



MITHRAS AND THE ZODIAC

Abstract: The Roman cult of Mithras has been the object of many controversies, for instance the question of the origin, the mythology, and the role of astronomical-astrological concepts. In this article we focus on another controversial point, the existence and content of a doctrine of salvation. We review systematically the literary, epigraphic, architectural, and iconographic evidence of salvation in Mithraism. We find that the evidence supports the existence of a doctrine that included a soul journey towards the solstices, along the lines of a famous passage in Porphyry's *De antro nympharum*.

Keywords: Mithras, ancient religions, mystery cult, zodiac, salvation.

1. INTRODUCTION

As Richard Gordon recently emphasized, “virtually all interesting questions relating to the history and doctrines of the Roman cult of Mithras are controversial.”¹ The issue of its origin, theological content, mythological bases, demography, connection to the other “mystery” or “oriental” cults and to Christianity, have all been matter of animated debate, to put it mildly, during the last fifty years. That is, ever since the bold construction set up in the first half of the twentieth century by the Belgian-French scholar Franz Cumont – based on the continuity of the Roman cult of Mithras with its Iranian origins – started to disintegrate under the criticism of a new generation of scholars skeptical of prejudicial labels like “oriental mystery cults,” and of superficial schemes of genealogical connection.

The relation between Hellenistic and Late Antique mystery cults and Christianity, in particular, has been at the center of scholarly debates for a large fraction of the twentieth century. On one side, scholars like Kirsopp Lake maintained that Christianity was just the last, more successful or more ruthless, oriental mystery cult: “Christianity became sacramental – or a Mystery Religion – in passing from Jewish to Greco-Oriental surroundings.”² On the other, scholars like Arthur Darby Nock viewed Christianity as arising straight out of Judaism and inheriting from it the only coherent, serious, theologically sound system of beliefs of Late Antiquity.³ As Jonathan Z. Smith acutely reconstructed in his landmark essay *Drudgery Divine*⁴, the debate was impregnated of ideological and apologetical biases. The progressive liberation from these biases has been certainly beneficial to the study of the Greco-Roman religious landscape and of Mithraism in particular. However, perhaps as an overreaction to early, unwarranted speculations, some recent research has begun to systematically spoil the field of mystery cults of content, reducing Mithraism, in particular, to a “rude fraternal cult of soldiers on the frontier,”⁵ without the dignity of proper myths and of a theological discourse. From the traditional of “oriental mystery cult,” Mithraism has rapidly lost the first qualification after the demise of the Cumontian view, save for a facade of *Perserie*, as Roger Beck puts it.⁶ The attacks moved then to

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¹ GORDON 2017.

² K. Lake, *Modern Churchman*, 11[1921-22]:235, cited in SMITH 1990, fn. 24.

³ NOCK 1964.

⁴ SMITH 1990.

⁵ SWERDLOW 1991.

⁶ Although there still are scholars that subscribe to an Iranian background. see. e.g. GNOLI 2016.

the second qualification, “mystery cult.”

One of the central points that some scholars targeted to strip the mystery drama out of Mithraism has been the question of salvation. Nobody denies that Mithraism along with some other cults diffused in the Greco-Roman world had certain forms of initiation (Eleusis, Isis, Great Gods of Samothrace, Hecate, Cybele), which the traditional, official or domestic cults did not. The problem is whether this initiation had any transcendent or spiritual scope beside social prestige, *camaraderie*, or pure *do ut des*, that is, a request to the god or goddess to grant down-to-earth advantages or protection.

While our experience with today’s great religions hardly allows us to think otherwise, the question of the role, if any, of salvation in the initiatory cults in Roman Late Antiquity is indeed far from settled. For as concern this study, we define here salvation simply as any form of blissful post-mortem existence.⁷ To focus our field of view, the relevant questions can be posed as follows: Did the Mithraists seek salvation with their cultic activities? Did they erect altars, dedicate statues, and meet, eat, pray in their caves (also) in order to plead their god for post-mortem happiness, in the soul if not in the body? Did they, as Cicero, declare that through initiation, “in very truth we have learned the beginnings of life, and have gained the power not only to live happily, but also to die with a better hope.”⁸ ?

While many scholars answer positively, in particular the authors of recent monographs on Mithraism or mystery cults like Beck, Alvar, and Mastrocinque⁹, others remain very skeptical. Manfred Clauss, in his well-known textbook on Mithraism¹⁰, disposes of the theological content of the cult in just about three pages.¹¹ Although he writes that, “Initiation into a mystery cult such as that of Mithras enabled one to acquire (...) rituals which guaranteed that the initiate’s soul would one day find its way to the sphere of the fixed stars,”¹² he does not discuss salvation at all and insists on the this-worldly aspects of the cult. Tellingly, he does not even cite the well-known Origen and Porphyry’s passages on the belief on soul journey in Mithraism that I discuss below. By and large, Clauss seems to subscribe to Swerdlow’s view that Mithraism was a conformist cult which resembles today’s Freemasonry, in which the spiritual dimension is just a thin veil cast over what really matters: prestige, influence, fraternity. Similar views are held by Gordon,¹³ which insists on the this-worldly or “locative” – to employ J. Z. Smith terminology – character of Mithras’ cult, although in a recent article¹⁴ he offers also some tentative evidence of a “utopian” model that will be mentioned later on. Robert Turcan, in a general review of Mithraism¹⁵, denies to Mithraism a doctrine of personal salvation, insisting instead on a collective salvation operated

⁷ This does not necessarily exclude soul transmigration. As we will see in section 2, Mithraism might have included some notion of transmigration, although we have no idea as to the details.

⁸ Cicero, *Laws* 2.36, Loeb Classics, translated by Clinton W. Keyes.

⁹ BECK 2007, ALVAR 2008, and MASTROCINQUE 2009.

¹⁰ CLAUSS 2001.

¹¹ CLAUSS 2001, 141-144. The treatment did not change in the revised German edition of 2012 (*Mithras*, Darmstadt: WBG).

¹² CLAUSS 2001, 141.

¹³ GORDON 2016.

¹⁴ GORDON 2017.

¹⁵ TURCAN 1993.

through the primordial bull’s sacrifice.¹⁶

The most explicit and authoritative voice of skepticism against the spiritual vocation of Mithras’ cult is probably Walter Burkert¹⁷. “If we turn to Mithraism,” he wrote, “we are left with a surprising dearth of evidence” for “some kind of transcendent salvation.” Although the supposed distant roots of Mithras lie in Zoroastrian Persia, or so believed Cumont and apparently some Late Antique writers, where “immortality of the soul, and the ascent of the righteous to heaven are such well-established ideas,” in Mithraism “there is no evidence of a breakthrough to some genuine beyond apart from some Platonizing hints in Origen and Porphyry.” Moreover, “a redirection of religion toward otherworldly concerns, contrary to what is often assumed, is not to be found with the ‘Oriental’ gods and their mysteries. At best they continue what was already there.” And finally: contrary to Christianity, in pagan cults, “there never was mortification; *laetitia vivendi* was left unimpeached.”

Burkert’s influential criticism of Mithraism as “salvation cult” takes central stage in this article. He mentions several key points: *a*) the existence of “some Platonizing hints in Origen and Porphyry;” *b*) the *joie de vivre* that pagans apparently displayed, at least in comparison to Christianity; *c*) the observation that mystery cults “continue what was already there,” in terms of concern for the otherworld, rather than redirecting religion towards a more spiritual dimension; and finally *d*) the “dearth of evidence” about salvation.

I think the first three statements are all essentially correct, while the fourth is only partially true. However, my conclusion is the opposite of Burkert and much closer to the viewpoints of Alvar and Beck. *In nuce*, I think that the hints in Origen and Porphyry are to be taken seriously, that the *laetitia vivendi* need not contradict a spiritual concern, and that mystery cults indeed did not necessarily innovate, but rather, and just as importantly, repackaged previous pagan, or maybe just human, attitudes. Finally, and most importantly, I believe the evidence is not so bleak after all, and insofar it is scarce, it is so for a reason.

This article reviews the literary, epigraphic, architectural, and iconographic evidence that supports the existence of a *specific* – that is, different from other cults – soul doctrine in Mithraism. Most of this evidence has been discussed before, but not in a systematic way and without a statistical comparison with non-Mithraic counterparts.

2. THE PASSAGES IN ORIGEN AND PORPHYRY

The passages in Origen (written around¹⁸ 248) and in Porphyry (a few years later) deal directly with the soul path before and after terrestrial life. In his *Contra Celsus*, Origen reports the words of Celsus, the pagan author of the work against the Christians that Origen sets out to refute. In trying to show that Christians did not invent anything,

¹⁶ TURCAN 1993, 109ff and 147ff. Beside the supposed lack of evidence about salvation, the main argument of Turcan is the famous graffiti, “*nos servasti (a)eternali sanguine fuso*” of the Santa Prisca Mithraeum, that we will mention later on. He does not accept the reading “(a)eternali” – without proposing an alternative – and interprets the plural past tense “*nos servasti*” as a collective salvation occurred *in illo tempore*. But also Jesus “saved us” in, e.g., 2Ti 1:9.

¹⁷ BURKERT 1987. All subsequent citations are from this work.

¹⁸ All dates in this article are Common Era.

Celsus compares the doctrine of souls in the Bible with Plato and with the Mithraic one:

*These things are obscurely hinted at in the accounts of the Persians, and especially in the mysteries of Mithras, which are celebrated among them. For in the latter there is a representation of the two heavenly revolutions — of the movement, viz., of the fixed stars, and of that which take place among the planets, and of the passage of the soul through these. The representation is of the following nature: there is a ladder with lofty gates, and on the top of it an eighth gate.*¹⁹

Usually, in his work Origen replies by invoking either Celsus' misunderstanding of Scripture or claiming that Christians took their teaching from Jewish prophets who predate even Homer and Esiod, let alone Plato. But this time Origen chooses a different strategy: instead of dismantling Celsus argument, he minimizes it by declaring the Mithraists an "insignificant sect," whose opinion is not worth of proper comment: "Now, whatever be the case with regard to these — whether the Persians and those who conduct the mysteries of Mithras give false or true accounts regarding them — why did he select these for quotation, rather than some of the other mysteries, with the explanation of them? For the mysteries of Mithras do not appear to be more famous among the Greeks than those of Eleusis, or than those in Ægina, where individuals are initiated in the rites of Hecate." It appears then that Origen does not disagree with Celsus's statements about the Mithraists, or at least that he has nothing to say for or against it.

