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# From Body to Space and Time: Perceiving space and time in the Mithras Cult

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## Abstract

This article investigates the possible ways in which Mithraists perceived the major categories of space and time in their ritual context. Merleau-Ponty's approach to the perception of space offers an appropriate theoretical framework for understanding how initiates used to perceive and experience the sacred space of the mithraeum. Further, the Lakoff and Johnson approach to the metaphorization and conventional conceptions of time is applied illustrating the way in which the initiates into the mithraic mysteries perceived and conceptualized time. In particular, it is suggested that conventional metaphorical mappings, imbuing the conceptual systems of Mithraists, functioned as a means of conceptualization of the initiatory experience in relation to the perception of space and time.

## Key words

Mithras, Mithraism, mithraeum, mysteries, initiation, perception of space, perception of time, metaphor, ritual, cognition, phenomenology

## Introduction

The Mithras cult emerged as a new religious form and was widespread throughout the Greco-Roman world in late antiquity. In contrast to the traditional ancient Greek religion, as well as to other mystery cults of the time, Mithraism was coterminous with its mysteries and offered an integrated worldview to its initiates, defining their specific images and assumptions about reality, their selves, and the world. The perceptions of space and time constituted fundamental categories of this worldview instantiated in the symbolic construction and perception of the mithraeum (the modern term for the cult meeting place) as an actual image of the cosmos.

In particular, the way in which Mithraists perceived and experienced the mithraeum as an authentic replication and image of the universe was not identified with a purely physical perspective that confronts the phenomenal world as subject to the principles of physical causality, historical evolution, and psychological predispositions and gives an objective form to the world independent of the agents who interact with it. On the contrary, the symbolic construction and conception of the mithraeum was based on the direct experience and perception of space by Mithraists, who ascribed specific significance and meanings to it through the association of their consciousness with their surrounding world (Tilley, 2004: 1).

## From Body to Space

Phenomenology, as a special way of thinking and existing rather than as a specific set of beliefs and doctrines, provides a suitable theoretical framework for understanding the perception and conceptualization of the world and its component elements and dimensions as they are presented to consciousness (Tilley, 2004: 1–2). Particularly, the somewhat materialistic approach formulated by the French philosopher Merleau-Ponty (2002) could contribute to understanding the way in which the initiates into the mysteries of Mithras perceived space.

In his approach to landscape and place, Merleau-Ponty (2002) attempts to describe the world as it is actually experienced and perceived by humans during their interactions with their surroundings (Tilley, 2004: 1). According to his view, the human body is not a mechanistic object distinguished and personalized by the mind but is the particular medium that situates people in the world and provides them with a specific way to live within it and sense themselves, others, and things. Humans are body-subjects with a mind physically embodied, which always faces the world from a particular point of view and in a particular temporal and spatial context. In this perspective, humans are physical subjects in space-time. Perception is the bond between consciousness and the world mediated through the body and involves a continual mutuality and interchange between the world and the body (Tilley, 2004: 2). Perceptual consciousness, thereupon, is not a totally internal mental state, but is dependent on the human bodily presence in the world and a bodily awareness of it.

The living body, as it moves and interacts with its surroundings, makes human beings capable of perceiving space, place and landscape, since it is the benchmark for what is perceived as being near, far, above, below and so forth, as well as the line of the horizon (Merleau-Ponty, 2002: 236–237) and the limits of vision (Merleau-Ponty, 2002: 295). As Merleau-Ponty suggests, there are six major concrete dimensions related to the body which define the space experience. These dimensions are the perception of above/below or up/down, in front/behind, and to the left/to the right, and acquire their specific meanings at a first in regard to the body itself (see Tilley, 2004: 4).

Human bodily construction may be perceived in relation to its up/down parts (head/feet), its front and back (chest/back) as well as to its basic bilateral symmetry that defines left and right (for example a hand, a leg, an eye etc. to each side). However, these dimensions are not constrained to perception of the body itself. They rather expand to the world and connect the body with the surrounding space (Tilley, 2004: 4), which lacks direction in the absence of an embodied living agent who constructs and perceives spatial dimensions on the basis of his/her own movements and intentions (Merleau-Ponty, 2002: 236).

From an embodied perspective, humans are related to a specific place or landscape through coordinating their bodies, since they perceive the spatial height, breadth and depth in relation to their bodily position. As they move in space, the relative spatial dimensions may change since they are perceived from the changeable point of view of the embodied person (Tilley, 2004: 5; Merleau-Ponty, 2002: 236–237).

