

Mithras and the Mithraic Mysteries

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Self-driving Cars and the Transport Revolution PHILOSOPHY CULTURE SOCIETY ESOTERICA ART AND MORE



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Editorial

Our Many Different Realities

One thing that never fails to amaze me is how one and the same cause can bring about so many completely different experiences and consequent 'realities'. The current pandemic is a good example of this. As I look around my wide circle of friends and family (in various different countries), colleagues, neighbours and acquaintances, I can see how this unprecedented situation has had a wide range of different impacts on them.

For some the whole situation has lead to one of the best times of their lives: they relish not having to commute, being able to work from home, spending more time with their loved ones; they enjoy the benefits of the reduction in noise, air pollution and they don't miss their previous hectic life. For others, the lockdown is a miserable experience: they feel almost imprisoned, they acutely miss their social life, some miss their colleagues and some even miss the commute because it gave them the opportunity to switch off and transit from one "world" to another.

Even those directly infected by the virus have had widely differing experiences: some displayed only mild symptoms, in a few the illness was so severe that it became a lifechanging event, and everyone knows someone for whom it was fatal. Regarding our work lives, the impact of the current situation has also been varied: some have had to work much less or not at all because they have been furloughed, others have had to work more than ever, some lost their jobs. Those working in hospitals and care homes have been through extremely intense and difficult situations, also having to cope with many heartbreaking moments.

Even the experiences of 'the others' differ widely. Many people experienced completely unexpected acts of kindness, others selfish panic buying and a few completely shocking supermarket fights over toilet paper.

But is it not always like this in life? Do we

not always have very different experiences despite many shared circumstances (same weather, same city, similar jobs, etc.)? We are all governed by the same laws of reality (both physical and governmental) and yet we live very much in our own realities. Although this is normal and even unavoidable, it is a fact that we often forget.

It is also something that can divide us at a moment when what we need, maybe more than ever, is connection and union. The underlying problem is that we have an often unconscious tendency to think that our version of 'reality' is the 'right' one and also the only one. Thinking that our experience is right makes everyone else's experience automatically wrong. As we can see, this can easily lead to fierce battles over who is right and the more we identify with 'our' reality, and 'our truth' and hold on to it, the harder it will be to find commonalities with others.

This is exacerbated by another human tendency: our 'need to be right'. This is partly because we feel that 'not being right' severely damages our trustworthiness in the eyes of others and our own sense of self-worth, and we associate it with humiliation and failure. We don't want people to question our legitimacy or our competency.

We all need to be aware of these tendencies and we need to work on overcoming them. Everything is relative and we need to acknowledge that everyone's experience is unique and real and true for them. It is not about 'right or wrong'. It is about being able to deeply understand that reality has many facets. No one has the truth. As Plato already pointed out 2,500 years ago, we all live in the world of opinions and not of real knowledge.

In these special and difficult times we need to emphasise what unites us, and we need to rise above a dualistic black-and-white mentality that will always divide. Strength and beauty lie in differences, not in similarities.

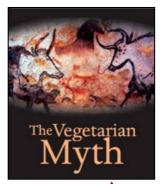
Sabine Leitner

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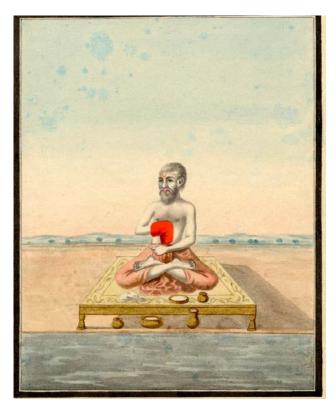




Samkhya Philosophy

Samkhya is regarded as the oldest philosophical system in Hinduism and its teachings can be found in the Bhagavad Gita. Samkhya has a dualistic view based on two main components which constitute the whole of reality, namely, spirit (*Purusha*) and matter (*Prakriti*).

Everything that exists is the result of the evolution of prakriti, but the first impulse of evolution is caused by the contact of *purusha*



Watercolour painting on paper of Kapila founder of the Samkhya school.

with *prakriti*, which creates a kind of imbalance in prakriti and sets it in motion. *Prakriti* also has an innate tension created by its three constituent parts, each with its own quality: *Tamas*: inertia or heaviness, *Rajas*: activity or passion, and *Sattva*: lightness or purity. These three qualities or modes, called *gunas*, in combination create the array of the manifested universe. This is also the reason why the universe is in constant flux, as long as it is evolving.