Is Celsus projecting his own views, Platonic or otherwise, on Mithraism? Celsus was attacking the Christians, and Mithras's cult was just an example of similarity between Christianity and more ancient (or so supposed) cults. Origen is right: why should Celsus have chosen Mithraism to make his point, rather than a more prestigious cult like Eleusis, or "barbarian mysteries" like the Egyptian ones, "highly regarded by many"? If Celsus decided to invent or distort Mithras's theology to fit his discourse, why not target a more famous cult? Celsus wrote his treatise around 160-180; at that time Mithraism was yet to reach its epoch of maximum expansion. The first Mithraea in Rome and Ostia date from approximately the same epoch.²⁰ If the cult was really little known, what weight could carry Celsus's argument? And if, on the contrary, it was considered a prestigious one, then how could one distort its teaching on such a central point as the soul's destiny without the trick being easily exposed? Origen lived and taught for twenty years in Caesarea Maritima, where a Mithraeum active from mid-second century has been discovered²¹: it is therefore unlikely that he was completely ignorant of Mithraism's practices. Then why, if Celsus inaccurately claimed that Mithraism had a form of salvation doctrine, didn't Origen

¹⁹ Origen, *Contra Celsum*, 6:22. This and all subsequent quotations from Origen are from *Ante-Nicene Fathers*, edited by Alexander Roberts, James Donaldson, and A. Cleveland Coxe, Christian Literature Publishing Co. (1885), revised and edited for *New Advent* by Kevin Knight, available online at www.newadvent.org/fathers.

²⁰ WHITE 2012, 470.

²¹ PAINTER 1994, 2000; PATRICH 2011.

simply unmask the falsity? Which better way to defend Christianity than saying loud and clear that mysteries knew nothing about souls, nor did they teach salvation, contrary to Jewish and Christian Scriptures²²? All of this makes little sense: unless, of course, Celsus reported things correctly and Origen had no ground for a rebuttal.

The second set of passages is in Porphyry, the neo-Platonic pagan philosopher that flourished in the second half of the third century. According to the fourth century church historian Eusebius,²³ Porphyry met Origen in Caesarea, before moving to Athens and finally to Rome, where he studied under Plotinus and became one of the most influential neo-Platonist of his epoch. Porphyry might have become familiar with Mithraism either in his youth in Tyre and Caesarea, or later in Rome. As a matter of fact, he displays respect and a non-superficial, almost esoteric, knowledge of Mithraism. In *De Abstinencia*, Porphyry mentions that the Persians believed in the transmigration of souls, "and this they also appear to indicate in the mysteries of Mithra."²⁴ A few lines further, Porphyry quotes from a lost book by Pallas on the Mithraic mysteries. Referring to the initiation degrees, Pallas said that, "it is the common opinion that these things are to be referred to the circle of the zodiac, but that truly and accurately speaking, they obscurely signify something pertaining to human souls."

It is however in another work, *The Cave of the Nymphs*, that we find the most explicit narrative. Here Porphyry explains an enigmatic passage in the *Odyssey* as an allegory of the soul path to terrestrial life before birth and back to Heaven after death. He refers repeatedly to Mithras to reinforce his thesis that Homer allegorized a profound religious truth. First he comments on the spiritual meaning of caves among the ancients:

*Similarly, the Persians call the place a cave where they introduce an initiate to the mysteries, revealing to him the path by which souls descend and go back again. For Eubulus tells us that Zoroaster was the first to dedicate a natural cave in honour of Mithras, the creator and father of all; it was located in the mountains near Persia and had flowers and springs. This cave bore for him the image of the cosmos, which Mithras had created, and the things that the cave contained, by their proportionate arrangement, provided him with symbols of the elements and climates of the cosmos. After Zoroaster others adopted the custom of performing their rites of initiation in caves and grottos, which were either natural or artificial.*²⁵

Then Porphyry points out that Homer says that the cave of the nymphs in Ithaca had two apertures. One, towards

²² One could also extend the same question to all the Church Fathers: if mysteries were not concerned with salvation, then why, in the many polemical works against paganism, nobody scored an easy point by remarking that Christianity guaranteed what nobody else could? Of course Christian writers stressed their opinion that mystery cults were ineffective because directed to false gods, but wouldn't have been much more convincing to point out that the cults had no notion of a way to salvation?

²³ SIMMONS 2015, 10ff.

²⁴ Porphyry, *De Abstinencia*, 4.16, transl. T. Taylor (1823).

²⁵ Porphyry, *De Antro Nympharum*, 6 (transl. from Seminar Classics 609, State University of New York at Buffalo).

north, is open to the mortals. The other, however, towards south, is reserved to the immortals. The cave, “image of the cosmos,” represents the Universe and the two entrances are, allegorically, the gates through which the soul enters at the birth in the human body (becoming, as it were, mortal) and exit at death (regaining immortality):

The theologians spoke of these, Capricorn and Cancer, as two gates; and Plato called them orifices. Of these Numenius and Cronius²⁶ say that the gate through which souls descend is Cancer, but that they ascend through Capricorn. And Cancer is northerly and suitable for descent, while Capricorn is southerly and suited to ascent. (...) As a creator and lord of genesis, Mithras is placed in the region of the celestial equator with the north to his right and the south to his left; to the south, because of its heat, they assigned Cautes and to the north Cautopates because of the coldness of the north wind.²⁷

The point Porphyry makes can be summarized in this way. The sun at the summer solstice reaches, at midday, the highest point above the southern horizon, so is closest to north. Vice versa, it is closest to south at the winter solstice. So summer solstice = north. At the summer solstice the sun is in Cancer, so summer solstice = north = Cancer. The high position of both sun and Cancer is favourable to descent, so summer solstice = north = Cancer = genesis. From north comes the cold wind of Boreas, which is represented by the torch down of Cautopates. So, finally, summer solstice = north = Cancer = genesis = coldness = torch down = Cautopates. And, vice versa, winter solstice = south = Capricorn = apogenesis = heat = torch up = Cautes. Also, since north is on the right of the sun seen as a charioteer heading towards sunset, i.e. west, Cautopates is on Mithras’ right and Cautes on his left. This is indeed the most common position of the torchbearers in Mithraic art, although there are several exceptions.²⁸

These passages have been taken seriously by several scholars of Mithraism. Roger Beck, for instance, has built his 2007 monography on Mithraism around the passages from *The Cave of the Nymphs*. But according to other scholars, Turcan²⁹ in particular, followed by Burkert and Gordon,³⁰

²⁶ Two neo-Platonic philosophers of the second century.

²⁷ Porphyry, *De Antro Nympharum*, 22-24 (transl. from Seminar Classics 609, State University of New York at Buffalo).

²⁸ Moreover, is not clear whether Porphyry means to the right/left as seen by Mithras or by a spectator facing him. Whenever statues or other representations of Cautes and Cautopates are found *in situ*, Cautes is invariably to the right of the spectator facing the cult niche, and Cautopates to the right (BECK 1976). In this case, indeed, Cautes (Cautopates) would appear on the left (right) as seen by the god.

²⁹ TURCAN 1975. Although this work is often cited as a demonstration of the unreliability of Porphyry, or his source Numenius, concerning Mithraism, one finds sentences like, “Therefore, concerning certain cultic, cosmographic, iconographic data, the information provided by Numenius (and Cronos) is correct and can be verified archaeologically,” (p. 88, my translation). Turcan, however, rejects the passage about Cancer and Capricorn as not Mithraic (p. 88-89). The entire analysis neglects to mention any evidence of a “cult of solstice” as those collected in this paper, even when discussing the Barberini Mithraeum or the circle zodiacs. Turcan also posits a number of additional assumptions – including that the *De antro nympharum* is a “vrai manteau d’Arlequin du paganisme finissant,” p. 63 – that I find biased and outdated. In his comprehensive book on Mithraism in 1993, Turcan does not discuss this Porphyrian passage.

³⁰ BURKERT 1987 and GORDON 2016.

Porphyry is just forcefully enrolling Mithras in his neo-Platonic agenda. This reproach seems to me lacking merit. First, once again, if Mithraism was an insignificant sect, why making it a centerpiece in Porphyry’s explanation, and if, on the contrary, it was, or was perceived, as a popular and prestigious cult, why risking the credibility by advancing false claims? By the time Porphyry was active in Rome, there were at least forty working Mithraea in the City³¹ and probably many more: how could a distortion of such weight be left unchecked? Second, in order to reject their statements, we must assume that all of them, Celsus, Origen, and Porphyry, misrepresented Mithraism *in exactly the same way* to suit their aims. Aims that were evidently as divergent as their personalities: respectively, a second-century pagan calling for respect for state religion, a Christian preacher, and a neo-Platonist with mystic venatures. This is untenable: if they agree, it must be because the reports are substantially true.

Other two literary texts should be mentioned. First, the closing words of *The Caesars* written in 361 by Julian, the last pagan emperor:

As for you, Hermes said to me, I have granted you the knowledge of your father Mithras. Keep his commandments, and thus secure for yourself a cable and sure anchorage throughout your life, and when you must depart from the world you can with good hopes adopt him as your guardian god.³²

How much this text represents mainstream Mithraism and how much Julian’s own view, is of course debatable. At a minimum, this shows that at least one follower of Mithras, initiated or not, believed that his god could do some good to his soul.

Finally, another passage, this time by the second-third century Christian writer Tertullian, does not mention soul-journeys but confirms that Mithraist rituals had a connection to salvation. He writes that the devil, “who apes even the divine sacraments in the idol-mysteries (...) celebrates the oblation of bread, brings on a representation of the resurrection, and buys a wreath at the point of the sword.”³³ Actually the manuscripts contain the word “Mithras” as subject of the last sentence, but this could be a later interpolation, meant to clarify which “idol-mysteries” are referred to. In any case, there is wide consensus that the passage refers to Mithras’ cult.³⁴ What this “representation of the resurrection” is, is unclear. Perhaps the ritual included a simulated death and resurrection.³⁵ Combining this with Porphyry’s passage and with the archaeological evidence to be discussed next, the “representation of the resurrection” could have made a ritual use of the zodiacal symbols of solstices.³⁶

³¹ See e.g. BJØRNEBYE 2007; WHITE 2012.

³² Julian, *The Caesars*, 336, transl. W.C. Wright (1913).

³³ Tertullian, *Prescriptions against heretics*, 42, (Early Latin Theology, Library of Christian Classics V 1956, translated and edited by S.L. Greenslade).

