Social Mobility: Mithraism and Cosmography in the 2nd-5th Centuries CE

Abstract
Pragmatic cognitive science, rooted in Dewey’s epistemology and models of distributed cognition, offers new hypotheses for the emergence and decline of the Mithraic rites. These models foreground the responsiveness of the rites to their economic and social environment, generating new form-meaning pairs through multimodal engagements inside the Mithraic caves. These moments of cognitive blending answered the needs of the early social catchment of the rites, which was predominantly freedmen and soldiers benefitting from the upward mobility of the thriving second century CE. Within the caves, multimodal engagements with the triumph of light over dark – physical movement, imagery, gesture, role playing, and interaction with cult equipment – aligned the experience of the initiate with Mithras’ cosmological triumph. The caves are also a confluence of mechanisms for social mobility that were broadly familiar in the imperial period, including patronage, symposia, engagement with exotic cultural forms and philosophical speculation. The decline of the rites was coincident with the dissolution of the economic opportunities that enabled the rise of the Roman middle class and of the social currency of these practices. The language of euergetism yielded to the language of service to the poor, and the cosmological imagery that characterized the caves shifted into the restricted spheres of exchange among competing princes. This model of the rites suggests dynamics with Christianity focused less on theology than on responsiveness to the economic and social transformations of the fourth and fifth centuries CE.

Introduction: Mithras between cognition and historiography
The mysteries of Mithras – apprehended through images and cult spaces, broadly spread but chronologically restricted – offer a productive case study for the exploration of multimodal ritual experience and historical change. Mithras rises in an empire with rich literary traditions, but itself has no texts to compare to Apuleius’ novel of Isis, Livy’s account of Cybele, the senatus consultum against Bacchus, or the Greek hymnic traditions for Eleusis.¹ The narratives of Mithras’ life, the experiences of initiates, and the promises of the ritual come to us in visual, embodied, non-verbal form, set in intimate ritual spaces which blend the markers of subterranean and celestial realms.² These data have proven a significant draw for cognitive

¹ Apuleius, Golden Ass; Livy 29.10-14; Homeric Hymn to Demeter; Vermaseren 1956, 1980; Meyer 1999, 197-222. Beck 1984b, 2049-2057; Vollkommer 1992. http://www.tertullian.org/rpearse/mithras/literary_sources.htm provides a list of Greek and Latin texts referring to Mithras, in English translation.
² Dirven and McCarty 2014; Adrych et al. 2017.
approaches, pioneered by Martin and most recently pursued by Beck and Panagiotidou. These have tended to a representationalist tradition, focused on unpacking the images which constitute the internal Cartesian theater of Mithraea. This focus has seemed to offer distance from some problematic issues in Mithraic studies. Primary among these is the potential distortion of an etic lens: Beck and Panagiotidou argue that the absence of significant evolution of the human brain in the last 2000 years means that the subjective, phenomenological responses of contemporary scholars to the rites maps with precision onto the ancient experience. Similar in spirit is the approach to cross-cultural comparanda – Martin points to rituals in New Guinea, Beck to the Chamula in Mexico, as parallels and so confirmations of the proposed reading of the rites. The comparanda are cited for their apparent identicality with ancient Mithraic evidence; missing is the anthropological tradition that pushes further to uncover distinctions in use, which cast light on both the parallel phenomena and the cultural contexts. And Clauss has noted that the embrace of experience re-directs scholarship away from the notoriously complex intellectual and philosophical exegesis of the rites’ complex symbolism. These approaches model apprehension in a Mithraeum as a matter of experience, not allegory and explanation.

Pragmatic traditions within cognitive sciences, in contrast, foreground the enculturated as well as the embodied functions of the human mind. These approaches are rooted in Dewey’s epistemology, particularly his emphasis on environmental and cultural disruptions as generators of new meanings. Those interpretations that yield effective courses of action themselves become new cultural forms which spread, per Hutchins’ model of distributed cognition, into the environment through social and technological pathways. While the emergence of new meaning-making machinery is linked to cultural disruptions, the storage of long established categories and pathways remain central to its cognitive ecosystems. These categories include the physical experiences of sight and sound, cultural traditions of image, performance and commensality, and narrative forms of myth, allegory and history reimagined. Each of these modalities may enable cognitive blending, the emergence of new form-meaning pairs which connect the symbolic array with the cultural context which determined their structure, and onto which, if they prove successful, they will be mapped.

This focus on context, emergence and adaptivity recommends pragmatic cognitive science frameworks for a perennial question in Mithraic studies: the emergence and decline of the

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1 Whitehouse and Martin 2004; Martin and Pachis 2009; Martin 2005; Martin 2015; Beck 2006, 88-99; Panagiotidou 2017.
2 Martin 2015, 31; Beck 2006, 88-99.
3 Teehan 2016. Embodiment figures in numerous theoretical debates within Classics and archaeology as well as cognitive science. Within ancient studies, the term includes an approach to the body as a flexible, complex icon and metaphor, capable of articulating social relations and practices, political, gendered and religious notions, relevant to questions of materiality and agency (Shanks 1995, Lesure 2005; Crossland 2010). These conversations overlap with questions central to environmental approaches to cognition, which recognize the role of sensory and motor functions in the origin of concepts, and the hypothesis that mental activities are bodily based (Chemero 2013, Foglia and Wilson 2013). The data for the celebration of Mithras foreground the generation of concepts in the body of the celebrant who dines, lights images, acts out sequences and may challenge the definitional outlines of his own body by taking on identities such as raven, lion, or male bride; the complex convergence of image and icon recommends that portion of embodiment that recognizes the reshaping and reenacting of knowledge representations and experiences in the brain.
4 Norenzayan et al. 2016.
5 Hutchins 2014; Hoffman 2017.
Mithraism has a far more limited chronological reach than the other great mysteries of the Mediterranean. It arises with force only in the 2nd c CE, some 800 years after the first evidence from Eleusis and Samothrace, and in the world dominated by imperial Rome; it comes to an end in the 5th century CE. Mithraic studies have turned away from the longstanding traditions that sought the answers to these questions outside Roman contexts, with origins in Persia and endings in the encounter with Christianity. The Roman context of Mithras, however, is far from straightforward. Mithraea are varied in nature and widely scattered, reaching from the army camps of Germany, Dacia and Britain to the urban port of Ostia and the wealthy families of Rome. There is significant methodological distance between the culture historical frameworks used for publishing individual Mithraea – an activity which remains foundational in the discipline – and the quantitative analyses brought to economic and social trends. Increasingly, however, studies of Mithras have addressed and confirmed the responsiveness of the cult’s structure and imagery to the communities in which they were embedded. Bjørnebye and Gordon note the flexibility of the language of symbols, the conformist, non-subversive nature of the communities, and the extent to which the rites reproduced the central Roman social institutions of familia and patronage; McCarty, Griffith and Walsh emphasize the connection between the rites and the economic and social networks that bound the world together. These recommend a pragmatic cognitive framework for the rise and fall of the rites, a prospect with both methodological and historical contributions. First among these is the connection forged between cognitive science approaches and historical studies, foregrounding and expanding the capacity for metaphor formation between the initiate’s spiritual hopes and economic realities. Cognitive approaches to date may be conceptualized as operating at a micro-scale, within the cognitive machinery of the individual initiate; Walsh et al demonstrate the capacity to expand this to the world of a specific family, firm or professional network. Dewey’s pragmatics encourage us to press these boundaries to the macro-economic frameworks within which Mithraism emerged and declined. This yields a fresh hypothesis for the rites: among the questions to which Mithras may have been an answer was the social mobility of the high imperial period. The early social catchment of Mithras is predominantly freedmen and soldiers. Their rise created a challenge to the social fabric, a need to resolve the gap between the elites born to high status and those who rose purely on the basis of financial success. Clauss has suggested that the richer, more elaborate dedications to the god appeared as these individuals ascended the social ranks and thanked the god who enabled their rise. A focus on blended cognition offers the second contribution of this study, suggesting that the cult caves offered multimodal engagement with cosmic symbols and narratives that mapped onto the rising fortunes of these members, in narratives of elevation and transformation. These provided a framework for metaphor formation between Mithras and his

8 Chalupa 2016; Gordon 1994; Gordon 2017.
9 Walsh 2016; Walsh 2018.
10 Beard, North and Price 1998a, 279; Alvar Ezquerra 2008; Bjørnebye 2007.
11 McCarty et al. 2017; Adrych et al. 2017.
12 Garnsey and Saller 2015, 71-91.
13 Bjørnebye 2007; Gordon 1972; Walsh 2018, 95. For the subversive potential of mysteries, see Gruen 1990.
14 Turner and Fauconnier 2008; Hoffman 2017; Teehan 2016.
15 On Mithraism’s social profile see Clauss 1992; Liebeschuetz 1994; Merkelbach 1984, 153-188.
16 Clauss 2001, 22-23; Gordon 1972, 98.
followers that exceeds the conventional analogies drawn between worshipper and god, as individual social and professional trajectories could be assimilated to cosmic patterns. The referent, in this metaphor formation, is less occupation specific than the important contributions of McCarty, Griffith and Walsh, directed instead at the macro-economic and sociological trends of the high imperial period. This leads to the third outcome of the investigation: an engagement in meso-scale phenomena, the Roman cultural institutions of patronage, symposia, philosophical and mythopoeic exegesis that enabled socio-economic mobility during the Mithraic floruit. These institutions intersect in both modality and function with Mithraism; their change and decline in the fourth and fifth centuries provides a framework for the decline in the cult in the same period, and in response to the same social pressures. A pragmatically grounded cognitive framework thus yields a fresh historical hypothesis for the history of the rites, and a more carefully articulated relationship between micro, meso and macro scale analyses.

We begin with a consideration of the cult spaces as blended cognitive experiences, foregrounding the multiple modalities in which key metaphors could be experienced; we then turn to the challenges of prosperity to which the rites, in the second century, could respond. The fourth and fifth century CE evidence for reduced standards of economic well-being correlates to a diminished presence for the Mithraic rites; it is also coincident with a shift in the uses of cosmography, as the iconsphere moves from the ubiquitous to the restricted spheres of exchange among competing princes, coterminal with the end of the economic mobility that relied on the civic and social structures of Rome.