However, the vertical axis defining the perception of up and down seems to be more stable and important for body-subject spatial orientation than the organization of space in a horizontal axis that defines the perception of front/behind and right/left. The line of the horizon is the compendium of the horizontal vision of the earth and constitutes a more concrete borderline between the above and below parts of space. On account of its specific significance for the separation between the earth and heaven, the dimension of up and down has acquired fundamental metaphorical meanings in many languages (Lakoff & Johnson, 1980: 14–19) and has been invested with particular cultural and moral values in various contexts. The metaphorical distinction between the lightness of the heavens and the gravity of the land – the terrain where humans live and act – is common place to many religious systems and cosmologies. In this way, the separation between up and down constitutes a self-contained dimension according to which the body is perceived as part of an earth/heaven cosmic axis (Tilley, 2004: 5–6).

In contrast, perceptions of what is in front or behind and to the left or to the right are more fluid distinctions in direct connection with the body and its movements in space. The body-subject is always between in front and behind and between to the left and to the right and there is a sense of encirclement caused by the multiple visual, tactile, auditory and olfactory stimuli perceived by humans from different directions (Tilley, 2004: 6).

However, the specific structure of the human body predetermines that people mainly move, act and look at things which are in front of them. In this way, the front/back axis somehow separates the parts of the world that people can see and interact with, and the parts remaining out of their visual field. The concepts of front and behind have acquired also metaphorical meanings and are related to different treatments of places and landscapes which have social and moral impacts on people's behavior and their relationships with each other (Tilley, 2004: 6–7).

Further, the distinction between right and left is even more unstable and mutable than the other bodily dualisms, since it depends on the direction faced by a body-subject and affects the way in which he/she perceives the world. Nevertheless, the bilateral dualism of the human body has been correlated to heaven and the passage of the sun from east to west. The association of the right with the east and of the left with the west may situate the body in place or landscape constituting the base for a person's bodily orientation in it (Tilley, 2004: 8–9).

In this perspective, human beings experience and perceive space in relation to spatial dualisms not generated by fixed operations of the human mind, but originating from human bodily experiences. It is through their bodies that humans find their way into and out of places and landscapes and organize their actions in space. The human body carries a specific, organized spatial framework according to which people are able to orient themselves in places and to form internalized cognitive mappings that play a significant role in the perception of space (Tilley, 2004: 9–10).

### **Perception of Space in the Mithraeum: From Earth to Cosmos**

In the case of Mithraism, the way in which the initiates perceived and conceptualized space was in direct connection with their presence and movements

in the mithraeum, which provided the scaffolding for the construction, expression and justification of the Mithraic worldview.

According to Porphyry (*De Antro* 6: 8–9), the Mithraists designed their meeting places as authentic replicas of the cosmos, following the precedent of their supposed founder Zoroaster who “was the first to dedicate a natural cave in honor of Mithras”. Caves were considered to be ideal places for the Mithras cult. Several mithraea were in fact located in natural caves, and the esoteric name for the mithraeum, any mithraeum, was, in fact, the *cave*. Porphyry (*De Antro* 6: 8–9) states explicitly that the natural cave is an “image of the universe” (*eikona kosmou*). It follows, therefore, that the mithraeum could and should be perceived as an image of the universe.

As the archaeological evidence indicates, the majority of the mithraea were small places that could be viewed as *caves* giving the sense of a *closed* space, seemingly without any connection with the *outside* world, and encapsulating the whole structure and order of the universe. Thus, the mithraeum became a metaphor for the world, where the arrangement of its internal furnishings corresponded to the arrangement of the celestial bodies (Beck, 2006: 102–112).

The perception and conception of the mithraeum as an image of the universe would have been based on the bodily experiences of the initiates and their positions and movements within the space, since, as Merleau-Ponty (2002) suggested, major spatial dimensions acquire their specific meanings by means of the relationship between a person’s body and its surroundings.

As the initiates entered the mithraeum, they imaginatively perceived the place and its specific topology as a concrete microcosm mapping out the universal macrocosm. In this way, the specific features of the mithraeum represented and, in ritual context, were perceived as the actual cosmic structures of the universe.