³⁴ See e.g. CLAUSS 2001, 108.

³⁵ As hinted at in “Lampridius,” *Life of Commodus*, Chap. 9.

³⁶ A further passage concerning Mithraic soul doctrine comes from the fifth-century Christian writer Epiphanius, *Adversus Haereses*, 64.3. Here, two priests of Mithras debate with a prophet precursor of Manicheism, about the way souls enter and leave the human body. The disputation however occurs in Persia and the connection with Roman Mithraism is very uncertain.

We can summarize with Beck³⁷: Porphyry “clearly tells us not only that induction into a mystery of the soul’s descent and return was an activity of the cult but also that Mithraea were designed and equipped for this very purpose. They function as ‘cosmic models’ for the accomplishment, no doubt both by ritual and instruction, of a celestial journey.”

If Celsus, Origen, and Porphyry were right, we must assume then that Mithraism had some teaching concerning the soul journey before and after terrestrial life. Let us then now review the internal evidence.

3. EVIDENCE FROM INSCRIPTIONS

Perhaps the strongest argument of Burkert against a specific Mithraic salvation – shared by Turcan, Gordon, and Clauss among others – is that there is almost no internal evidence in support of a transcendent theology in Mithraism. Concerning epigraphy, that is true, to a certain extent. Clearly we cannot expect from an initiatory cult that the esoteric teachings concerning the soul journey could be committed to stone in ordinary language, but one could nevertheless reasonably expect some hint at transcendence the same way we find it in several Christian inscriptions. But there can be a reason for this scarcity, and the reason is *genre*. Religious inscriptions come typically in three genres: dedications (of new or renovated temples, altars, statues), *ex-voto*, and funerary inscriptions. Almost all the Mithraic epigraphy are dedications or *ex-voto*. We have essentially no explicit funerary inscriptions linked to Mithraism. And that is precisely the point. Most Christian inscriptions mentioning eternal life or salvation come from the place where one should expect them, that is, from funerary inscriptions. If we look for theological messages in Christian dedications and *ex-voto*, we find very little: among the 29 inscriptions in the EDCS³⁸ database referring to Christ and containing the word “*votum*” or “*voto*,” – in the sense of having been granted a vow – only two also contain some theological statement related to the afterlife (EDCS-05101375, EDCS-26800781). In a survey of Christian archaeology of pre-Constantinian era, Graydon F. Snyder³⁹ finds that early Christians stressed concepts of peace, confidence, security, rather than transcendent soteriology: in the third-century church, “there is no sign of a more sophisticated immortality, nor does resurrection, at least as revivification or resuscitation play any role.” Even the motif of resurrection expressed in funerary context, “supports neither a view of otherworldly immortality, nor a view of end-time judgement and resurrection.” The conclusion is not that pre-Constantinian Christianity did not possess transcendent eschatological teachings, but that these kinds of messages did not find an adequate medium in routinely inscriptions or iconography. A causal look at the hundreds of *ex-voto* one finds in some of today’s Christian shrines will confirm immediately that the concern is not salvation or theology, but the relief of having overcome some illness or personal trouble. *Laetitita vivendi* is the common theme, not death. The two poles of the human adventure, a better life here and some hope for the after-life,

³⁷ BECK 1996.

³⁸ Epigraphische Datenbank Clauss-Slaby, at www.manfredclauss.de

³⁹ G. F. Snyder, *Ante Pacem: Archaeological Evidence of Church Life before Constantine*, (Mercer, 1985), cited by SMITH 1990.

are not at all mutually exclusive: they just take a key role at different moments.

The Christian inscriptions with transcendent soteriological language usually date from the post-Constantinian era, when Christianity was imposing itself over the last pagan cults, and every opportunity was grasped to advertise as publicly as possible the new faith and its salvific content. These inscriptions, in particular dedications of new churches, are often long, well-composed texts that proclaim to everybody a triumphant faith. On the contrary, extant Mithraic inscriptions are very short texts,⁴⁰ hidden in the temple-caves, and meant to be read only by co-religionists. When they expressed gratitude for being granted a vow, the Mithraists did what Christians normally did and still do: talk about enjoying life again, not death. Obviously, no *ex-voto* for having been granted a happy soul immortality has ever been recorded. Similarly, when reporting a renovation or a new dedication, inscriptions, both Christian and Mithraic, are busy extolling the patrons and their generosity, not proclaiming theological statements.

But is there really no Mithraic “salvific” epigraphy? Actually there is. There is a Mithraic altar (EDCS-17300658) set up by a Mithraist *pater* who was also an adept of other initiatory cults, that contain the words “*in aeternum renatus*” – reborn in eternity. There is then another inscription on a tauroctony with the same wording (EDCS-18600408), but it’s very likely a modern-age forgery, although the text could have been copied from ancient inscriptions. The same words (“*a Christo renatus aeternam vitae*”) appear also in a Christian inscription (EDCS-58700040, dated 337-348).

In addition, there is the only extended Mithraic inscription that does not fall into any of the three genres mentioned earlier, maybe because it is not properly an inscription: it is the famous graffiti – more exactly, dipinto – on the walls of the underground Santa Prisca Mithraeum in Rome.⁴¹ This broken, worn-out text distributed over several lines contains two interesting verses. One is “*pie rebus renatum dulcibus atque creatum*,” – “him (or that) who (or which) is piously reborn and created by sweet things” – which once again seems to refer to some form of renewal of life, even if not necessarily eternal life.⁴² The second verse has been reconstructed as, “*et nos servasti (a)eternali sanguine fuso*,” – “you saved us for the eternity by shedding the blood.” The reading was first reported by father A. Ferrua⁴³ in 1940 and then confirmed by the greatest twentieth century expert of Mithraism after Cumont, M. Vermaseren⁴⁴, in the 50s, who directed an intense archaeological campaign in the *speleum*. Everybody agrees with reading “*et nos*” and “*sanguine fuso*,” –

⁴⁰ A statistical analysis from the EDCS database reveals that the Mithraic inscriptions are on average 89 characters long; Christian inscriptions before 400 are almost twice as long, 164 characters, and become 240 characters after 400. This counts the reconstructed text as provided in the EDCS database.

⁴¹ VERMASEREN/VAN ESSEN 1965.

⁴² Vermaseren (VERMASEREN/VAN ESSEN 1965) thinks this verse is linked to another verse just before it. In this case, the whole sentence reads: “Sweet are the livers of the birds, but Mithras’ care guides him who is piously reborn and created by sweet things.” Vermaseren’s interpretation is that the writer compares the sweetness of material life to the greater sweetness of Mithras’ guide for the initiates. This makes the connection to salvation even more pregnant.

⁴³ FERRUA 1940.

⁴⁴ VERMASEREN/VAN ESSEN 1965.

an expression which occurs elsewhere only in two Christian inscriptions, EDCS-35701045 and EDCS-34200640, both also from Rome. The reading of the two key words “*servasti (a)eternali*,” especially the second one, has been criticized by some scholar, in particular by Panciera⁴⁵, who however inspected the graffiti only after forty years of exposure to weathering. Panciera did not reject the old reading, although he could not confirm it either. He concluded that, “it seems obvious, after what has been said, that this famous verse should be studied again by epigraphists, as well as by Mithraic specialists.” This, however, did not happen. Today the graffiti is unfortunately even less readable than it was then, but we still have the original pictures of Vermaseren. Although criticized, Ferrua’s and Vermaseren’s readings have not been replaced by more credible readings, and have not been convincingly demonstrated to be incorrect. Sfameni-Gasparro⁴⁶ judged Ferrua’s reading as “very likely, although not completely sure.” Ferrua was not only an eminent epigraphist but also a Catholic priest, hardly motivated to assign a clear Christian overtone to a Mithraic verse – possibility indeed avidly grabbed by many popular accounts of mystery cults, but that is another story. Vermaseren was the most recognized expert on Mithraism, and confirmed Ferrua’s reading, even changing his mind on the first two words, that he first read “*viros*” instead of the initial Ferrua’s reading, “*et nos*.” I don’t see any reason to read differently from Ferrua and Vermaseren, except by taking for granted that Mithraism was incapable of lofty speculations. So the only surviving extended Mithraic text that does not conform to genres in which theological statements would be out of place, does indeed contain a theological statement concerning salvation.

Beside this, Richard Gordon⁴⁷ added a couple of considerations not related to epigraphy. Sometimes Mithraea were built near cemeteries,⁴⁸ in some cases with a clear connection between burials and temples: “perhaps the choice of such a location was not simply a matter of cheap land - perhaps (...) was actually thought desirable”. He also interprets a Mithraic terra-sigillata plate found in a tomb in Trier (CIMRM⁴⁹ 988) as an item that could be linked to post-mortem expectations. Moreover, simulated death in Mithraea, stigmatized by some ancient writers,⁵⁰ and apparently confirmed by the sword with the metal hoop found at Riegel,⁵¹ points to a propitiatory ritual for the afterlife. Also the banquet, both the one consumed by adepts in the caves and the one depicted on many reliefs between Sol and Mithras and attended by mystae, “intentionally points beyond the (repeated) ritual present towards the question of after-life, what awaits the worshipper after death”.

However, Gordon⁵² also maintains, like Burkert, that there is “no archaeological or epigraphic confirmation of

⁴⁵ PANCIERA 1979.

⁴⁶ SFAMENI-GASPARRO 1979.

⁴⁷ GORDON 2017.

⁴⁸ Hensen (HENSEN 2017) lists six cases in Germania, to which one can add Proložac Donji-Postranje in today’s Croatia (GUDELJ 2006).

⁴⁹ CIMRM stands for the catalog of Mithraic finds by M. Vermaseren, VERMASEREN 1956 and 1960.

⁵⁰ “Lampridius,” *Life of Commodus*, Chap. 9.

⁵¹ HULD-ZETSCHKE 2001.

⁵² GORDON 2017, 426. Gordon also dismisses, as Turcan, the testimony of Origen and Porphyry.

the neo-Platonist story about soul-journeys”. As it will be clear in the following, I think there is on the contrary some archaeological confirmation.

