

ATTILA SIMON

*University of Debrecen*

## **“Bull in the Boat” – A New Interpretation for One of the Depictions of Mithraic Iconography**

*For more than a century, the history of Mithras mysteries has been a his topic in religious history research. Countless works have been written on this subject since Franz Cumont. Numerous monographs have also been written on the subject of Mithras iconography, but there are elements that have not really come into the studies. Most of these works deal with the motif of tauroctony, the astronomical significance of which has been authentically proven by several excellent researchers. Among the iconographic elements that have survived in fewer numbers, there are several for which no acceptable interpretation has been found so far. One of these is the depiction of a bull in a moon-shaped boat, which occurred mainly in the Danube regions. In my presentation, I undertake to demonstrate the prevalence of this motif in the field of Mithraic representations and to try to give a new interpretation to this iconographic element that has so far been little studied.*

**Keywords:** Roman history, religion, Mithras, iconography, bull, boat, astronomy

This paper will focus on a less researched element of the Mithraic iconography, the bull in the boat. I have been studying in detail the major elements of the Mithras symbol system, with a special focus on the representations from the Danubian provinces. It is important to clarify that these are not representations of the Persian god Mithra, but of the Roman cult of Mithras. The aim of my research was to attempt to interpret these representations and to try to determine the origin of the symbol.

To examine the representations, I used partly textual descriptions and figurative sources from the CIMRM, partly from the roger-pease.com online database photo library, and also my own photographs. I also examined all

previous works on the subject in the Mithras literature. For astronomical questions, I consulted specialist astronomical portals.

### About the motif

The "bull in the boat" motif is usually depicted as a sub-plot of the Mithras reliefs depicting the killing of the bull (tauroctony). Of the total Roman Mithras monuments, 31 instances of this representation have been found.<sup>1</sup> Of these, 5 are damaged or fragmentary. The 31 reliefs are spread over 6 Roman provinces. 16 of these were found in Dacia,<sup>2</sup> while far fewer were found in other provinces. The second largest proportion was found Moesia Inferior

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<sup>1</sup> CIMRM 1019 (Köln, Germania Inf.) – <https://www.roger-pearse.com/mithras/display.php?page=cimrm1019>; CIMRM 1128 (Nida, Germania Sup.) – Lupa 7181; CIMRM 1422 (Lauriacum, Noricum); CIMRM 1475 (Siscia, Pannonia Sup.); CIMRM 1740 (Alcsút, Pannonia Inf.) – Lupa 13180; CIMRM 1815 (Sárkeszi, Pannonia Inf.) – Lupa 12826; CIMRM 1920 (Potaissa, Dacia) – Lupa 21938; CIMRM 1926 (Potaissa, Dacia) – Sicoe, 2013, Kat. Nr. 7.; CIMRM 1935 (Apulum, Dacia) – Lupa 17299; CIMRM 1958 (Apulum, Dacia) – Lupa 19324; CIMRM 1974 (Apulum, Dacia); CIMRM 1975 (Apulum, Dacia) – Lupa 19290; CIMRM 2000 (Apulum, Dacia) – Lupa 17466; CIMRM 2036 (Sarmizegetusa, Dacia) – Sicoe, 2013, Kat. Nr. 118.; CIMRM 2037 (Sarmizegetusa, Dacia) – Sicoe, 2013, Kat. Nr. 42; CIMRM 2051 – Lupa 17604; CIMRM 2054 (Sarmizegetusa, Dacia); CIMRM 2086 (Sarmizegetusa, Dacia); CIMRM 2111 (Sarmizegetusa, Dacia); CIMRM 2189 (Dacia); CIMRM 2201 (Biljanovac, Mosia Sup.); CIMRM 2202 (Skopje, Moesia Sup.); CIMRM 2214 (Janjevo, Moesia Sup.); CIMRM 2244 (Tavalicavo, Moesia Sup.); CIMRM 2272 (Sexantaprista, Moesia Inf.); CIMRM 2291 (Acunar, Moesia Inf.); CIMRM 2292 (Acunar, Moesia Inf.); CIMRM 2310 (Callatis, Moesia Inf.); CIMRM 2315 (Scythia minor?, Moesia Inf.); CIMRM 2338 (Kurtowo-Konare, Thracia); CIMRM 2359 (Kabyle, Thracia); LISSI-CARRONA (1986: 36–37). (Rome, Mithraeum. S. Stephano Rotondo / Castra Peregrinorum).

