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Astral Path to Soul Salvation in Late Antiquity? The Orientation of Two Late Roman Imperial Mausolea from Eastern Serbia

DRAGANA MLADENOVIĆ

Abstract

The following study advocates an archaeoastronomical approach to interpreting the orientation of two Late Antique mausolea and associates them with the Mithraic circle of belief. The mausolea in question are the so-called Romula's mausoleum at Gamzigrad and the mausoleum at Šarkamen, both believed to have contained burials of women belonging to the imperial family. On the basis of measurement, comparison, and analysis of the orientation of these two structures, it is argued that they were intentionally orientated toward the same celestial event and that this orientation has a cultic explanation.*

INTRODUCTION

The following study advocates an archaeoastronomical approach to interpreting the orientation of two Late Antique mausolea, the so-called Romula's mausoleum at Gamzigrad and the mausoleum at Šarkamen, both believed to have contained burials of women belonging to the imperial family. In order to talk about the two women, I must start with the story of two men.

During the period of the Tetrarchy, two men native to the rolling hills of eastern Illyria rose to high prominence: C. Galerius Valerius Maximianus (Caesar 293–305 C.E., Augustus 305–311 C.E.) and his nephew, Galerius Valerius Maximinus Daia (Caesar 305–309 C.E., Augustus 309–313 C.E.).¹ Following Diocletian's lead, both men began to construct residential complexes in the vicinity of their birthplaces—Galerius at Gamzigrad (ancient Romuliana) and Maximinus Daia at Šarkamen (fig. 1). They probably hoped to retire there after celebrating their *vicennalia*, but it was not to be. While Diocletian enjoyed a number of quiet years in his Salona retreat, Galerius died of a terrible illness while still in power, and Daia was killed in the turbulent times that preceded the rise of Constantine.

Consequently, Daia's complex at Šarkamen was never finished and lay abandoned, while Galerius' changed hands and soon witnessed a complete transformation that eradicated much of its original design.² The only structures that were completed and remained as originally planned were the mausolea: two at Gamzigrad and one at Šarkamen.

ROMULA'S MAUSOLEUM AT GAMZIGRAD

The complex at Gamzigrad consists of a fortified residential core and two mausolea with associated funerary pyres and is situated on the overlooking ridge called Magura, some 1,000 m from the east gate (fig. 2). The residence was investigated during the 1970s–1980s, and its imperial character was postulated early on, based on the exceptional quality of decoration and finds of porphyry sculptures, including the portrait head of a Tetrarch.³ A tentative attribution of the complex to Galerius was proposed, based on the date of construction and the fact that Aurelius Victor (*Epitome* 40.16) states Galerius built a palace in the area where he was born and named it Romuliana after his mother. The assumption was soon confirmed by the find of an inscribed archivolt bearing the name of the palace, Felix Romuliana.⁴ Investigated parts of the residential complex include earlier and later fortifications, a palace, two temples, and several architectural units of uncertain purpose.⁵

Aurelius Victor (*Epitome* 40.16) also states that, according to his last wish, Galerius was buried in the complex, and so for some time, it was believed that his tomb was in the crypt of the large temple. In 1989, however, remains of two mausolea and two consecration mounds containing pyre residues were discovered when the forest on the nearby ridge was felled (fig.

*I would like to express my gratitude to Andrew Wilson, Simon Price, Jas Elsner, Angelos Chaniotis, and Bert Smith for commenting on an earlier draft of this paper. The responsibility for the views expressed remains solely mine.

¹Cf. Jones et al. 1971, 574, 579.

²Cf. Srejić et al. 1983a, 1996; Srejić 1993b.

³Srejić 1993b, 232; 1994.

⁴Srejić 1985.

⁵For architecture and related finds, see Čanak-Medić 1978; Srejić et al. 1983a, 1983b; Srejić 1993b; Srejić and Vasić 1993, 1994a.

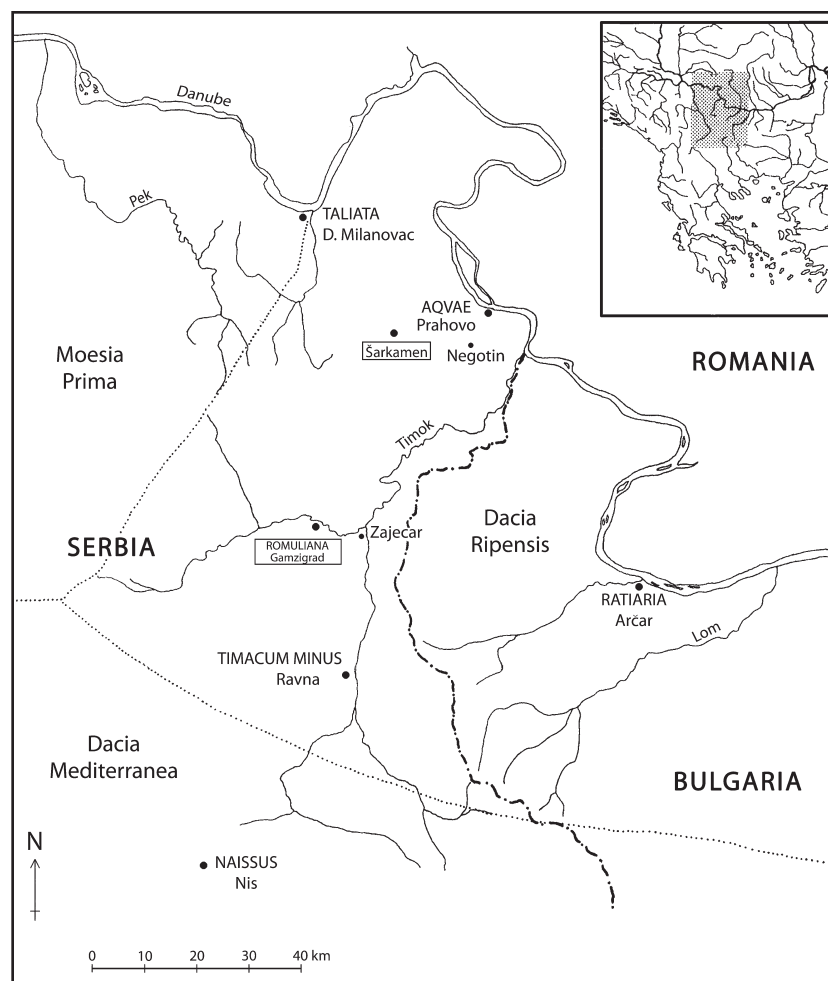


Fig. 1. Location of Gamzigrad/Romuliana and Šarkamen (modified from Tomović 2005b, fig. 2).

3). The smaller, square mausoleum is older (see figs. 2[1], 3[1], 4, 5). Since the entire complex was built in honor of Galerius' mother, Romula, it is believed that she was interred within this structure and that the adjacent tumulus marks the site of her cremation. The larger mausoleum (see figs. 2[2], 3[2]) and the associated consecration mound are identified as the last resting place of the emperor Galerius.⁶ Preservation of each structure does not extend beyond a base (cf. fig. 4), making reliable architectural description of their appearance impossible.⁷ Both mausolea were

robbed, and the only finds come from the consecration mounds. Mound 2, associated with Galerius' mausoleum, yielded evidence of a large pyre construction (*rogus*), while fragments of silverware, gold coins, and more than 3 kg of amorphous silver were retrieved from Mound 1.⁸

MAUSOLEUM AT ŠARKAMEN

Šarkamen is situated about 40 km northeast of Gamzigrad (see fig. 1). The initial rescue excavation in the 1970s⁹ was followed in 1994 by large-scale inves-

⁶ Srejić 1993a; Srejić and Vasić 1994b. The true nature of the Thessaloniki Rotunda, for a long time believed to be Galerius' mausoleum (cf. Grégoire 1939; Dyggve 1941; Waurick 1973; Spieser 1984), is currently being reexamined after the discovery and identification of Galerius' mausoleum at Gamzigrad (Duval 2003; Torp 2003).