4. EVIDENCE FROM “CULT OF SOLSTICES”

If Porphyry is correct, Mithraists should have paid special attention to solstices, the directions of soul’s genesis and apogenesis. I think this fits very well with the archaeological evidence that I review below.⁵³

Sol Invictus as a state god was celebrated in Rome on December 25, with the obvious symbolization of a rebirth of the Sun when daylight hours finally begin to increase again. Although *Sol Invictus* and Mithras were two distinct cults, the many connections and the overlap between the two divinities – Mithras was regularly saluted as *Sol Invictus Mithras* – makes the hypothesis of a Mithraic special celebration on the winter solstice quite likely.⁵⁴ In a painting in the Barberini Mithraeum in Rome,⁵⁵ a light ray from *Sol* passes exactly through the torch of *Cautes* and the sign of *Capricorn* – winter solstice and, more importantly, “gates of the immortals” – before reaching Mithras. Since *Sol* is almost invariably to the left of Mithras, to achieve this effect the artist had to set up the zodiac in a counterclockwise fashion, contrary to almost all the other known Mithraic arc reliefs, including the arch zodiac around the cult niche in the same Mithraeum.⁵⁶ This confirms that the arrangement was deliberate. In the Linz Mithraeum a large amount of cherry-stones has been found, indicating perhaps a summer solstice celebration;⁵⁷ analogous conclusions have been drawn from the remains of animal bones in Tienen.⁵⁸ Three Mithraic inscriptions that can be precisely dated, found in *Nersae/Nesce* and in *Virunum*,⁵⁹ cluster to just after the summer solstice (June 24, 25, and 26). On a statue of the leontocephaline god – one of the accompanying figures in Mithras’ pantheon – now conserved in the Vatican,⁶⁰ one can see the zodiacal signs of *Cancer* and *Capricorn* (solstices) on the thighs, and *Aries* and *Libra* (equinoxes) on the chest.

Substantial evidence comes also from the architecture of the Mithraic temples, which conforms to a universal model adopted with little variation in all of the Empire. This is to be expected if one interprets, as Gordon or Beck⁶¹, the entire Mithraeum as an astronomical-astrological cosmos organized around the celestial equator and the ecliptic, whose key reference points are obviously the solstices and

⁵³ Several of these evidences have been collected in MANDELBAUM 2016.

⁵⁴ BJØRNEBYE 2007.

⁵⁵ CIMRM 390. See also BECK 1994.

⁵⁶ The only other two instances of counterclockwise arcs, in the *Dura-Europos* Mithraeum, see Table 2, entry 2.1, and in the *Sāra* Mithraeum, 2.11, are both in Syria, are both real arches and not reliefs, and both begin on the left with *Virgo* and end on the right with *Libra*, the signs that enclose the autumn equinox. In ancient Persia the month of *Mehr*, when the *Mehragan* festival in honor of Mithra was celebrated, marked the beginning of autumn (see “*Mehragan*” in the *Encyclopaedia Iranica* online, www.iranicaonline.org/articles/mehragan). It is interesting that the two easternmost Mithraic zodiacs reproduce this feature.

⁵⁷ CLAUSS 2001, p. 115.

⁵⁸ MARTENS 2004; Alvar (ALVAR 2008, 362) criticizes this point, and notes the lack of evidence supporting a relation between soul and solstices, but does not reject it.

⁵⁹ BECK 1998.

⁶⁰ CIMRM 545.

⁶¹ GORDON 1976; BECK 2007.

the equinoxes. The soul's path seems to be encoded for instance within the complex iconography of the Mithraea of the *Sette Porte* and of the *Sette Sfere* at Ostia.⁶² They both contain mosaics representing seven gates: as we have seen in Origen's passage, Celsus seems to refer, in a garbled way, to a similar composition as a representation of the path the souls have to take during the heavenly journey. Ascension or descent through the planetary spheres and towards the solstices are of course not contradictory. In the *Sette Sfere*, the signs of the zodiac run along the side benches and two altar-niches are carved in correspondence to the solstices, i.e. between Gemini and Cancer on one side and between Sagittarius and Capricorn on the other. Cautes is depicted on the winter solstice side and Cautopates opposite, as Porphyry intimated. At the same position, that is, halfway through the side benches, two Greek graffiti in Dura Europos' Mithraeum read 'entrance' and 'exit'.⁶³ Again in Ostia, in the Mitreo del Palazzo Imperiale, the two halfway niches were occupied by statues of the torchbearers, while two altars were found at the same position in the Mitreo delle Sette Porte. Oil lamps were found still inside the halfway niches in the recently discovered Mithraeum at Lucciana in Corse.⁶⁴ Similar niches are visible in many other Mithraea, for instance at Vulci, in the Mitreo delle Terme del Mitra, at Aquincum, etc.

Most Mithraea do not show any particular geographical orientation. This is probably to be attributed to the fact that the cave is a self-contained "image of the cosmos" and there was no need to refer to anything external.⁶⁵ Moreover, in many cases Mithraea were underground structures and any ritual effect based on sunlight, if needed, had to be realized through mirrors or vertical shafts, so an alignment with sunset or sunrise at solstices would have been irrelevant. There are however some interesting exceptions.

During the excavation of the Mithraeum in Caesarea Maritima, perhaps known both to Origen and Porphyry, the archaeologists observed that, around noon of June 21, direct sunlight penetrated into the *speleum* from a hole in the vault.⁶⁶ Similarly, in the Hawarte Mithraeum, a man-made crack in the wall lets direct sunlight shine on the altar in December and until January 12, that is, close to the winter solstice.⁶⁷ The Mithraeum at Carrawburgh (UK) is aligned with the Sun roughly one hour before sunset at the summer solstice, which is the last moment of visibility due to the horizon elevation.⁶⁸ Beck⁶⁹ mentions this orientation but in connection with the winter solstice. However, on that day the Sun is still a few degrees below the horizon in the Mithraeum's direction and therefore invisible.

All of this amounts to a substantial confirmation of Porphyry's account. Solstices had an important cultic

meaning for Mithraists.

5. EVIDENCE FROM ZODIACS

One of the features of Mithraic iconography that has elicited heated discussion has been its obvious connection to astronomy and astrology. Almost all the elements of the tauroctony (the torchbearer twins, the bull, the raven, the snake, the dog, the ear of grain, the crater, the lion) can be put in direct correspondence with a constellation or a star. The fact that Mithras himself cannot, has been one of the contending points: is he Orion⁷⁰? or Perseus⁷¹? or a Sun avatar⁷²? or is he above everything, a hyper cosmic god⁷³?

There is no point in reviewing once more this "star-talk," as Beck⁷⁴ calls it, because here we focus on the only astronomical connection with salvation that has been transmitted to us, namely Cancer and Capricorn, the solstitial constellations, as soul gates. Hans Georg Gundel compiled in 1992 a survey of all the zodiacs of Antiquity, from Hellenistic times to Late Antiquity and beyond. In the tables 1–4, I will often refer to his catalog entries. Confining the discussion to zodiacs in form of rings or arcs, one finds overall 23 Mithraic surviving representations, 11 in the form of a ring, 12 in the form of an arc (see Tables 1 and 2). Whenever one can recognize the central scene of the reliefs, the arc zodiac is always carved on the vault of the cave in which the tauroctony takes place. That is, the zodiac is both the rock and the sky above Mithras. Above the zodiac there is no open space: there is Sol and Luna, or other divinities (for instance the planet gods) or scenes of Mithras' mythological biography. There can be little doubt that the zodiac explicitly represents the cave meant as "the image of the cosmos," as Porphyry reads in his source, Eubulus. The zodiacal arcs are mostly in a clockwise fashion and almost invariably begin with Aries (spring equinox), with the only exception of the architectural arches in Dura Europos (2.1) and Sa'ara (2.12) that begin with Virgo (autumn equinox). That is, the zodiac is shown in its standard format, the one by far most adopted in Antiquity. That the Mithraists recognized Aries as the first sign is also borne out in another Santa Prisca graffiti⁷⁵ "*Primus et hic aries astrictius ordine currit*" – "And here as the first the ram runs exactly on his course". On arcs, therefore, the zodiac just represents the sky in the cosmic cave. No attempt at a special alignment with the solstice signs seems to have been realized, except for the Barberini Mithraeum, perhaps also because an arc does not possess an obvious axis to be aligned with Mithras.⁷⁶

But what about the zodiacal rings? Of the ten with a recognizable central scene, we find in five cases a tauroctony, in two cases the birth of Mithras from the rock, in two cases Sol, both doubtful, and one case with other constellations.

⁶² An impressive amount of material concerning the Roman town of Ostia, today called Ostia Antica, is collected at www.ostia-antica.org, including these Mithraea. On the interpretation of the *Sette Sfere*, see GORDON (1976) and BECK (1979).

⁶³ BECK 1998.

⁶⁴ This site has been discovered near Lucciana in Corse in 2017 and it is still to be published (see www.ibtimes.co.uk/ancient-sanctuary-obscure-religion-that-competed-christianity-uneearthed-corsica-1608421).

⁶⁵ See e.g. GORDON 1976, 125.

⁶⁶ BULL 1982; PAINTER 1994.

⁶⁷ GAWLIKOWSKI *et alii* 2011.

⁶⁸ MANDELBAUM 2016.

⁶⁹ BECK 1984, 2034.

⁷⁰ SPEIDEL 1980.

⁷¹ ULANSEY 1991.

⁷² BECK 2007.

⁷³ MASTROCINQUE 2009.

⁷⁴ BECK 2007.

⁷⁵ VERMASEREN 1974, 27.

⁷⁶ According to Blomart (BLOMART 1994), another possible hint at the role of Cancer and Capricorn in zodiac arcs can be seen in the Osterburken tauroctony (CIMRM 1292). Here, Cancer appears below the personification of the northern Boreas wind, and Capricorn below the southern Notos wind, just as described in Porphyry's passage. However the zodiac signs are not really close to the winds and the scheme might be purely accidental.

Some of these representations require some discussion.

The zodiac 1.6 in Table 1 (the Modena Relief) is a highly untypical representation of unknown provenance, perhaps Rome. Scholars have identified the central figure as Phanes born of the primordial egg, or as Aion (Time) or Eros, or as the leontocephaline god⁷⁷. An inscription next to the god appears to have been erased, and a new one carved later on the rim, “*Felix Pater*,” that might be associated with Mithras’ cult. Probably this indicates that the relief at some point had been reutilized for a new purpose. In any case, the god is certainly not Mithras, although one cannot exclude that in some esoteric way he functioned as Mithras.