<sup>2</sup> CIMRM 1920 (Potaissa, Dacia) – Lupa 21938; CIMRM 1926 (Potaissa, Dacia) – Sicoe, 2013, Kat. Nr. 7.; CIMRM 1935 (Apulum, Dacia) – Lupa 17299; CIMRM 1958 (Apulum, Dacia) – Lupa 19324; CIMRM 1974 (Apulum, Dacia); CIMRM 1975 (Apulum, Dacia) – Lupa 19290; CIMRM 2000 (Apulum, Dacia) – Lupa 17466; CIMRM 2036 (Sarmizegetusa, Dacia) – Sicoe, 2013, Kat. Nr. 118.; CIMRM 2037 (Sarmizegetusa, Dacia) – Sicoe, 2013, Kat. Nr. 42; CIMRM 2051 – Lupa 17604; CIMRM 2054 (Sarmizegetusa, Dacia); CIMRM 2086 (Sarmizegetusa, Dacia); CIMRM 2111 (Sarmizegetusa, Dacia); CIMRM 2189 (Dacia).

and Superior with 9 in total.<sup>3</sup> 3 from Pannonia,<sup>4</sup> 2-2 from Thrace<sup>5</sup> and Germania,<sup>6</sup> and 1 from Noricum<sup>7</sup> and Italia.<sup>8</sup>

### Interpretations up to now

So far, science has been unable to find a satisfactory explanation for the meaning of this motif.

Jason Cooper has addressed this question in his work *Mithras: Mysteries and Initiation Rediscovered*. He has stated that the "bull in a boat" motif was a common depiction of the moon as a boat in antiquity, but has not interpreted the depiction beyond that.<sup>9</sup> Mastrocinque refers to Turcan's *Mithras Platonicus*, in which the author derives the motif from the Bundahisn treatise and interprets the bull in the moon-shaped boat as symbolizing the purification of the bull's semen in the moon.<sup>10</sup> In my opinion, due to the Iranian origins of the Mithras-religion may have contributed to the metaphor from the world of Bundahisn to root the motif in the Mithras-religion, the relationship between the bull and the moon may have been present in Mithraic thinking before the appearance of the "bull in the boat", but like other major motifs, its development may have had an astronomical background. In her doctoral thesis, Vittoria Canciani mentions a depiction of a ship in an Ostian Mithraeum associated with Isis, while at the same time stating that it is a sanctuary of Isis converted into a Mithraeum. He also does not claim

<sup>3</sup> CIMRM 2201 (Biljanovac, Moesia Sup.); CIMRM 2202 (Skopje, Moesia Sup.); CIMRM 2214 (Janjevo, Moesia Sup.); CIMRM 2244 (Tavalicavo, Moesia Sup.); CIMRM 2272 (Sexantaprista, Moesia Inf.); CIMRM 2291 (Acunar, Moesia Inf.); CIMRM 2292 (Acunar, Moesia Inf.); CIMRM 2310 (Callatis, Moesia Inf.); CIMRM 2315 (Scythia minor?, Moesia Inf.)

<sup>4</sup> CIMRM 1475 (Siscia, Pannonia Sup.); CIMRM 1740 (Alcsút, Pannonia Inf.) – Lupa 13180; CIMRM 1815 (Sárkeszi, Pannonia Inf.).

<sup>5</sup> CIMRM 2338 (Kurtowo-Konare, Thracia); CIMRM 2359 (Kabyle, Thracia).

<sup>6</sup> CIMRM 1019 (Köln, Germania Inf.) – <https://www.roger-pearse.com/mithras/display.php?page=cimrm1019>; CIMRM 1128 (Nida, Germania Sup.) – Lupa 7181.