A Multimodal Cosmos: blended cognition and Mithraic caves

The cult sites of Mithras blended the starry sky with chthonic vaults and an intimate group of individuals whose status outside the rites would have been known to all present.\(^\text{17}\) That the settings – either natural or constructed – were to be understood as caves is affirmed through terminology, form and iconography. The term *spelaeum* was used in Rome, though *templum* is more common in the provinces; only rarely are Mithraea in actual natural caves.\(^\text{18}\) Preserved Mithraea suggest the material aptness of the cave concept, as the cult space is consistently formed by a long vaulted area, an architectural approximation of the geologically shaped space; many ceilings were worked to look like rough stone.\(^\text{19}\) Full size and votive tauroctonies emphasize the identification by borders worked to look like rough stone (Fig. 1: *CIMRM* 736). With few exceptions, the caves rarely exceeded 10 x 17 m in size, capable of holding congregations of some 20 individuals; the exceptions include the Baths of Caracalla and Carnuntum III which are about twice as large and able to accommodate 40 maximum.\(^\text{20}\) Beck notes that, particularly when placed within buildings, the spaces were an inside without an outside, space ships that themselves constituted the universe, microcosms for the macro-

\(^{\text{17}}\) Griffith 2010; Bjørnbye 2007, 13.

\(^{\text{18}}\) Campbell 1968, 6-11; Beck 1984; Gawlikowski 2007; Schütte-Maischatz and Winter 2001; Gawlikowski 2007; Clauss 2001, 42.

\(^{\text{19}}\) Bjørnbye 2007, 16; Clauss 2001, 51.

\(^{\text{20}}\) *CIMRM* 457, Baths of Caracalla; *CIMRM* 1682, Carnuntum III; Griffith 2010, 69 and n. 13.
The dome of the sky is brought into the cave through multiple mechanisms: at Santa Prisca, the ceiling was painted blue and adorned with painted stars; the Mithraea at Caesarea, Carrawburgh, Arupium and Bourg-Saint-Andéol may have been constructed to allow penetration by shafts of sunlight or starlight at particular seasons. The starry sky may also be condensed onto the cloak of Mithras himself: the garments of Mithras are full of tiny brilliant stars in the Marino Mithraeum, seven of which, particularly large, may evoke planets. In a relief at Neuenheim, Mithras’ mantle takes the form of a circular globe, in which two folds mark the annual course of the zodiac. And on the tauroctony of the Barberini Mithraeum, the globe-like mantle of the god bears seven large stars, while additional large stars with short rays are painted behind the god (Fig. 2, CIMRM 389). The seven planets may be evoked in the form of seven burning altars, as on a marble relief from the Esquiline (CIMRM 368), a tauroctony from Dura Europos (CIMRM 40-41), and a relief from Ladenburg (CIMRM 1275). Alternatively, they may appear as busts of planetary gods, as on a bronze plaque from Brigetio in Pannonia Superior (Fig. 3, CIMRM 1727) or a relief from Bologna (Fig. 4, CIMRM 693). A subterranean sky may resonate, on the one hand, with Stoic models of the natural world in which winds have origins beneath the earth, or reflect a willing suspension of disbelief, a role for ludic representation and enactments whose meaning reaches beyond the literal. Multiple mythic caves may be invoked: the cave of Mithras’ birth in Persia, Plato’s mythic cave where the alternative world may be seen, the cave where Odysseus hid his stash in that liminal time between his arrival and his first encounter with the Ithakans, as well as the cosmos imagined in Porphyry’s Neoplatonic tones. The plurality of possibilities indexes the mythopoiesis attendant upon these settings, and the ease with which the cosmic and terrestrial may be blended within them.

Within these spaces, visitors experienced the regular alternation between light and dark in multiple modalities that foreground that cycle as a contest. The dominating image is the tauroctony in which Mithras, representing the sun, conquers the bull who embodies the moon. The visitors’ access and interaction with this three dimensional image reflects a particular intimacy between worshipper and god. Romans did have tactile interaction with cult statues in calendrical rituals and special celebrations in which the statues were bathed or led in procession. The interaction afforded by the quintessential acts of Roman religion – sacrifices and feasts – is more difficult to judge. The position of cult statues deep inside the temples distanced these divine embodiments from their followers, and even the lectisternia need not have included a physical carrying of the statues onto the couches set out for them. Mithra-

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21 Beck 1992, 6-7.
22 Beck 1984, 364-366.
23 Vermaseren 1982.
24 Clauss 2001, 84-85, 159; see CIMRM 368, CIMRM 40, 1275, 1818, 2245; CIMRM 1727; CIMRM 693).
25 Esquiline, CIMRM 368; Dura Europos, CIMRM 40-41; Ladenburg, CIMRM 1275; for a thorough list of seven altars, see Gasparro 1979, 364 n. 56.
26 Beck 1987b.
27 Williams 2012, 213-258; Clauss 2001, 65.
28 Beck 1987, 301-302; Beard North and Price 1998a, 285; 1998b, 313-316; Porphyry De Antro Nympharum 5-6, 9-10.
29 Perry 2015; Weddle 2010: Stewart 2003, 261-300; Mylonopoulos 2010; Estienne 2010; Squire and Platt 2017. Elsner 1996. For the mystical force of statues in the second sophistic, see Artemidoros of Daldis, Oneirocritica 2.35, 2.39; Achilles Tatius Leucippe and Clitophon 5.4; Clerc 1915, 63-82.
ists themselves, however, reclined to feast in the presence of their god every time they came to their cave. The duration of the feast meant a lingering physical closeness, while the size of the cave brought the celebrants into close proximity with their divine patron; it also ruled out colossal representations, so that celebrant and god shared a generally human scale.

This intimacy with the divine image was paired with multiple modalities – physical movement, imagery, gesture, role playing, and interaction with cult equipment – through which the visitor experienced the triumph of light over dark. The visitor himself, upon entering the cave, walked from darkness toward light: entrances are at a blank, dark wall opposite the cult statue of the god, so that movement into the room draws the visitor toward the narrative of the sun’s triumph. That light-dark, solar-lunar imagery repeats in anthropomorphic representations of sun and moon in the spandrels above the tauroctony; the solar bust is usually to the left, male with a radiate crown, and the lunar bust, female with crescent, to the right (Fig. 5, CIMRM 641). The torchbearers Cautes and Cautopates frame the tauroctony as embodied symbols of the sun’s rising and setting with one torch up, the other down. (see Fig. 1) Cumont was the first to identify the pair as hypostases of Mithras; they wear Persian-type caps and tunics, and their heraldic position may derive from figurative conventions of two attendants on a major god. Together with him they represent its rising, high point and setting, a notion confirmed by the inscription of a pair of altars by T. Martialis Candidus in Germania Superior, to D(eo) Oc(cidenti) and D(eo) O(rienti). Torches are entirely familiar accoutrement within the mystery religions, but the heraldically positioned gestures are distinctive to Mithras, and suggest the potential for human actors, equipped with torches, to act out the cosmic alternation between light and dark. That potential intimacy between Cautes and Cautopates and the initiates is suggested at Jajce in Dalmatia (Bosnia), where celebrants could literally give the gods their light: small triangular niches for lamps were cut into the rock above the torch bearers’ heads to give the effect of a star over their caps (Fig. 6, CIMRM 1902). Their appearance as paired opposites seems central to their meaning, and if they represent the potential for human gestures that encapsulate cosmic patterns, those patterns could extend beyond the rising and setting of the sun. Beck has identified referents for that principle of opposition across a range of celestial and natural phenomena, including the arrival of autumn and spring, heat and cold, growth and decay, sprouting and harvest, the summer and winter solstices, the spring and fall equinoxes, and ascending and descending nodes, where the moon’s path intersects that of the sun, as well as the cardinal directions east and west.

The play between light and dark was diffused throughout the caves in multiple other modalities, involving the lighting of lamps and ritual apparatus. These represented further opportunities for the initiates or cult leaders to embody, within the constructed cosmos of the cave, the agentive force that brought light into the world. A lamp on a cult image from Fellbach in

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30 Beard North and Price 1998a, 285.
31 Campbell 1968, 101, 134-139.
32 Beck 1984b, 2084; Cumont 1894-96, I, 203-208; The term ‘triformed Mithras’, which appears in pseudo-Dionysius refers to the Aereopagite (Epist. 7), seems a titular reference to the intimacy of this relationship Gershevitch 1959, 70-71; Clauss 2000, 96.
33 CIL XIII 11791a, b = CIMRM 1214-15, Clauss 2001, 95-97.
34 Clauss 2001, 95 and fig 45; CIMRM 1902.
35 Beck 1982, 126; Beck 1994, 33.
upper Germany suggests the use of a hand-held light to illuminate the Mithraic scene (Fig. 7, CIMRM 1306); sequential disclosure of the scenes from the life of Mithras is suggested by evidence that individuals scenes were hidden behind curtains to be revealed and illuminated one at a time, possibly accompanied by the ringing of small bells.  

Monuments that could be illuminated from within appear frequently in Mithraic contexts, including altars with radiate crowns and crescent moons and lion-headed statues which emitted light (Fig. 8, CIMRM 847). Conical rocks encircled by snakes could also be lit from within, so that flames could shine and possibly reach out of the rock, offering analogy to Mithras’ emergence from the rock with torch held high at his birth. An encounter with a brilliant light as a culminating moment in the rites is suggested in an inscription in a cult niche in the Mithraeum under the Santa Prisca in Rome: “born at the first light when the Emperors (Septimius) Severus and Antonius (Caracalla) were consuls.” Clauss notes, in addition, the potential for blending between the dedicator and the images of the god as he is born from the rock with a torch in his hand. The role for a burst of light at the culminating moment of initiation is suggested as well in other mysteries. A great flash of light, accompanied by the ringing of a gong, marked the culminating appearance of Kore in the Eleusinian mysteries, and a hierophant’s epigram of ca. 200 CE describes how initiates saw him “stepping forward from the anaktoron into the shining lights.” Apuleius’ Isiac initiate Lucius describes his vision of the sun, flashing with brilliant light, at the revelation of the goddess (Apuleius Met. 11.23); an epitaph from Kavala declares that the interred, the actor Isidorus (2nd-1st c BC), saw “the doubly sacred light of Kabiros in Samothrace / and the pure rites of Demeter in Eleusis.” Distinct to Mithras is the darkness and small size of the cave, in which that bringing of light, expressed through a range of enacted, observed, metaphoric and narratological modalities, was accessible at a more intimate and repeatable level within a social group drawn from the daily social life of the world outside the cave.