The stucco zodiac in the vault of Ponza’s Mithraeum, 1.8, is also very untypical. It’s in fact the only Mithraic representation without godlike figures, but rather a detailed astronomical map, showing the two Bears and Draco. Beck⁷⁸ interpreted it as a star chart related to 14 August 212, a few years after the Mithraeum construction, a day in which a solar eclipse was visible in the Ponza island or nearby. The sign above the Bears is Aries; but if we consider the tauroctony located in the cultic niche, it appears that the solstitial axis Cancer-Capricorn is aligned along the main temple axis and points towards Mithras, although Cancer is actually a bit displaced due to the exceeding size of Scorpio. The Mithraic cave would then be an accurate representation of Porphyry’s cave, with the soul gates aligned with the main axis. Here too, the real, external geographical north-south direction plays no role (the central aisle is aligned east-west) because the cave is the cosmos in itself, and needs no external reference system.

The zodiac 1.9 was painted on a lateral wall in the Mithraeum of Santa Prisca. The central figure is now completely erased but Vermaseren claimed he could see traces of the radiant head of Sol. He also said that on the bottom left it was possible to identify the sign of Scorpio and deduced that the zodiac started above the central figure with Aries, as most zodiacs do. However, in four cases out of nine, the Mithraic circular zodiacs run counterclockwise (40 out of 59 with recognizable chirality for non-Mithraic zodiacs in Gundel’s catalog) and in this case the top sign would be Cancer

We discuss here also the small zodiac fragment 2.11. This relief was judged to be part of an arc by Vermaseren, showing (starting from the right) Sagittarius, Scorpio, and Libra. However, Merkelbach⁷⁹ interpreted it instead as a piece of a ring, with Taurus and Gemini. If Merkelbach interpretation is right, then Cancer would be located approximately above the central figure, of which there is no trace. If instead Vermaseren is right, this would be just another traditional arc starting with Aries on the left. I inspected this item in the museum of Dieburg and I am inclined in favour of Vermaseren: the slant of the relief is quite more compatible with an arc than with a circle, and one can indeed clearly see three figures, not two. Between Scorpio and Libra there is an unidentifiable piece of relief that disturbs the whole composition. Merkelbach thought that this part, along with what Vermaseren thinks is Scorpio,

⁷⁷ CIMRM 695, see e.g. CLAUSS 2001, 165.

⁷⁸ BECK 1978.

⁷⁹ MERKELBACH 1994.

was just a divisor, but one can clearly distinguish Scorpio’s paws.

Focusing now on the reliefs in which the central figure is Mithras, one notices that in four zodiacs out of seven, Cancer appears above him and Capricorn just below. If we could see the constellations on which the Sun is projected, say at the moment of highest elevation at midday, we would see during the course of the year Cancer highest in the sky, Capricorn lowest, and all the others taking turn in hosting the Sun.⁸⁰ The zodiac ring would then materialize in front of us in exactly the same configuration as in several Mithraic reliefs, with the equator – Mithras’ seat according to Porphyry – in the middle.

In three of these four cases, what is exactly above and below Mithras is actually the beginning of Cancer and of Capricorn, that is, the exact position of the solstices, just as in the *Sette Sfere*. Out of the remaining three, 1.5, 1.10, and 1.11, the first is the beautiful, very untypical and probably very late – end of fourth century – relief of Sidon at the Louvre. Rather than forming a rigid ring, here the zodiac signs fluctuate freely in the composition, interacting, so to say, with all the other figures. It’s the only known relief in which Scorpio is both the zodiacal sign and the beast biting the bull’s genitals that regularly appears in most tauroctonies. With this artistic constraint, the geometry of the zodiac is fixed, up to the clockwise or counterclockwise direction, neither of which would have set Cancer directly above. This relief has been interpreted by Beck⁸¹ on astrological terms: “Taurus is shown leaping towards the bust of Luna, and Aries, the sign of the Sun’s exaltation, towards the bust of Sol. To achieve this effect while preserving the zodiac’s proper counterclockwise order the busts of the luminaries are reversed: Sol is on the right, Luna on the left.” This unusual relief seems therefore to have employed the zodiac symbolism to express meanings not connected to the solstices.

There remains only two zodiacal ring encircling Mithras tauroctonus that does not show any solstitial axis aligned with the god, item 1.10 from Kašić,⁸² Croatia (often erroneously indicated as Banjevaca-Sibenik) and the small fragment 1.11 conserved in Catania but of unknown provenance.

So it seems that the axis Cancer-Capricorn was in most cases intentionally aligned with Mithras. In one of the birth scenes, 1.4, baby-Mithras touches with his hands the sign of Cancer. In the other, 1.3, the dagger in his right hand – the same dagger that will one day kill the bull to bring life upon earth – is stuck between Gemini and Cancer, the exact position of the summer solstice. This “ring” is actually an incomplete ring, or an almost closed arc, beginning with Aquarius on the left. This choice is extremely unusual – there are only three other zodiac rings in all of Antiquity that show Aquarius in a special position (3.12, 3.25, 4.4). This reinforces the hypothesis that it was chosen in order to put Cancer in a meaningful position.⁸³

⁸⁰ We refer of course to the astrological signs, not to the astronomical ones. Due to the precession of the equinoxes, the constellations have moved their positions with respect to the apparent course of the Sun during the year.

⁸¹ BECK 2007, 219, fn. 23; see also CHALUPA 2010.

⁸² VRKLJAN 2005, fn. 15.

⁸³ Beck (BECK 2007) presents an explanation of the Housestead relief 1.3,

The fact that Cancer was for the Mithraists the sign of the soul entrance at birth as narrated by Porphyry appears therefore confirmed in these reliefs. The peculiar position of Cancer and Capricorn in some Mithraic zodiacs has been noted several times in the past, for instance by Merkelbach and by Beck,⁸⁴ but without a systematic analysis of all the available iconography, both in Mithraism and outside. In order to assess the significance of this disposition, in fact, we should compare it with similar antique zodiacs.

Let us consider now all the non-Mithraic ring zodiacs reported in Gundel's catalog, excluding several broken or damaged zodiacs whose alignment with a central figure, if any, could not be reconstructed. We exclude also the synagogue mosaics, to be discussed separately. Of the 72 non-Mithraic zodiac circles listed by Gundel with recognizable structure (see Tab. 3), the vast majority, 49, begins at the top with Aries or Pisces-Aries or Aries-Taurus. Only three rings show clearly Cancer or Gemini-Cancer aligned with the central figure; one more is uncertain, an oval gem having Cancer or Capricorn near the top; another one has the winter solstice, Sagittarius-Capricorn; finally, two have Cancer-Leo. The only two rings with the exact summer solstice between Gemini and Cancer at the top are a mosaic with Sol from a Roman villa in Münster-Sarnsheim (Germany, dated around 250 according to Gundel, 3.23) and an oil lamp with Sol and Luna from Patras (Greece, 3.29). Remarkably, the first zodiac was located two kilometers away from the contemporary Mithraeum in Bingen,⁸⁵ and the second item comes from a city that has produced one of the very few Mithraic artifacts⁸⁶ ever found in all of Greece. If one excludes nine zodiacs from Rome, all the others have been found in locations where no Mithraic finds have been unearthed, except for Aquileia, Pisa, and Trier. These noteworthy coincidences lead to obvious hypotheses: Could it be that the wealthy Roman of Münster-Sarnsheim was influenced by Mithraism, or was a Mithraist himself, and that the oil lamp⁸⁷ was employed in Mithraic rituals? Could the fact that the Patras oil lamp has Capricorn (= torch up) on the flame side, thereby reproducing the Barberini Mithraeum's arrangement, be also meaningful?

Be that as it may, only 4-8% of non-Mithraic ring zodiacs have an alignment close to solstices,⁸⁸ compared to 50-70% of the Mithraic ones, depending on how one counts the uncertain cases. It's very unlikely this is a coincidence. In a random distribution of signs, Cancer will be located at the top position 1/12 of the times; assuming that this position can be shared by another adjacent sign, this becomes 1/8.⁸⁹

according to which the zodiacal signs are paired based on the associated exaltation planet. The motif of the dagger stuck at the summer solstice can well coexist with Beck's proposal.

⁸⁴ MERKELBACH 1984, 329 and BECK 2007, 199.

⁸⁵ In fact, there were possibly two Mithraea in Bingen, CIMRM 1241, 1245.

⁸⁶ Tauroctony CIMRM 2351. Only seven findspots in Greece are listed in CIMRM, one of which dubious.

⁸⁷ A similar oil lamp representing Sol, but without zodiac, has been found in Romula/Resca (Romania), see CLAUSS 2001, fig. 87.

⁸⁸ Several gems have very similar designs, so one could lump them together to avoid possible redundancy. This would slightly raise the percentage to 9% in the most conservative case.

⁸⁹ Let us consider a ring with 12 signs and 12 divisories. As top position one can have anyone of the signs or divisories, so 24 possibilities in total. If we consider as valid alignment cases either Cancer, or the divisory Gemini-Cancer, or the divisory Cancer-Leo, we have three valid cases out of 24 possibilities, that is, a successful rate of 1/8. Cancer-Leo obviously should not

Let us consider only the seven Mithras' scenes, including the very atypical Sidon relief: with a probability of 1/8, one should expect 0.875 chance cases instead of the four we find. Applying the binomial distribution, the probability of finding Cancer by chance four times out of 7 at the top is less than 0.6% (0.3% if we exclude Sidon). Considering that the occurrence of Cancer at the top in non-Mithraic items is not 1/8 but at most 1/12, including also the Jewish mosaics to be discussed next, the probability that the Mithraic Cancer occurrences are due to a random choice sinks to 1 in 800. It is very likely therefore that this configuration was intentional and linked to the Porphyrian soul-journey.

6. THE SYNAGOGUE ZODIACS

There is a quite unexpected non-Mithraic religious culture in which the solstitial alignment was not rare. In two synagogue floor mosaics of the fourth to sixth century, among seven similar ones discovered in Israel and Palestine in the last century, one finds Cancer or Capricorn just above the central figure, which in all cases is Helios (see Table 4, entries 4.2 and 4.3). This is not the place to enter into a detailed discussion of these mosaics, which have excited passionate debates on the connection, if any, of Late Antique Judaism with pagan astrological speculations and its apparent transgression of the prohibition of anthropomorphic representations.⁹⁰ We just notice two relevant facts. First, referring to the connection between the souls and the water symbolized by the aquatic nymphs of the Homeric cave, Porphyry writes that Numenius quoted the famous verse from the Genesis, "the spirit of God was borne upon the waters."⁹¹ According to G. Karamanolis,⁹² in his works, "Numenius wanted to show that the Jewish nation must be counted among the ancient ones that have a share in *logos* and also that Moses had a conception of the first principle similar to that of Plato, since both identified God with being." Numenius was active in Apamea in Syria, where a well-integrated Jewish community, mentioned by Josephus,⁹³ was present. A Mithraeum active until the end of the fourth century has been discovered 15 km from the city, in the village of Hawarte.⁹⁴ Numenius' speculations on souls might then have been regarded with interest in some non-orthodox,⁹⁵ Platonizing Jewish circles. Secondly, the two mosaics above mentioned are located in Sepphoris and in Beth Alpha, both not far from Caesarea Maritima (43 km and 49 km, respectively), which once again resurfaces as a recurring locale for the solstitial "star-talk" of Late Antiquity.