<sup>7</sup> CIMRM 1422 (Lauriacum, Noricum)

<sup>8</sup> LISSI-CARRONA (1986: 36–37). (Rome, Mithraeum. S.Stephano Rotondo / Castra Peregrinorum).

<sup>9</sup> COOPER (1996).

<sup>10</sup> MASTROCINQUE (2017: 156).

that the bull in the boat was moved from Isis symbolism to Mithraeum symbolism, there is no bull in the same depiction. He herself sees no convincing explanation for the motif.<sup>11</sup>

In his work, Manfred Clauss discusses at length the identification of the bull's horns with the moon, the *cornua lunae* phenomenon, which has been attested from several directions in Mithras symbolism, and compares the bull in the boat to this, and associates the body shape of the dying bull with the crescent moon.<sup>12</sup>

The identification of the bull's horns with the moon is a relevant approach, but it does not seem realistic that *cornua lunae* is represented twice in a given motif (by the horns on the bull's head and the moon-shaped boat at the same time). Moreover, in the case of other motifs, the figurative elements of the figures can be identified with a single celestial body participating in a particular astronomical constellation. And the crescent-shaped boat is not a reference to the death of the bull, as it is not the last of the sub-plots depicted, so there is still more to come before the bull is killed in the myth of Mithras.

Only one work in Hungarian Mithras literature mentions this motif. Here it is mentioned as one of the elements of the water miracle,<sup>13</sup> which in my opinion is mistake, more on this later. I consider Vermaseren work from 1963 *Mithras. the secret God*, in which he made it clear that the boat with the bull in it is identified with the moon because of its shape, but he did not propose a specific astronomical phenomenon, to be of pioneering importance among the earlier hypotheses, and he also considered the image of the bull in the boat and the representation of the bull in the house as one motif, which can also be refuted.<sup>14</sup> My investigation of this is described in more detail below.

Campbell, in his 1968 work, associates the motif with Indian mythological figures, forgetting that, as I have already mentioned, in the Roman myths of Mithras only Mithras and the two torch-bearers and the killing of the bull (but not in this form) are derived from Indian and Persian mythology, and

<sup>11</sup> CINCIANI (2022: 28–29; 124–125).

<sup>12</sup> CLAUS (2000: 81–82).

<sup>13</sup> LÁSZLÓ (2005a: 191).

<sup>14</sup> VERMASEREN (1963: 81).

that in this work he confuses it with the motif of the hanging of the spring, although the two representations are not at all always shown side by side, as will be discussed in more detail later. In addition, the bull in the boat is seen here as having the same meaning as the image of Mithras riding the bull, although they are not both depicted on the same relief. In this work Campbell also identifies the image of the bull in the boat with the bull-riding image of Mithras carrying the bull on his shoulders, but this is contradicted by the fact that there are reliefs which show both (e.g. CIMRM 1974, Apulum v. CIMRM 1019, Cologne), and why would they depict the same phenomenon in the same place in two different ways. The author, like Turcan, associated the motif he called *scapha lunata* with the semen of the bull and the *Bundahisn*, interpreting it as the substance of creation and the generative liberating power of the celestial bull. It cannot be ruled out that the bull in the boat motif contributed as a secondary meaning to the importance of the bull in the boat motif in the symbolism of Mithras, but it is likely that its primary meaning was not this but an astronomical phenomenon.<sup>15</sup>

### **Proving that a motif is separately from other motifs**

After collecting the 31 representations, I started my investigations with the hypothesis that this motif could not be interpreted together with or as an element of other representations in Mithraic symbolism.