The contrast between light and dark was not a static portrait of paired opposites. It was set against patterns of constant motion at a cosmic level: the predictable rise and fall of the sun, articulated by Cautes and Cautopates, the regular movement of the constellations, reflected in zodiacs as well as the evocation of the constellations Scorpio, Taurus and Canis Major in the

36 Clauss 2001, 120-127, especially 122.
37 Clauss 2001, 127.
38 This has been dated to the 20th of November, 202 CE: Clauss 2001, 64.
39 Lactantius describes ‘brandishing of torches’, Div. inst. epit. 18 (23), 7: et ea (Proserpina) inventa ritus omnis gratulatione ac taedarum iactatione finitur.Gong, Apollodorus FGrH 244 F 110b; Bremmer 2011, 384.
40 IG II/III2 3811.1-2 = I. Eleusis 637.1-2; IG II/III2 3709.10 = I. Eleusis 659.10; Philostratus, Vit. sophist. 587. Bremmer 2011, 387; Seaford 2005.
41 Μύστης μὲν Σαμόθρᾳ Καβίρου διὰ ἑρῶν φῶς, ἀγνὺ δ’ Ἑλευσίνως Δημηνίος μεγάθυνος [μόε] γιος.
As an initiate, great-hearted
He saw the doubly sacred light
Of Kabiros in Samothrace
And the pure rites of Demeter in Eleusis
Dimitrova 2008, 83-90; Karadima and Dimitrova 2003.
tauroctony itself, and the predictable impact of the cardinal winds. The latter may be included in the cult relief and in votives themselves: they may be seen at the four corners of the cult relief from Heddernheim (Fig. 9, CIMRM 1083). Among the most dramatic indices of movement are depictions of sun and moon in chariots. Marble reliefs from London, Virinum and Rome show Sol driving a quadriga to heaven, pulled by its horses. The London and Roman reliefs include Luna driving a biga downward, pulled by oxen; Sol’s cloak streams behind him in the wind generated by his speed (Rome, CIMRM 415, Fig. 10; Virinum, Fig. 11). Ascent rather than regular rotation is suggested in the Mithras liturgy in which the initiate, having summoned Sol Mithras, takes wing like an eagle, leaving earth behind as he ascends to the planetary spheres to become a soul star. Iconographic evidence for this notion comes from the ladder-like mosaic that runs down the center of the mithraeum of Felicissimus in Ostia Antica, dated to the 3rd century CE (Fig. 12, CIMRM 299). The mosaic consists of icons for the grades of the rites as Porphyry identifies them - Raven, Male Bride, Soldier, Lion, Persian, Sun-runner, culminating in the Father. They are laid out in ascending order, beginning at the entrance and concluding with Felicissimus’ declaration of the fulfilment of his vow, directly in front of the space for the tauroctony. A cult vessel from Mainz may offer further evidence that this upward ascent was physically acted out in the course of some celebrations. The vessel depicts two cult members playing the roles of Cautes and Cautopates, holding rods rather than torches. They attend a cult member who carries a whip, appropriate for driving the horses who pull a chariot: he is plausibly identified as Heliodromos. Beck has proposed that the group suggests a ritual procession that enacted the cosmology of the rites, in which the sun runner moves along the “pathway of the sun”, conceptualized as its annual journey around the ecliptic. This trek defines and generates the seasons of the earth: the ritual actor marches out, in his performance, the calendrical sequences of the year. Further evidence of role playing comes in the form of masks: a cult relief from Konjic shows individuals wearing a raven’s mask, a Phygian cap, and a lion’s mask (Fig. 14, CIMRM 641). Enactment as well as observation seem to have been one potential modality, within Mithraic spaces, for opening a pathway between human participants and celestial bodies.

The Mithraists who were climbing the social and economic ladder could blend their rise with that of Mithras, who himself merges with Sol through visual as well as verbal modalities. Iconographic evidence includes rays of light that connect the upturned face of Mithras to the sun over his shoulder; Mithras’ radiate crown; and the single torch which Mithras may

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42 Henig 2004, 232.
43 See also altar from Carnuntum, CIMRM 1685; Clauss 2001, 59-60; CIMRM 810, Clauss 2001, 88; votive from Nida/Heddernheim, Mithraeum III, CIMRM 1127, Clauss 2001, 65; relief from Alzbachtal, Augusta Treverorum/Trier, CIMRM 985, Clauss 2001, 68; a cult relief from Walbrook, CIMRM 1472, Clauss 2001, 89.
44 London, CIMRM 810, fig. 54; Rome, CIMRM 415-16; Clauss 2001, 84, 88-8.
45 Clauss 2001, 106, 120-130 PGM IV 475-829, specifically line 574-5, “I am a star”.
46 Chalupa and Glomb 2013.
47 Gordon 2001, 248-251; Edmonds 2000; Beard, North and Price 1998a 285; Gordon 1980, 48-54; Beck 1984b, 2056-63; Beck 1987a, 306-307; Beck 1992, 8 and n. 22; Chalupa 2008.
48 Beck 2000, Rebillard 2015, 231; Huld-Zetsche 2008; Alvar Ezquerra 2008, 347-348; Spickermann 2006, 184.
49 CIMRM 1896.3; Ulbert, Wulfmeier and Huld-Zetsche 2004: Eros and Senyurt 2011; for caveats, Dirven 2015; Chalupa 2008.
50 Clauss 2991, 113; Gordon 2001, 251.
hold at his emergence from the rock.\textsuperscript{51} Epigraphic evidence is abundant: over one hundred votive inscriptions from the 2\textsuperscript{nd}-4\textsuperscript{th} c celebrate Mithras as Sol Invictus,\textsuperscript{52} a title with little regional or temporal variation; they may also, however, be identified separately, as on an inscription from Sublavio in Gallia Cisalpina to Deo Invicto Mithrae et Soli socio.\textsuperscript{53} Depictions of Mithras and Sol as competitors suggests a worthy match that results in an exchange of identity. In scenes of obeisance, Sol kneels on one or both knees in a gesture of humility: in a Dacian relief he hunches, covering face with his hands, while Mithras puts his Phrygian cap on his head. Other scenes have Sol’s radiate crown lying on the ground, an index of the interchangeability of identities.\textsuperscript{54} The resolution of the competition is also indexed by a handshake, a gesture that was in the Roman context a sign of formal agreement more than casual interaction.\textsuperscript{55} The weight of the gesture within the cult is indexed by the Mithraists’ use of the term ‘syndexioi’ to describe themselves; images of that gesture to conclude the identification of Mithras and Sol connect it to the hoped for celestial ascent (see Fig. 11, \textit{CIMRM} 1430C).\textsuperscript{56} The success of Mithras’ trek is exemplified by scenes of Mithras and Sol dining together on the hide of the slaughtered bull (Fig. 14, \textit{CIMRM} 641).\textsuperscript{57} The mutual feasting and the shaking of hands that bound Mithras to Sol also joined the initiates to each other, and blended their identities with the celestial drama of the caves – even without donning masks, or acting out the trek of the sun.

Ascent and assimilation are underwritten by multiple modalities of transformation, suggested visually in the scenes of Mithras’ life that may border the tauroctony.\textsuperscript{58} Mithras himself is born from a rock in some relief images; flames may also emerge from the stone, an apt embodiment of the god of light, as in the cult-niche fresco at Dura-Europas Mithraeum III.\textsuperscript{59} Analogous transformation occurs in scenes known as the ‘water miracle’, in which Mithras shoots an arrow at a rock and water emerges. Both the water miracle and the rock birth may be tied into the tauroctony’s vocabulary, as serpents, dogs and ravens, all of which function in the tauroctony, may be associated with the stone that yields water. Wheat is another emergent form. The tail of the bull as he is stabbed frequently metamorphoses into ears of grain, changing one life form to another; in the rock birth relief from the Mithraeum II in Cologne, Mithras himself holds a shaft of wheat instead of his customary torch (Fig. 15).\textsuperscript{60} The compression of these narratives re-writes the killing of the bull into the emergence of new life – appropriate embodiments for the advancing up the ranks of the Mithraic hierarchy.\textsuperscript{61}

\textsuperscript{51} Clauss 2001, 64-66, 125-128; \textit{CIMRM} 353; \textit{CIMRM} 125-128.

\textsuperscript{52} Lincoln 1982; Chiarsi Colombo 1982; Ries 1979; Clauss 2001, 146-55; Clauss 1990.

\textsuperscript{53} \textit{CIMRM} 730; cf. \textit{CIMRM} 1676, Carnuntum, in which Mithras is genitor luminis; \textit{CIMRM} 1241; Clauss 2001, 125; Szabo 2015.

\textsuperscript{54} Clauss 2001, 150; \textit{CIMRM} 1292.5d.

\textsuperscript{55} Bjørnebye 2011, 362-3.

\textsuperscript{56} \textit{CIMRM} 1584.

\textsuperscript{57} Beck 2001; Beck 1987a, 314.

\textsuperscript{58} One in ten of the Roman reliefs have such images, one in four in the provinces.

\textsuperscript{59} Alvar Ezquerra 2008, 81 and n. 172; Clauss 2001, 65-70.

\textsuperscript{60} Clauss 2001, 64; Ulansey 1989, 20, 54-55, 116.

\textsuperscript{61} The scenes suggesting earnest labor on Mithras’ part, including a bull hunt, bull hauling, as well as a fight between Jupiter and snake-footed giants, and Saturn with a sickle – may offer analogy to tests that initiates would have to overcome: Gordon 2001, 260-266.
Two examples highlight the ability of congregants and individuals to render their cult sites a reflection of their specific professional success. The dedications of the publicum portorium Illyrici of Dacia show a special focus on the transitus dei or taurophoros, Mithras carrying the bull, holding its hind legs on his own shoulders. 62 (Fig. 16, CIMRM 1494-1495). While the image itself appears around the empire, the majority of dedications to it come from sites with certain or likely customs stations, and dedications in the dative case have been found only in sites connected with the portorium Illyrici. 63 Free standing statues are so far only attested at Poetovio Mithraea I and II and at Aquileia, which was intimately tied to the portorium Illyrici. 64 Poetovio emerges as a central hub for this idiom; McCarty et al have identified the potential for one individual, a conductor pascui et salinarium, Public Aelius Marius, to have facilitated its spread through his work within the professional network of the Danubian customs system. 65 The bull hauling itself is accorded various astrological or moral meanings, including the overcoming of obstacles, heroic and Herculean deeds, submission to the will of the gods, and analogy between Mithras the divine cattle rustler and Roman Cacus. 66 No inscriptions from Poetovio offer explanation for why this image might have provided a suitable metaphor for the customs workers: it is tempting to consider the analogy between the labor of the god and the transport of goods which was the basis of the customs system in which they labored. Such speculation may be encouraged by Octavian Zeno, who wrote his professional success into the iconography as well as the dedicatory inscription of his Mithraeum at Rome. His tauroctony is now known only from a Renaissance etching (Fig. 17, CIMRM 335). 67 Two trees frame the stabbing of the bull; on the right, a tree in leaf supports a raised torch, appropriate for Cautes, and a bull’s head; on the left, a tree in fruit suggests harvest season, accompanied by a down-ward facing torch and by a scorpion. 68 The novel inclusion of trees in bud and in fruit suits the professional success of Zeno himself, who descended from a long line of Roman farmers. The inscription describes his prosperity in Mithraic terms:

Qui assiduo labore, die noctuque, tribus solis, quattuor lunae stationibus, et naturali utrusque sideris cursu observatis, fortitudine, providentia, fide, et diligentia, terram fatigando rem agranam tractat et proinde carum frugum quae lucis in tenebrarum tempore creantur, orientur, excolunturque uberrimum pioventum fert.