7. THE CAPRICORN

We have noted that there is no proper Mithraic funerary epigraphy. This is not entirely correct: in the EDH

count as solstice but we can allow, conservatively, for some approximation in the execution.

⁹⁰ See HACHLILI 2009. For a different interpretation of the Helios figure, see WADESON 2008.

⁹¹ Porphyry, *De Antro Nympharum*, 10 (transl. from Seminar Classics 609, State University of New York at Buffalo). The citation is Gen 1:2.

⁹² KARAMANOLIS 2016.

⁹³ Josephus, *Bell. Jud.* ii. 18, 5.

⁹⁴ GAWLIKOWSKI *et alii* 2011.

⁹⁵ The fact that the figures in the synagogues of Na'ran and Khirbet-Susiya were all meticulously carved out in antiquity, leaving all the rest intact, points clearly to a dispute about the unorthodoxy of iconic representations.

catalogue⁹⁶ there is actually at least one (HD006826) and perhaps two (HD066978) funerary inscriptions. But it is true that when it comes to death, Mithraists apparently did not invoke the Persian god, or at least we have no evidence for this. Since Mithraism was not a religion but rather one of the many cults that a pagan freely chose to follow, this is not particularly surprising. The gods the Romans invoked at death were normally the Manes, the chthonic ghosts that could be seen representing the souls of the deceased ones. Even Late Antique Christian epitaphs sometimes begin with the letters DM, “*Diis Manibus*.” The followers of Mithras – or, more properly, those that took care of their burials – apparently did not derail from traditional Roman customs.

However, it might also be that the adepts of a cult based on secrecy, initiation, and a flamboyant iconography employed symbols rather than open words to express their hope. We have seen that the sign of Capricorn was supposed to be the apogee direction. Indeed, a handful of funerary reliefs might allude to this symbolism. For instance, two symmetric Capricorns, significantly holding a globe with ecliptic and equator, appear on the tympanum of a first century tomb of a Roman soldier in Cologne, see e.g. Gundel⁹⁷ and Hoffmann⁹⁸. A Capricorn was the symbol of the emperor Augustus – although it is unclear why, since he was not born under it⁹⁹ – and therefore adopted also by many legionary units and often reproduced on coins. But there are a few instances in which a Capricorn was employed in civilian’s epitaphs. On the *Lupa* iconographic database of the University of Salzburg¹⁰⁰ one can find seven funerary *stelae* that do not mention any military status and that are decorated with one or two capricorns, sometimes holding a globe – another symbol that repeatedly shows up in Mithraic iconography, see e.g. Merkelbach¹⁰¹ – between their legs.¹⁰² The *stelae* are all dated from the first to the third century and all come from regions with intense and contemporary Mithraic activity (Pannonia, Noricum, Germania). In four cases, they have been found in places where a Mithraeum also existed, that is in Sarmizegetusa (two epitaphs), Osterburken, and Mainz.

It’s very unlikely that the zodiacal symbol could have been adopted because the deceased was born under its sign, since otherwise we should also find the other signs in other *stelae*, and we don’t. Certainly, people might have adhered to the views expressed by Numenius and Cronius without being Mithraists. But it would also be very natural for a follower of Mithras to record the Capricorn motif on their funerary stones, or those of their beloved ones, and maybe this is just what happened in some cases.

8. THE GEOGRAPHIC DISTRIBUTION

A quick overview of the evidence we have collected so far in support of a teaching connected to the solstitial soul

journey shows that it comes from very different geographical areas. We have seen examples of solstice iconography in Ostia and Rome, and in the Roman regions of Germania, Britannia, Dalmatia, Palestine, and Syria. This observation might help gauging the degree of uniformity and of regional variation within the cult, another topic of intense scholarly debate.¹⁰³ As is to be expected by a self-organized and self-propagating cult without central authority, Mithraism might have had some core teachings transmitted with minor variation from place to place and from *pater* to *pater*, and also a number of local or individual developments, perhaps also reflected in the rich palette of Mithraic scenes that often accompany the tauroctony. The distribution of solstitial evidence supports therefore the idea that the soul journey was not a regional development of secondary importance but one of the core tenets of the Mithraic cult, one that propagated coherently, literally from one end to the other of the Roman world, and from its center to the extreme periphery.

9. CONCLUSIONS

Mithraism has always excited the interest of classicists, archaeologists, and historians, because of its enigmatic mythology, the scarcity of contemporary texts, and the abundance and diffusion of temples within the Roman Empire. Another reason for this fascination is Mithraism’s exuberant iconography, endlessly repeated for three centuries, with many variations but also a surprising unity of inspiration, in monuments scattered through the entire Roman world. While some scholars see Mithras’ cult as an “insignificant sect,” – to repeat Origen’s own words – or merely as an association devoted more to worldly sociality than to spiritual concerns, others subscribed to a more balanced view in which various aspects, from *laetitia vivendi* to a sophisticated ideological discourse, did coexist and evolve together.

One of the points of contention is the theme of salvation. Were Mithraists particularly interested in otherworldly expectations? Did they develop their own peculiar view on salvation or just inherited the common pagan lore? Are the testimonies of Celsus, Origen and Porphyry about soul-journey to be taken literally or were they manipulating Mithraism for their own scope? In a very influential work, Walter Burkert argued negatively about all three aspects, and underscored the scarcity of archaeological internal evidence.

We have shown however that internal evidence is not to be searched only in texts but also, or mainly, in architecture and iconography. This appears in keeping with a cult that as far as we can see emphasized the emotional power of images¹⁰⁴ over everything else. Motivated by Porphyry’s passage on soul journey, we first reviewed the role of solstices in Mithraea (cult niches, orientation, light effects), finding significant traces of what we have called “cult of solstices”. Then we examined all the ring zodiacs within and without Mithraism and we found that while Mithraists aligned Mithras’ figure with solstices in a large fraction of

¹⁰³ See for instance GORDON 2016, where Gordon “thoroughly deconstructs the idea that Mithraism was a coherent system with a certain ‘belief’ in afterlife” (quoting from the editor’s introduction, p. 12).

¹⁰⁴ Perhaps of music as well, as Celsus seems to argue in the same chapter 6.22 of Origen’s *Contra Celsus*.

⁹⁶ EDH Epigraphic Database Heidelberg, edh-www.adw.uni-heidelberg.de.

⁹⁷ GUNDEL 1992, no. 265.

⁹⁸ HOFFMANN 1963, fig. 5.

⁹⁹ See for instance BARTON 1995 for a summary of the question.

¹⁰⁰ LUPA.

¹⁰¹ MERKELBACH 1984, 119.

¹⁰² LUPA (www.ubi-erat-lupa.org) catalog entries 3167, 3446, 14966, 16613, 18046, 25681, 26650. Two *stelae* were set up in memory of women, but this is not at all in contradiction with women’s exclusion from initiation.

cases, this peculiar alignment was almost unknown in the rest of the pagan world. The only two non-Mithraic clear cases of solstice alignments were found in places that are geographically linked to Mithraism, raising the interesting possibility of a direct connection. We also noticed that Caesarea Maritima appears as a sort of center of “solstitial star-talk”: Origen lived and taught there, Porphyry very likely also visited the city (and married a Jewish woman from Caesarea¹⁰⁵), the Caesarea Mithraeum had a shaft that led sunlight on Mithras’ altar on the summer solstice and, finally, the only two synagogue mosaics with a solstitial alignment are to be found in the vicinity of Caesarea. We also speculated on the possibility that some Mithraist carried the “cult of solstices” to their funerary monuments, in the form of the zodiacal sign of Capricorn. Finally, we noted that the vast geographic distribution of solstitial iconography, from Dura Europos to Hadrian’s Wall, supports the idea that the solstitial soul journey was a central tenet of Mithraism theology rather than merely a regional development.

In his work, Burkert expressed strong doubts on whether mystery cults redirected pagan religiosity towards more spiritual concerns, somehow prefiguring an evolution that anticipated Christianity. This question often underlined ideologically-biased investigations aimed at showing either that Christianity was just one more, particularly successful, mystery cult or that, on the contrary, it has been a uniquely new and revolutionary entry in the religious landscape of Late Antiquity. Clearly, we did not even try here to answer this question. However, the various strains of evidence we reviewed show that Mithraism was in possess of a teaching regarding the soul journey, distinct from other pagan cults and from Christianity. This certainly does not show that Mithraism was *more* concerned with salvation than other cults. It does not even necessarily prove that Mithraism innovated mainstream pagan concepts of salvation: Numenius’ “soul journey” reformulates ideas already in wide circulation, in particular the famous Platonic myth of Er. It only shows that Mithraism had a peculiar way of approaching the problem, believing in a specific and coherent salvation scheme about which we only get to know the exterior form couched in a “soul journey through the solstices.” The zodiacal sign of Cancer appearing on the breastplate in several statues of Artemis of Ephesos¹⁰⁶ might indicate that the genesis scheme was cherished also in other cults. Whether all this means that paganism was evolving towards a form of sensibility to the other-worldly fate akin to Christianity cannot be easily established. Since religions, like all human endeavors, do not evolve separately but rather through interaction, competition, and contrast, a common development of the theme of salvation in Late Antiquity appears however very natural.

¹⁰⁵ SIMMONS 2015.

¹⁰⁶ GUNDEL 1991,150 and no. 225 and 233-241.