I classified the different motifs or sub-motifs into 9 groups according to their juxtaposition:

1. Water-miracle, bull in the boat, bull in the house: CIMRM 2036 (Sarmizegetusa), CIMRM 2037 (Sarmizegetusa), CIMRM 1910, (Potaissa), CIMRM 2051 (Sarmizegetusa) CIMRM 1935 (Apulum), CIMRM 1475 (Siscia), CIMRM 1972 (Apulum)
2. Bull in the boat, water-miracle, bull in the house: CIMRM 1974, CIMRM 2000

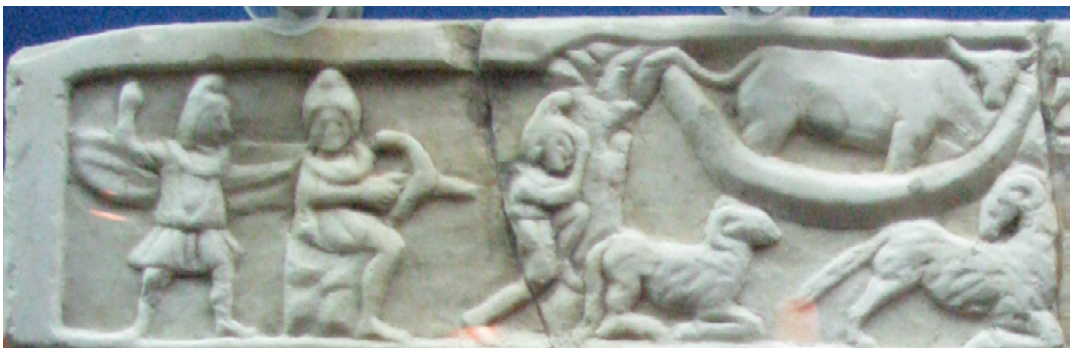
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<sup>15</sup> CAMPBELL (1968: 252; 255–257; 336; 338).

3. Water-miracle, Mithras climbs a tree, bull in the boat, bull in the house: CIMRM 1958 (Apulum)
4. Bull in the house, water-miracle, bull in the boat: CIMRM 1740 (Alcsút, Pannonia)
5. Bull without house, Oceanus or Saturnus, Petra genetrix, Part of Mercury, lost piece, , bull in the boat, water-miracle (CIMRM 1815, Sárkeszi, Pannonia)
6. Water-miracle, bull in the house, bull in the boat: CIMRM 2292 (Acunarnar, Moesia)
7. Bull in the boat one row down from the water-miracle and the bull in the house: CIMRM 2244 (Tavaličevó, Moesia)
8. Bull in the boat, Mithras holds the boat (fragment): CIMRM 1926 (Potaissa)
9. Water-miracle, bull in the boat (fragment, no bull in the house, but the picture is broken): CIMRM 2272 (Sexantaprista, Moesia)



CIMRM 2244



CIMRM 1958

Although in many cases the bull in the boat and the water-miracle, or the bull in the boat and the bull in the house, are depicted side by side, there are also some cases where they are not:

CIMRM 2244, CIMRM 1958: the bull in the boat is depicted separately from the water-miracle. CIMRM 1740, CIMRM 1974, CIMRM 2000, CIMRM 1815: these are four cases of the bull in the house when depicted separately from the bull in the boat or there is no representation of the bull in the house. Their existence is consistent with the fact that the bull in a boat is a separate motif from other Mithraic motifs.



CIMRM 1740

### **An attempt to make sense of the Bull in the boat**

As I have mentioned above, several attempts have been made to interpret this motif, and my arguments against them are well known: the obscurity of the literary parallel and the dead-end nature of deriving it from Persian mythology in the analysis of the Roman Mithras mysteries, the small number of interpretations beyond the unsatisfactory explanations of the Isis parallel, and the independence of the motif from other Mithraic images, make it entirely unacceptable. I would like to present a proposal for a radically different interpretation, but one that fits in with the practice of interpreting other Mithraic images. I do not, of course, intend to claim that the interpretative framework I have sketched out is without doubt the only correct interpretation of the motif that is the subject of my presentation, but merely to open up a new perspective in the discourse on the interpretation of representation.

