Zmago Šmitek

MANDALAS: SECRET GARDENS OF ENLIGHTENMENT

From Mythology to Geography

pp. 10–33

In a certain way, every debate on the iconography of mandalas relates to the symbolism of two seemingly simple geometric shapes – the circle and the square. The graphic two-dimensional form of a mandala is usually a square, drawn inside the rim of a circle, while the architectural and sculptured versions of it form a cube superimposed by a dome. Symbols of the circle and the square thus complement each other, with their final metaphysical meaning attained only in their mutual connection. For example, a cube, crowned with a dome, represents a transition of earthly individualities towards an elevated ideal of integrity.

For two millennia, mathematicians and geometricians have tried to bridge the fundamental contrast between the two shapes and to "square the circle", however, they only came up with more or less accurate approximations. Such efforts result in failure on account of the limited human mind, just as it is impossible to comprehend the mystery of the Paradise, so it seems that Dante's words are still valid (Paradiso, Canto XXXIII, 133-135). Still, why should we insist on an exclusively rational way? Mircea Eliade thought that, by principle, symbols are not supposed to be understood and they preserve their structure even when they have been long forgotten. (1) Carl G. Jung saw the creation of symbols as the most important function of the subconscious, yet he still acknowledged a certain measure of rationality. (2) We might add that symbols have their own inner logic, there is no doubt, although it is often different from our trained everyday logic.

It certainly made a certain sense to enclose a square in a circle or to place it within a circumference, there was a deeper meaning to it that today we cannot explain in detail. We lack adequate insight into the reason why did archaic humans in various corners of the world select these two geometric shapes – out of many others - to represent the most elementary symbols. Perhaps they did it, because their shapes can construct other symbols. The square, for example, is the base for the symbols of the cross and the swastika, as they both connect points along the edges of the square to its centre through various designs. The difference between the two lies in the fact that the cross is static, while legs of the swastika present its dynamic aspect, a rotation in space. If we bend sides of the cube downwards, to the basic plain, we create an image of the cross. A diagonal that connects the opposite corners of any square draws a shape of a triangle. The same principle allows us to draw structures of a pentagram, a hexagram, etc into a circle.

German philosopher Franz von Baaden showed considerable interest in the relationship between the triad and the quaternity. In the beginning of the 19th century, he wrote about a

triangle with a transcendental centre by which it passes into the quaternity. That centre was marked by a dot, which represents the fourth element along the passiveness of the rest of the structure. (3) Thus, Von Baaden intuitively drew the same symbol we can find in the Indian Tantric triangles, *yantras*, which include the central creative "point" or "seed" (parabindu). Justinus Kerner, a poet and von Baader's contemporary, claimed that visions of the quaternity are filled with numinosity and psychic energy. (4)

Von Baader and Kerner inspired C. G. Jung, who recognized the triangle as complete when transformed into the square, so he presented the quaternity by the equation 4 = 3 +1. By itself, the triangle is a weak geometric shape, whereas the perfection of the square can be compared only to the circle. The notion is universal; for example, the Tibetan Wheel of Life illustrates the imperfection of existence by showing *three* animals. (5) A similar meaning of symbols was also discovered in alchemy.

Let us begin with a discovery, namely that the circle and the square posses their own spatial dimensions, which already represented a certain quality by themselves, in addition to other possible meanings. The perception of space is in some way always intertwined with concepts of time, therefore we have to pay attention to both categories. Together they compose a macrocosmic model, a source of eternal inspiration and a challenge to humans, who very early sought to systematise earthly and, in particular, celestial phenomena and give them a symbolic meaning, as well as to gather them in a space-time sequence. Given such outlines of the venture point, it appears that a deeper insight into the old lore may be provided by a branch of astronomy that develops at a fast pace: archaeoastronomy. For our research, at least for the initial phase, this is valuable and important, because it offers the required historical depth and an adequate body of provable data. Symbols always enable the crossing between manifestation and empirical levels, which means that all further steps branch out towards other broad topics.

Occurrences in the celestial sphere have always been a source of mythological, or rather cosmogonical speculations about the beginning of the world and they can be traced to various ancient cultures. Such knowledge did not appear all of a sudden, it is the result of several millennia of a sedimentation and cascade of experiences in many directions throughout the Euro-Asian area from Stonehenge, the ancient Egypt, Greece, Anatolia, Iran and Mesopotamia to India, China and Siberia. Migrations of some of the population brought them even to the Americas. The transmission of knowledge over such vast territories and at such an early age that lasted up to the Meso- and Neolithic might seem impossible to those unfamiliar with the subject. Nevertheless, certain indisputable evidences can convince us of such processes of diffusion of knowledge.

In his recent and well supported book on archeoastronomy , with its main part focused on China, John C. Didier summed up scientific discoveries to this date. They indicate that the ancient Indian and Chinese astronomies did not lead to a great number of original discoveries, they rather followed a sufficiently known Sumerian-Babylonian-Assyrian tradition of observing the skies. We may appreciate some of the local character in the fact that the Indian and Chinese astronomies preserved the memory of the previous central role of the north celestial pole, where Sun and Moon played a secondary part. (6) A clay seal, dated to the Harappa culture, which flourished in the Indus River basin during the Bronze Age from 2,600 to 1,900 BC, bears an image of a buffalo with a square above it, rotated by 45 degrees, which resembles a diamond (see image on page 7). The sign represents the ancient north celestial pole, through which, as it was believed, the Earth's axis travelled. Within the sign is a wheel with a hub and spokes, which the later Vedic, Brahman, and Hindu culture identified as *chakra*. In the centre of the wheel shines the brightest polar star Thuban that around 3,000 BC used to occupy the very centre of the square on the north celestial pole.