⁷ Idealized reconstructions of the mausolea appear in a site monograph (Srejić and Vasić 1994b, figs. 43, 56), but it is uncertain what actual evidence was used for these reconstructions.

⁸ Srejić and Vasić 1994b, 82–8, 102–7.

⁹ Janković and Janković 1975.

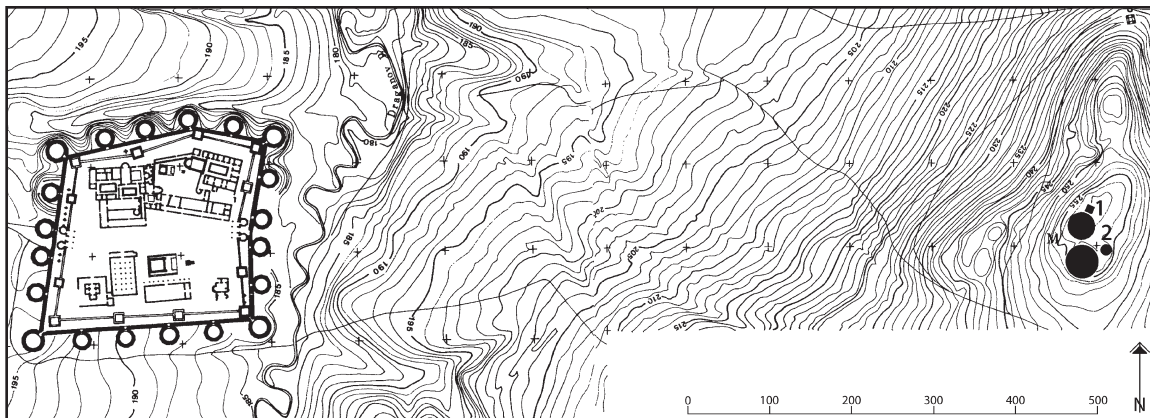


Fig. 2. Gamzigrad complex with mausolea on Magura: 1, Romula's mausoleum; 2, Galerius' mausoleum (Srejšović and Vasić 1994b, fig. 23a).



Fig. 3. The ridge of Magura with the east gate of Romuliana in the foreground: 1, Romula's mausoleum; 1a, Mound 1; 2, Galerius' mausoleum; 2a, Mound 2.

tigations. The complex spreads over an area of almost 10 ha and includes a fortification, a mausoleum, a tumulus, and several associated structures, all of which have been investigated to different degrees (fig. 6).¹⁰

Many of the structures were never completed, and at one point, construction ceased at the site: only the foundations of the northern fortification wall were built, and stratigraphic data from within the *castrum*

¹⁰Srejšović et al. 1996; Tomović et al. 1997; Popović 2005b.



Fig. 4. Romula's mausoleum, present state.

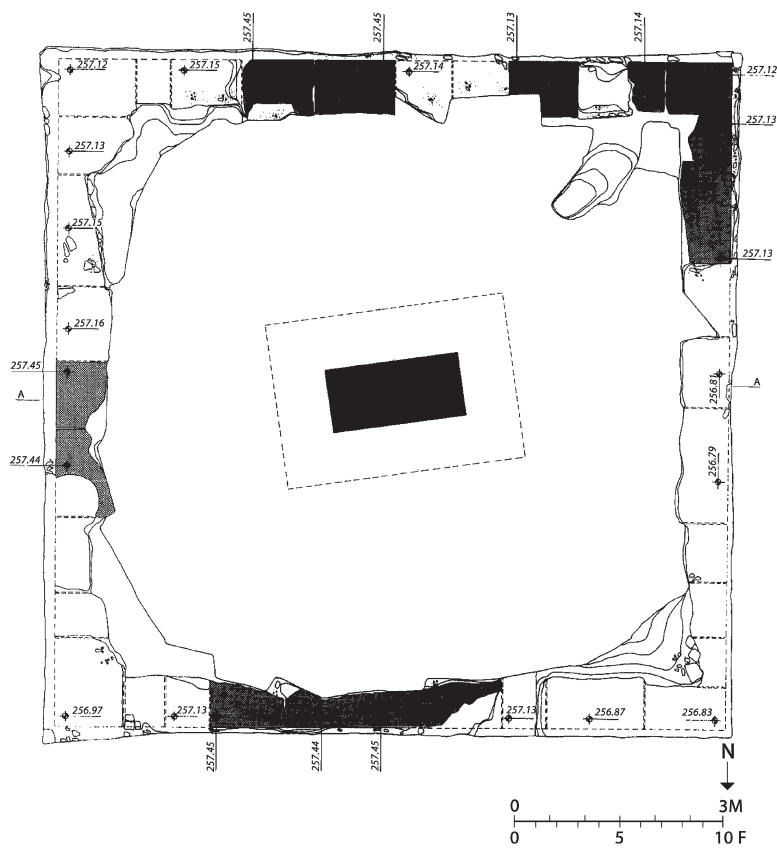


Fig. 5. Romula's mausoleum, plan (Srejić and Vasić 1994b, fig. 33).

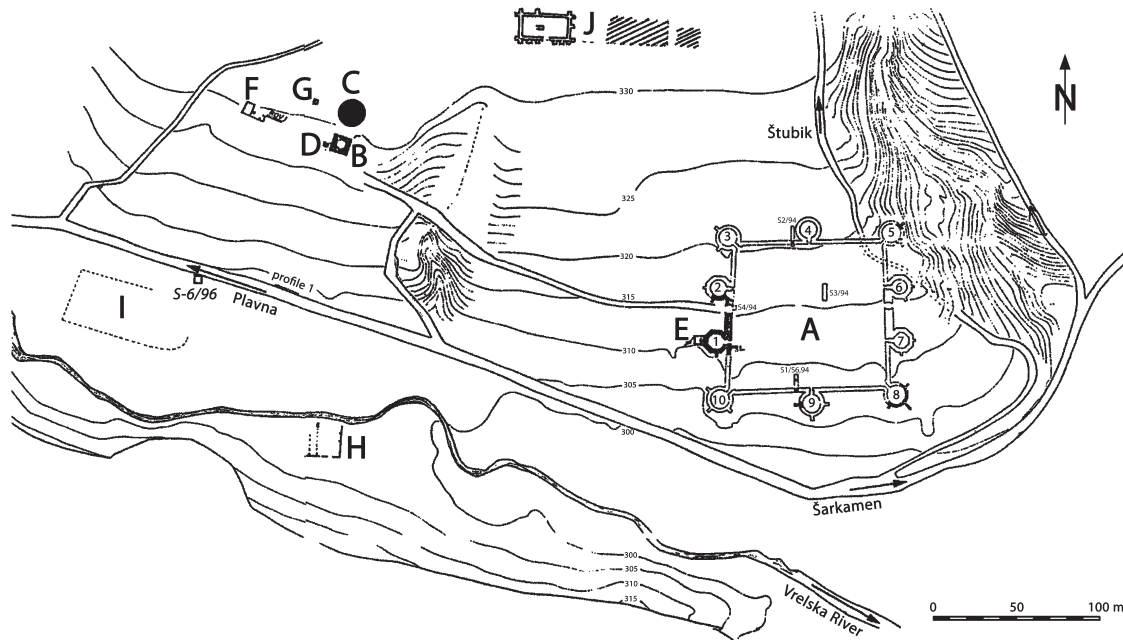


Fig. 6. Šarkamen complex: A, fortification; B, mausoleum; C, tumulus; D, platform; E–J, structures of uncertain nature (Tomović 2005b, fig. 7).

show no trace of occupation.¹¹ The mausoleum is the only structure that was completed and used.