In particular, there were benches extending along the long sides of the Mithraic chamber. At the Sette Sfere mithraeum in Ostia, which Richard Gordon (1976) and Roger Beck (2006: 102–112) have argued best instantiates the ideal model of the mithraeum, each of these side benches carries mosaic images of six of the signs of the zodiac, starting from the sign of Aries at the far left<sup>1</sup> and returning to the sign of Pisces on the far right.<sup>2</sup> Consequently, the zodiac signs on the benches could be read in a circle joined at the cult niche and the entrance and so perceived as the actual route of the sun through the zodiac, which constituted a recurrent physical event determining the alteration of seasons, months and years (Gordon, 1976: 52). Accordingly, the icon of the tauroctony, interposed on the end wall between the signs of Aries and Pisces, could be perceived as the spring equinox, and the entrance between the signs of Virgo and Libra as the autumn equinox (Beck, 2000: 163; 2006: 103–111). In this view, the longitudinal aisle linking the two short sides of the mithraeum represented, and in ritual context was perceived as, the actual diameter of the universe linking the spring and autumn equinoxes at the points on

<sup>1</sup> To the left as someone is looking from the entrance to the image of bull-killing Mithras.

<sup>2</sup> Thus, starting from the image of Mithras sacrificing the Bull (the tauroctony) at the far end, the signs of Aries, Taurus, Gemini, Cancer, Leo, and Virgo were represented in that sequence on the left bench. The sequence of the zodiac ran in the opposite direction on the opposite bench: starting from the entrance, Libra, Scorpio, Sagittarius, Capricorn, Aquarius, and Pisces were depicted in that order.

the ecliptic (i.e. the central line of the zodiac and the actual path of the sun) where the ecliptic is bisected by the equinoctial colure.<sup>3</sup>

Mithras, therefore, in the person of his cult image, was placed exactly on the axis of the equinoxes. To his right he had the signs of the zodiac which lie to the north of the ecliptic and to his left the signs which lie to the south. This location corresponded to the way in which Porphyry described the “proper seat” of Mithras at the equinoxes “having north to his right and south to his left” (*De Antro* 24; further Beck, 1976: 95–98; 1994a: 106–113; 1994b: 39–41; 2000: 160; 2006: 103–115; Gordon, 1988: 58).

In this arrangement, the signs of the zodiac on the benches, which were opposite to each other, formed pairs with the same celestial latitude or zone.<sup>4</sup> In astrological terms, this means that when the sun is in one or other of these pairs, the day, and of course the night, had the same duration. These pairs were said to “behold” each other and were called *isodunamonta* (equally-powered) by the astrologers (Ptolemy, *Tetrabiblos* 1: 15; Gordon, 1976: 131–132).

As the initiates looked upwards towards the vaulted ceiling of the mithraeum, they would have the impression that the aisle/diameter opened up into a semicircle arching across the northern celestial hemisphere. In this view, the diameter that the aisle represented also determined a horizontal level which coincided with the mithraeum’s floor. The plane of the floor could be considered the plane of the celestial equator dividing the celestial sphere into two hemispheres. Consequently, the visible northern hemisphere extended above, and the invisible southern hemisphere extended below the floor. On the top and exactly in the center of the ceiling, the north celestial pole should be located, and an imagined axis could be perceived as penetrating the floor in the middle of the aisle and extending downwards below the floor, thus linking the north and the south celestial poles (Beck, 2006: 108–111).

The two niches sited at the midpoint of the benches facing each other defined another imagined axis, that which linked the solstices. The niche to the left of the initiates, as they faced the scene of the tauroctony, was located in or at the start of the sign of Cancer and so was perceived as the summer solstice. On the opposite side, the niche to the right of the initiates was in, or at the start of, the sign of Capricorn and so represented the winter solstice (Beck, 2006: 111; Gordon, 1988: 57). In this way, the latitudinal axis between the two solstices bisected the universe at the solstitial colure, “the great circle which joins the solstices to the poles” (Beck, 2006: 111). This axis separated the “fast rising” zodiacal signs on the benches (Capricorn to Gemini, the six closer to the image of the tauroctonus Mithras at the cult-niche end of the mithraeum) from the “slow rising” signs (Sagittarius to Cancer, the six closer to the entrance end) (Gordon, 1976: 132).

Since the summer solstice is the most northerly point in the sun’s orbit and the winter solstice the most southerly (Porphyry, *De Antro* 22: 3–5), initiates could orient themselves by identifying what was to the left (as one entered) with the north and what was to the right with the south. Further, in this image of the

<sup>3</sup> The equinoctial colure is the great circle on the celestial sphere passing through the celestial poles and the equinoxes. The plane of the colure, like the plane of any great circle, bisects the universe.

<sup>4</sup> In correlation with terrestrial latitude.

universe embodied in the structure of the mithraeum, the earth was perceived as being in the middle of the ritual place precisely at the intersecting point of the longitudinal and latitudinal axes. In this light, if an initiate stood in the middle of the mithraeum, he was imaginatively at the centre of the universe, on the immobile earth, with the northern celestial hemisphere extending above him and the southern below.