Tab. 1. Mithraic zodiacs (rings)

	Object¹ (findspot)	Scene	Direction²	Vertical alignment	Notes³
1	CIMRM 810 (Walbrook London)	Tauroctony	CCW	Gemini-Cancer	
2	CIMRM 1472 (Sisak, Croatia)	Tauroctony	CCW	Gemini-Cancer	
3	CIMRM 860 (Housesteads UK)	Birth	CW	Cancer-Leo	
4	CIMRM 985 (Trier, Germany)	Birth	CW	Gemini-Cancer	Only six signs
5	CIMRM 75 (Sidon)	Tauroctony	CCW	Aries-Taurus	
6	CIMRM 695 (Modena, Italy)	Phanes?	CCW	Aries	
7	CIMRM 1162 (Stockstadt, Germany)	Sol?	CW	Virgo-Libra	Fragment. Not a full ring, probably more like an arc (see also HD042521)
8	Mithraeum at Ponza ⁴	Great and Little Bear and Snake	CW	Aries-Pisces or Capri- corn	Stucco relief
9	Mithraeum of Santa Prisca, Rome ⁵	Sol?	?	Aries or Cancer	Stucco relief
10	Gundel 54 (Kašić, ⁶ Croatia, earlier assigned to Banjevaca - Sibenik)	Tauroctony	CW	Leo-Virgo	Several fragments
11	CIMRM 163A (Catania)	Tauroctony	CCW	Aries	Fragment

Tab. 2. Mithraic zodiacs (arcs)

	Object⁷ (findspot)	Scene	Direction	Initial sign (left)	Notes⁸
1	CIMRM 34 (Dura Europos, Syria)	Cult niche	CCW	Virgo	Painted on the cult niche arch
2	CIMRM 40 (Dura Europos, Syria)	Tauroctony	CW	Aries	
3	CIMRM 390 (Mithraeum Barberini, Rome)	Tauroctony	CCW	Pisces	Painted
4	CIMRM 389 (Mithraeum Barberini, Rome)	Cult niche	CW	Aries?	Painted on the cult niche arch; only Pisces on the right is visible.
5	CIMRM 1083 (Nida, Germany)	Tauroctony	CW	Aries	
6	CIMRM 1292 (Osterburken, Germany)	Tauroctony	CW	Aries	
7	CIMRM 1148 (Groß-Krotzenburg, Germany)	Tauroctony	CW	Aries	
8	CIMRM 1137 (Rückingen, Germany)	Tauroctony	CW	Aries	
9	CIMRM 1052 (Friedberg, Germany)	?	CW	Aries	
10	CIMRM 635 (Rome)	Tauroctony?	CW	Aries	
11	CIMRM 1271 (Dieburg, Germany) ⁹	?	CW?	Aries?	
12	Mithraeum (Sa'ara, Syria)	Cult niche	CCW	Virgo	Arch on the vault

1 In Table 1 and 2 we indicate the objects with their classification in Vermaseren's catalog (VERMASEREN 1956, 1960), unless otherwise specified. In Table 3 and 4 we mostly refer to Gundel's catalog (GUNDEL 1992).

2 CW=clockwise; CCW=counterclockwise.

3 Unless otherwise indicated, all items are stone reliefs.

4 VERMASEREN 1974. See discussion in section 5.

5 VERMASEREN/VAN ESSEN 1965. See discussion in section 5.

6 VRKLJAN 2005, fn. 15.

7 See fn. 107.

8 Unless otherwise indicated, all items are reliefs.

9 See discussion in section 5.

Tab. 3. Non-Mithraic zodiacs (rings)

	Gundel catalog, findspot¹⁰	Scene¹¹	Direction	Vertical alignment	Notes¹²
1	44, Palmyra (Syria)	seven planets	CW	Cancer	several independent central figures
2	45, Palmyra (Syria)	?	CW	Aries	
3	47, Rome	empty	CW	Cancer-Leo	
4	48, Rome	empty	CW	Virgo-Libra	
5	49, Rome	empty (modern age replacement)	CCW	Pisces-Aries	
6	50, Khirbet-et-Tannûr (Jordan)	Tyche? Atargatis? Cybele?	Irregular	Aries-Libra	
7	51, Igel (Trier)	Apotheosis of Hercules	CCW	Virgo-Libra	
8	55, Bologna?	?	CCW	Sagittarius	
9	57, Rome	busts of a deceased couple	CCW	Aries-Taurus	Sarcophagus
10	58, Pisa	busts of a deceased couple	CCW	Aries-Taurus	Sarcophagus
11	59, Sassari (Italy)	bust of a deceased person	CCW	Aries-Taurus	Sarcophagus
12	60, Denizli (Caria)	busts of two persons (one with crescent, the other with wall crown)	CCW	Pisces-Aquarius	
13	61, Utica (Tunis)	?	CW	Cancer-Leo	
14	62, Cairo (Daressy marble)	Helios and Selene	CW	Aries	
15	63, Rome (Tavola Bianchini)	Great and Little Bear, Draco	CCW	Aries	
16	69, Rome	empty	CCW	Aries	
17	70, Hatra (Egypt)	Helios and Selene	CW, Irregular	Sagittarius	
18	74, Baitylos (Beirut)	Helios	CCW	Aries	
19	76, Argos	Selene?	CCW	Aries-Taurus	
20	78, Carthage	empty	CCW	Aries	
21	81, Odessa (Ukraine)	Sol	CW	Aries	Bronze
22	82, Grand (France)	Sol and Luna	CCW	Aries-Taurus	Ivory
23	84, Münster-Sarnsheim (Germany) ¹³	Sol with quadriga	CCW	Gemini-Cancer	Mosaic
24	85, Sparta	Helios and Selene	CCW	Scorpio	Mosaic
25	93, Ammaedara-Haidra (Tunis)	Aion?	CW	Aquarius?	Mosaic only three signs represented (Aries, Taurus, Gemini)
26	96, Pergamon	Artemis	CCW	Libra-Scorpio	Ceramic
27	96,1 Romula (Dacia)	Helios with quadriga	CCW	Aries	Ceramic
28	98, Rome or South Italy	Trajan?	CW	Aries	Ceramic
29	100,1 Patras (Greece) ¹⁴	Helios and Selene	CCW	Gemini-Cancer	Oil lamp
30	112, Egypt	Sun and Moon	CCW	Aries	Painted on sarcophagus
31	113, El-Salamûni (Egypt)	Isis-Sothis with a dog	CW	Aries-Taurus	Painted on a vault
32	114, El-Salamûni (Egypt)	Harpocrates	CW	Aries-Taurus	Painted on a vault
33	115, El-Salamûni (Egypt)	Harpocrates	CW	Aries	Painted on a vault
34	117, El-Salamûni (Egypt)	Isis-Sothis	CCW	Aries	Painted on a vault

Gundel catalog, findspot¹⁰	Scene¹¹	Direction	Vertical alignment	Notes¹²
35 118, El-Salamûni (Egypt)	Harpocrates	CCW	Aries	Painted on a vault
36 119, Dachla (Egypt)	Planets and Northern constellations	CW	Aries-Taurus	Painted on a vault
37 121, Dachla (Egypt)	Bust of man	CCW	Leo-Virgo	Painted on a vault
38 126, ?	Trajan?	CW	Aries	Coin
39 127, Nikaia (Bithinia)	Zeus	CCW	Aries	Coin
40 128, Alexandria (Egypt)	Sarapis/Zeus	CCW	Aries	Coin
41 131, Rome	Helios/Sol with quadriga	CCW	Pisces-Aries	Medal
42 132, Amastris (Paflagonia)	Zeus and Hera	CCW	Aries	Coin
43 133, Ptolemais (Phoenicia)	Temple	CCW	Aries	Coin
44 135, Tium (Pontus Euxino)	Zeus	CCW	Aries	Coin
45 136, Perinthos (Pontus Euxino)	Zeus	CW	Pisces-Aries	Medal
46 137, Cyzicos (Anatolia)	Zeus	CCW	Aries	Coin
47 139, Aigai (Cilicia)	Medusa	CCW	Aries	Coin
48 141, Izmit (Nikomedia)	Woman	CCW	Aries	Medal
49 142, Rome	Achilles' shield	CCW	Virgo	Gem
50 144, [London]	Serapis	Irregular	Aries	Gem
51 145, [London]	Zeus	?	Cancer? Capricorn?	Oval gem
52 147, [Munich]	Apollo	CCW	Pisces-Aries	Oval gem
53 150, ?	Asclepius	?	Aries	Oval gem
54 152, [London]	Helios	?	Virgo?	Gem
55 152,1 [Geneve]	Helios	CW	Gemini	Oval gem
56 156, [Florence]	Helios with quadriga	CW	Aries-Taurus	Gem
57 157, [Athen]	Helios	?	Aries	Oval gem
58 158, [Bern]	Helios	CW	Taurus	Gem, 11 signs
59 159,1 Aquileia	Helios	?	Aries	Gem
60 160, Malta	Helios and Selene	CW	Pisces-Aries	Gem
61 160,1 [Nijmegen]	Woman head with Moon	?	Aries	Gem
62 161, [Paris]	Medusa	CCW	Virgo-Libra	Gem
63 162, [Paris?]	Victory	CCW	Aries-Taurus	Gem
64 163, [Florence]	Pan	?	Aries	Gem
65 164, [Paris]	Pan	?	Aries	Gem
66 165, [Florence]	Pan	?	Libra	Gem
67 167, [Munich]	Serapis	CCW	Aries-Taurus	Gem
68 170, [Paris]	Zeus, Hermes, Aphrodite	CCW	Sagittarius Capricorn	Gem
69 172, [Karlsruhe]	Knight on a bird	CCW	Aries	Gem
70 172,1 [Munich]	Palmtree	?	Aries	Gem
71 Hachlili (2009) plate III, 12.a, Astypalea (Greece)	Helios	CCW	Pisces-Aries	Mosaic
72 417, Vat. gr. 1291, Rome	Helios	CCW	Aries-Taurus	Codex

Tab. 4. Non-Mithraic zodiacs (synagogues)

	Gundel catalog, findspot	Scene	Direction	Vertical alignment	Notes
1	91, Hammat Tiberias	Helios	CCW	Pisces-Aries	
2	–, Sepphoris	Helios	CCW	Sagittarius-Capricorn	Discovered in 1993, not in Gundel
3	87, Beth Alpha	Helios	CCW	Cancer	
4	88, Na'aran	Helios	CW	Aquarius	
5	89, Huseifa/Isfiya	?	CW	Aries?	
6	90, Khirbet-Susiya	?	?	?	
7	92, Yaphia (Nazareth)	?	?	Aries?	Only one sign visible

10 If the findspot is unknown, the present location is given in square brackets.

11 As identified in Gundel's catalog.

12 Unless otherwise indicated, all items are reliefs.

13 See discussion in section 5.

14 See discussion in section 5.

REFERENCES

ALVAR 2008

Alvar, J., *Romanising Oriental Gods*, transl. R. Gordon (Leiden: E. J. Brill).