He overcame the land through constant labor, night and day, through the three watches of the sun and four of the moon….and thus bears the most fertile and beloved of the fruits which are created, cultivated, and born at once into the light from the darkness.

The multimodal engagements with ascent and transformation that characterize Mithraia – realized in visual, titular and enacted means – seem to have provided for Octavian Zeno a framework for blending his own economic and social advancement with the cosmic Mithraic

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62 Vermaseren 1982, 74-77; Gordon 1988, 61.
63 Tóth 1977, Beskow 1980; Misic 2013, 296-310.
64 McCarty et al 2017, 380 and n. 47.
65 McCarty, Egri and Rustoiu 2017, 386; Tóth 1977; Gordon 2001, 251.
66 Vermaseren 1982, 74-77; McCarty et al. 2017, 379-380, nn. 43-46; Beskow 1980; Gordon 1988, 61.
67 CIMRM 335.
68 Ulansey 1989, 64-65.
frame. He casts them as the birth into light from darkness, through continual labor that was aligned with the cyclical movement of the heavens. He also demonstrates the capacity for one man to add his individual narrative to the many other, more literarily articulated narratives for the meaning of the cave – from Plato’s drama of the human condition, through Mithras’ birth, the episodes of his life, the conquest of the bull, and the celestial trek of rising and setting stars. This is consistent with a reflexive model of Roman art, and with Panofsky’s concept of the _phantasia_ which enables a magical identification of viewer and the broader parallel universe made possible in the object. What distinguishes this experience in Mithraea is the multimodality of the themes of ascent and transformation, and the projection of the viewer’s life into the regular patterns of the cosmos.

_Mithras and the challenges of prosperity_

The paradox of Mithras is that the rites – emphatically oriental, famously secret, possibly violent, and broadly rooted in the least powerful classes of Roman society – were not subversive. Contemporary perspectives have broken from the paradigms of otherness that dominated its early research, and cast light on the extent to which the rites affirmed and replicated the existing social structure of imperial Rome. That social order, and its most elite membership, was critical for the economic mobility of freedmen and slaves. The upper classes anchored the financial and civic structures that enabled what Edward Gibbon famously described as “the period in the history of the world during which the condition of the human race was most happy and prosperous . . . from the death of Domitian to the accession of Commodus”.

More recent analyses, which integrate textual and epigraphic records with quantitative and archaeological analyses, are less hyperbolic even when in essential agreement with the notion of increasing scale, growth and internationalism. Economic opportunities, combined with the pathways created by the emperors for admission into the propertied class, meant that soldiers and freedmen could transition into the upper echelons of local communities. Four of the ten richest men in the principate were imperial freedmen, who were stigmatized by their servile background, but had significant advantages over the humble freeborn when it came to making money in commerce and manufacturing. The transfer of wealth was part of the manumission process: former slaves brought with them the trade and manufacturing networks built up in their time of service; soldiers brought capital as well as specialized skills. Their success meant that only birth, not fortune, separated them from the upper social echelons. Citizenship, once a distinguishing barrier between the upper and lower classes, ceased to serve as a marker after Caracalla granted citizenship to all free people liv-

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69 Bartman 1995; Koortbojian 2005.
70 For the responsiveness of Mithraea to their local environments, McCarty et al. 2017, 133-137; Bjørnebye 2007, 3.
71 For the persecution of a ‘secret’ cult, Gruen 1990, 34-78; on the category of ‘Oriental’ cults, Alvar Ezquerra 2008; Beard North and Price 1998a, 254-55, 264-267, 278-295; on violence within Mithraism, Gordon 2001.
72 Walsh 2018; Gordon 1972, 2017.
73 Gibbon 1776, 80.
74 Kehoe 2007, 550; Morley 2007, 571, 575 and n. 19; Kron 2012, Wilson 2012; caveats from Jongman 2007, 594; Garnsey and Saller 2015, 71-90.
75 Garnsey and Saller 2015, 134; Mouritsen 2005; Andreau 1992; Scheidel and Friesen 2009.
ing within the empire in 212 CE. The contradiction between rank and status had to be accommodated. Those engaged in the upward climb engaged themselves in the traditional cultural genres of elite expression – including cult patronage, funerary monuments, domestic design and decoration, and the epigraphic habit – to close the gap between their birth and their wealth. Petronius’ Trimalchio is a famously satiric portrait of the risks of wielding these vocabularies of privilege poorly, and thereby only confirming one’s low born origins.

The freedmen and former soldiers who constituted Mithras’ largest constituency were very often those engaged in this upward climb. Participation in the rites took the form of traditionally elite modalities including patronage, symposia, the exegesis of images, and cosmological speculation. Patronage was fundamental to the structure of the Mithraic communities, part of the ritual progression as well as a simple means of paying for the buildings. The cult communities were designed around stages of initiation; inscriptions designating individuals as agathos (good), akeraios (unsullied), and dikaios (just) suggests a moral judgement as part of their progression. Dipinti at Dura-Europas refer to those who were as melleleon and petitores, signal an application for advancement and the concentration of power in the hands of those who could apply the criteria. These were the fathers, who were deemed wisest and most free from sin, their moral authority marked iconographically with a staff, a ring, and a sickle as well as the Phrygian cap. Gordon notes that the authority of the patres was modeled on that of the emperor himself, as the pinnacle of a system which connected hundreds of individual senators and equestrians, all deploying personal largesse to confirm their own positions.

The ability to move up through the stages of the rites, as well as to offer financial support to their local Mithraeum, offered former slaves a system of honors analogous to the cursus honorum which was explicitly denied them in civic life. The financial side of Mithraic patronage could operate at humbler economic levels. The small size of the buildings, and the capacity to place them inside existing structures, meant that a single individual could cover the cost of an entire Mithraeum. Names placed on images of the gods, altars, and wall paintings suggest opportunities for benefaction at an even more modest scale. The spectrum of largesse meant that the deference and respect afforded to acts of patronage was broadly dispersed among members of the cult, for whom Mithras granted access to acts of generosity that marked patronage at the highest social levels.

The setting of the Mithraeum – a biclinium as well as a cave – enrolls it among the physical structures of the Roman symposium. The caves consist of two klinae placed along the

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76 Garnsey and Saller 2015, 138 and n. 26.
77 Petersen 2003, 2006; Mouritsen 2011; Stewart 2014. The social and geographic mobility that characterized life under the Principate was accompanied by a growth in the epigraphic habit; at the end of the first century this habit spread from elite to non-elite groups, for whom cemeteries, rather than the forum, were the dominant arena for epigraphic display (Llors 2014, 134-136). Meyer and Woolf emphasize the epigraphic commemoration among freedmen as part of their social competition; Mouritsen, in contrast, emphasizes the function of freedman epigraphy as a mechanism for validating family relations: Meyer 1990; Woolf 1996; Mouritsen 2005.
78 Petersen 2006, 1-17.
79 Beck 1992, 12 and n. 42; Gordon 1972; Liebeschuetz 1994; Clauss 2001, 21-23, 40.
80 Gordon 2001, 248-251; Gordon 1972, 101; Gordon 2007, 402.
81 Griffith 2010; Clauss 2001, 43.
82 Bjornebye 2007, 73; cf. Petersen 2006, 56.
83 Bjornebye 2007, 15; Turcan 2000, 74; Griffith 2010.
long sides of the vaulted space, creating a functionally specific and inflexible room. The setting echoes collegial scholae as well as domestic cults, reinforcing the intimacy created by shared initiation.  

84 There is wide agreement that this was the setting for the diners to re-enact the shared feast of Mithras and Sol, who become co-diners with the assembly.  

85 The images of Mithras in the cave answered the function of the mythological images that were key elements of the Roman triclinium, the rear wall of which was often adorned with a complex mythological picture, complemented by paintings on the left and right that related thematically to each other. Their exegesis – fanciful or philosophical – was a key element of the symposium itself.  

86 The lines of site could be carefully curated to ensure what the guests would see: in the House of the Moralist, for example, the triclinium looked out over a garden that was half the size of the whole house, which the owner seems to have sought to turn into a sacred wood for Diana.  

87 The symposium was among the key cultural forms that articulated social advancement, both in its invocation of classical prototypes and in the space it provided for the display of classical paideia. Knowledge of the Greek past distinguished the Roman aristocracy, and was part of the competition for status that characterized imperial life. Gains in this arena required continual re-negotiation, making the symposium a particularly apt theater.  

88 Plutarch, Athenaeus, and Lucian reflect the second sophistic obsession with symposia and their accompanying conversation.  

89 Once deemed merely derivative, their sympotic works are now recognized for the inventiveness that mirrors the playful, polyvocal, improvisational dialogues – with much at stake – that are their putative frame. That frame was a cosmopolitan one: Athenaeus opens his work with praise of the city as the epitome of the world, which brought into a single space the best of all the world’s great capitals. Guests were expected not only to draw from that ecumenical menu, but create something new, kaina, on topic for that table’s guess and their moment.  

90 The innovation and openness of the form may have contributed to the disfavor of sympotic forms for early Christianity, and its decline in the fifth century CE.  

91 Visual exegesis was as critical as literary display in the sympotic performance of status. Longus, Lucian, Philostratus and Cebes confirm the high stakes of visual exegesis in the literary imagination. Longus’ Daphnis and Chloe is imagined as a long excursus on a single painting; Lucian’s Apelles details the vengeful creation of an allegorical image.  

92 Philostratus’ Imagines and the Tabula of Ceres foreground the role of an authoritative guide, the educational force of interactions in front of the image, and a paideia appropriate for the symposium as well as the image-rich Mithraic caves. Philostratus frames his work as the much anticipated visit of an art critic to the painting gallery of a wealthy man. The critic instructs the eager listeners in a model of reflexive, creative viewing that blends the life of the viewer with the world of the image, and can in the strongest cases alter the viewer’s soul. Written in the

84 Griffith 2010, 70 nn. 20, 21.  

85 Griffith 2010; Merkelbach 1998, 132-33; Clauss 2001, 108-113; Beck 2000.  

86 Clark 2003, 223-246; Bjørnebye 2007, 15.  

87 Clark 1003, 234.  

88 McClure 2003, 27-58; Anderson 1993, 8; Whitmarsh 2001, 90-132; Braund 2000, 18.  

89 König 2009; Romeri 2002; B.  

90 Braund 2000, 18; König 2009; König 2012, 7.  

91 König 2012, 177-201; König 2009, 102.  

92 Elsner 1996.
third century CE, it echoes Stoic *phantasia* and Longinus’ discussions of the sublime.⁹³ Cebes’ account is more overtly ritual, focused on an old, authoritative figure who draws on Pythagorean and Parmenidean principles to teach a young man secrets unknown even to local residents. Elsner characterizes this as ritual centered viewing, capable of opening the doors to higher realities. The visual richness of the Mithraea and the sympotic emphasis on images make the caves a natural context for this ritual centered viewing, and the delivery of ever evolving, new form-meaning pairs in response to the cultural world in which the Mithraea were embedded.