Since the bench to the left on entering (to the right of Mithras in the cult niche) represented the six northern signs of the zodiac and the bench on the right represented the six southern signs, the initiates who sat on the bench to the left (to the right of Mithras) knew subliminally that they were “higher” or more “northerly” than the initiates on the opposite bench to the left of Mithras (Beck, 2006: 108–111).

This particular perception of space and orientation by the Mithraists in the microcosm of their mithraeum was based on the fundamental assumption that the mithraeum was not perceived in the mystery context as a geographical area on the surface of the earth, but as the cosmos itself. It therefore followed not a geographical but a cosmographical orientation (Beck, 2000: 162). From this perspective, the symbolic orientation within the mithraeum bore no relationship to the actual orientation of any particular mithraeum in terms of its specific geographical location.

Furthermore, the Mithraic ritual space constituted the ground on which the initiates projected their specific concepts of time, as they were formed according to the standard Hellenistic cosmological model.

In the Ptolemaic geocentric cosmography, South and North were determined by the celestial poles. There were, however, no specific points corresponding to East and West. Rather, East and West were determined on the basis of the motions of the celestial bodies around the earth, particularly around the axis which linked the north and south celestial poles (Beck, 2000: 162). Accordingly, East and West had to be imagined in the revolutions of the planets eastwards around the earth and through the signs of the zodiac depicted on the benches, and of the whole universe westwards in the opposite direction (Beck, 1994a: 113–114; 2004: 245; 2006: 110).

If an initiate moved within the mithraeum following the zodiac carried on the benches, starting from the sign of Aries round to the sign of Pisces, he would be following the ecliptic, namely the movement of the Sun, which determined the annual change of seasons (Beck, 2006: 78–79). If, instead, he followed the reverse direction, he would move in parallel with the celestial equator, following the movement of the universe and celestial bodies around the immobile earth, which lasted twenty four hours and marked the succession of days and nights (Beck, 2000: 162).

Each bench, as we have seen, symbolized one half of the zodiac. Thus, the niches in the middle of the benches further divided the zodiac into four quadrants representing the four seasons commencing at the equinoxes and solstices. The

sequence starts with the spring quadrant on the right of Mithras in the cult niche and runs counterclockwise through summer and across to autumn and so back to winter on Mithras's left. Time could be represented as 'changing' now by moving a marker around the benches from sign to sign as appropriate (Beck, 2006: 114).<sup>5</sup> In this way, a fusion of space and time was realized in the mithraeum, in which time and temporal differences were signified by spatial signs that defined a past and a future in reference to a moving present.

## **From Body to Time**

The spatial perception of the temporal dimension instantiated in the mithraeum was grounded on the common human cognitive and imaginative means of perceiving time. Persons, objects, places, and landscapes were not perceived as static standing entities, but existed in and through time transforming their nature and their interrelations between each other. As Merleau-Ponty suggested, time is the fourth 'hidden' dimension of existence and is always contained in the perception of self, others, things and places (Merleau-Ponty, 2002: 476–503). The body carries time into the experience of places and landscapes, since memories of previously experienced places are recalled and modulate the ground for the perception of new ones (Tilley, 2004: 12).

According to Lakoff and Johnson (1999), humans have unconsciously and automatically constructed conventional conceptions of time comprising parts of their ordinary conceptual systems. Nevertheless, people cannot think or, even less, talk or reason about time without using metaphors. Accordingly, a metaphorical conceptualization of time is fundamental for the construction of a time concept (Lakoff & Johnson, 1999: 137).

In particular, human understanding of time is mostly related to the concepts of space and motion, and further to the embodied conceptualization of time in terms of events. Since humans cannot observe time as a thing-in-itself, in their everyday interaction with the world, they perceive continually iterated events towards which they compare other events and metonymically represent their iterations as intervals of time. Specifically, the certain, sequential iteration of physical events – such as the passage of the sun across the heavens – is perceived as defining the "same" intervals of time being conceptualized, for example, days, months, seasons and years. Consequently, the most literal attributes of the human concept of time are generated by the specific features of events. In this way, what is called the domain of time is a conceptual domain characterized by comparison between events (Lakoff & Johnson, 1999: 138–39).

Further, since only a minimal part of the human understanding of time is purely temporal, the perception of time is constructed mainly on the basis of metaphorical interpretations of movements in space. From a cognitive perspective, there is a specific area in the visual system of the human brain dedicated to the tracing of movement, but there is no corresponding area for the detection of 'global

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<sup>5</sup> In the mithraeum at Vulci (Sgubini Moretti, 1979), the unusually high benches are carried on arches, six for each bench, divided into pairs of three on either side of the mid-bench niches. By moving images of the planets between the recesses formed by the arches, the passage of periods of time other than annual/seasonal could be intimated (Beck, 1994a: 108).

time'. In virtue of this fact, direct perception of movement may be used as a source domain from which mental imagery may be transferred to the target domain of time (Lakoff & Johnson, 1999: 140). Time metaphors and Space-Time metonymies arise from the very ordinary human embodied experience of acting and moving in the world.