The mausoleum at Šarkamen is located 250 m from the west gate of the *castrum* (see figs. 6[B], 7, 8). Stone above the base has been robbed, making a reconstruction of its superstructure and exterior impossible. It is exceptionally fortunate that the crypt of the mausoleum, although plundered, yielded important finds, including cremated human remains, a hoard of exquisite gold jewelry,¹² and golden votive plaques impressed with the obverse of Tetrarchic aurei, dating the burial to the end of the third or the beginning of the fourth century C.E.¹³ The adjacent mound contained a number of burials, some of which are later; it is unclear if the mound marked the location of a funerary pyre.¹⁴

In the vicinity, fragments of a life-sized porphyry statue representing an enthroned emperor were found.¹⁵ These remains, together with the presence of rich grave goods, suggest an imperial association for the mausoleum.

The resemblance between the structures at Šarkamen and Gamzigrad is remarkable. Indeed, the Šarkamen mausoleum and Romula's mausoleum are comparable in dimensions, shape, building material, and the manner of construction,¹⁶ suggesting that the Šarkamen complex was commissioned by somebody close to Galerius and was perhaps even built by the same architects and masons.

Besides Galerius, only Constantius Chlorus, Maximinus Daia, and Licinius were born in these regions. Considering Constantius' short reign and death in Britain in 306 and the role Licinius played in the events after Galerius' death, the Šarkamen complex has been associated with Maximinus Daia.¹⁷ His death in Tars in the conflict with Licinius (313 C.E.),¹⁸ followed by his *damnatio memoriae*, would explain why the construction was abruptly stopped, never to resume, as well as why the emperor himself was not buried at Šarkamen. To judge from the jewelry found in the crypt, the deceased was probably female. Daia's wife suffered a violent death in the vicinity of Antioch

¹¹ Srejić et al. 1996, 236–38; Tomović 2005b, 31.

¹² On the cremation remains, which were too fragmentary to indicate sex, see Stefanović 2005. On the found jewelry, see Tomović and Vasić 1997; Popović and Tomović 1998; Popović 2005a.

¹³ Borić-Brešković 2005.

¹⁴ Cvjetičanin 2005.

¹⁵ Tomović 2003; 2005b, 53–6.

¹⁶ Srejić et al. 1996, 233; Tomović 2005b, 39.

¹⁷ Srejić et al. 1996, 233; Tomović 2005a, 108.

¹⁸ Aur. Vict. *Caes.* 41.1; Lactant. *De mort. pers.* 49.

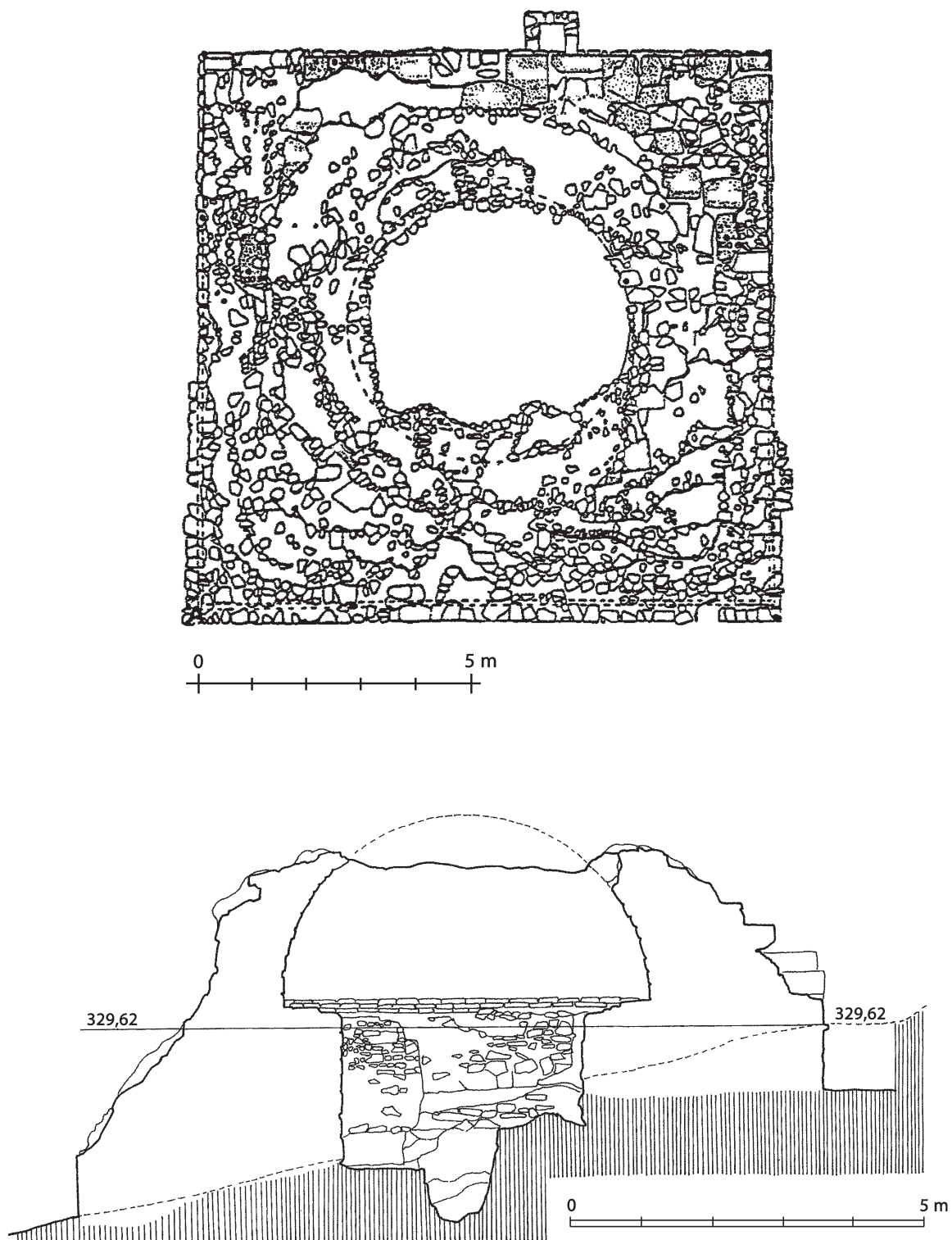


Fig. 7. Šarkamen mausoleum: *top*, plan (Srejšović et al. 1996, fig. 12); *bottom*, north-south vertical section (Tomović 2005b, fig. 16).