The cosmography of the caves suggests that the route to that superior world included the contemporary science of the stars. Such engagements were part of the model of cultivated society, exemplified in Nigidius Figulus’ astrological efforts, and in Aratus’ *Phaenomena*.⁹⁴ Aratus’ composition became a standard school text through the imperial period and into late antiquity, inspiring at least six Latin translations and twenty seven commentaries.⁹⁵ Cicero noted that Aratus’ value lay in its aesthetic polish rather than its scientific accuracy, a striking indication of the discursive use of astronomy in Roman contexts, from Stoic cosmology to state propaganda, with its greatest floruit in the ²nd century CE.⁹⁶ Such enthusiasms were not limited to the literate upper classes: Pliny noted that the common people themselves interpreted the comet that appeared at Caesar’s funerary rites as a confirmation of his apotheosis (*NH* 2. 93-94).

In their reflexivity, philosophical leanings, and taste for the exotic, the Roman symposia overlap with Mithraic experience and corroborate a hypothesis for its role in the confirmation of social status. The diners who could reflect on the commensality of Mithras and Sol from the comfort of their *klinae* shared a visual reflexivity with their archaic and classical Greek counterparts, whose cups were decorated with images of symposia or heroic deeds that invited the viewer to project himself into their mythic ranks.⁹⁷ The intersection of dining and cosmological imagery in the caves becomes more natural in light of the propensity for symposia to lean to philosophical questions, including the realm of natural philosophy. And the exoticism of a Persian god resonates with the cosmopolitanism of sympotic literature. Both the social modalities of the rites and its symbolic system offer responses to the economic dynamics of the ²nd century imperial period. Patronage, symposia, learned exegesis and cosmological speculation represented the cultural vocabulary of the upper classes, whose use helped normalize the new higher status of the cult’s adherents, in the same way that their participation in funerary monuments, epigraphic commemoration, and domestic decoration did. The symbolic system, viewed through the lenses of cognitive blending, offered multiple modalities for engendering new form meaning pairs that mapped the rise of the adherents onto the success of their god – rendering their financial success in comforting and authoritative cosmic terms.

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⁹³ Elsner 1995, 24-28; Bartman 1996.
⁹⁴ Le Boeuffle 2003 xxi; Meier, Günther, and Fantuzzi 2006; Csapo 2008; Kidd 1982.
⁹⁵ Gee 2013, 5-7; Le Boeuffle xi-xix.
⁹⁶ Hübner and Hunger 2006.
⁹⁷ Neer 2002, 27-86; Lissarrague 1987.
The end of Mithras: from Christianity to cultural metaphors

The end of Mithraism is traditionally located in the fourth and fifth centuries CE, indexed by destruction of sites, the imposition of crosses, legal actions and the words of Christian writers. These are also the centuries identified, by earlier generations of scholars, as the period of nearly apocalyptic decline and decay in social and economic wellbeing. Those models were challenged in the late 20th century by Peter Brown and his school, who emphasize transition, while Liebeschuetz, McCormick, Carandini and Ward-Perkins, among others, have reaffirmed the models of decline. Both schools recognize significant distinctions between social and economic well being in this period and its 2nd century counterpart, the social structures which could enable success as well as its second level signifiers. The end of the slave villa mode of production from the 2nd to 3rd centuries was followed by the crises of the third century. Plague and war led to depopulation, declining tax flows, and fewer resources for infrastructure; social and economic pressures trended to large scale acquisitions, and the concentration of landed property. While there are indices of economic vitality, the living conditions of laborers could be extremely poor. Giardina notes that an unequal relationship between two individuals became the dominant paradigm, in place of the traditional relationship of individual to community. The poor, under the influence of the new Christian faith, became the focus of a new ideology of social engagement, replacing the traditional focus on benefits to the citizenry as a whole. The amator populi / amator civium became the amator pauperum: the public image of the meritorious citizen became interaction with the disempowered, with rewards anticipated in the next life rather than mortality. After the death of Constantine, the successor states that emerged in the west did not take the form of miniature Romes: most critically in terms of the shape of the upper classes, they did not rely on large scale taxation and bureaucracy. Warrior aristocrats, not bureaucrats, were needed for success, and the link between literacy and elite status came to an end.

All of these factors suggest a decoupling of Mithraism from the mechanisms and symbols of social and economic prosperity and so offers an aitiology for its decline that lies beyond doctrinal clashes with Christianity. The multimodal cognitive blending of the 2nd century phenomenon offered opportunities for participants to pair their own circumstances – specifically the successful, upwardly mobile, economically and socially optimistic ones – with imagery that grounded them in the longstanding cultural norms of power, up to and including the same image of the heavens that the emperors used. The new trends, however, severed that meaning-making machinery from a pragmatic social function. The changes in the signifying functions of paideia, symposia and cosmology rendered Mithraea unsuitable for the performance of ambition, as leaders held paideia at a distance, the inventiveness of sympotic dialog clashed with Christian norms, and cosmology migrated to new realms. The cosmology of the Mithraic caves has been characterized as the sole element of the rites to survive antiquity, but

98 Winter 2000; Gordon 1999; Sauer 2003, 79-89; Turcan 1983.
99 Ward-Perkins 2008, 199; Brown 1997a, 1997b; Bowersock et al. 1997; for affirmation of decline, Liebeschuetz 2001, McCormick 2001, Carandini 1993, Ward-Perkins 2005.
100 Giardina 2007, 764-768.
101 Cameron 1999; Brown 1992; Liebeschuetz 2001, 223-248.
102 Bjørnebye 2007.
in forms which had nothing to do with Mithras, and left no footsteps as easy to follow as the translation of Isis into Mary or Dionysos into the Eucharist. Blume has characterized the ancient knowledge of the stars as an interrupted tradition, noting that only the most negligible portion was integrated into the structure of medieval thought, and recognized as a usable instrument of the Christian mastery of life.\textsuperscript{103} Gordon has proposed that the extinction of Mithras emerges from its failure to become an element of pagan paideia; Mastrocinque identifies the survival of Mithraic cosmology among the heretical Gnostics, a channel which would seem to reinforce the distance between the cult and the realities of everyday Roman civic life.\textsuperscript{104} Anderson notes the evidence for cosmologies to be especially eagerly guarded, no longer exchanged, and to retreat into the clutches of competing princes – a model diametrically opposite to the suggestion that it provided, in the Mithraic caves, access to new social status for freedmen and soldiers in their migration into a new social level.\textsuperscript{105} The brief floruit of the rites among 4\textsuperscript{th} century Roman senators may be the exception that recommends the rule: Griffith argues that this was a phase of the cult qualitatively distinct from its earlier centuries, answering the need for the senators to confirm their hierarchy and so enable peer interaction, rather than responding to the freedmen and legionaries of earlier generations.\textsuperscript{106}

\textit{Conclusion: star talk, cognitive blending, and cultural shift}

A pragmatic cognitive science offers three new pathways into the historical phenomenon of this short lived but broadly spread ancient mystery cult. Challenging us to frame cognitive blending in the entire lived world of the participants, it expands the scale of our Mithraic studies beyond the mind of the initiate, the space of the cave, and even the immediate community of worshippers, to include the macro-economic trends that defined the centuries of its floruit. This is a significant challenge for a cult whose vocabulary combines a resilient, recurring central narrative with nearly infinite multiple local adaptations. The latter are the natural focus of publications of individual sites, a project that remains core to the discipline. The outcome is a hypothesis for the function of the cosmic patterns articulated in the caves as responses to social patterns broadly realized in the first centuries of the cult’s floruit. This is paired with a contextualization of the rites in the social institutions that were part of the most admired and desired Roman cultural strata, to which the freedmen and former soldiers, who repeatedly emerge as participants in the rites, could aspire. Mithraic spaces blended cosmic cycles with human collegiality and personal success: from a cognitive perspective, the caves were potent locations for the emergence of new form-meaning pairs that wrote personal biographies onto celestial patterns. Their demise reflects less the conflict with Christianity than the historical changes that rendered the social entanglements of Mithraism’s symbolic vocabulary – images, actions, communications and commensalities – irrelevant to new forms of civic power. Broad hypotheses of this nature are, on the one hand, natural for assessing periods of historical change; the best hope of a brief paper may be to argue in favor of further research in which focused case studies support, challenge and refine these proposals. The

\textsuperscript{103} Blume 2000.
\textsuperscript{104} Gordon 1999; Mastrocinque 2009.
\textsuperscript{105} Anderson 2017, 8.
\textsuperscript{106} Griffith 2000.
investigation of Mithras will always be complex, and the outcomes beyond firm proof. For pragmatic cognitive science, however, it offers an exceptional case study of cosmic metaphors that can track the life story of its adherents as well as the change in historical epochs.

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BIBLIOGRAPHY

Adrych P., Bracey R., Dalglish D., Lenk S., Wood R. 2017: *Images of Mithra. Visual conversations in art and archaeology*, Oxford.

Alvar Ezquerra J. 2008: *Romanising Oriental Gods: Myth, Salvation, and Ethics in the Cults of Cybele, Isis, and Mithras*, trans. R. Gordon, Leiden.

Anderson B. 2017: *Cosmos and Community in Early Medieval Art*, New Haven.

Anderson G. 1993: *The Second Sophistic. A Cultural Phenomenon in the Roman Empire*, New York.

Andrea J. 1992: “*Mobilité sociale et activités commerciales et financières*”, in E. Frézouls (ed.), *La mobilité sociale dans le monde romaine*, Strasbourg, 21-32.

Bartman E. 1996: “*J. Elsner, Art and the Roman Viewer. The Transformation of Art from the Pagan World to Christianity. Cambridge University Press, 1995*, BMCR 96.04.31.

Beard M., North J., Price S. 1998a: *Religions of Rome: Vol. 1: A History*, Cambridge.

Beard M., North J., Price S. 1998b: *Religions of Rome: Vol. 2: A Sourcebook*, Cambridge.

Beck R. 1982: “*The Mithraic torchbearers and ‘Absence of Opposition’*, EchosCl 26.1, 126-40.