In their everyday interactions with their surroundings, humans participate in 'motion situations', as they move in relation to others or others move in relation to them. The association of these situations with 'time defining events' – which provide humans with a sense of time – constitutes the experiential ground that brings together the space-source domain and the time-target domain and makes possible the associations between them mapped in Time metaphors (Lakoff & Johnson, 1999: 151). In literal 'motion situations', in which these associations hold, metonymy is also possible. A specific 'motion situation' constructs a single complex conceptual schema in which the two domains of time and motion are present as parts of a single whole. These correlations between the two domains are the basis on which one part can metonymically represent the other. Further, as Lakoff and Johnson underline, "Time metaphors are grounded in literal motion situations, in which the time and motion domains come together in experience" (199: 152).

In this perspective, spatial-temporal metaphors constitute a part of human's cognitive unconsciousness that structures not only the way in which people conceptualize the relation between time and events but also the perception of time and the formulation of the common sense understanding of temporal experiences (Lakoff & Johnson, 1999: 153–54).

Further, humans experience only the present and they conceptualize past and future by the function of their memory systems and their images and plans about the future. Nevertheless, their memories and expectations are not inherently figured along a time line, and metaphorical principles of thought provide the foundation for the perception of the temporal dimension of human existence (Lakoff & Johnson, 1999: 159).

Nevertheless, the biological and cognitive construction of time does not imply that the temporal concept is purely subjective, arbitrary, or even cultural. Spatial metaphors make possible the conceptualization and measurement of time, and are grounded to a great extent in the human body and basic brain structures and the nature of human bodily experience (Lakoff & Johnson, 1999: 167–68).

Consequently, time is a concept constructed via human bodies and brains, and structures the actual experience and perception of the world and its nature. Times, places, and landscapes are reflected in turn on human consciousness and constitute the foundation for any knowledge and any further intellectual and abstract thought. In this way, the perceiving body-subject and the perceived world unfold in a dialectical interrelation that is realized in the body itself (Tilley, 2004: 10, 20).

### **Perception of Space in Ritual: From Genesis to Apogenesis**

In this view, the perception of the interrelation and infusion of time and space in the mithraeum probably constituted the basis and means for the realization of the mystery of the souls' journey lying at the heart of the mithraic mysteries. Entering,

being, and moving in the mithraeum could lead the initiates to salvation from their mortal nature, revealing to them the path by which souls had descended from the sphere of the fixed stars into mortal genesis on earth, and the route that they could follow to ascend back to the immortality of the heavens (Porphyry, *De Antro* 6).

In particular, as the initiates entered the mithraeum, the gates of the descent and ascent of souls were revealed to them, but remained inaccessible to, and hidden from, those who did not belong to the mithraic community. According to Porphyry, the gate through which the soul had gone down into the mortal life of the terrestrial space was on the northern/summer solstice, at the sign of Cancer. On the opposite side, the southern/winter solstice was the gate through which the soul could ascend back to heaven, at the sign of Capricorn (*De Antro* 22: 14–23, 21–23, 23–24). The space between the peripheral benches and the centre, perceived as the space between the ultimate heaven and the earth, included the seven planetary spheres that constituted the climax by which souls could ascend to the sphere of the fixed stars.

In some mithraea, as for example at the Sette Sphere Mithraeum (Beck, 1994: 109), the outlines of seven arches in mosaic from the entrance toward the cult niche represented the seven planetary spheres through which the soul should pass in order to arrive at the sphere of the fixed stars and “apogenesis”. However, the other planetary symbols accompanying these arches seem to be associated rather with the order of the initiation into the seven initiatory grades than with the order of the relative distances of the planets from earth. A relative association between the initiations to the sequential initiatory grades entailing the passage from the particular planetary gates has been considered by scholars as an ulterior aspect in Mithraism.<sup>6</sup>

Nevertheless, even if the mystery of the soul’s journey was not directly related to the initiatory rituals, it could not be viewed simply as a metaphor for a spiritual journey. It was the journey of souls through the actual heavens that took place in the mithraeum. As Beck argues, “if the mithraeum/cave was duly consecrated, ‘made sacred’ by being properly made a model of the universe, then merely by being in the mithraeum and by apprehending it as the universe the initiate would effectively enjoy the freedom of the heavens” (2006: 129). Being in the mithraeum entailed being in the heavens and the appropriate positions of the initiates on the benches could signify their corresponding positions on their celestial route.