In our case, we may compare the symbol of a wheel with many spokes to a Sumerian symbol for a deity – a star with many rays. In a number of ancient cultures, the symbol of swastika represented the polar star and the Ursa Major constellation. (7) For example, the Iranian god Mitra gazed onto the world with his thousands of eyes, while he stood on the northern sky by the celestial pole. His quadriga, decorated in stars, resembled a swastika (*Mihr Jašt* 112, 124-125, 136, 145).

The composition of Vedic sacrificial altars have also clearly defined the original meaning of the square and the circle, where the altar of the sky was square and the altar of the earth circular, with the altar of the air or ether (*akasha*) in a semicircular form. The same symbolic was later recognized, at least partially, in the architecture of the Buddhist *stupas* with semicircular domes, which signified the sky up to the celestial vault, and their cubic addition, *harmika*, in the sphere of the Sun and the Moon. Placed on the highest position, the *harmika* duplicated the form of the square foundation of the *stupa* structure.

All this makes it evident that the polar square was the highest and immobile part of the sky, around which other stars seemingly moved through several ellipses, therefore it enjoyed the reputation of the highest heavens. It was where several Vedic interpretations placed Mount Meru, circumnavigated by the Sun and the Moon, the domicile of the most powerful deity. The Indian Vedic deity Varuna was connected to the north celestial pole, as well as Mitra and Agni, who all happen to be manifestations of the supreme deity Indra (*Rigveda* 6.8.2-3). *Vishnu Purana* mentions that all celestial lights were bound to the polar star by aerial ropes (1.12, 2.24).

The Iranian mythology names the star as "the general of generals" and "the axis in the centre of the sky".

Texts of the *Rigveda* offer clues about the symbolic meaning of the north celestial pole and already in 1893, Bal Gangadhar Tilak conducted a thorough analysis. (8) Tilak argued that the ancestors of Indians migrated from the Arctic (Hyperborean) areas, as in their new geographic environment they would be unable to register a number of celestial phenomena, for example the aurora borealis described by the *Rigveda*. Today, the Tilak's explanation sounds rather biased, similar to his hypothesis that the knowledge reached India in an early period through an intercultural diffusion, there it was recognized as first-class information, not only a curiosity. The spread of those cultural influences from the west of Asia towards the east depended on nomadic people of the steppe, for example Scythians and Sarmatians, whose migrations up to the borders with China have been documented already in 3,000 – 2,000 BC.

Over the periods and through different regions of China, the god of the north celestial pole was known as tian, yi, de, jing, and tao (dao). During the Shang and Zhou periods, the square pattern became the basis of the logogram describing the highest deity. Proto-Chinese objects made of jade, ceramics, and bone, as well as early bronze artefacts show images of square or rectangular star shapes, which probably depict the north celestial pole, however we do not possess any written evidence to be able to confirm that. (9) The Tao literature names the inner circle of stars on the north celestial pole as "the Central Palace" or "the Jade Palace". (10) In time, the myth was also explained by the divine image of Emperor Huang Ti. Coins from the Qin period and later were round with a square hole in the middle, which represents the power of heavens. (11) In China, square symbols appeared earlier than in the western and central Asia. According to Didier, we can detect them as early as the second millennium BC, if not even further in the past. This leads us to an interpretation that Proto-Chinese were soon to adopt the Siberian myth of the hunters and the bear in the sky. The myth originates in the Palaeolithic-Mesolithic period and was known in Australia, as well as America all the way down to the Amazonian Plain. The celestial drama took place in the night sky between the southern constellation of Orion and the northern constellation of the Great Bear (*Ursa Major*), the location of the north celestial pole. A tradition from the western Siberia tells us that the four stars in the handle of the "Big Dipper" represent hunters with a dog, who chase a bear or a reindeer, represented by other stars in the constellation. In two alternative stories from the central Asia and the Arctic, which cover the greater part of the northern Asia up to Tibet and India, the roles are assumed by the constellations of Orion and the Pleiades.

Certain myths in India tell us about a chase of a deer – in Orion – wounded by an arrow, Orion's Belt. In the conclusion of the *Madai-kara*, an Altai epos, seven heroes turn into Ursa Major with the main protagonist as the North Star, while three reindeers remain visible in Orion. In certain ethnical groups in Siberia, shamans still sing to the seven great gods of the constellation – the eight is the North Star – and ask for cleansing from all evil. (12) Algonquian peoples and Iroquois connect that part of the sky to the four seasons. The hunters chase the bear from the spring until the autumn, when the blood of their prey colours leaves of the trees.