Beck R. 1984a: “*The Rock-Cut Mithraea of Arupium*”, Phoenix 38.4, 356-371.

Beck R. 1984b: “*Mithraism since Franz Cumont*, ANRW II.17.4, 2002-2115.

Beck R. L. 1987a: “*Merkelbach’s Mithras*, Phoenix 41.3, 296-316.

Beck R. 1987b: *Planetary Gods and Planetary orders in the mysteries of Mithras*, Leiden.

Beck R. 1992: “*The Mithras cult as association*”, SR 21.1, 3-13.

Beck R. 1994: “*In the place of the Lion: Mithras in the Tauroctony*”, in J.R. Hinnells (ed.), *Studies in Mithraism*, Rome, 29-50.

Beck R. 2000: “*Ritual, myth, doctrine and initiation in the mysteries of Mithras*”, JRS 90, 145-80.

Beck R. 2001: “*History into fiction: the metamorphoses of the Mithras myths*”, AncNarr 1: 283-300.

Beck R. 2006: *The Religion of the Mithras Cult in the Roman Empire: Mysteries of the Unconquered Sun*, Oxford.

Beskow P. 1980: “*The Portatorium and the Mysteries of Mithras*”, JMithrSt 3, 1-18.

Bjørmebye J. 2007: “*Hic locus est felix, sanctus, piusque benignus*” *The Cult of Mithras in fourth century Rome*, PhD Dissertation, University of Bergen.

Bjørmebye J. 2011: “*Secrecy and Initiation in the Mithraic Communities of Fourth Century Rome*”, in C.H. Bull, L. Lied and J.D. Turner (eds.), *Mystery and Secrecy in the Nag Hammadi Collection and Other Ancient Literature: Ideas and Practices: Studies for Einar Thomassen at Sixty*, Leiden, 351-374.

Blume D. 2000: *Regenten des Himmels: Astrologische Bilder in Mittelalter und Renaissance*, Berlin.

Bowersock G.W, Cameron A., Clark E.A., Diile A., Fowden G., Heather P., Rousseau P., Rousselle A., Torp H., Wood I. 1997: “*Comments*, SymbOslo 72, 31-69.

Braund D. 2000: “*Learning, Luxury and Empire: Athenaeus’ Roman Patron*”, in D. Braund and J. Wilkins (eds.), *Athenaeus and his World: Reading Greek Culture in the Roman Empire*, Exeter, 3-22.

Bremner J.N. 2011: “*Initiation into the Eleusinian Mysteries: A “Thin” Description*”, in C.H. Bull, L. Lied and J.D. Turner (eds.), *Mystery and Secrecy in the Nag Hammadi Collection and Other Ancient Literature: Ideas and Practices, Studies for Einar Thomassen at Sixty*, Leiden, 375-397.

Brown P. 1992: *Power and Persuasion in Late Antiquity*, Madison.

Brown P. 1997a: “*The World of Late Antiquity Revisited*, SymbOslo 72, 5-30.

Brown P. 1997b: “*Reply to Comments*, SymbOslo 72, 70-80.

Cameron V. 1999: “*Remaking the Past*”, in G.W. Bowersock, P. Brown and O. Grabar (eds.), *Late Antiquity: A Guide to the Postclassical world*, Cambridge, 1-20.

Campbell L.A. 1968: *Mithraic Iconography and Ideology*, Leiden.

Carandini A. 1993: “L’ultima civiltà sepolta o del Massimo oggetto desueto, secondo un archeologo,” in A. Carandini, Ruggini L.C. and Giardina A. (eds.), *Storia di Roma, l’età tardoantica, 2, I luoghi e le culture III*, Turin, 11-38.

Chalupa A. 2008: “Seven Mithraic Grades: An Initiation or Priestly Hierarchy?”, *Religio* 16.2, 177-201.

Chalupa A. 2016. “The Origins of the Roman Cult of Mithras in the Light of New Evidence and Interpretations: The Current State of Affairs”, *Religio* 24.1, 65-96.
Chalupa A. and Glomb T. 2013. “The Third Symbol of the Miles Grade on the Floor Mosaic of the Felicisimus Mithraeum in Ostia: A New Interpretation”, Téma 21, 9-32.

Chemero A. 2013: “Radical Embodied Cognitive Science”, Review of General Psychology 17.2, 145-150.

Chirassi Colombo I. 1982: “Sol Invictus o Mithras”, in M. Mothi, Chirassi Colombo I. 1982: “Sol Invictus o Mithras”, in U. Bianchi and Vernasero M.J. (eds.), La soteriologia dei culti orientali nell’Impero romano, Leiden, 649-72.

Clark J.R. 2003: Art in the Lives of Ordinary Romans: Visual Representation and Non-Elite Viewers in Italy, 100 B.C. – A.D. 315, Berkeley.

Clauss M. 1990: “Sol Invictus Mithras”, Athenaeum 78.2, 423-450.

Clauss M. 1992: Cultores Mithrae: Die Anhängerschaft des Mithras-Kultes, Stuttgart.

Clauss M. 2001: The Roman Cult of Mithras: The Gods and his Mysteries, tr. R. Gordon. New York.

Crossland Z. 2010: “Materiality and Embodiment”, in D. Hicks and M.C. Beaudry (eds.), The Oxford Handbook of Material Culture Studies, Oxford, 386-405.

Csapo E. 2008: “Star Choruses: Eleusis, Orphism, and New Musical Imagery and Dance”, in M. Revermann and Wilson P. (eds.), Performance. Iconography, Reception: Studies in Honour of Oliver Taplin, Oxford, 262-290.

Cumont F. 1894, 1896: Textes et Monuments figurées relatifs aux mystères de Mithra: pub. Avec une introduction critique, Bruxelles.

Dimitrova N. 2008: Theoroi and Initiates in Samothrace: the Epigraphical Evidences, Princeton.

Dirven L. 2015: “The Mithraeum as tableau vivant. A Preliminary Study of Ritual Performance and Emotional Involvement in Ancient Mystery Cults”, Religion in the Roman Empire 1.1: 20-50.

Dirven L. and McCarty M.M. 2014: “Local Idioms and Global Meanings: Mithraism and Roman Provincial Art”, in N. Netzer and Reynolds P. (eds.), Roman in the Provinces: Art on the periphery of Empire, Chicago, 127-144.

Edmonds R.G. 2000: “Did the Mithraists Inhale? A Technique for Theurgic Ascent in the Mithras Liturgy, the Chaldaean Oracles, and some Mithraic Frescoes”, AncW 32.1, 10-24.

Elsner J. 1995: Art and the Roman Viewer. The Transformation of Art from the Pagan World to Christiani ty, Cambridge.

Elsner J. 1996: “Image and Ritual: Reflections on the Religious Appreciation of Classical Art”, CQ 46(3), 515-531.

Elsner J. 2007: Roman eyes: Visuality and Subjectivity in Art and Text, Princeton.

Erol A.F. and Senyurt S.Y. 2011: “A terracotta mask of Mithras found at Camihöyük-Avano, Cappadocia providing new evidence on the Mithraic cult and ritual practices in Anatolia”, TÜBA-AR 14, 87-106.

Estienne S. 2015: “Simulacra deorum versus ornamento aedium. The status of divine images in the temples of Rome”, in J. Mylonopoulos (ed.), Divine Images and Human Imaginations in Ancient Greece and Rome, Leiden, 257-273.

Foglia L. and Wilson R.A 2013: “Embodied cognition”, WIREs Cognitive Science 4, 319-325.

Garvey P. and Saller R. 2015: The Roman Empire: Economy, Society and Culture, 2nd ed., Berkeley.

Gasparro G.S. 1979: “Il Mitraismo: Una Struttura Religiosa fra ‘Tradizione’ e ‘Invenzione’, in U. Bianchi (ed.), Mysteria Mithrae, Leiden, 349-384.

Gawlikowski M. 2007: “The mithraeum at Hawarte and its paintings”, JRA 20: 337-361.

Gee E. 2013: Aratus and the Astronomical Tradition, Oxford.

Gershevitc I. 1959: The Avestan Hymn to Mithra, Cambridge.

Giardina A. 2007: “The Transition to Late Antiquity”, in W. Scheidel, Morris I. Saller R.P. (eds.), The Cambridge Economic History of the Greco-Roman World, Cambridge, 743-768.

Gibbon E. 1776: The History of the Decline and Fall of the Roman Empire, Vol. 1, London.

Gordon R.L. 1972: “Mithraism and Roman Society: Social Factors in the explanation of religious change in the Roman Empire”, Religion 2.2, 92-121.

Gordon R.L. 1980: “Reality, evocation and boundary in the mysteries of Mithras”, MithSt 3, 19-99.

Gordon R.L. 1988: “Authority, Salvation, and Mystery in the Mysteries of Mithras”, in J. Huskinson, M. Beard and Reynolds J. (eds.), Image and Mystery in the Roman World: Three Papers Given in Memory of J. Toynbee, Cambridge, 45-80.

Gordon R.L. 1994: “Who Worshipped Mithras?”, JRA 7, 459-74.

Gordon R.L. 1999: “The end of Mithraism in the north-western Provinces (review of E. Sauer)”, JRA 12, 682-688.

Gordon R.L. 2001: “Ritual and Hierarchy in the Mysteries of Mithras.” Antigüedas, Religiones y Sociedades 4, 245-274.

Gordon R.L. 2007: “Institutionalized Religious Options: Mithraism”, in J. Rügke (ed.), A Companion to Roman Religion, Malden, 392-405.

Gordon R.L. 2015: ‘From Μιθρας to Roman Mithras.’ In Y. Vevaina (ed.), The Wiley Blackwell Companion to Zoroastrianism, Chichester, 451-455.
Gordon R.L. 2017: “Cosmic Order, Nature, and Personal Well-Being in the Roman Cult of Mithras”, in A. Hintze and Williams A. (eds.), *Holy Wealth: Accounting for This World and The Next in Religious Belief and Practice: Festschrift for John R. Hinnells* (Iicana 24), Wiesbaden, 93-130.

Griffith A.B. 2000: “Mithraism in private and public lives of the 4th century senators in Rome”, *Electronic Journal of Mithraic Studies* 1, 1-27.

Griffith A.B. 2010: “Amicitia in the Cult of Mithras: The Setting and Social Functions of the Mithraic Cult Meal”, in M. Tamminen et al. (eds.), *Passages from Antiquity to the Middle Ages III: De Amicitia: Social Networks and Relationships* (Acta Instituti Romani Finlandiae v. 36), 64-77.

Gruen E. 1990: *Studies in Greek Culture and Roman Policy*, Leiden.

Henig M. 2004: “Roman Religion and Roman Culture in Britain”, in M. Todd (ed.), *A Companion to Roman Britain*, Malden, 220-241.