In this view, the movements of the initiates during rituals were obviously movements taking place in a specific geographical area, but they acquired their specific meanings and actual significance through the perception of the mithraeum as a model of the universe. Although there is too little literary testimony concerning

<sup>6</sup> The order of the planets in terms of their distance from the earth was considered in the Hellenistic era as follows: Moon – Mercury – Venus – Sun – Ares – Jupiter – Saturn. This sequence, however, does not coincide with the order of the tutelary planets of the seven grades, as they are symbolically represented in the Mithraeum di Felicissimo: Raven – Mercury, Nymphus – Venus, Soldier – Ares, Leo – Jupiter, Perses – Moon, Heliodromus – Sun, Father – Saturn. This contradiction between these two planetary orders is one of the most difficult puzzles of Mithraism which scholars have not yet resolved. However, as Gordon remarks, this symbolic order could be perceived in a manifold way by the initiates, and possibly this complex structure would not be completely conceived by anybody except the initiates into the higher grade of Father, who could also disagree regarding the meanings which were available in the cultic context (Gordon, 1980: 71).

the actions during rituals, scholars have suggested that the scene depicted on one side of the Mainz vessel represents a procession of initiates who imitated the movements of the celestial bodies in heaven (Beck, 2000: 147). Particularly, in the scene, four figures are depicted parading leftward. The first figure wears a breastplate, is the most clad of the four, and probably represents a member of the grade of Soldier. The second wears a Phrygian cap and holds downwards a rod with his right hand, while the fourth also carries a similar rod but upwards almost vertically, and is bareheaded.<sup>7</sup> The third figure brandishes a whip, considered a symbol of the sixth grade of Heliodromus (Beck, 2000: 154–155).

Focusing on the form and meaning of the represented ritual action, the two figures carrying the rods<sup>8</sup> in reverse probably depicted initiates who symbolized *Cautes* and *Cautopates* in the ritual context and accompanied Heliodromus, who represented the Sun. Playing these roles during the ritual the initiates probably imitated and represented the course (*dromos*) followed by the sun during its annual journey around the earth defining the alterations of seasons. Since the Sun followed the ecliptic, it passed through the four tropic points (spring equinox, summer solstice, autumn equinox, winter solstice) (Beck, 2000: 157). *Cautes* and *Cautopates* respectively represented the winter and summer solstices – where the gates through which the souls descended (summer solstice) and ascended (winter solstice) back were located – and they followed the route of the Sun as he passed through the equinoxes (Porphyry, *De Antro* 24: 12–15). In this perspective, the scene on the Mainz vessel seems to represent an initiatory ritual of the soul's genesis and apogenesis mysteries, which could be represented and actually realized in the mithraeum perceived as an image of the universe.

### Perception of Time in Ritual: From Past to Future

Since in the Mithraic ritual context the initiates' positions and movements in the mithraeum were perceived and conceptualized as taking place in the cosmos, they could therefore metonymically expand their meanings and signify specific moments and periods of time as the sun and the other planets following their rotation around the earth passed to and from the appropriate zodiac signs. Although the inadequacy of ancient records concerning the specific metaphorical and conceptual significance of the ritual does not allow definite and/or certain inferences, the association and fusion of space and time in the Mithraic cave could constitute the basis for assumptions about the way in which initiates conceptualized time in the ritual context.

<sup>7</sup> Horn and Merkelbach identify the second figure with a member of the grade of *Perseus*, but they are differentiated in the identification of the fourth figure. Horn argues that this is a member of the grade of *Nymphus*, and Merkelbach identifies it with a member of the grade of *Raven*. However, as Beck argues, these identifications with members of specific grades are not supported by the iconographic data and in any case do not essentially contribute to conceive this particular ritual action. For a brief outline of the figures' identifications of the Mainz vessel suggested by Horn (1994) and Merkelbach (1995), see Beck (2000: 155).

<sup>8</sup> The fact that they carry rods instead of torches is considered of minor significance, since the desirable meaning is rendered. Such variations are also found in other cases without elimination of their meaning. For example, on a monument from the lower Danube instead of torches there are birds flying, one upright, and the other upside down see Beck (2000: 157).