BARTON 1995

Barton, T., Augustus and Capricorn: Astrological Polyvalency and Imperial Rhetoric, *The Journal of Roman Studies*, 85, 33-51.

BECK 1976

Beck, R., Interpreting the Ponza zodiac, I, *Journal of Mithraic Studies* 1: 1-19.

BECK 1978

Beck, R., Interpreting the Ponza zodiac, II, *Journal of Mithraic Studies* 2: 87-147.

BECK 1984

Beck, R., Mithraism since Franz Cumont. In *Aufstieg und Niedergang der römischen Welt*, II.17.4, 1984, 2002-2115.

BECK 1994

Beck, R., In the Place of the Lion: Mithras in the Tauroctony. In Hinnells J.R. (ed.), *Studies in Mithraism*, (Rome: Breitschneider).

BECK 1996

Beck, R., The Mysteries of Mithras. In Kloppenborg, J. S. and Wilson, S. G. (eds.), *Voluntary Associations in the Graeco-Roman World*, 176-185, (London: Routledge).

BECK 1998

Beck, R., "Qui Mortalitatibus Causa Convenerunt": The Meeting of the Virunum Mithraists on June 26, A. D. 184, *Phoenix*, 52, 3/4, 335-344.

BECK 2007

Beck, R., *The Religion of the Mithras Cult in the Roman Empire. Mysteries of the Unconquered Sun* (Oxford: OUP).

BJØRNEBYE 2007

Bjørnebye, J., "Hic locus est felix, sanctus, piusque benignus" *The cult of Mithras in fourth century Rome* (PhD dissertation University of Bergen, Norway).

BLOMART 1994

Blomart, A., MITHRA ET PORPHYRE: Quand sculpture et philosophie se rejoignent, *Revue de l'histoire des religions*, Vol. 211, No. 4, 419-441.

BULL 1982

Bull, R. J., Caesarea Maritima: The Search of Herod's City, *Biblical Archaeology Review*, 8:3, 24-40.

BURKERT 1987

Burkert, W., *Ancient Mystery Cults*. (Cambridge-London:

Harvard University Press).

CHALUPA 2010

Chalupa, A., *Mithraism in Ancient Syria: Persian Cult on the Borders of the Roman Empire*, *Anodos*, vol. 10, 57-66.

CLAUSS 2001

Clauss, M., *The Roman cult of Mithras*, transl. R. Gordon (New York: Routledge).

EDCS

Epigraphische Datenbank Clauss-Slaby
www.manfredclauss.de.

EDH

Epigraphic Database Heidelberg,
edh-www.adw.uni-heidelberg.de.

FERRUA 1940

Ferrua, A., *BCom.*, LXVIII, 59.

GAWLIKOWSKI et alii 2011

Gawlikowski, M. / Jakubiak K. / Małkowski W. / Sołtysiak A., A Ray of Light for Mithras. In Lippolis, C., and de Martino, S. (eds.) *Un impaziente desiderio di scorrere il mondo, Studi in onore di Antonio Invernizzi per il suo settantesimo compleanno* (Firenze: Le Lettere), 169-175.

GNOLI 2016

Gnoli, T., The Mithraeum of Dura-Europos: New Perspective. In Kaizer, T. (ed.), *Religion, Society and Culture at Dura-Europos* (Cambridge: Cambridge University Press), 126-143.

GORDON, R. 1976

Gordon, R., The Sacred Geography of a Mithraeum: the Example of the Sette Sfere, *Journal of Mithraic Studies*, 1.2, 119-165.

GORDON 2016

Gordon, R., "Den Jungstier auf den Goldenen schültern tragen": Mythos, Ritual, und Jenseitsvorstellungen im Mithraskult. In Waldner, K., Gordon, R. and Spickermann, W. (eds.), *Burial Rituals, Ideas of Afterlife, and the Individual in the Hellenistic World and the Roman Empire*, (Stuttgart: Franz Steiner Verlag) 207-240.

GORDON 2017

Gordon, R., From East to West: Staging Religious Experience in the Mithraic Temple. In Nagel, S., Quack, J. F., and Witschel, C., (eds.), *Entangled Worlds: Religious Confluences between East and West in the Roman Empire* (Tübingen: Mohr Siedeck).

GUDELJ 2006

- Gudelj, L., *Od svetišta Mitre do crkve Sv. Mihovila* (Split: Muzej Hrvatskih Arheoloških Spomenika Split).
- GUNDEL 1992
Gundel, H. G., *Zodiakos. Tierbilder im Altertum* (Mainz am Rhein: Verlag Philipp von Zabern).
- HENSEN 2017
Hensen, A., *Templa et spelaea Mithrae*. Unity and Diversity in the Topography, Architecture and Design of Sanctuaries in the Cult of Mithras. In Nagel, S., Quack, J. F., and Witschel, C., (eds.), *Entangled Worlds: Religious Confluences between East and West in the Roman Empire* (Tübingen: Mohr Siebeck).
- HACHLILI 2009
Hachlili, R., *Ancient Mosaic Pavements, Themes, Issues and Trends, Selected Studies* (Leiden: E. J. Brill).
- HOFFMANN 1963
Hoffmann, H., Helios, *Journal of the American Research Center in Egypt*, 2, 117.
- HULD-ZETSCHKE 2001
Huld-Zetsche, I., Der Mithraskult in römischen Germanien. In Spickermann, W., Cancik, H., and Rüpke, J., (eds.), *Religion in den germanischen Provinzen Roms* (Tübingen: Mohr Siebeck).
- KARAMANOLIS 2016
Karamanolis, G., Numenius, *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Zalta, E. N. (ed.), plato.stanford.edu/archives/win2016/entries/numenius/. Accessed 5 December 2017.
- LUPA
F. and O. Harl, *Ubi Erat Lupa*, picture database of antique stone monuments, www.ubi-erat-lupa.org.
- MANDELBAUM 2016
Mandelbaum, L., *The Axis of Mithras* (North Charleston: CreateSpace.com and Harran House).
- MASTROCINQUE 2009
Mastrocinque, A., *Des Mystères de Mithra aux Mystères de Jésus*, Potsdamer Altertumswissenschaftliche Beiträge, 26 (Stuttgart: Franz Steiner Verlag).
- MARTENS 2004
Martens, M., The ritual deposits of the temple of Mithras at Tienen, *Journal of Roman Archaeology*, 17, 333.
- MERKELBACH 1994
Merkelbach, R. *Mithras* (Weinheim: Beltz Athaeneum).
- NOCK 1964
Nock, A. D., *Early Gentile Christianity and its Hellenistic Background* (New York: Harper Torchbooks).
- PAINTER 1994
Painter, R. J., *Mithraism and the Religious Context at Caesarea Maritima* (PhD Thesis, University of Michigan).
- PAINTER 2000
Painter, R. J., Caesarea Maritima as starting point for Mithraism. In Donaldson, T. L. (ed.), *Religious Rivalries and the Struggle for Success in Caesarea Maritima* (Wilfrid Laurier University Press).
- PANCIERA 1979
Panciera, S., Il materiale epigrafico dallo scavo del mitreo di S. Stefano Rotondo. In Bianchi, U. (ed.), *Mysteria Mithrae, Proceedings of the International Seminar on the 'Religio-Historical Character of Roman Mithraism, with Particular Reference to Roman and Ostian Sources'. Rome and Ostia 28-31 March 1978*, EPRO 80 (Leiden: E. J. Brill) 87-126.
- PATRICH 2011
Patrich, J. *Studies in the Archeology and History of Caesarea Maritima* (Leiden: E. J. Brill).
- SIMMONS 2015
Simmons, M.B., *Universal Salvation in Late Antiquity: Porphyry of Tyre and the Pagan-Christian Debate* (Oxford: Oxford University Press).
- SFAMENI-GASPARRO 1979
Sfameni-Gasparro, G. Riflessioni ulteriori su Mithra "dio mistico". In Bianchi, U. (ed.), *Mysteria Mithrae, Proceedings of the International Seminar on the 'Religio-Historical Character of Roman Mithraism, with Particular Reference to Roman and Ostian Sources'. Rome and Ostia 28-31 March 1978*, EPRO 80 (Leiden: E. J. Brill) 397-408.
- SMITH 1990
Smith, J. Z., *Drudgery Divine: On the Comparison of Early Christianity and the Religions of Late Antiquity* (Chicago: University of Chicago Press).
- SPEIDEL 1980
Speidel, M. P., *Mithras-Orion: Greek Hero and Roman Army God*, EPRO 81, (Leiden: E. J. Brill).
- SWERDLOW 1991
Swerdlow, N. M., Review Article: On the Cosmical Mysteries of Mithras, *Classical Philology*, 86, 48-63.
- TURCAN 1975
Turcan, R., *Mithras Platonius*, EPRO 47 (Leiden: E. J. Brill).
- TURCAN 1993
Turcan, R., *Mithra et le Mithracisme* (Paris: Les Belles Lettres).
- ULANSEY 1991
Ulansey, D. *The Origins of the Mithraic Mysteries: Cosmology and Salvation in the Ancient World* (Oxford: Oxford University Press).
- VERMASEREN 1956 AND 1960
Vermaseren, M.J., *Corpus Inscriptionum et Monumentorum Religionis Mithriacae* (The Hague: Martinus Nijhoff).
- VERMASEREN 1974
Vermaseren, M.J., *Mithriaca II. The Mithraeum at Ponza* (Leiden: E. J. Brill).
- VERMASEREN/VAN ESSEN 1965
Vermaseren, M.J. / Van Essen, C.C., *The excavations in the Mithraeum of the church of Santa Prisca in Rome* (Leiden: E.J. Brill).
- VRKLJAN 2005
Vrkljan, G. L., Some examples of local production of Mithraic reliefs from Roman Dalmatia. In Sanader, M., Miočević, A. R., (eds.), *The Proceedings of the 8th International Colloquium on Problems of Roman Provincial Art*, (Zagreb: Tehnička knjiga).
- WADESON 2008
Wadson, L., Chariots of Fire: Elijah and the Zodiac in synagogue floor mosaics of late antique Palestine, *ARAM* 20, 1.
- WHITE 2012
White, L. M., The Changing Face of Mithraism at Ostia. In Balch, D. L. and Weissenrieder, A. (eds.), *Contested Spaces* (Tübingen: Mohr Siebeck).