When we speak of matter, we have to acknowledge that matter can be very subtle. According to Samkhya philosophy, matter has been evolving successively and the first step in evolution which came forth as an illumination of *prakriti* by *purusha* was *Mahat*. *Mahat* is like a cosmic mind or cosmic intellect, and when it became aware of itself we have the second step of evolution, *Ahamkara*, the sense of 'I', the ego. And the third step which evolves from sattvic *Ahamkara* is *Manas*, a more individualised portion of mind. Understanding this, it becomes clear that the whole universe is pervaded by mind, intelligence, and also, we can see that mind and thoughts are part of *prakriti*, matter.

Matter itself is only a potentiality without consciousness. A good example of the linkage between *purusha* and *prakriti* is light. Light or *purusha* is not visible by itself; it needs a medium onto which it can project itself, and that medium is *prakriti*. If we want to watch a movie with a projector, we need a screen; without one it is impossible. Another good example of their interplay is the image of a blind man carrying a disabled man who can see, with prakriti playing the part of the blind man. In this way we see how movement and consciousness are linked.

Samkhya philosophy has a counterpart in the system of yoga, which enabled the philosophy to come forth in practice. The aim of yoga is to unite with our true self, which is *purusha* and by that we find liberation. The main exponent of the science of yoga is Patanjali, who lived somewhere between 400-200 BCE, through his work the Yoga Sutras. The second sutra summarises the work of yoga: "Yoga is the inhibition of the modifications of the mind."

What does it mean to inhibit the modifications of the mind and why is it important? In the analogy of light, if the screen is moving the projection will not be true to its original image. Which means that if the mind is not still, we only receive a modified image, which gives rise to embodied consciousness, which is what we identify with. We must be reminded that the consciousness that arises through our mind is not the same as *purusha*.



"The aim of yoga is to unite with our true self, which is purusha and by that we find liberation."

So we come to a problem: what is disturbing the surface? Our every action, including just making a thought, creates an impression which is stored in our subconscious. Those impressions are called *Samskaras* and arise from the subconscious without our control. They are like vertices, creating a ripple effect on the surface of our mind. Again, this is a very subtle mechanism which is not easy for us to notice or recognise. The problem is that we identify ourselves with those conditions, while the real self is *purusha*, unchangeable consciousness. In the human being this element is called *Atma*.

One of the major problems of our existence is therefore the problem of our false identification, which arises from the profound ignorance of true self. The whole process of evolution, according to Samkhya philosophy, is to realise who we are in our essence. The third sutra of the Yoga Sutras states that, when the mind is still, "then the practitioner is established in his own essential and fundamental nature."

In that stillness the consciousness will shine through as a bliss and the universe will reveal its mystery; until then everything is just theory. All these steps are inevitable... this is the eternal law.

Miha Kosir

The Vegetarian Myth

In liberal-thinking circles it is fast becoming almost an article of faith that eating meat is bad for the planet and a plant-based diet is the only ethical way forward. In a book entitled *The Vegetarian Myth*, however, Lierre Keith, who was a vegan for 22 years before ill-health forced her to change her diet, disputes this view in a well-researched but vegetarianfriendly onslaught. This article is a brief summary of her findings.

The author divides her critique into three parts: 'Moral Vegetarians', 'Political Vegetarians' and 'Nutritional Vegetarians'. She has sympathy with them all, having been one of them herself, but believes their views are misinformed.

We are often faced with statistics like the following: it takes 12 to 16 pounds of grain to make one pound of

beef, and that grain could be used to feed the hungry of the world. The problem with this statistic is that it is based on animals which are fed grain, in other words, animals which are reared in what are called in the US 'concentrated animal feeding operations' (CAFOs). This is Orwellian double-speak for factory farms, where cows, chickens and pigs never see the light of day, which unfortunately account for most of the meat that people eat today.

But let's go back about a hundred years or less, basically before the 2nd World War. Farms were smaller and 'mixed': some vegetables, some crops, some fruit and nut trees, some animals. The cows on such farms would eat grass or, in winter, hay. They were not fed grain. Their stomachs are not designed for it, so it makes them sick. But it also makes



them grow faster, so it makes for a more profitable operation.

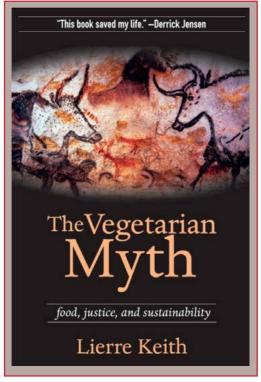
Keith explains that this change in farming came about with the invention of synthesized nitrogen fertilizer. This made it possible to produce enormous quantities of grain, which then resulted in a vast surplus. What to do with the surplus? Part of it is exported (mostly to poorer nations, thus destroying their previously self-sufficient rural communities and forcing farmerpeasants to migrate to big cities), and part of it is fed to animals. The grain surplus was therefore the root cause of the factory farming system which has become selfperpetuating.