In particular, the correlation of the planetary motions with the definition of time could be perceived according to the fundamental principle that the perception of time is grounded on the metaphorical perception of the movement of a subject in space (Lakoff & Johnson, 1999: 139). Specifically, there are two primary metaphors which appear to pervade the human conceptual systems and incorporate movement in space as the benchmark for the conception and conceptualization of time. In the first case, the observer is perceived as static, while time is moving (the MOVING TIME metaphor). In the second, the observer is moving in relation to static time (the MOVING OBSERVER or TIMES' LANDSCAPE metaphor) (Lakoff & Johnson, 1999: 141–148).

According to the MOVING TIME metaphor, time is conceptualized as moving in relation to a static observer who experiences the passage of time. In this metaphorical mapping, inferences from a specific spatial schema are drawn to the target domain of time. Times are conceptualized as places that move past a perceiving subject. Each location of the observer is perceived as the Present, since the places behind him/her are the past and the places in front of him/her are the future (Lakoff & Johnson, 1999: 141–142).

In Mithraism, the perception of time could be based on a variation of this particular metaphorical schema. Specifically, the various zodiac signs and symbolic places in the Mithraic cave could be perceived as representing the different places which the sun passes through during its annual revolution around the earth beginning from the spring equinox. In this view, the initiates' various positions on the benches – on which the zodiac signs were carried – represented specific moments in the annual solar motion and, accordingly, positions to the left of their places were perceived as the past and to the right as the future, since the sun moves eastwards (counterclockwise) passing successively through the signs of the zodiac. Thus, for example, an initiate who sat on the bench at the sign of Cancer was at an oncoming point of the solar orbit in relation to an initiate sitting to his left, on the bench carrying the sign of Gemini, and at a previous point of solar movement in relation to an initiate sitting to his right, at the sign of Leo.

A variation of the second major metaphor, the MOVING OBSERVER or TIMES' LANDSCAPE metaphor (Lakoff & Johnson, 1999: 145), could be assumed as the means of conceptualizing the temporal experience of the main Mithraic mystery – that of the soul's journey. According to this metaphor, the observer is not perceived as static, but as moving in space, and each location on the route represents a time (Lakoff & Johnson, 1999: 146–147). In the Mithraic context, the initiate's soul followed a specific itinerary through the heavens in order to arrive at the sphere of the fixed stars. The successive planetary spheres represented medial stations of this journey that could further signify the moments of this route. In this view, the arrival at each sphere could be perceived as the present in relation to the ascent of the initiate's soul, since the lower planetary spheres – at a smaller distance from the earth and which had already been passed – could be perceived as the past, and the higher planetary spheres – at a greater distance from the earth – could be perceived as the future, the locations on the route at which the initiate's soul was going to be in due course. In other words, according to this metaphorical schema, the different locations of the initiate's soul represented the times, the motion of the soul could be conceptualized as the 'Passage of Time', and the distance already

moved by the soul could be perceived as the amount of time that had passed (Lakoff & Johnson, 1999: 147).

From a neural perspective, the conceptualization of the temporal dimension of the initiatory experience within the complex MOVING TIME and MOVING OBSERVER or TIME'S LANDSCAPE metaphors might be generated by the parallel activation of neural connections which define the inner structure of these metaphors (Lakoff & Johnson, 1999: 62). The conceptualization of time in the Mithraic context according to these conceptual mappings could have further ramifications in the sequence of months and seasons as well as in relation to the motions of the planets and the revolution of the sphere of the fixed stars – the space where the human soul would regain immortality.

As Roger Beck put it, the perception of space and time in Mithraism was seemingly grounded on the specific symbolic structures of the mithraeum, which constituted simultaneously a *material environment* – in which initiates could move around and sense the things inside it – as well as a 'cognized environment' – perceived as an authentic image of the universe (2006: 141–142). Being, moving, and acting in the mithraeum entailed a reorientation of the initiates and a recognition that the space around them was not just a cave but a virtual universe. Sensory stimuli (visual, auditory, haptic and olfactory) during rituals as well as previously formed mental representations could lead to the re-activation of the 'cognized environment' and contribute to the projection of the corresponding mental representations on to the sacred space (Beck, 2006: 141–148).

This particular process of the cognitive transformation, construction and perception of the Mithraic cave was in direct connection with, and directly dependent upon the processes of the initiates' embodied perception. The initiates were actually and physically situated within the mithraeum, perceiving their bodies as natural objects moving in space as well as benchmarks of their orientation within the sacred cave. Furthermore, common conventional metaphors being formed in ordinary motion situations could function as cognitive devices for the conceptualization of time in the ritual context. Even if the conventional metaphors presented in this paper did not operate exactly in the suggested form, similar metaphorical and linguistic expressions of the mystery journey were probably the cognitive means for the conceptualization of time and temporal experience in the Mithraic ritual-mystery context.