The version with the seven hunters or brothers, or wise men, was known in China. The seven bright stars of the constellation were also renowned in India on account of the myth of the seven wise men (*saptaris*), who ascended to the sky. (13) Contemporary calculations from India reveal the royal position of the North Star – the Sun was closest to the Earth, 100,000 *yojanas* away, the Moon travelled 100,000 *yojanas* farther and it took another identical length to reach the star vault. Planets Mercury, Venus, Mars, Jupiter, and Saturn followed in 200,000 *yojanas* intervals, another 100,000 *yojanas* farther was Ursa Major (*saptaris*), while the Pole Star radiated even higher. (14)

Until now, experts have introduced the circle as the symbol of the universe, god, heaven, or kinds of perfection, while the square presented a less spiritual sphere - the worldly, earthly, or human. The examples above reveal that it was not always so. According to the data, collected by Didier, there was no concept of a rectangular Earth in China prior to the second century BC. By then, due to the precession of Earth (rotation of the axis), star Thuban (or 11 Draconis) moved away from the north celestial pole by such a degree that it was no longer its central or even a significant star. As a result, the gods "settled" in other parts of the sky, as well. Only then did the former "square sky" assume its circular form, which represented the star vault or the circumference of the horizon. Around year 600, Sengcan, the Third Chinese Patriarch of Chan, could assert, without a hint of a doubt, that the circle was "a common possession of the sky and our minds."

At the same time, the square symbols "transferred" to Earth in the form of pyramid outlines, square temples and tombs, as well as in the shape of rectangle chariots of temporal rulers. Mitra and Varuna, the Vedic gods of the day and the night sky, travelled across the firmament in one of such chariots, pulled by horses, similar to those used by Egyptian pharaohs and kings from Mesopotamia. The roles of the circle and the square switched during the process of transformation, nevertheless, the magical image of a square or a rectangle inside a circle remains anchored in our memory.

However, as we reach conclusions, we must pay attention to avoid excessive generalizations. Therefore, it is not possible to accept the dogma, which occasionally surfaces in numerous amateur and even some academic debates, namely that myths throughout the world are merely "encoded astronomy". The meaning of myths is multi-layered, thus there are many ways to interpret them and each way has its own point. Actually, some myths can also provide the religious and cult meaning of the circle and the square in various cultures, yet there are also other explanations. The Seidenberg's interpretation is worthy of our attention in particular, even if it is somewhat mechanistic. It was founded on the principles of human spatial orientation and draws the usual four directions out of a simpler dual system, for example, "up the river – down the river" or "to the mountain – to the sea". The next phase saw each half of the field of view divided into two parts. That development from the initial circle to the final square is represented by a graphic sequence on the next page.

There is a possibility that only one half of the field of view was divided. An additional division of one of the now three parts created a four-part structure. Thus, the ternary numeral system is also a product of the process. (15)

The historical excursus laid out above helps us understand the origins and, to a certain extent, even the age of basic components of the mandala. In addition, cosmogony and cosmology offer an insight into the inner spatial arrangement of the micro- and macrocosm, the object of our attention in the next passage.

Indian myths about the creation of the world

Who knows then whence it first came into being?
He, the first origin of this creation, whether he formed it all or did not form it,
Whose eye controls this world in highest heaven, he verily knows it, or perhaps he knows not.
(*Rigveda* 10.129.7) (16)

The Indian mythology offers numerous interpretations of the creation of the world. Several classic versions tell us that the world was created by the Vedic deity Indra, others assign the role to Agni, Shiva, Vishnu, Brahma, Shakti, or the universal soul (Prajapati, Purusha). Some claim that there was a multitude of creators, while atheist schools of philosophy (*adjativada, samkhya, mimamsa*) argue that there has never been a creator of the world. Early texts of the *Rigveda* already contain a surprising diversity of cosmogonical intuitions and speculations, which shows that the topic appeared in deep contemplations and debates very early and that different flows of thought and local traditions contributed to the process.

Cosmogony reveals itself as a vast, complex, and exacting area of research, especially, when observed in its geographical and historical entirety. In our case, it includes the Indian subcontinent, Nepal, Sri Lanka, Pakistan, and Bangladesh. Classic texts in Sanskrit should not stand as limits to our research, we have to include those written in many other Indian languages and dialects. The topic can also be expanded with records of the lore (myths, legends, fairy tales, and stories), collected among the rural and tribal population from the 19th century onward. Those records may contain cosmogonical motifs, as well. The sheer quantity of the written and oral material allows only a glimpse of an overview of everything that should be common to many traditions. Even when the classic literary texts are mentioned, we should differentiate between those fairly loyal to their tradition, and those, which stem from individual creativity and personal philosophical speculations. The difference between the two types of texts is often revealed by their literary form and metaphors. (17)

Fortunately, our deliberation of mandalas will not require all of the encyclopaedic knowledge about various Indian cosmologies. We shall focus on the finest literary, visual, and architectural creations connected to elite social classes and their religious teachings, which narrows down the scope and make our work less difficult. Not exclusively, of course, as there are still many elements of folk religion and mythology, as in the Tantrism, for example.

Looking back at the ideology of the rich and patronal higher casts, we may assume that cosmogonic excerpts within the corpus of the *Rigveda* were deemed very important. We can suppose a certain chronological and logical order of the excerpts, as was done by Norman Brown, thus we can follow his classification and present the structure and genesis in a few broad strokes. (18) Brown thought that the oldest idea present was the one about the connection of the Heaven and Earth, from which gods and everything else were born. Other Indo-Europeans noted the idea, for example, the ancient Greeks and Romans, however it did not leave a deep footprint in India. Another version tells that the world was created by Tvastar, the first being in existence apart from the great waters. Tvastar represented the creative energy and was a hermaphrodite, therefore it could give birth to the sky, earth, and all creatures. The third version introduces twins Yama and Yami as the ancestors of all people. *Rigveda* does not reveal details about the sister Yami, on the other hand, brother Yama retained an important position even in the religion of the post-Vedic period. (19) Heaven and Earth, a hermaphrodite deity, a divine couple – all these are binary oppositions, whose origins are present in the mandala combination of the circle and the square.