Fig. 8. Šarkamen mausoleum at the time of excavation (Tomović 2005b, fig. 11).

soon after the fall of her husband, and her body was thrown into the Orontes.¹⁹ Consequently, the woman for whom the mausoleum was built is presumed to have been the mother of Daia, Galerius' sister, whose name we do not know.²⁰

THE ORIENTATION OF THE MAUSOLEA

The present study grew out of my collaboration with Andor Vince to record the orientations of all the structures at Šarkamen.²¹ In this work, I discovered that the seemingly random orientation of the mausoleum is strikingly similar to that of Romula's mausoleum at Gamzigrad (fig. 9). The values given here for the orientation of both derive from measurements I took in 1998

and 2003 using both a solar and an electronic compass and thus supersede data in earlier publications.²² Galerius' mausoleum could not be incorporated into this study because it was not possible to determine its orientation with any degree of certainty.²³

Orientation Analyses

As the measurements show (see fig. 9), the orientation of Romula's mausoleum at Gamzigrad and that at Šarkamen are practically identical: the alignment of the orientation axes displays a deviation of less than 1°, which agrees with the tolerance of the orientation measuring methodology used.²⁴ If each mausoleum was aligned with the cardinal points of the compass

¹⁹Lactant. *De mort. pers.* 50.6–7.

²⁰Supra n. 17.

²¹The work was conducted as a case study in the application of the solar compass in archaeological fieldwork (Mladenović and Vince 2003).

²²Little attention has previously been paid to the orientation of individual structures at the two sites, and in many of the existing publications orientation information is lacking, incorrect, or contradictory. To take Gamzigrad as an example: published plans often lack the orientation arrow, and two plans of the same structure in the same publication can follow completely different orientations (see figs. 2, 5 [reproduced

here with their original erroneous orientation]). Furthermore, the only mention of the orientation of Romula's mausoleum by Srejšević and Vasić (1993, 150) is contradicted by maps in the same publication.

²³The base of the mausoleum is round, with no evident front facade; remains of an entrance noted and marked on the mausoleum plan (which in the case of Romula's mausoleum was completely erroneous with regard to its orientation) are impossible to identify on the monument in its present state.

²⁴Cf. Mladenović and Vince 2003.

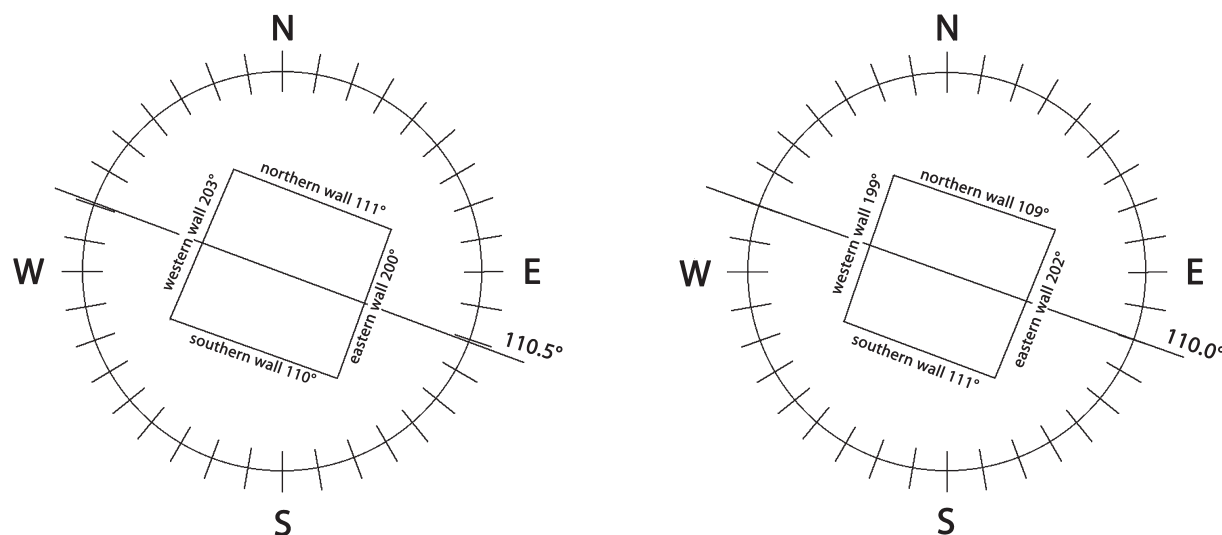


Fig. 9. Orientation measurements: *left*, Romula's mausoleum at Gamzigrad; *right*, Šarkamen mausoleum.

(i.e., north–south, east–west), the agreement would not be surprising, but their identical atypical orientation demands an explanation.

Since both mausolea were erected on previously unoccupied terrain, and no natural or man-made feature dictated their orientation, how likely is it that the match in orientation is coincidental?²⁵ In strictly mathematical terms, it is 1 in 129.600 (0.000772%) and is therefore statistically negligible. Moreover, the structures are very close in date, follow the same plan, were built perhaps by the same builders,²⁶ and were intended for two closely related individuals (mother and daughter). Therefore, it is doubtful that their identical orientation was the product merely of chance. Equally doubtful is the possibility that a random orientation was arbitrarily chosen for one and then meticulously copied onto the other merely as an attempt at uniformity. In such a case, we might expect more conspicuous imitation in the design, dimensions, or relative positioning of the mausolea in relation to other structures—and that did not happen. Copying an atypical orientation is not an easy task, and undertaking it without there being any underlying significance in the particular orientation is hard to endorse, particularly

since the terrain at each site makes different orientations much more attractive.

At Gamzigrad, the view that opens up to the west of the mausoleum demands attention as it provides a panorama with the residential complex in the valley beneath and the mountain ridge closing off the horizon. At Šarkamen, the most compelling view is the southern vista, toward the valley of the Vreška River and the hills on its other bank. However, work at Gamzigrad proves that the entrance of Romula's mausoleum faced east,²⁷ away from the residential complex; the Šarkamen mausoleum was not sufficiently preserved to identify its front. Initially, an eastern orientation appears a surprising choice, for at Šarkamen, it would face the fortification, and at Gamzigrad, it would turn away from the scenic panorama and the residential complex. However, east is the only direction at Gamzigrad that both Galerius' and Romula's mausolea could face without obstructing each other's view (see fig. 2), and thus it seems appropriate at that site.

Therefore, the question seems to be: why did these two mausolea, being 40 km apart and without any visual contact, face approximately 20° south of east? The possibility that both were orientated toward a spot on

²⁵ Let us imagine mausolea as squares set in a horizontal plane, and that plane as a circle divided into 360° (1° is the minimal unit because we cannot measure orientation more precisely than to a degree). If the mausolea each had one side that can be considered the front facade, then there are 360 differ-

ent positions each could have in space. So the probability that the mausolea were independently identically oriented on this particular alignment is 1 in 129.600 (0.000772%).

²⁶ Srejović et al. 1996.

²⁷ Srejović and Vasić 1994b, 72–81.

the ground can be eliminated. The technical knowledge at the time was such that in order to orientate two structures toward a particular landmark, each would require visual communication with that spot. Furthermore, with their orientation axes being almost parallel lines at a 40 km distance from each other, the spot where they would intersect would be almost infinitely far away, definitely beyond the Earth's surface. Here perhaps lies our clue: with "earthly" things eliminated, one is left with only the sky.