According to my thesis, the meaning of the depiction of the Bull in the boat is an astronomical phenomenon. I want to support this idea, first of

all, by pointing out that several representations associated with the Mithras mysteries are also attributed astronomical meanings.<sup>16</sup> For example, the animals and objects depicted in the tauroctony are identified with their corresponding constellations, which were observed in this arrangement in 92 and 93 AD.<sup>17</sup> An astronomical explanation is also attributed to the image of the spring hanging, the Eternal Spring, which is associated with the constellations Sagittarius and Gemini and the formation of the Milky Way.<sup>18</sup> The birth of Mithras is associated with the winter solstice. These opinions have also supported me in suggesting that the Taurus in the boat is a graphic representation of an astronomical phenomenon in which the Moon and Taurus constellation play a role. Such phenomena are certain occultations of the Moon, three of which can be linked to the major stars of the Taurus constellation: the first is when the Moon occults the stars of Pleiades, the second is when the Moon occults the stars of Hyades, and the third is when the Moon occults Aldebaran. In my opinion, the illustration may represent the third case. The Pleiades and Hyades are formed by certain stars of the two horns of the bull, but the bull itself is emphasised in the representation, not the horns of the bull. The star that forms the eye of the Taurus constellation, and is the brightest of all the stars in it, and is more of a defining element of the constellation, so it can be represented by the whole bull, rather than the horns. Aldebaran's connection with the religion of Mithras may be suggested by the depiction of Cautes holding a bull's head, in which case the bull's head is also identified with the star.<sup>19</sup> Aldebaran was also important to other astronomical cultures: 5000 years ago, the rising of the star marked the beginning of the Babylonian New Year.<sup>20</sup> The occultation of Aldebaran

<sup>16</sup> BECK (2006: 31–36; 49–52; 60–63; 194–196).

<sup>17</sup> LÁSZLÓ (2005b).

<sup>18</sup> LÁSZLÓ (2005a). In most cases, a man is seen near the archer Mithras, catching the spill. However, in seven depictions (CIMRM 1584, Poetovio, Pannonia Sup., CIMRM 1958, Apulum, Dacia, CIMRM 1920, Potaissa, Dacia CIMRM 2036, Sarmizegetusa, Dacia, CIMRM 1292 Osterburken, Germania Sup. CIMRM 1301, Besieghem, Germania Sup. CIMRM 1815 Sárkeszi, Pannonia Inf.) there are two male figures near Mithras, in my opinion in these cases the two male figures represent the constellation Gemini.

<sup>19</sup> SZABÓ (2015).

<sup>20</sup> BAILEY (2012: 143).





Moon Aldebaran occultation in 1997 July, photo by Bart Benjamin

by the Moon is a common phenomenon it was recorded in the sixth century.<sup>21</sup> The first known occultation of Aldebaran is dated to 509, and the phenomenon has been observed in several other important cases: in 1497 by Copernicus, in 1607 by Fabricius, and in the 19<sup>th</sup> century in several other places.<sup>22</sup> It was captured in June 1997 on photo by Bart Benjamin,<sup>23</sup> and was visible in different parts of the world between 2015 and 2018,<sup>24</sup> so this shows that this phenomenon occurs every few decades, so we can be certain that it surely occurred on one or more occasions during the Roman occupation of Dacia, between 106 and 271 AD. In other words, a phenomenon that also occurred during the Mithras mysteries could have inspired one or more Mithras priests to tie a solemn occasion to the occurrence of this astronomical conjunction, similarly the tauroctony or the water-miracle, and based on the spatial distribution of the finds, this could have happened in Dacia.

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<sup>21</sup> Japanese records first mention it in the sixth century: STEPHENSON 1968.

<sup>22</sup> JOHNSON (1885); JOHNSSON (1887).

<sup>23</sup> <https://www.constellation-guide.com/aldebaran/>

<sup>24</sup> <https://www.universetoday.com/110706/observing-alert-watch-the-moon-cross-the-hyades-this-week/>

### Special cases of occurrence of the motif

Among the depictions found, there are two that do not merely show the bull in a boat.



CIMRM 1926

One of these is one of the two reliefs from Potaissa (CIMRM 1926), a fragment showing Mithras on the left pushing or holding the boat with the bull in it. Of course, we cannot give a definitive explanation for this either, but I believe that in this case it is conceivable that Mithras, if identified with the star image of Perseus, could be a representation of the star Algol, whose occultation by the moon is a pre-existing astronomical phenomenon revered in ancient Egypt.<sup>25</sup> Algol is located close to Aldebaran, so in this case we can think of an occultation where the Moon occulted both Algol and Aldebaran.