Compared to those versions, the story about a battle between god Indra and demon Vrtra resonated much farther through the ancient India. In the fierce battle, the demon was slain; the

act released the waters, which then returned to the heavenly ocean, where the Sun was then born. The light, warmth, and humidity accelerated the Earth's fertility, which Indra had enhanced, as well as propped the sky, thus creating a middle living space. A *Rigveda* hymn (2.12.2) worships him, because he strengthened the quaking ground and its mountains, measured the vast air above it, and supported the celestial vault. Symbols of a pillar, mountain, tree, wind, and the Sun bear reminder of the separation of heaven and earth and are constantly repeated in the Indian art. Buddhism follows those archetypes and compares Buddha to the world tree (in *Lalitavistara*), to a pillar, the world mountain, or the world conscience (Purusha). Materialistic sceptics soon voiced their claims that the world came into existence as the result of mechanical and impersonal natural processes, which began to create dents in the authority of Indra. Teistic replies to those claims came into the form of the Vedic, Brahmanic, and Hindu deity Brahmanaspati (or Brihaspati or even Ganapati), credited for some of Indra's achievements. The new deity was even supposed to have cooperated with Indra in the creation of the world (*Rigveda* 2.24). In time, Brahmanaspati took over the role of the sole creator and the highest deity, a feat that Prajapati and Vishvakarman achieved in other Indian regions (*Rigveda* 10.121, 10.81, 10.82).

The idea that the world developed from a single divine source seems completely different from those mentioned above. The world came into existence spontaneously by its own creative warmth, without any outside influence. Some Indian myths describe the original cosmos as a golden egg (*hiranjagarbha*), which floated on waves of the primordial sea. According to the *Rigveda* (4.42), Varuna separated the sky and the earth into two shells of the original wholeness and then reigned as the king over both of them. A similar version tells as of Indra, who broke the egg into two halves; he raised the upper one and propped it, then stood between them as the supporting pillar (*Rigveda* 2.12.2). This explains the creation of the space, or strictly speaking, a limited or closed sacred space, which presents itself in forms of paradises and mandalas.

Nevertheless, there are interpretations that present the initial creative principle as a cosmic organism Prajapati, who applied yogi practice to wake energy in his body and soaked the world with it. The *Rigveda* equals *hiranjagarbha* to Prajapati (10.121), "Only Lord of all created beings. He fixed and holdeth up this earth and heaven". Several experts tried to prove the age and the extent of representations of the golden egg by referring to findings from Lepenski Vir in Serbia. Of particular interest to this case is a sculpture of a fish goddess with an egg-shaped body and distinct fish-like features, which perhaps allude to the primordial ocean. This parallel could push the age of the Vedic cosmogony close to 4,000-7,000 BC. (20) In India, round or oblique pebbles are sacred symbols of the origin, as well as the stones, found in riverbeds of

some of the Himalayan currents; they are considered to be cult objects. The Vishnuists name those *salagrama* and the Shivaists call them *brahmanda*.

Prajapati ("master of the living beings") plays a part in the later hymns of the *Rigveda*, however not merely as a nickname, but also as a particular deity. The *Rigveda* venerates him as "the Deities' name-giver" (10.82), therefore, he was the first among them, the creator and destroyer. Even the *Yajurveda* and the *brahmanas* elevate him to position of the supreme deity, while the Purana literature know him as an alias for Brahma the creator. A myth, written in the *Shatapatha Brahmana* (2.1.1.8-10), describes that at the beginning of the world, Prajapati built two sacrificial altars on the sole support in existence, a lotus leaf that floated on the surface of the sea. He brought sand from the bottom of the sea to the lotus leaf and fortified it with pebbles. As his (self)sacrifice caused the creation of the cosmos, every sacrificial altar is his immortal body, while he is also personified by the priest during the ritual of sacrifice. (21)

According to the *Shatapatha Brahmana*, the five layers of bricks in the Vedic altar represent Prajapati and the five elements born from his body. Those five components can be interpreted as time (a year and the four seasons), or space (the centre and four sides of the sky). (22) The five-fold symbolism has an important role also in the context of the Mahayana Bhuddism and its mandalas, which shall be discussed at a later point.

Just as Prajapati is the primate of the construction of Vedic altars, which are spatial and temporal images of the creation *par excellence*, so is the role of the architect of the universe in the hands of his double, or emanation, Vishvakarman. Among other structures, he built palaces for deities and designed divine cities like the celestial city of Indra and Dvaravati, the earthly capital of Krishna. Ancient records report that after Krishna had left, sea flooded the city on the coast of Gujarat, which was confirmed by underwater archaeology research. John Didier identified the celestial palace of Indra as an image of the north celestial pole, the centre of a seeming circulation of stars. (23) Tvashtri or Tvastar was born out of the belly button of the invisible Vishvakarman and created people and animals, thus completing his "father's" work.

In the late Purana cosmogony, the creative principle was the divine self-manifested Swayambhu, who created the primordial waters with his mental energy and set the grain of life onto them. From that, the golden egg emerged, shining like the Sun. He was born from the egg like a Brahman, while the halves of the eggshell became the sky and the earth (Matsya Purana 2.25-30; The Laws of Manu 1.9, 1.12-13).