Celestial Orientation

There are a number of celestial objects that continually attract human attention. Only a small number of them, however, have the sort of regular movement that makes orientating a structure toward one of its positions understandable. For example, the movement of the planets when viewed from the earth seems completely random. Their cycles of revolving around the sun are different from that of the earth; thus, there is no rule as to where the planets might appear in the sky year after year in, for example, January. That is why they were called wandering stars in antiquity.²⁸ It is also very unlikely that any of their positions in relation to one another would have been considered significant, bearing in mind there was no way of predicting when that occurrence would happen and knowing if it would ever be repeated. The moon shows the same erratic pattern because its cycle, the lunar year, is shorter than that of the earth. If we disregard ephemeral and random celestial phenomena, such as the appearance of comets or short-lived bright stars, which even if they were an inspiration for builders cannot be reconstructed today, we are left with only the sun and stars.²⁹

The most obvious aspect to consider with an eastern orientation of a structure is the possibility that it is orientated toward sunrise on a particular day in the year. In our case, the azimuth of 110° corresponds to the sunrise on 14 February and 27 October. There is no other solar event that would correspond to this orienta-

tion. When it comes to the stars, the problem is rather more complex. First, one needs to identify those stars that appear on the horizon at this azimuth. Next, one must select those that are visible to the naked eye and then determine if any of them appears on the horizon at a relevant moment. The last step is particularly important, since the stars, unlike other celestial bodies, are in the sky constantly. Thus, for example, if a star appears on the horizon at that azimuth at noon, it is of no importance to us because it is at that time invisible to a spectator. Potentially significant moments could be just before the sun rises (heliacal rise) or just after it sets (acronychal rise).

Of all the stars and constellations that fulfill the required criteria, only two stars are truly conspicuous: Rigel, a star in the Orion constellation, and Sirius of the constellation Canis Major.³⁰ Neither of these stars rises with the sun on the given azimuth, but they both appear just after sunset. Because the sky is sufficiently dark for the stars to become visible only 30 minutes after the actual sunset, the calculations were made using this time rather than the astronomical time of sunset. Thus, we determined that Rigel appears on the horizon at the given azimuth 30 minutes after the sun sets around 21 December; Sirius appears around 1 January.

Therefore, the orientation of our two mausolea can be categorized as:

1. Toward sunrise on 18 February and 31 October, according to the Julian calendar of the fourth century C.E. (14 February or 27 October in the modern calendar).³¹
2. Toward the rising of the star Rigel, the brightest star of the Orion constellation, on the winter solstice, 25 December in the Julian calendar of the fourth century C.E. (21 December in the modern calendar).
3. Toward the rising of the star Sirius, the brightest star of the constellation Canis Major, on 5 January in the Julian calendar of the fourth century C.E. (1 January in the modern calendar).

²⁸ Evans 1998, 289–99.

²⁹ The following orientation analyses were done using the value of the eastern orientation of 110°, for the geographic location of Gamzigrad, determined by both geographic maps and GPS. All calculations regarding the celestial objects were computed by Istvan Vince, professor of astronomy and astrophysics at the University of Belgrade and to whom the author is deeply grateful. The 40 km distance between Gamzigrad and Šarkamen does not affect celestial computations, and the results obtained correspond to the situation at Šarkamen as well.

³⁰ Other constellations with the 110° azimuth of rise at Gamzigrad are Aquarius, Capricornus, Cetus, Corvus, Cra-

ter, Eridanus, Libra, and Ophiuchus. These were not taken into consideration either because of the inconspicuousness of their stars that correspond to this azimuth (some are barely visible to the naked eye) or because their appearance does not coincide with the important moments discussed above.

³¹ In order to study the significance of particular dates, the time of the occurrence of the astronomical phenomena has been calculated into the calendar of the time. Aurelian's religious reform by which the winter solstice (21 December) was celebrated on 25 December reveals that, by then, the error of the Julian calendar has already reached four days. On correlation between the Julian and Gregorian calendars, see Evans 1998, 163–68.

The Sunrise Dates

In the Early Christian world, there was a common practice of orientating churches in relation to the azimuth of the sunrise on the day of their patron saint or on the day when construction began.³² The practice was an obvious consequence of the fact that the east was determined by the point of sunrise on the given day. The Romans knew how to determine the astronomical east, so the position of the sun on the horizon on the day the construction started would mean little to them. Also, the possibility of both mausolea discussed here being built on the same two days in the year is very small. Furthermore, 18 February and 31 October were quite ordinary days in the Roman calendar.³³ It thus seems clear that the possibility of the mausolea being orientated toward the sunrise on these particular dates in the year can be excluded.

The Stars: The Roman Context

To understand what significance the Romans gave to the stars we must understand how they envisaged the cosmos and the earth's position in it. Greek astronomy supported a geocentric view of the world, with the earth in the center of the universe and around which rotated the moon, the sun, and the known planets (considered to be wandering stars). The outer edge of this universe was a sphere covered with stars grouped into constellations.³⁴ It is difficult to know what was believed to lie beyond this sphere. Plato, in *Phaedrus*, describes a journey of the soul to the edge of the universe and its crossing to the other side, where divine intelligence, essence of life, and true knowledge are revealed.³⁵

The ideas of the celestial origin and the destiny of the soul, as well as of star veneration, infiltrated the Greek and Roman worlds in part through stoicism.³⁶ Posidonius of Apameia (ca. 135 B.C.E.) played a significant part, and his influential circle of followers included Pompey and Cicero.³⁷ Posidonius incorporated astrology—then considered a science—into the greater view of the universe, according to which the movement of the celestial bodies was no longer considered to be a product of physical laws but of divine intelligence and will.³⁸

In late antiquity, when preoccupations with the heavenly destination of the soul peaked,³⁹ astrology ceased to be a set of mathematical theories and became a sacred doctrine. At the same time, philosophy became religious; the leading schools of the time, such as Neo-Platonists and Neo-Pythagoreans, showed interest in astrology.⁴⁰ If the whole world was in harmony, one could conclude that the heavenly bodies moved in the same order as the lives of people, which opened the doors for astrology at many levels. As celestial and chthonic realms were entwined, astrological knowledge became a means of understanding the divine and securing one's salvation. It had a prominent place in many eastern cults, where knowledge and belief were often inseparable.⁴¹

The celestial bodies, particularly the stars, thus moved from being subjects of scientific study to mystical objects of veneration, with the process culminating at the end of the third and the beginning of the fourth century C.E. It would not be surprising, therefore, for the symbolism of a funerary complex from that period to be found in the astrological significance of the constellations relevant to this study.

Sirius: Canis Major. Sirius is the brightest star of the sky. It is clearly visible to the naked eye, and its rising in the winter months is one of the most striking events on the night horizon. It is not surprising that many ancient cultures gave it a prominent place in their mythology. It was identified with a dog from the earliest times in a number of cultures independently. Babylonian sources call it "Sun Dog," and its Egyptian hieroglyph was a dog. The Egyptians also identified it with Isis and placed such importance on its heliacal rise—which coincided with the beginning of the Nile's rising—that it marked the beginning of the new year.⁴² To the Greeks, Sirius was known at least from the Early Archaic period, and both Homer and Hesiod mention it.⁴³ In classical antiquity, it became synonymous with scorching heat, and it had a reputation for bringing illness and death.⁴⁴ In the Roman period, Sirius was simply called Canis and was often associated with the dog belonging to Actaeon or Orion. Over time, the mythological connotations disappeared, and only its

³² E.g., Nissen 1906, 391–460; Firneis and Köberl 1989.

³³ *II* 13(2) 241, 257; note that in some later versions of the Roman calendar, such as the Codex Calendar of 354, 31 October is marked as *Iudi*, possibly associated with the cult of Isis (Salzman 1990, 121, 135 n. 1).

³⁴ Evans 1998, 75–91.

³⁵ Pl. *Phdr.* 247c–d.

³⁶ Cf. Sen. *Q Nat.* 1, 7, 11, 12; see also Le Boeuffe 1989, 122–25; Barton 1994, 34; Bakhouché 2002, 107.

³⁷ Cf. Cic. *Nat. D.* 2.4, 2.15, 2.19, 2.54, 2.97; *Somn.* 6.9–26.

