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*Received on 30 September 2015*