Followers of the ancient Tibetan religion *Bon* believe that in the beginning of the world, five elements were born, assisted by the primeval principle of light in an empty space and a hot whirl. Two cosmic eggs took shape, a glowing one and a dark one. The former brought forth

the first divine creatures, while the latter spawned the ruler of destruction. Another myth of the *Bon* tells us about a blue lake that a wind whipped up and created a water bubble in the size of a tent. A blue egg was formed, the origin of a female creature, the fore-mother of all humanity. (24) It seems that cosmogony of the *Bon* is a mesh of Hindu notions of the golden egg and the Buddhist vision of the creation of the elements from the initial natural chaos. Due to the possibility that the opposition of dark versus light can be interpreted as divine versus demonic or good versus bad, direct or indirect influence from the neighbouring Iran should not surprise us. (25) Manichaeism was spread also among Uygurs, the neighbouring people to the east, where it even enjoyed support from the authorities.

According to *Abhidharmakosa*, a Buddhist text from the 4th or the 5th century AD, actions of the creatures from the previous eras set in motion karmic consequences in the form of strong winds that rushed in from all four sides of the sky. The winds filled the empty space and created clouds that generated enormous rain. Storms shaped the water into a vast cylinder-shaped base of the creation. Foam appeared on the surface, it grew in density and weight, and turned yellow. Thus, the Earth was created. The Tibetan Buddhist *Kalachakra Tantra* somewhat deviated from that interpretation and teaches that in the beginning, atoms of air, remnants of the previous world system, joined together and caused powerful storms. They initiated the joining of the fire atoms, which manifested as lightning strikes in the sky. Finally, strong rain was released from the water atoms and rainbows appeared, indicating the earth atoms coming closer into a solid mass. (26)

Several Indian cosmogonies assign the credit for the creation of the world to Purusha, a cosmic anthropomorphic creature sacrificed by deities. However, the holy scriptures name him "Lord of Immortality", therefore it is clear that the sacrifice was merely a game. Or put in other words, "Gods sacrificing sacrificed to the victim..." (the *Rigveda* 10.90.16). Purusha is a single entity, however, he is all that was and will be, therefore he encompasses a multitude of creatures and things:

A thousand heads hath Purusha, a thousand eyes, a thousand feet.
On every side pervading earth he fills a space ten fingers wide.

This Purusha is all that yet hath been and all that is to be;
The Lord of Immortality which waxes greater still by food.

So mighty is his greatness; yea, greater than this is Purusha.

All creatures are one-fourth of him, three-fourths eternal life in heaven.
(the *Rigveda* 10.90.1-3) (27)

The ritual dissection of his body spurred the process of the creation, which we can trace in several other Indo-European mythologies through almost identical metaphors.

The Brahman was his mouth, of both his arms was the Rajanya made.
His thighs became the Vaisya, from his feet the Sudra was produced.

The Moon was gendered from his mind, and from his eye the Sun had birth;
Indra and Agni from his mouth were born, and Vayu from his breath.

Forth from his navel came mid-air the sky was fashioned from his head
Earth from his feet, and from his car the regions. Thus they formed the worlds.
(the *Rigveda* 10.90.12-14) (28)

As all beings originate from Purusha, they carry something of the divine, to a greater or a smaller extent. In this game of deities, everything that is good and bad in this world is divine. We need to add that the Indian philosophy was aware of the impossible task of discussing such questions in a conventional language and from the standpoint of the "scientific" logic, therefore it surrendered the topic to myths and poetry.
According to the *Bhagavata Purana* (1.1.1), Purusha is the personification of the absolute truth. In *Samkhya*, a Hindu school of philosophy that influenced the early Buddhism, Purusha is the pure conscience and differs from *Prakriti*, the material world or "the nature". In this complementary couple, Prakriti can take the role of the "female" principle opposite to the "male" Purusha. Prakriti is the active energy, while Purusha is immobile. Thus also Prakriti evolved into an essential ingredient of the creation and the basis for every manifestation. Purusha is presented by a vertical line, while Prakriti is indicated by a horizontal one. They both connect in the sign of the cross. (29)
Purusha was pictured like a man, stretched over a basic square, divided into 9 by 9 fields (that is 81), sometimes also into 64 fields. The man lied in the position of a sacrifice on a Vedic altar, with his face turned to the ground. His head was to the northeast, his legs pointed towards the west, while his arms touched the northern and south-eastern corner of the square. Next to his feet there was the earth (*bhuloka*), next to his head lied the celestial sphere (*brahmaloka* or

satyaloka), and the rest of the worlds were located at other parts of his body. Even the construction yard of a typical Hindu temple (*vastu purusha*) was seen like a sacrificial place of such giant, because the building of a shrine could in the symbolic sense compare to the original creation of the world. Before the works commenced, a ritual (*vastu puja)* had to be performed to venerate the deities in vastu-mandala and to feed the sacrificed creature. (30) The construction of the vastu purusha mandala will be described in detail in the chapter on architecture.