³⁸ Barton 1994, 107; Volk 2004.

³⁹ Cf. Boustani and Reed 2004.

⁴⁰ Barton 1994, 109–10.

⁴¹ Cf. Bakhouché 2002, 137–56.

⁴² Allen 1963, 117; Bonneau 1964, 263; Lesko 1999, 156.

⁴³ Hes. *Op.* 587; Hom. *Il.* 22.29.

⁴⁴ Geminus *Isagoge* 17.26, 17.31–6; Hom. *Il.* 22.25–32; Plin. *HN* 2.40.107, 18.68.270.

relationship with high temperatures remains. Vergil marked the beginning of the planting season by the heliacal rise of Canis on 1 May,⁴⁵ while Cicero refers to it as a source of summer heat.⁴⁶ Roman farmers sacrificed reddish dogs to Canis on Robigalia, on 25 April, to placate it.⁴⁷

One could argue that through the introduction of the cult of Isis into the Roman world, the importance of Sirius for the Romans was greater than the sources lead us to believe. Although clearly associated with Sirius in ancient Egypt,⁴⁸ however, the only vestige of such a link in the Roman world are rare representations of Isis on the Sothis-dog.⁴⁹ Furthermore, Graeco-Roman Isis was traditionally related to the moon,⁵⁰ and her holidays had no astral dimension or Sirius connection.⁵¹ Additionally, the day Sirius appears on the horizon at Gamzigrad (5 January of the Julian calendar) had no ritual or mythic connection with either Isis or Sirius/Sothis.⁵² Somewhat surprisingly, although it is the brightest star in the heavens, Sirius does not seem to offer the solution to our orientation problem.

Orion. Orion is the most prominent constellation of the northern hemisphere and is one of the easiest to identify in the night sky. Rigel, the star that appears on the spot of the horizon toward which the mausolea are orientated, is bluish white in color and is the brightest star of Orion.⁵³ We do not know if it had a special name in antiquity; the name Rigel derives from an Arabic source of 1521.⁵⁴ The constellation of Orion resembles its iconographic image. Many cultures saw in it the giant human figure of a hunter or a warrior,

often viewed as hunting the bull (constellation Taurus next to it) with the help of his dog (constellation Canis Major).

The specific identity of the figure was different from civilization to civilization but was most commonly that of a supreme hero.⁵⁵ The Greeks identified the constellation with either Herakles fighting the Cretan bull, Phaethon falling into Eridanus (the immediately adjacent constellation), or Orion, a great hunter of impressive stature and beauty.⁵⁶ The identification with Orion became obsolete over time, and the Romans referred to it simply as an ambiguous great hunter or warrior, with the heroic attributes of *audax*, *bellator*, *fortissimus*, *furius*, *sublimatus*, and *venator*.⁵⁷ Scholars have suggested that at some point the constellation that depicts a warrior killing a bull with the help of his dog inevitably became associated with Mithras,⁵⁸ although other celestial identities of Mithras have been put forward as well.⁵⁹ I do not wish to engage in the debate over the astral identity of Mithras, as I share the belief that it is a largely futile one.⁶⁰ But it seems plausible that the constellation could have brought Mithras to the mind of a late third-century observer, particularly given its trajectory in the sky. Orion is most impressive when it rises. Its figure slowly appears and grows over the entire horizon, dwarfing the night landscape. It rises just after Taurus, and during the course of the night, as it reaches the zenith, it moves above Taurus until they both disappear on the west.⁶¹ It would not take much imagination on the part of the observer to recall the taurochtony in the movement of the stars.

⁴⁵ Verg. *G.* 4.425–28.

⁴⁶ Cic. *Phaenomena Aratea* 349.

⁴⁷ Ov. *Fast.* 4.941–42.

⁴⁸ Zábkar 1988, 140–41.

⁴⁹ Sothis was the name for Sirius in Egypt, where this iconographic image was most common. For Isis-Sothis representation in Roman art, see Clerc 1978.

⁵⁰ Associations with the moon are attested in art (cf. *LIMC* 5:761–96, s.v. “Isis” [Tam Tinh]), in contemporary literature (cf. Plut. *Vit. Ant.* 52; see also Dio Cass. [50.4, 50.25], who reports that Cleopatra styled herself “as Isis or the Moon” and Apul. [*Met.* 11.1–2], which is particularly interesting for us, since in the night when Isis appears to Lucius, she is not announced by a star but by the moon), and in magic spells (Wesely 1893, 498); it is this identity of Isis that survived into the Early Middle Ages (Lydus *Mens.* 4.45).

⁵¹ Salzman 1990, 170; Turcan 1996, 114–21.

⁵² It marked the end of the Ludi Compitales, the festival of the crossroads lares (*II* 13[2] 239; Salzman 1990, 122, 170).

⁵³ Rigel is marked as the β star of Orion, which would mean that it is the second brightest. However, the classification is an old and erroneous one, since Rigel is in fact the brightest star of the constellation (Allen 1963, 312).

⁵⁴ Lum 1951, 205.

⁵⁵ Uru-anna (“The Light of Heaven”) or Gilgamesh for the

Summerians; “The Son of Life” for the Babylonians; in Egypt, he was identified as Horus or Osiris, and as Jacob or Joshua by the Jews (Allen 1963, 310; Campion and Eddy 1999, 278).

⁵⁶ Lum 1951, 205; Renaud 1996.

⁵⁷ Allen 1963, 307–8.

⁵⁸ Speidel 1980; Campion and Eddy 1999.

⁵⁹ Rutgers 1970; Bausani 1979; Speidel 1980; Beck 1988; Sandelin 1988; Ulansey 1989; North 1990; Beck 1994b; cf. 2004; 2006d, 35–9.

⁶⁰ For an overview of the debate, see Beck 2004.

⁶¹ I do not wish to dwell on the work of Ulansey (1989), the weaknesses of which have been already pointed out by a number of authors (e.g., Swerdlow 1991; Beck 1994b; Clauss 2001), but I must comment on something other scholars have not noted. Ulansey’s disqualification of Mithras as Orion was based in part on the fact that Orion is “under” the bull (Taurus), which is contrary to Mithraic iconography. This reasoning is dubious. “Above” and “under” are dangerous concepts when one is dealing with the sky, for while the figures may appear to be so arranged on celestial atlases, we have no proof that these reflect the way people in antiquity imagined their relation. From the view of an observer of the night sky, Orion in the course of the night moves above Taurus, which might be of greater significance to the conceptualization of heavenly settings.

Orion and the Mausolea

The orientation of the mausolea at Gamzigrad and Šarkamen matches the azimuth of Orion's rise at those sites on 21 December (25 December in the fourth-century Julian calendar). This marks the winter solstice, an important day for many peoples and cultures.⁶² After the sun sets on this day, the shortest of the year, it starts to renew its strength, and the days become longer, the significance of which did not escape many.

For a long time, though, the Romans did not attribute any particular significance to the winter solstice. This changed with Aurelian's religious reform in 273 C.E., when 25 December was declared the holiday of a new state god, Sol Invictus.⁶³ Some believe that with the syncretism of Mithras and Sol, 25 December (Natalis Invicti) became the holiday commemorating the birth of Mithras.⁶⁴ While the association might not have been conventional everywhere, in the wider Balkan region, the syncretism of Sol/Mithras represented the dominant form of Mithraic worship.⁶⁵ Furthermore, it is in this form—*D(eo) S(oli) I(nvicto) M(ithrae)*—that Mithras was commemorated by Galerius and other tetrarchs on the Carnuntum monument.⁶⁶ Perhaps also significant is that Natalis Invicti was celebrated after sunset,⁶⁷ the same time of day that was apparently commemorated by the orientation of the mausolea.