This solution can of course only work if Mithras can be identified with Perseus.<sup>26</sup> Of course, since this is a fragment, we can also think of Mithras being depicted in some other image and this situation being caused by the images being too close together.

The other is a relief (CIMRM 2310, fragment from Callatis, modern Mangalia), with Oceanus holding it on the right. In this case, one might think that Oceanus would represent Aquarius and then depict a Moon-Aldebaran-Aquarius phenomenon, or that the bull in this case would not repre-

<sup>25</sup> JETSU-PORCEDDU (2015).

<sup>26</sup> ULANSEY (1989: 26–40; 60–67).

sent Aldebaran but the Hyades and that the depiction would imply that the Moon was covering it, since in mythology the father of the Hyades was Oceanus, however in my opinion this is not the case, yet simply what I have suggested in the previous case: another image closely juxtaposed with the bull in a boat motif and interpreted as an image by Vermaseren. Indeed, this image is also shown in another representation, then combined by the author with another image of Mithras mounted on a chariot, from CIMRM 2338 Thrace, this one depicted above Oceanus and a vase or rython.



CIMRM 2310

### **Investigation about the place of origin of the motif**

In the absence of written sources or archaeoastronomical evidence, we cannot say for sure when and where this motif originated and entered into Mithraic iconography. However, if we look at the occurrence of the motif in relation to the spatial distribution of the Mithras monuments that have been found, two things are striking. Firstly, the fact that only 8 Danubian provinces (Germania, Noricum, Pannoniae, Dacia, Moesiae, Thrace) have been found to depict this motif, so that the place of origin is to be found in these provinces, and secondly, the number of monuments from Dacia, as already mentioned, is clearly outstanding, with 16. The only exception is the Mithraeum under the Stephano Rotondo cathedral in Rome, which was reconstructed in the 1970s and is not included in Vermaseren’s database, but Italian researchers have concluded from the elements of the whole relief

that it could have been made by a person who moved from Dacia to Italia.<sup>27</sup> The second largest number of finds was from Moesia, 10 in number, almost one and a half times the number from Dacia, which is significant even if one takes into account that not all the finds have survived for posterity. These data, together with the large number of Mithraic monuments in other provinces along the Danube, suggest that there is a strong possibility that Dacia may have been the site of the motif, although Moesia cannot be excluded.

Within Dacia, the spatial distribution of the depiction is as follows: the largest number was found in Sarmizegetusa, from a single mithraeum: 6 pieces.<sup>28</sup> The same number of finds as those from Sarmizegetusa were found in Apulum,<sup>29</sup> in the centre of Dacia Apulensis. A total of 2 instances of the representation have been found from Potaissa,<sup>30</sup> and one from an unknown site in Dacia.<sup>31</sup> Taking all this into account, it appears that in Dacia the motif was most widespread in Sarmizegetusa, where, moreover, all the cases from the city were found in a single sanctuary. Although we cannot be certain, the possibility arises that the motif may have originated in Sarmizegetusa. In addition to the reliefs from the Sarmizegetus foot depicting the motif that I have studied, other reliefs, in many cases found in other places, may have been made in a workshop in the city, which can be identified by certain iconographic features.<sup>32</sup> Since the reliefs were commissioned by the faithful and initiates, and not by the artistic freedom of the stone carvers, it can be assumed that the iconographic features are an imprint of the Sarmizegetian version of the Mithras religion. An additional clue to the Dacian origin is the single Italian example mentioned earlier, which researchers believe was made by an emigrant from Dacia.

<sup>27</sup> LISSI-CARRONA (1986: 38).

<sup>28</sup> CIMRM 2036 (Sarmizegetusa, Dacia) – Sicoe, 2013, Kat. Nr. 118.; CIMRM 2037 (Sarmizegetusa, Dacia) – Sicoe, 2013, Kat. Nr. 42; CIMRM 2051 – Lupa 17604; CIMRM 2054 (Sarmizegetusa, Dacia); CIMRM 2086 (Sarmizegetusa, Dacia); CIMRM 2111 (Sarmizegetusa, Dacia).