Several other Indian doctrines have presented the beginning of the creation in a way similar to the myth of Purusha. As the text of the *Karandavyuha* tells us, the Buddhism explains that the initial Adi-Buddha first created the bodhisattva Avalokitesvara, then made the Sun and the Moon out of the eyes of the bodhisattva, from its forehead he fashioned Shiva or Mahesvara, from its shoulders rose Brahma, from its heart sprung Narayana or Vishnu, its teeth became Saraswati, etc. The Shaktism offers an interpretation that from the bones of the she-deity Devi rose mountains, from her veins flew rivers, her hair gave rise to vegetation, her eyes gave us the Sun and the Moon, etc (*Devi Bhagavata Purana* 7.33.21-41). Some interpretations teach that parts of the dismembered body of the goddess fell onto the earth and thus marked numerous places, which later became centres of pilgrims. The *Matsya Purana* (226) teaches that a drop of Shiva's sweat spawned an enormous demon, who threatened to swallow the world. The deities joined forces and knocked the demon to the ground, then sat on various parts of his body to keep him pinned down. The position of the demon was designed as lying down in a square frame of gridlines, which could represent the mandala. The demon's heart is in the quadrant of the mandala, where the seat of Brahma (*brahmasthana)* is located.

The thirteen Tibetan shrines and stupas have supposedly been built to pin down the body of a giant she-demon, who resisted Buddha's teachings in Tibet. Those shrines are located over the vital parts of her imaginary body, lying on the back. Her head is Mount Kailash in the western Tibet, while her torso and the legs reach all the way to the eastern borders of the country. Her whole body resembles a map with mountains, valleys, and rivers; of course, it is rather liberal with geographical precision. Data on (Tibetan) pilgrims exhibit that they actually experience the landscape as if it possessed human characteristics. Its geographical terminology proves that numerous toponyms reveal connection to human body parts.

The Indian myth about churning the primordial ocean again refers to the very beginnings of the world. According to several versions, laid down in the *Ramayana* and the *Mahabharata puranas*, deities joined forces with demons and used the body of the cosmic snake Vasuki with a part of the cosmic mountain Mandara (or Meru) as a device to churn the milky ocean, which

surrounded one of the ring-shaped continents. The stir agitated the ocean floor, whirls and foam brought nine (or more, up to fourteen) miraculous treasures to the surface. Among those was Lakshmi, a deity who became a spouse of Vishnu, then a cow that made all wishes come true (also appropriated by Vishnu), and a white elephant, claimed by Indra. The goddess, who created alcohol, was "destined" to become a property of the demons, as well as a seven-headed horse. The fiercest fight erupted over a jug of *amrita*, ambrosia or the elixir of immortality, which surfaced alongside Dhanvantari, the physician of the gods. After numerous twists and dramatic plots, the gods won it for themselves.

This particular myth can be understood in more than one way, as an allegory of waking the energy *kundalini*, for example, which is presented in the form of a snake. However, we can spot vantage points that are more obvious. The myth describes the process of producing butter from milk, a process well known to the ancient Indians. The procedure itself was deemed holy, because the cooked butter, free from the last remnants of moisture, played an irreplaceable role in the Vedic and all later forms of sacrificial rituals. In the same way, with a rope and a rotating wooden pole, they performed rituals of building altar fires, which consumed the offered butter. If we transfer the process of churning into macrocosmic dimensions to the celestial space of the Milky Way, we may notice the same process of separation and coagulation of (primordial) matter in the creation of the universe. At the same time, the rotation around the axis established the centre and the margin, space and time were created. The shovel-like axis of the churn in our case is merely a version of the potter's wheel or a spindle, which in different mythologies symbolize the space-time continuum.

The *Atharvaveda*, however, does not recognize the basic creation principle in the spatial context of the creation, which we have seen so far, but in the eternity of time:

This Time hath seven rolling wheels and seven naves immorality
is the chariot's axle.
This Time brings hitherward all worlds about us: as primal
Deity is he entreated.

He only made the worlds of life, he only gathered the worlds
of living things together.
Their son did he become who was their Father: no other higher
power than he existeth.
Kāla created yonder heaven, and Kāla made these realms of

earth.
By Kāla, stirred to motion, both what is and what shall be
expand.
(*Atharvaveda*, 19.53.2, 19.53.4-5) (31)

Numerous spiritual masters further developed this monistic idea, which is continually present in the *Upanishads*. The *Brihadaranyaka Upanishad* presents the dismembered ritual sacrifice in the form of an enormous horse, which is the substance of our world. The ancient Indians saw the horse walk and the gallop as units of time. Therefore, the horse would be an adequate personification, because in addition to a physical body, the flow of time is represented, too.

"... his untouchable body is composed
of parts of hours, moment by moment.
Seconds are the smallest hairs of this sacrificial horse...
Months are his limbs, mornings and evenings are his mighty shoulders.
People sit upon this relentless horse,
called "aging" (*vayo hayah*).
(*Mahabharata* 12.321.25)

An annual horse sacrifice ritual in the spring (*Ashvamedha*) was intended to renew the cycle of time and for a rebirth of the Sun. The selected horse had been free to run whenever it pleased for the year before the ritual took place. The horse was marked in a special pattern: black in the front and white in the back, with a patch on the forehead. Indian sacred scriptures do not provide an unambiguous confirmation that the animal was actually killed in the ritual, followed by a communal meal of the cooked meat. The act may very well have been a symbolic one, the *Mahabharata* even recommends offering a cake of ground grain instead (14.90-92) (32)
The classic period of the Indian astronomy from the 6th to the 12th century was familiar with various units to measure time, the range included extremely short ones as well as the unimaginable long ones. A calendar year was pictured as a rotating divine wheel, upon which gods travel through three spheres of the world. (33) The twelve signs of the Zodiac, the seven-day week, and the partition of the day were probably introduced after western (the Greek) examples. The day was also composed of 86,400 seconds and even smaller "atoms of time".
The *Puranas* present the idea about four long ages in the cyclic existence of the world, from the initial golden age to the final iron era (*Satya Yuga, Treta Yuga, Dwapara Yuga, Kali Yuga*).