The holiday had an underlying eschatological dimension, since it was believed that the winter solstice represented the gate of departure for the soul's rise to the heavens; this connection may well be significant for funerary monuments such as our mausolea. It was believed that the soul enters this world through a celestial gate coinciding with the summer solstice and exits through the Capricorn gate at the winter solstice to attain immortality or *apogenesis*.⁶⁸ The view was Neo-Platonic⁶⁹ but also rooted in Mithraic practice.⁷⁰ Furthermore, Mithraism was the dominant cult with astrological elements when the mausolea were constructed at the end of the third and the beginning of the fourth century.

If the result of this analysis is a coincidence, it is a very cruel coincidence indeed. Surely the probability of orientating both structures by chance toward the celestial association of one of the most influential pagan gods of the time—the visual vocabulary of whose cult consists primarily of astral symbolism—and on a holiday when the celestial gates were open to take the souls of the deceased, is negligible. I would therefore argue that the two mausolea were deliberately orientated toward the rising of Orion, here perceived as Mithras, on the eve of the winter solstice, symbolically facilitating the rise of the deceased's soul to immortality.

INTERPRETATION

Other scholars have successfully demonstrated the important role both astronomy and astrology played in the mysteries of Mithras.⁷¹ But a few problems that arise from a supposition presented above must be addressed.

While symbolic orientation played an important role in Mithraic practice, primarily through the design of the mithraea,⁷² the actual terrestrial orientation of these structures is believed to have been insignificant.⁷³ Furthermore, precise astronomic orientation was not generally very common in the Roman world; Roman temples, for example, do not exhibit any consistent, overarching patterns of orientation. There was a general tendency for a temple to face east, but the topography and the urban layout were the prevalent factors in determining their precise orientation.⁷⁴ Temples dedicated to Saturn, which were orientated toward sunrise azimuths, were the main exceptions.⁷⁵ In certain cases, however, an actual orientation was used to convey a precise message; the axis of the Pantheon, for example, is said to align with sunrise on 1 April, the holiday of Venus, the patron of the *gens Iulii*,⁷⁶ and the only time that the sun penetrated the so-called Neo-Pythagorean basilica at Porta Maggiore was on the summer solstice.⁷⁷ Mithraea display a similar tendency. That they were often located in caves,

⁶²The builders of Stonehenge on one end of the spectrum and the Christians on the other end both honored this event, and the Western church still celebrates the birth of Christ on this day (still on the Julian calendar date).

⁶³*II* 13(2) 260/1; Salzman 1990, 127, 149–51.

⁶⁴Merkelbach 1984, 141; Weiss 1998.

⁶⁵Zotović 1973, 112; Selem 1980, 76; Tacheva 1982, 439; Sanie 1989, 1209–18.

⁶⁶*CIL* 3 4413: "D(eo) S(oli) I(nvicto) M(ithrae)/fautori imperii sui/Iovii et Herculii/religiosissimi//Augusti et Caesares/sacrarium/restituerunt."

⁶⁷Halsberghe 1984, 2198.

⁶⁸Porph. *De antr. nymph.* 21; see also Lamberton 1986, 66–7; Beck 1988, 42 n. 91.

⁶⁹Turcan 1975.

⁷⁰Cf. Porph. *De antr. nymph.* 6; Beck 1994b, 29–31; 2006d, 128.

⁷¹See esp. Beck 1988; 1994b; 2006a; 2006d, chs. 7–15; contra Swerdlow 1991; Clauss 2001.

⁷²Lentz 1975; Gordon 1976; Beck 1994a, 106; 2006d, 102–52.

⁷³Beck 1994a, 112–13; 2006d, 110.

⁷⁴Cf. Vitruvius. *De arch.* 92; Nissen 1906, 261–390.

⁷⁵Esteban 2003, 87.

⁷⁶Le Boeuffe 1989, 107–9.

⁷⁷Labianca et al. 2007. One might think of the Horologium in the Campus Martius as another obvious example, but its alleged positioning so that its shadow points to the Ara Pacis

or parts of preexisting structures, determined their orientation in the majority of cases; this factor cannot be stressed enough, since only about 20% of mithraea were purposely built.⁷⁸ Whenever possible, mithraea tended to face east, and instances where the orientation was more significant have been recorded.⁷⁹ The mithraeum at Angera in Cispadana, the only Italian mithraeum built *de novo*, was allegedly orientated so that the rising sun at equinox illuminates the main cult picture;⁸⁰ similarly, an off-centered opening in the vault of the mithraeum at Caesarea Maritima was said to throw light onto the altar at midday on the summer solstice.⁸¹ It may not be coincidence that a gnomon, an astronomical instrument that the Romans used both for time measuring and orienting different types of structures,⁸² was found in a mithraeum in southwestern Germany.⁸³ While this handful of examples is not conclusive, it does show that the practice was not unique, and that in some cases, precise astronomical orientation had cultic associations.

There does not seem to have been any rule in the Roman world governing mausolea orientation,⁸⁴ but then again, it is hard to know how many mausolea were ever examined for potential astronomic implications of their orientation. Furthermore, orientating a structure in relation to celestial phenomena is an undertaking that requires some expertise that would no doubt have been beyond the scope of most people.

But perhaps the most obvious question is: why would the mausolea of two women face the celestial Mithras? The exclusion of women from the mysteries of Mithras, one of the very few concepts in the Mithraic studies that has passed almost unchallenged from the time of Cumont, has been the subject of recent scholarly debate. Gordon, for example, argued that women and female principles were not only excluded from the mysteries but were despised as well.⁸⁵ In reaction to this view, David, using both written sources

and archaeological material (primarily statue dedications and votive inscriptions), attempted to make a case for their direct involvement.⁸⁶ Although Griffith has convincingly refuted most of David's evidence by pointing out that it is not possible to prove that this material was dedicated to Mithras by women, she did, in fact, argue that the female principle was present in Mithraic iconography. Thus, she has mitigated the traditional view of the cult as hostile to women.⁸⁷ Some of the epigraphic evidence, such as the so-called Cascelia's Prayer, a third-century inscription found at the mithraeum at Castra Peregrinorum,⁸⁸ is difficult to ignore. Therefore, an increasing number of researchers are considering the possibility of female participation in the cult.⁸⁹ Although there were, for example, limitations in both early Christianity and Judaism on the official roles women could play, many women were nonetheless believers and were present in significant numbers in those congregations. Perhaps Mithraism presented a similar picture.

Whether women could believe in or consider Mithras their savior while their devotion took other less official forms is a different question. In the case of Gamzigrad and Šarkamen, someone evidently thought they could. Bearing in mind that the orientation of the mausolea may have been chosen either by women themselves or on their behalf, in this case, we can be quite certain this could have been done only by their sons, the emperors Galerius and Maximinus Daia. Some scholars believe that the Tetrarchs, particularly Diocletian and Galerius, were either Mithraic initiates or active supporters of Mithraism for political reasons.⁹⁰ Imperial support of the cult is seen in the 307 C.E. decision of Diocletian, Galerius, and Licinius to rebuild a local mithraeum in Carnuntum and make a dedication there to Mithras.⁹¹ This is the only known record of official imperial patronage of a deity other than those of the official tetrarchic ideology.⁹² What makes the

on Augustus' birthday (Buchner 1982, 37) seems to be nothing more than an erroneous modern reconstruction (Schütz 1990; Heslin 2007).