Thus, an understanding of the cognitive and emotional processes that probably generated the conceptualization of Space and Time in the Mithraic mysteries seems possible on the basis of the common structures and functions of human cognition. In this perspective, the deficiency of ancient records on the specific beliefs and precepts of Mithraism could be completed by well-articulated scientific models of human cognition providing valid heuristic methods for a reconstruction of historical knowledge.

## Appendix

The notions of “up” and “down” constitute fundamental concepts in the human perception of space, which have acquired complex metaphorical meanings and various qualitative values in different cultural and religious contexts (Lakoff &

Johnson, 1980: 22). However, although such metaphors can vary from culture to culture, they depend on and emerge through the natural and cultural experiences of humans, who experience space and time through their biological structure and the functioning of their own bodies (Lakoff & Johnson, 1980: 14–17).

Particularly in Mithraism, the perception and conception of “up” and “down” by the initiates varied from the ordinary meanings of the words out of the cultic context. The twin figures of Cautes and Cautopates – dressed in Persian costume similar to that of Mithras and represented holding torches – constituted one of the major means for the metaphorical conception of “up” and “down” in the mystery context.

In particular, Cautes was represented holding a torch upwards, which could be perceived as a reference to the sunrise, spring, summer, day and light. On the other hand, Cautopates, depicted holding a torch downwards, was seemingly associated with sunset, autumn, winter, night and darkness (Clauss, 2000: 95).

In the mithraea the torchbearers were represented framing the reliefs and the scene of the tauroctony. Their position to the left or to the right of Mithras could vary, entailing relative modifications to their respective symbolization. However, apparently there is a more significant contradiction in the mithraea in which the torchbearers are placed at the end of the benches, as for example in the Mithraeum of Sette Sfere, where their locations seem more stable, amplifying the symbolic orientation in Mithras’ sacred place (Gordon, 1988: 55–56).

Specifically in these Mithraea, Cautopates is represented at the end of the left bench, and Cautes at the end of the right. According to the description of the Mithraic cave – outlined previously – the left benches coincided with the North. In the middle of these benches the summer solstice was marked, occurring between the end of spring and early summer<sup>9</sup> and indicating the northernmost point of the ecliptic. In contrast, the right benches coincided with the South. They symbolized the route of the Sun during the autumn and winter, which reached the southernmost point at the winter solstice localized at the borderline between these two seasons. In these frameworks, Cautopates’ placement to the left as a symbolic representation of darkness during the winter and autumn months, as well as the installation of Cautes to the right as a symbolic connotation of the light during the spring and summer months seems contradictory (Gordon, 1976: 127–128; Gordon, 1988: 55).

However, this contradiction seems to be resolved on the basis of Porphyry’s relative testimony, recorded in a passage from *De Antro Nympharum* (24: 13; 25: 19). In particular, it is mentioned that Cautopates was set to the North and associated with the cold North wind<sup>10</sup>, and Cautes was placed to the south and related to the

<sup>9</sup> The seasons were signified by the signs of the zodiac carried on the benches and corresponded to these signs. According to the zodiac, the following associations are recognized: Aries + Taurus + Gemini = Spring / Cancer + Leo + Virgo = Summer / Libra + Scorpius + Sagittarius = Autumn / Capricorn + Acquarius + Pisces = Winter.

<sup>10</sup> In terms of the co-relation of the summer solstice to the North and of the winter solstice to the South, Beck (1994a: 114; 1984: 2085) mentions a paradox that appears in the context of the Mithraic cult. In particular, the connection of the summer solstice as the northern tropic with the cold and coming to life on the earth, and respectively the co-relation of the winter solstice as the southern tropic to the heat and apogenesis impugns the usual association of the heat with the summer solstice and of the cold with the winter solstice.

heat. In the mystery context, the North and particularly the northernmost point of the ecliptic was associated with the descent of the souls from the heavens into the world of genesis on earth through the gate of the summer solstice. In this perspective, Cautopatēs, holding the torch downwards, symbolized the descent of souls. In contrast, Cautēs, holding the torch upwards, was associated with the South and indicated the route of the souls' ascent to the sphere of the fixed stars through the gate of the winter solstice, symbolizing in this way the release of the soul from birth and its incoming to the blessedness of the heavens (Gordon, 1988: 56).

Thus, in the context of the Mithraic mysteries, "up" was metaphorically related to the apogenesis and immortality while "down" was associated with birth and mortality. The figures of the Torchbearers and their placement in the Mithraeum were the empirical means for such a metaphorical perception, conception and conceptualization of these notions.

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