Just as the continents around Mount Meru are placed in order by their size, so do the cosmic ages pass in uneven sequence 4:3:2:1. The Satya Yuga lasts for 1,728,000 sun years and the final Kali Yuga only for 432,000 years. The humanity is now in the sixth millennium of the Kali Yuga. When this age comes to pass, the universe shall face a partial ruin, and in the middle of the primordial ocean, Vishnu will remain rested on the sea serpent. Then the universe shall be born anew for the next four cosmic ages. The *Brahmanda Purana* (Chapter 122) describes the *yugas* as the four faces of time that creates and destroys everything in existence. All four *yugas* form the whole, *Maha Yuga* or *Chatur Yuga*, which lasts for 4,320,000 years. Apart from the cosmic system of the *yugas*, there existed also a shorter, "human" cycle 24,000 years long, also divided into four ages. The longest of them was the "golden age", which lasted for 7,200 years.

The *Maha Yuga* is a combination of two temporal concepts: within each of the four *yugas*, time is linear, even if not directed towards evolution, but towards degeneration. The *Maha Yuga* itself, on the other hand, is caught into a cycle of endless repetition, when each eon is followed by the next. Even our human perception of the 21st century cannot grasp the cosmic numbers we speak of here, thefore it is no wonder that the Theravada *Samyutta Nikaya* tries to explain them by comparisons. According to it, the world cycle resembles a giant rock, touched every 100,000 years by a human, clad in fine cashmere silk. Once, whenever that will be, the rock will be completely smoothed down and will vanish, while the world cycle will continue (*Pabata Sutta, Samyutta Nikaya* 15.1.5). Another comparison presents the number of years in the cycle with an enoromous pile of mustard seeds or grains of sand and pebbles in the whole riverbed of the Ganges (*Sasapa Sutta* and *Ganga Sutta, Samyutta Nikaya*, 15.1.6,8). It is interesting that all those illustrations of the time units are actually put into a spatial context.

A thousand mahayugas compose one *kalpa*, also named a day of Brahma. When Brahma falls asleep in the evening, a great deluge destroys the world, which remains dead until the morning, when the god recreates it. Day and night, the periods of activity and inertia, each one *kalpa* long, continuously take turns. Some calculations state that a *kalpa* is twelve million years long (*The Laws of Manu* 1.72-74 and *Mahabharata*). The Tantric Shivaist tradition sums 360 days of Brahma into one year of Brahma, and one hundred such years into his life cycle. After Brahma dies, the world will face a complete destruction, while the new Brahma will create the next world. Speculations about the infinite time reach even further: the life of Brahma represents one day of Vishnu, one hundred days of Vishnu count as one day of Rudra and the entire life time of Rudra is one day of Ishvara or Mahesha. All are surpassed by Shiva, who is destined to live 540,000 lives of Rudra. Shiva thus earned his title of *Mahakala* (the Great Time)

and *Sadashiva* (the Eternal Shiva). In the *Bhagavad Gita* (11.32) we find Krishna, an incarnation of Shiva, identified with time: "Time I am, destroyer of the worlds..." Yet such devastating vision of cosmic time could only have obstructed the speculations about its essence. Because of all this, numerous questions about the reality or the illusion of time arose, as well as about causal connections of events, whether time can mean something else beside changes and if those changes are only external or are they also qualitative. Indian traditions of philosophy offered each their own answer and in very different ways. (34)

The period of Buddha's life saw an influential philosophical tradition of the *Ajivika*, ascetic atheist hermits, who interpreted the future as something foreseeable through the laws of the cosmos and in a way already present. Even the past lives on in the present. This makes time the present, which lasts from one moment to another, and is in the final consequence only an immobile eternity. This idea is also the source of the Buddhist concept of time as a sequence of moments, which deviated from an old interpretation of the Brahmanists that time is a whole, omnipresent and independent reality with no beginning and no end. The Buddhist concepts of time trod near Jain philosophy, which deemed time as real, objective, and eternal, but also composed of fragments ("atoms of time"). While time formed the foundation of Theravada cosmological vision, it was completely replaced by the spatial aspect in the Mahayana Buddhism.

The Theravada and the Mahayana Buddhism assigned the control over time to the Buddhas. The current *kalpa* shall see Krakuchanda Buddha, Kankamuni Buddha, Kashyapa Buddha, and Gautama Buddha (the historical Buddha). Some sources also included the future Buddha, Maitreya. Each of them connected to a specific direction of the sky (as for example, in the Ananda Temple in Bagan, Burma or in the stupas of Sri Lanka) and was thus included into the time-space complex. According to the *Visuddhimagga*, there are *kalpas* of various time lengths, from ten years in duration onwards, and they are based on various astronomical and astrological calculations. At the end of the longest *kalpa*, the world will perish in deluge, fire, and wind.