⁷⁸On a sample size of 58 mithraea, only ca. 10–14 were specifically built as such (White 1990, 48). Survey of the standard catalogue *Corpus Inscriptionum et Monumentorum Religionis Mithriacae* and of sites discovered since would provide more instances, but there are no reasons to think the proportion would change significantly.

⁷⁹Campbell 1968, 50–5; Lentz 1975.

⁸⁰Campbell 1968, 50; White 1990, 48.

⁸¹Bull 1978, 79. Both claims were never subjected to proper archaeoastronomical investigation, either by scholars who reported them or by those who discussed them (cf. Lentz 1975). For other mithraea with reported artificial light effects that should be investigated, see Lentz 1975, esp. 364–65.

⁸²Vitr. *De arch.* 27.

⁸³Lentz and Schlosser 1978.

⁸⁴Cf. von Hesberg 1992.

⁸⁵Gordon 1980, 42–64.

⁸⁶David 2000. Sources include Porph. *Abst.* 4.16; Tert. *De praescr. haeret.* 40.4–5.

⁸⁷Griffith 2006, 68.

⁸⁸In the prayer carved on four sides of a marble altar, Cascelia Elegans, through mediation of her patron, addresses Dominus Aeternus, in this context almost certainly taken to represent Mithras (*AEpigr* 1980, no. 51; Mussies 1982).

⁸⁹Cf. Turcan 1975, 36; Blomart 1996; Beard et al. 1998, 298.

⁹⁰Cumont 1913, 88–9; Seston 1946, 225; Vermaseren 1965, 154; Turcan 1993, 42; 1996, 244; cf. Baynes 1948, 112; Simon 1979; Bianchi 1984, 2118.

⁹¹*CIL* 3 4413; *Corpus Inscriptionum et Monumentorum Religionis Mithriacae* 1698; supra n. 66.

⁹²Cf. Seston 1946; Baynes 1948; Kolb 1995, 2004.

monument even more interesting is the description of Mithras there as *fautor imperii*, the “patron of the empire.” Although such a dedication may imply that the emperors were *cultores Mithrae*, it does not have to mean that they were initiates as well, since patronage by the elite without actual participation is not an unknown phenomenon in Mithraism.⁹³ Eusebius, however, tells us that Daia was very superstitious and that he supported charlatans and wizards,⁹⁴ which sounds very much like a Christian perspective on a Mithraic priesthood involved in astronomy or Neo-Platonic and Neo-Pythagorean philosophers who had a reputation as miracle makers in antiquity.⁹⁵

But this is all rather circumstantial. Archaeological evidence from both the mausolea and their related sites does not provide conclusive evidence for the cult affiliations or beliefs of their occupants. Similarly, other monuments attributed to Galerius in his capital, Thessaloniki, have also yielded nothing that could either confirm or deny Galerius’ support of Mithraism.⁹⁶ We must remember, however, that the followers of Mithras made no public display of their religious allegiance outside the mithraea.⁹⁷ Although the interpretation presented here may not constitute proof that Galerius and Daia were followers of Mithraism, the orientation of the mausolea point in that direction.

CONCLUSION

The case that I have presented has no known parallels elsewhere in the Roman world.⁹⁸ But, then, it has been widely accepted in modern scholarship that no overarching uniformity existed in the cult of Mithras. Indeed, because of the nature of the cult, empire-wide homogeneity was never achieved, either on the level of personal religious experience or of the system of belief.⁹⁹ Owing to the lack of centralized overall organization in the cult, regionalism was very strong, with many variations arising from local interpretations of

the god and his sphere of activity. This is very clear in the Danubian region here examined. The density of Mithraic finds from Pannonia, Moesia, and Dacia is striking. About one-third of the monuments from Vermaseren’s corpus come from these three provinces alone,¹⁰⁰ numbering almost 800 in total, not counting the finds made in the past 40 years. Even more impressive—and what truly sets this region apart—is the originality of its Mithraic monuments, the complexity of which is unparalleled in the Roman world.¹⁰¹ The iconographic elaborateness of the cult images in this region suggests to some researchers that it was in this area that the Roman cult was developed and shaped.¹⁰² Another striking regional feature is an early syncretism of Sol and Mithras, with dedications *Deo Soli Invicto Mithrae* being very common from the end of the second century C.E.¹⁰³ Should, then, an appearance here of a practice unattested elsewhere be surprising? Furthermore, regional differences aside, the two mausolea in question were imperial enterprises that were relatively free from conformity to any norm.

That stars were used to communicate a cult message can serve as another argument in favor of the reading of the orientation presented here. Indeed, Beck’s interpretation of the nature of Mithraic belief provides an almost perfect context for my argument. He rejects the existence of a doctrine of Mithraism, seeing it, rather, as a “loose network of cosmological, theological and soteriological ideas which were expressed, transmitted and apprehended symbolically”¹⁰⁴ through the media of astronomy and astrology; something he calls “star-talk.”¹⁰⁵ This is exactly how I believe the orientation of the mausolea should be read: as a subjective evocation of Mithras through their alignment to the constellation Orion. I argue here that Romula’s mausoleum at Gamzigrad and the Šarkamen mausoleum were orientated toward the rising of Orion, perceived as Mithras, on the eve of the winter solstice. This association, furthermore, symbolically facilitated the

⁹³ Cf. Clauss 1992, 183–84; Beck 1996, 179.

⁹⁴ Euseb. *Hist. eccl.* 8.14.8.

⁹⁵ Jones 1948, 31.

⁹⁶ These include the Rotunda (Grégoire 1939; Dyggve 1941; Waurick 1973; Spieser 1984; Duval 2003; Torp 2003), the Palace, the Octogon (Vickers 1973, 120; Mayer 2002, 39–68), and the Arch (Laubscher 1975 [with bibliography]). Daia’s building activity beyond the Šarkamen complex is unknown, and it is uncertain how much he could have undertaken during his short and eventful reign.

⁹⁷ Beck 2006c.

⁹⁸ The closest analogy, but belonging to a different culture and period, is a late first-century B.C.E. tomb from Karakush that Mithridates II of Commagene built for his mother, two sisters, and a niece, which shows astronomic orientation: con-

stellations Leo, Taurus, and Aquila rise and set in relation to three columns bearing their images. Though Beck (1999) sees Commagenian astrology as an ancestor to Mithraen, it is impossible to propose any connection between this monument and the two discussed in this paper.

⁹⁹ Beard et al. 1998, 248, 278, 301–12; Clauss 2000, 16–17; Beck 2006d, 50–64.

¹⁰⁰ Cf. *Corpus Inscriptionum et Monumentorum Religionis Mithraicae* 1–2.

¹⁰¹ Campbell 1968, 271; Turcan 1996, 213, 251.

¹⁰² Turcan 1996, 215.

¹⁰³ *Supra* n. 65.

¹⁰⁴ Beck 2006b, xxii.

¹⁰⁵ Beck 2006d, 153.

rise of the deceased's soul to immortality. The only explanation I see for this is that it was achieved by, or with the consent of, the two women's sons, emperors Galerius and Maximinus Daia, who in turn would probably have been *cultores Mithrae*. That two women were buried in the mausolea would imply that on some level, if only that of personal interpretation, the cult of Mithras was able to offer the hope of the soul's salvation for women as well. This may have been achieved only through the mediation of male relatives, just as Cascelia addressed her savior indirectly, not by name and through a patron.¹⁰⁶

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¹⁰⁶ *AEpigr* 1980, no. 51; Mussies 1982.

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