<sup>29</sup> CIMRM 1935 (Apulum, Dacia) – Lupa 17299; CIMRM 1958 (Apulum, Dacia) – Lupa 19324; CIMRM 1974 (Apulum, Dacia); CIMRM 1975 (Apulum, Dacia) – Lupa 19290; CIMRM 2000 (Apulum, Dacia) – Lupa 17466.

<sup>30</sup> CIMRM 1920 (Potaissa, Dacia) – Lupa 21938; CIMRM 1926 (Potaissa, Dacia) – Sicoe, 2013, Kat. Nr. 7.

<sup>31</sup> CIMRM 2189 (Dacia).

<sup>32</sup> SICOE (2013: 113–121).



Fragments of the Stefano Rotondo basin relief

### **The dating of the reliefs and the motivation for their creation**

Of the reliefs examined, only four date to the period of the province of Roman Dacia (three from Apulum and one from Potaissa), all of which date between 106 and 271 AD, and one from Pannonia, dated to 150 AD. Dated to the third century AD. From these we cannot draw any firm conclusions as to when the motif may have been created, but we can only be certain that it existed during the period in question. With one exception, the datable reliefs are on altar stones with text, so we know that they were usually commissioned by soldiers or officers as a vow to Mithras, and the fact that such reliefs were commissioned from stone carvers shows that in their circles (i.e. among the worshippers of Mithras in Dacia) the Bull in a boat was known at this time.

The geographical distribution of the motif suggests that we are dealing with a local specificity that actually developed in Dacia. Given the spatial distribution of the places where the reliefs were made, Sarmizegetusa was probably the place of origin. As in other religions, the central myth of the Mithras cult did not cover all the details of the cult, but provided a flexible framework which could be supplemented by different details for each local

community.<sup>33</sup> This was particularly the case in the rural provinces of the Danube, which could explain why in Dacia, for example in Sarmizegetusa, an astronomical phenomenon (whose Dacian significance may be confirmed by the rare representation of Cautopates with a bucranium) plays a prominent role in the local experience of the Mithras cult and thus appears in the reliefs made there.

### Summary

We can conclude that the depiction of the Bull in the boat is one of the elements of Mithraic iconography that has certainly not yet been fully deciphered. My study has shown that it is a motif in its own right, not part of the source hanging or the "bull in the house" image. The spatial distribution of the specimens recovered shows that it was most frequently found in Dacia, and we can therefore assume that it originated there. Within Dacia, it was most abundant in Sarmizegetusa, and in a sanctuary, so that its origin there is possible, although it cannot be proved. The meaning of the motif is, in my view, an astronomical phenomenon, the covering of Aldebaran by the moon, where the moon is represented by the moon-shaped boat, Aldebaran by the Bull. This would fit into the scheme that holds true for many Mithraic motifs of depicting astronomical phenomena associated with festivals. On the other hand, this phenomenon was certainly seen on several occasions during the Roman rule of Dacia. Research has not provided a satisfactory answer as to when this motif may have originated, but it has been established that it may have been known by the Mithras worshippers in Dacia from the middle of the second century AD until the abandonment of Dacia in the end of the third century AD.

### Bibliography

- BAILEY 2012            A. A. BAILEY: *Esoteric Psychology*. New York 2012.  
 BECK 2006             R. BECK: *The Religion of the Mithras Cult in the Roman Empire: Mysteries of the Unconquered Sun*. Oxford 2006.

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<sup>33</sup> SZABÓ (2022: 176–182).