Hoffman T. 2017: “Multimodal Constructs - Multimodal Constructions? The Role of Constructions in the Working Memory”, *Linguistics Vanguard* 3.2, https://doi.org/10.1515/lingvan-2016-0042.

Hübner W. and Hunger H. 2006: “Astrology”, in H. Cancik and Schneider H. (eds.), C.F. Salazar (ed.) (English edition), *Brill’s New Pauly*, consulted online on 27 January 2019 http://dx.doi.org/10.1163/1574-9347_bnp_e204700.

Huld-Zetsche I. 2008: *Der Mithräuskult in Mainz und das Mithräum am Ballplatz*, Mainz.

Hutchins E. 2014: “The Cultural Ecosystem of Human Cognition”, *Philosophical Psychology* 27, 34-49.

Jongham W.M. 2007: “The early Roman empire: Consumption”, in W. Scheidel, I. Morris and Saller R.P. (eds.), *The Cambridge Economic History of the Greco-Roman World*, Cambridge, 592-618.

Karadima C. and Dimitrova N. 2003: “An Epitaph for an Initiate at Samothrace and Eleusis”, *Chiron* 33: 335-345.

Kehoe D.P. 2007: “The Early Roman Empire: Production,” in W. Scheidel, Morris I. and Saller R.P. (eds.), *The Cambridge Economic History of the Greco-Roman World*, Cambridge, 543-569.

Kidd D.A. 1982: “Astrology for Maccenas”, *Antichthon* 16, 88-96.

König J. 2012: *Saints and Symposiasts: The Literature of Food and the Symposium in Greco-Roman and Early Christian Culture*, Cambridge.

König J. 2009: “Symotic dialogue in the first to fifth centuries C.E.”, in S. Goldhill (ed.), *The End of Dialogue in Antiquity*, Cambridge, 85-114.

Koortbojian M. 2005: “Mimesis or Phantasia? Two Representational Modes in Roman Commemorative Art”, *ClAnt* 24(2), 285-306.

Kron G. 2012: “Food Production”, in W. Scheidel, Morris I. and Saller R.P. (eds.), *The Cambridge Economic History of the Greco-Roman World*, Cambridge, 156-174.

Le Boeuffe A. 2003: *Germanicus: Les Phénomènes d’Aratos*, Paris.

Lesure R.G. 2005: “Linking Theory and Evidence in an Archaeology of Human Agency: Iconography, Style, and Theories of Embodiment”, *Journal of Archaeological Method and Theory* 12.3, 237-255.

Liebeschuetz J.H.W.G. 1994: “The Expansion of Mithraism among the Religious Cults of the Second Century”, in J. Hinnells (ed.), *Studies in Mithraism*, Rome, 195-216.

Liebeschuetz J.H.W.G. 2001: *The Decline and Fall of the Roman City*, Oxford.

Lincoln B. 1982: “Mithras as Sun and Savior”, in U. Bianchi and Vermaseren M.J. (eds.), *La soteriologia dei culti orientali nell’Impero romano*, Leiden, 505-26.

Lissarrague F. 1987: *The Aesthetics of the Greek Banquet: Images of Wine and Ritual*, tr. A. Szegedy-Maszak, Princeton.

Llors F.B. 2014: “The “Epigraphic Habit” in the Roman World”, in C. Bruun and Edmonds J. (eds.), *The Oxford Handbook of Roman Epigraphy*, Oxford, 131-152.

Maischatz A. and Winter E. 2001: “Die Mithräen von Doliche. Überlegungen zu den ersten Kultstätten der Mithras-Mysterien in der Kommagene”, *Topoi* 11.1, 149-73.

Martin L. 2005: “Performativity, Discourse and Cognition: ‘Demythologizing’ the Roman Cult of Mithras”, in W. Braun (ed.), *Rhetoric and Reality in Early Christianity*, Waterloo, 187-217.

Martin L. 2015: *The Mind of Mithraists: Historical and Cognitive Studies in the Roman Cult of Mithras*, London.

Martin L. and Pachis P. (eds.) 2009: *Imagistic Traditions in the Graeco-Roman World: A Cognitive Modeling of History of Religious Research*, Thessaloniki.

Mastrocinque A. 2009: *Des mystères de Mithra aux mystères de Jésus*, Stuttgart.

McCarty M., Egri M. and Rustoiu A. 2017: “Connected Communities in Roman Mithraism: Regional Webs from the Apulum Mithraeum III Project (Dacia)”, *Phoenix* 71.3/4, 370-392.

McClure L. 2003: *Courtesans at Table: Gender and Greek Literary Culture in Athenaeus*, New York.
McCormick M. 2001: *Origins of the European Economy*, Cambridge.

Meier M., Günther L.-M. and Fantuzzi M. 2006: ‘Aratus’, in H. Cancik and Schneider H. (eds.), *Brill’s New Pauly, Antiquity volumes*. Consulted online on 08 April 2017 http://dx.doi.org.proxy.library.emory.edu/10.1163/1574-9347_bnp_e131340.

Merkelbach R. 1984: *Mithras, Königstein*.

Merkelbach R. 1998: *Mithras: Ein persisch-römischer Mysterienkult*, Wiesbaden.

Meyer E.A. 1990: “Explaining the Epigraphic Habit in the Roman Empire: The Evidence of Epitaphs”, *JRS* 80: 74-96.

Meyer M.W. 1999: *The Ancient Mysteries: A Sourcebook of Sacred Texts*, Philadelphia.

Mics B. 2013: *Cults and Religious Integration in the Roman Cities of the Drava Valley (Southern Pannonia)*, PhD Dissertation, Royal Holloway, University of London.

Morley N. 2007: “The early Roman Empire: Distribution”, in W. Scheidel, Morris I. and Saller R.P. (eds.), *The Cambridge Economic History of the Greco-Roman World*, Cambridge, 570-592.

Mouritsen H. 2005: “Freedmen and decurions: epitaphs and social history in imperial Italy”, *JRS* 95, 38-63.

Mouritsen H. 2006: “Honores libertinii: Augustales and Seviri in Italy”, *Hephaistos* 24, 237-248.

Mouritsen H. 2011: “The families of Roman slaves and freedmen”, in B. Rawson (ed.), *A companion to families in the Greek and Roman worlds*, Malden, 129-144.

Mylonopoulos J. 2010: “Introduction: divine images versus cult images. An endless story about theories, methods, and terminologies,” in J. Mylonopoulos (ed.), *Divine Images and Human Imaginations in Ancient Greece and Rome*, Leiden, 2-21.

Neer R.T. 2002: *Style and Politics in Athenian Vase-Painting: The Craft of Democracy*, ca. 530-460 BCE, Cambridge.

Norenzaya A. et al., 2016: “The cultural evolution of prosocial religions”, *Behavioral and Brain Sciences* 39, 1-65 DOI: 10.1017/S0140525X14001356.

Panagiotidou O. and Beck R. 2017: *The Roman Mithraeum Cult: A Cognitive Approach*, London.

Perry E.E. 2015: “Human Interactions with Statues”, in E.A. Friedland, Sobocinski M.G. and Gazda E. (eds.), *The Oxford Handbook of Roman Sculpture*, DOI: 10.1093/oxfordhb/9780199921829.013.0042.

Petersen L.H. 2003: “The baker, his tomb, his wife, and her basket-tam: the monument of Euryaces in Rome”, *ArtB* 85, 230-57.

Petersen L.H. 2006: *The Freedman in Roman Art and Art History*, Cambridge.

Shanks M. 1995: “Art and an Archaeology of Embodiment: Some Aspects of Archaic Greece”, *CambrAJ* 5:2, 207-44.

Rebillard É. 2015: “Late Antique Limits of Christian-ness: North Africa in the Age of Augustine”, in É. Rebillard and Rüpke J. (eds.), *Group Identity and Religious Individuality in Late Antiquity*, Washington, 293-318.

Ries J. 1979: “Theologie solaire manicheenne et culte de Mithra”, in U. Bianchi (ed.), *Mysteria Mithrae*, Leiden, 761-76.

Romeri L. 2002: *Philosophes entre mets et mots: Plutarque, Lucien et Athénée autour de la table de Platon*, Grenoble.

Sauer E. 1996: *The End of Paganism in the North-Western Provinces of the Roman Empire: The example of the Mithras cult* (British Archaeological Report International Series, no. 634), Oxford.

Sauer E. 2003: *The Archaeology of Religious Hatred in the Roman and early medieval world*, Stroud.

Scheidel W., Friesen S.J. 2009: “The Size of the Economy and the distribution of income in the Roman Empire”, *JRS* 99, 61-91.

Schütte-Maischatz A. and Winter E. 2001: “Die Mithräen von Doliche. Überlegungen zu den ersten Kultstätten der Mithras-Mysterien in der Kommgene”, *Topoi* 11.1, 149-73.

Seaforth R. 2005: “Mystic Light in Aeschylus’ Bassetrai”, *CQ* 55, 602-06.

Spickermann W. 2006: “Mogontiacum (Mainz) als politischer und religiöser Zentralort der Germania superior”, in H. Cancik, Schäfer A. and Spickermann W. (eds.), *Zentralität und Religion*, Tübingen, 167-193.

Squire M. and Platt, V. 2017: “Getting to grips with classical art: Rethinking the haptics of Graeco-Roman visual culture”, in A. Purves (ed.), *Touch and the Ancient Senses*, London, 75-105.

Stewart P. 2003: *Statues in Roman Society: Representation and Response*, Oxford.

Stewart D. 2014: *The aesthetics of assimilation: non-elite Roman Funerary monuments 100 BCE – 200 CE*, PhD Dissertation, Emory University, Atlanta.

Szabo C. 2015: “Mithras rediscovered II. Further notes on CIMRM 1938 and 1986”, *Journal of Ancient History and Archaeology* 2.2, 67-73.

Teehan J. 2016: “Religion and Morality: The Evolution of the Cognitive Nexus”, in J.R. Liddle and Shackelford T.K. (eds.), *The Oxford Handbook of Evolutionary Psychology and Religion*, DOI: 10.1093/oxfordhb/9780199397747.013.11.
Tóth I. 1977: “Das Lokale System der Mithraischen Personifikationen im Gebiet von Poetovio”, Archeologoski vestnik 28, 385-392.

Turcan R. 1983: “Les Motivations de l’intolérance Chrétienne et la fin du Mithriacisme au IVe siècle ap. J-C”, in Proceedings of the VIIth Congress of the International Federation of the Societies of Classical Studies 2, 209-226.

Turcan R. 1986: “Mithras by Reinhold Merkelbach”, Gnomon 58.5, 394-99.