In other Indian cosmogonic myths, the overwhelming dimensions of time correspond to dimensions of space. There is a version of the creation myth, which tells that the world was created from a grain of sand, brought from the bottom of the primordial chaotic ocean by a deity or its animal assistant. This myth is spread through a larger part of Eurasia, from the north-eastern and south-eastern Europe across Siberia and farther to the northern America, with the exception of Alaska and the regions at the Mexican border. (35) The Indian version has already been smoothed into a literary narrative, but it can still be recognized. One version of the story tells us that Vishnu assumed the form of a giant boar and swam to the bottom of the ocean to

discover from where did the lotus, which floated on the surface, grew. He found soil and brought a small piece of it to the surface. Another version the same protagonist raises the goddess of the earth to the surface, after she had been kidnapped and hidden there by his demonic adversary. The latter version has already been known during the Gupta dynasty (4th-6th century). In that period, the rulers saw themselves as earthly representative of the omnipotent Vishnu and also as the protectors of the earth and natural balance.

Our narrative that our world came into existence from something extremely small (like a grain of sand) bears certain resemblance to an Indian myth, which tells us that the whole creation sprung from a speck of dust from the soles of goddess Devi. Goddess Mahadevi often corresponds to the primordial matter (*prakriti*) or to the nature. She was omnipresent. As a spider weaves his web, so does Devi create the world from her own body (*Devi Bhagavata Purana* 3.4.41; 4.19.10). The idea must be ancient, as already the *Rigveda* includes certain hymns, which venerate the anthropomorphic goddess Prithvi as earth with the potential of infinite fertility. We can recognize just how durable the idea is, as it resides in the modern cult of Bharat Mata (Mother India), where the goddess of earth is seen as the mother of all Indians and represents their vast territories. (36) The hymn of Purusha (*Rigveda* 10.90) states that only one quarter of the giant is on the Earth (with all her living creatures) and that the remaining three quarters reside in the sky and are immortal. We can detect a similarity with the Jain cosmology, where the macroanthropos belongs to the world of the gods with his upper body, his waist reaches to the world of humans, and the rest belongs to the underworld. A further list of Indian examples and details does not seem necessary, perhaps let us acknowledge a few close parallels.

A Chinese giant Pangu (or Pan Ku, even P'u-Ku), who already appeared in the sources from the 6th century, had a long beard and horns, and wore fur. He was born from the cosmic egg that emerged from the primordial chaos. Pangu is credited for separating the complementary principles of *yin* and *yang*, he also created the Heaven and Earth, and separated them by stepping between them. He died after 18,000 years, which did not put his creativity to end. From his head rose four sacred mountain tops, his eyes turned into the Sun and the Moon, his blood transformed into rivers and seas, his hair and beard changed into grass and trees, his breath became the wind, fog, and clouds. An anti-Tao text from 590 AD claimed that even philosopher Lao-tse underwent such posthumous transformation.

By the giant's transformation, a natural environment was created, where goddess Nuwa took to design the first humans out of yellow clay. We might say that Pangu and Nuwa themselves represent *yin* and *yang*. Despite several autonomous features, the ideas of the cosmic egg, the

two halves of its shell, and of the primordial macroanthropos that spawned the world remind us on the neighbouring Indian cosmogonical interpretations.

Without a detailed analysis it is difficult to decide, whether the Chinese myth of Pangu may be the result of Indian or Indo-Arian cultural influence, especially when we consider the creativity of local traditions. (37) There is a Manchurian narrative that tells us about the goddess of earth Banayiemu, whose ear hair turned into woods, mountain sprung from her ear wax, and her sweat produced rivers. (38) A number of similar versions, possibly connecting links, were recorded in Tibet, for example, a tale of a female fore-being named Klu-mo, who was born from the void and individual parts of her body evolved into the natural environment and phenomena (clouds, wind, thunder, rain, etc). The story does not mention a sacrifice, like in the case of the Indian Purusha, however, in some Eastern-Tibetan versions, the protagonist slays a nine-headed monster and uses its bones to build a fortress, fashion the Golden Mountain (Sumeru) out of its lungs, creates the Goma Valley out of its stomach, etc. (39)

We can interpret mythology in a literal or a metaphorical way. A metaphor tries to employ manageable ways to present something, which cannot be articulated or is difficult to understand, however it is important that it always connects the object and the observer into the same system of relations. If we take the Indian myths in a metaphorical way, we learn that most of the time they do not contradict each other, but present different interpretations of the same reality. In our study case of the mythological narrative about the grain of sand or the cosmic egg, they tell us how from the infinitesimal small can grow extremely large, or in other words, about the relationship between the micro- and macrocosm.

Some of the myths begin by a god waking from his deep sleep. Before that, there was nothing, however it should not mean that there was a void around the deity. When the deity woke up, he noticed what had already existed, for example, an infinite ocean. In order to create the cosmos, the deity had to make himself aware of it first. May we here recognize the idea and the experience that it is perception that is the key to every fundamental change?

According to this logic, perception and consciousness are prerequisites of divine and human creativity. (40) Such creativity did not rise out of nothing (*ex nihilo*) and we will try to support the claim also with an image of the geometric presentation of a chakra. Sensory perception of the material world gave birth to a divine desire and by that, the will to expand, change and upgrade the world. Supporters of the ecological psychology might see this myth as a confirmation of a different hypothesis, namely that perception already is an action, not a prerequisite of it. Creative action thus leads to new perceptions. (41)

The myths about Prajapati, Purusha, and Mahadevi weave a special connection of the whole creation to the human body. Those ideas continuously flow through the Indian culture and we can trace their steps through history of numerous spheres, but mostly through mythology, religion, philosophy, architecture, and arts.

excerpt translated by Roman Vučajnk