- CAMPBELL 1968 L. A. CAMPBELL: *Mithraic iconography and ideology*. Leiden, 1968.
- CANCIANI 2022 V. CANCIANI: *Archaeological Evidence of the Cult of Mithras in Ancient Italy*. PhD diss. Università degli studi di Verona 2022. <https://biblio.ugent.be/publication/8750224/file/8750225.pdf>
- CIMRM J. M. VERMASEREN: *Corpus Inscriptionum et Monumentorum Religionis Mithriacae*. The Hague, 1956–1960.
- COOPER 1996 D. J. COOPER: *Mithras: Mysteries and Initiation Rediscovered*. York Beach 1996.
- JETSU–PORCEDDU 2015 L. JETSU – S. PORCEDDU: *Shifting Milestones of Natural Sciences: The Ancient Egyptian Discovery of Algol’s Period Confirmed*. PLOS ONE 10 (12) (2015). DOI: 10.1371/journal.pone.0144140
- JOHNSON 1885 S. J. JOHNSON: *Old occultations of Aldebaran*. The Observatory 8 (1885) 55.
- JOHNSON 1887 S. J. JOHNSON: *Second occultation of Aldebaran*. Monthly Notices of the Royal Astronomical Society 47 (1887) 308.
- LÁSZLÓ 2005a L. LÁSZLÓ: A „Mithras-mítosz”. In: L. László – L. Nagy – Á. Szabó: *Mithras és misztériumai*. Budapest 2005, 189–193.
- LÁSZLÓ 2005b L. LÁSZLÓ: A „Mithras-mítosz”. In: L. László – L. Nagy – Á. Szabó: *Mithras és misztériumai*. Budapest 2005, 218–225.
- LISSI-CARRONA 1986 E. LISSI-CARRONA: *Il Mitreo dei ‘Castra Peregrinorum’ (S. Stephano Rotondo)*. Leiden 1986.
- MASTROCINQUE 2017 A. MASTROCINQUE: *The Mysteries of Mithras*. Tübingen 2017.
- SICOE 2013 G. SICOE: *Die mithräischen Steindenkmäler aus Dakien*. Cluj-Napoca 2014.
- STEPHENSON 1968 F. R. STEPHENSON: *Early Japanese astronomical observations*. Monthly Notices of the Royal Astronomical Society 141 (1968) 69–75.
- SZABÓ 2015 Cs. SZABÓ: *Notes on a new Cautes statue from Apulum*. AKB 45 (2015) 237–247.
- SZABÓ 2022 Cs. SZABÓ: *Roman religion in the Danubian provinces*. Oxford 2022.
- ULANSEY 1989 D. ULANSEY: *The Origins of the Mithraic Mysteries*. Oxford 1989.
- VERMASEREN 1963 J. M. VERMASEREN: *Mithras, the Secret God*. London 1963.

## Images sources

J. M. VERMASEREN: *Corpus Inscriptionum et Monumentorum Religionis Mithriacae*. The Hague, 1956, 1960.

<https://www.constellation-guide.com/wp-content/uploads/2014/09/Aldebaran-occultation.jpg>, photo by Bart Benjamin

[https://www.roger-pearse.com/mithras/images/cimrm1935\\_sibiu.jpg](https://www.roger-pearse.com/mithras/images/cimrm1935_sibiu.jpg)

[https://www.roger-pearse.com/mithras/images/cimrm1972\\_Alba\\_Iulia\\_National\\_Museum\\_of\\_the\\_Union\\_2011\\_-\\_Mithras\\_Cult\\_Relief\\_Apulum.jpg](https://www.roger-pearse.com/mithras/images/cimrm1972_Alba_Iulia_National_Museum_of_the_Union_2011_-_Mithras_Cult_Relief_Apulum.jpg)

[https://www.roger-pearse.com/mithras/images/sup\\_stefano\\_rotondo\\_broken\\_tauroctony.png](https://www.roger-pearse.com/mithras/images/sup_stefano_rotondo_broken_tauroctony.png)

[https://www.researchgate.net/figure/Three-register-tauroctony-Sicoe-2014-catalog-no-30-3-rd-c\\_fig1\\_339337267](https://www.researchgate.net/figure/Three-register-tauroctony-Sicoe-2014-catalog-no-30-3-rd-c_fig1_339337267)

<https://www.researchgate.net/profile/Catalin-Pavel-2/publication/339337267/figure/fig2/AS:859971822571540@1582044668797/Three-register-tauroctony-Sicoe-no-40-Early-Severan.jpg>