Turcan R. 2000: Mithra et le Mithriacisme, 2nd ed. Paris.

Turner M. and Fauconnier G., 2008: “Rethinking Metaphor”, in R. Gibbs (ed.), Cambridge Handbook of Metaphor and Thought, Cambridge, 53-66.

Ulansky D. 1989: The Origin of the Mithraic Mysteries: Cosmology and Salvation, Oxford.

Ulbert C., Wulfmeier J.-C. and Huld-Zetsche I. 2004: “Ritual deposits of Mithraic cult-vessels: new evidence from Sechem and Mainz”, JRA 17, 354-379.

Varner E.R. 2014: “The Patronage of Greek and Roman Art”, in C. Marconi (ed.), The Oxford Handbook of Greek and Roman Art and Architecture, DOI: 10.1093/oxfordhb/9780199783304.013.007.

Vermaseren M.J. 1956-1960: Corpus inscriptionum et monumentorum religionis mithriacae, The Hague.

Vermaseren M.J. 1982: Mithriaca III: The Mithraeum at Marino, Leiden.

Vollkommer R. 1991: “Mithras Tauroctonus. Studien zu einer Typologie der Stieropferszene auf Mithras-bildwerken”, MEFR 103, 265-281.

Vollkommer R. 1992: “Mithras”, LIMC 6.1, 583-626.

Walsh D. 2016: “Understanding the status of the cult of Mithras in the Tetrarchic Period: A Socio-Archaeological Approach”, in M. Mandich, Derrick T., Sanchez S.G., Savani G. and Zampieri E. (eds.), TRAC 2015: Proceedings of the 25th annual Theoretical Roman Archaeology, Oxford, 141-152.

Walsh D. 2018: The Cult of Mithras in Late Antiquity: Development, Decline and Demise c.a A.D. 270-430, Leiden.

Ward-Perkins B. 2005: The Fall of Rome and the end of Civilization, Oxford.

Ward-Perkins B. 2008: “Jones and the Late Roman Economy”, in D.M. Gwynn (ed.), AHM Jones and the Later Roman Empire, Leiden, 193-212.

Weddle P. 2010: Touching the Gods: physical interaction with cult statues in the Roman world. PhD Dissertation, Durham University.

Whitehouse H. and Martin L. (eds.) 2004: Theorizing Religions Past: Archaeology, History, and Cognition, Walnut Creek.

Whitmarsh T. 2001: Greek Literature and the Roman Empire: The Politics of Imitation, Oxford.

Williams G. 2012: The Cosmic Viewpoint: A Study of Seneca’s ‘Natural Questions’, Oxford.

Wilson A. 2012: “Raw Materials and Energy”, in W. Scheidel (ed.), The Cambridge Companion to the Roman Economy, Cambridge, 133-155.

Winter E. 2000: “Mithraism and Christianity in Late Antiquity”, in S. Mitchell and Greatrex G. (eds.), Ethnicity and Culture in Late Antiquity, London, 173-182.

Woolf G. 1996: “Monumental Writing and the Expansion of the Roman Society in the Early Empire”, JRS 86, 22-39.
Fig. 1 – CIMRM 736. Relief in white marble found South of Monastero near Aquileia in 1888, second half of 2nd century CE. Vienna, Alt. Mus. Room X 39. (H. 0.55, Br. 0.90 D. 0.22). Mithras tauroctone in a grotto. Photo used by kind permission of Carole Radatto, https://www.flickr.com/photos/carolemage/.

Fig. 2 – CIMRM 389. Detail from the cloak of Mithras, from the Mithraeum from the Palazzo Barberini, 3rd century CE. Above the tauroctony are the raven and the busts of seven planets: left to right, Sol with a radiate crown, bearded Saturnus with long hair, Venus with a diadem, bearded Jupiter with a kalathos, Mercury with a winged petasus, bearded Mars with a helmet, Luna with a crescent above her head. On the lower border, left to right, three individuals recline at a table; a naked child-like figure rides in a biga, with a flying shoulder cape and quiver, possibly representing Sol in his chariot; a bearded individuals reclines, possibly Oceanus. Vermaseren 1956-1960.
Fig. 3 – CIMRM 1727. Bronze plaque from Brigetio in Pannonia Superior, Budapest, Magyar Nemzeti Múzeum. (H 0.327 Br. 0.301 weight 333.8 gr). Below the scene of tauroctony are the busts of the seven planets with their attributes, left to right: Saturnus with falk, Sol with whip, Luna with torch and crescent, Mars wearing a helmet and cuirass with a lance, Mercury with caduceus, Jupiter with lightning, and Venus holding a mirror. Vermaseren 1956-1960.

Fig. 4 – CIMRM 693. White marble relief from Bologna, 2nd century CE (H 0.22, Br. 0.27). Above the tauroctony are the raven and the busts of seven planets: left to right, Sol with a radiate crown, bearded Saturnus with long hair, Venus with a diadem, bearded Jupiter with a kalathos, Mercury with a winged petasus, bearded Mars with a helmet, Luna with a crescent above her head. On the lower border, left to right, three individuals recline at a table; a naked child-like figure rides in a biga, with a flying shoulder cape and quiver, possibly representing Sol in his chariot; a bearded individual reclines, possibly Oceanus. Vermaseren 1956-1960.
Fig. 5 – CIMRM 641. Obverse of a white marble relief, found at Fiano Romano, 2nd century CE. Louvre Ma3441. (H 0.62 Br. 0.67 D. 0.16.) Upper corners of the rocky vault around the tauroctony are occupied by the busts of Sol (left) and Luna (right); a crescent rests behind Luna’s shoulders; Sol wears a crown of twelve rays, from which another ray darts out toward Mithras.

Fig. 6 – CIMRM 1902. Tauroctony from Jajce in central Bosnia, ancient Dalmatia. Likely 4th c CE. (H. 0.11 Br. 0.08-0.09 D. 0.07-0.09.) Mithras slays the bull, whose tail ends in three ears of grain; triangular niches for lamps are above the heads of Cautes and Cautopates. The relief was painted, with a blue tunic, red trousers, black bull, and red Sol and Luna. Vermaseren 1956-60.
Fig. 7 – CIMRM 1306. Mithras Relief found at Fellbach, gray sandstone. 2nd-3rd c CE. (H. 1.33 Br. 1.18 D. 0.30.) Above the left arm of Mithras, a burning lamp hangs from the vault of the grotto; underneath it is the hilt of a sword. Photo used by kind permission of the Landesmuseum Württemberg, Stuttgart, Foto: Ortolf Harl.

Fig. 8 – CIMRM 847. Altar to Sol Mithras, sandstone, from the Mithraeum at Carrawburgh near Hadrian’s Wall, Northumberland. (H 1.24 Br. 0.46.) A cavity was cut at the back of the capital to carry a lamp. Mithras faces front, arms at his waist, as he rises from the rock; he holds a whip in his right hand. The rays of his crown are formed by openings through which the lamp, inserted into a cavity at the back of the capital, could cast light. The cloak, hair and inscribed letters had red paint. Inscription: Deo invicto | Mithrae | M(arcus) Sim/plicius Simplex | pr(a)e(f(ectus)) v(otum) s(olvit) l(ibens) m(erito). Robert Estall photo agency / Alamy Stock Photo.
Fig. 9 – CIMRM 1083. Relief in Sandstone from Mithraeum I near Heddernheim. (H. 1.80 Br. 1.76 D. 0.22.) The front of this two-sided relief includes busts of wind gods in medallions in the four corners. These have wings in their hair; three are bearded, the exception located in the upper left hand corner. The god in the lower right breaths out a blast of wind. The busts of the four seasons are legible above and beneath these gods. Vermaseren 1956-1960.

Fig. 10 – CIMRM 415. White marble relief from Villa Borghese, 2nd century CE. (H. 2.54 Br. 2.65) Louvre No. 1023. Image used by kind permission of Jean-Pol GRANDMONT. https://commons.wikimedia.org/wiki/File:0_Relief_représentant_Mithra_-_Louvre-Lens_(2).JPG.
Fig. 11 – CIMRM 1430C. Relief from Mithraeum in Virunum, Magdalensberg, 2nd c CE. (H 1.45 Br. 0.45.) Mithras ascends a quadriga, in which Sol stands, wearing a crown with nine rays and holding a whip; Sol’s shoulder cap flies from his shoulders. Above, Hermes flies forward showing the way with outstretched right hand. He wears a small winged cap and shoulder cape, and holds the caduceus in his left hand. De Agostini / E. Lessing collection: Getty images.

Fig. 12 – CIMRM 299. Mithraeum of Felicissimus, Ostia, 3rd century CE. Vermaseren 1956-1960.
Fig. 13 – CIMRM 1896.3. Reverse of two-sided relief from Konjic, gray limestone, probably 4th c CE. (H. 0.59 Br. 0.825 D 0.10). Twisted Corinthian columns likely supported an arch; four individuals attend Sol and Mithras who recline behind a kline which is covered with the hide of a bull. Left to right: an individual wearing a raven mask; two individuals in Phrygian caps offer rhyton and cup; one individual wearing a lion mask. Vermaseren 1956-1960.

Fig. 14 – CIMRM 641. Reverse of a white marble relief, found at Fiano Romano, 2nd century CE. Louvre Ma3441. (H 0.62 Br. 0.67 D. 0.16.) Sol and Mithras lie side by side on a bull’s hide, the head and hind leg of which are visible. Mithras holds a long torch in his left hand, and extends his right hand behind Sol; Sol wears a crown of eleven rays, holds a whip in his left hand, and stretches his right hand toward the torchbearer who offers him a rhyton.
Fig. 15 – Rock birth of Mithras, from Mithraeum II of Colonia Agrippina / Köln. 3rd century CE. Relief from Mithraeum II of Colonia Agrippina/Köln. Photo used by kind permission of Carole Radatto, https://www.flickr.com/photos/carolemage/.

Fig. 16 – CIMRM 1494-1495; CIL III 14354. White marble statue of Mithras taurophoros, from the Mithraeum in Ptuj. (H. 1.59 Br. 0.48 D. 0.420). The fore-feet of the bull touch the ground; the inscription on the base reads Transitu / C(aius) Caecina / Calpurnius / temp(lum) redemi(t) et restitu(it). Photo used by kind permission of the Regional Museum Ptuj Ormož.
Fig. 17 – CIMRM 335. Tauroctony of Ottavio Zeno, Rome. Likely height 0.68. The tauroctony is framed by two trees; to the right of Mithras, a tree with scorpion and down-turned torch is in fruit; to his left, a tree in heavy foliate bears an upright torch. First published by Antonio Lafreri, Speculum Romanae Magnificentiae, 1564. Photo used by kind permission of the Special Collections Research Center, University of Chicago Library.