If cows graze on grass, the statistic I mentioned earlier becomes meaningless, because grass is free and moreover the animals fertilize the soil with their urine and faeces, improving the topsoil and doing away with the need for chemical fertilizers.

The ideal alternative to factory farming proposed by the author is 'rotating ruminants on perennial polycultures' and she cites Joel Salatin's Polyface Farm in Virginia as a model. Unfortunately, half the world (at least) is now dependent on the industrial agricultural system, which is also entirely dependent on fossil fuels. Sooner or later, with the increasing scarcity of fossil fuels, water (it takes anywhere between 250 and 650 gallons of water to grow a pound of rice) and topsoil (which is being constantly eroded by this system of agriculture), this system is going to crash. In the meantime, it is not a good idea to promote the consumption of more grains and more soy (which needs a lot of energyintensive processing to make it edible for humans), but more mixed farming in which livestock play an important part.

What about the moral aspect of vegetarianism? Do we have the moral right to kill animals in order to eat? Keith's take on this has many aspects, but at its root is a philosophical position which she describes as 'animist'. Everything is alive (including insects and plants), every life is sentient and precious, and as such should be respected. But, as happened (and still happens) in many traditional cultures, there is a recognition that we are all interdependent and life feeds on life. Death is part of life and we will always be indebted to other lives for our life. This is 'adult knowledge' (according to a Mayan elder).

Finally, regarding the 'myth' that vegetarianism is better for you than eating meat, the chapter on 'Nutritional Vegetarians' ¹ presents many counter-arguments. One of the author's claims



is that the healthiest people in the world are generally 'herdsmen-hunter-fishermen', such as the Masai of Kenya who "eat a diet almost entirely of meat, milk and blood".

This book is surely going to ruffle some feathers, but it does show that the picture is not as simple as some would like to paint it, and that the mass production of grains and soy is at least as harmful to the environment and health as factory-farmed meat. Perhaps we should remember what so many philosophers of the East and West have repeatedly said: the middle way, the golden mean, is best.

Julian Scott

(1) For more information on balanced diets, see www.westonaprice.org

Mithras and the Mithraic Mysteries

The Mithraic Mysteries have their roots in the remote Vedic culture of India. Already in the *Rig Veda*, we find the god Mitra as regent and protector of a perfect cosmic order.

Subsequently, in the Indo-European tradition of Iran, we find Mithra identified as the tutelary god of the pact (or oath), slowly assuming a more prominent warrior status.

The contact between Mithraism and the Western world occurred through the expansion of the Roman legions (roughly from the 1st to the 4th century AD). Thanks to influences from the Greco-Roman mystery tradition and the Neoplatonic teachings, an authentic initiatic path, reserved for the chosen few, was forged.

Written sources about the Mithraic mysteries are very scarce, but iconographic findings abound. Obviously this 'visual' material can be interpreted at various levels: at the *theogonic* level (concerning



the birth of the god), *cosmogonic* (concerning the birth of the cosmos), *astrological* (related to the ascent of the soul through the planetary spheres) and *initiatory* (related to the inner transformation of the adept in the mysteries of Mithras). For reasons of space, I will deal with aspects concerning the latter approach only.

Following the alchemical tradition, Mithras is born from a stone (petra genetrix). We find him portrayed as a boy who, at birth, carries in one hand a torch and in the other a dagger (image 1). The god born from a stone refers to the idea that his body is the temple of the spirit. From this temple, the light or divine spark latent in him will manifest. The birth of the god happens next to a river, symbol of the currents of becoming (recalling the Buddhist concept of samsara). Detachment from material conditionings and the abandonment of earthly attachments is preparatory to a new beginning and a 'new life'. The birth scene is complemented by representations of shepherds who pay homage to the god. The shepherds can be seen as symbols of spiritual presences, assisting the initiatory rebirth of the adept, which nevertheless has to be a self-willed act.

The central scene found in all mithraea¹ is that of Mithras fighting and killing the 'sacred' bull (**image 2 - next page**). In this scene Mithras, after climbing on the animal's back and having received the order from the sun, enters in a cave and kills the bull. In the act of sacrifice, Mithras directs his gaze away from the bull and towards the Sun. From the tail and blood of the bull, ears of corn are born, to symbolise the 'new life' arising from death. The flesh of the killed animal is then consumed by Mithras

⁽¹⁾ The Mithraea were places where Mithraic cults and initiation rites were performed. They were always built underground and their shape resembled a cave.

and the Sun in a ritual banquet (image 3).

In the act of killing Mithras's face shows an expression of pain and suffering. As commented by Porphyry, in this scene, *the god secretly mourns the birth of life*. In order for the spiritual life to be born the sacrifice of the bull (symbol of the *lunar* self or personality) is unavoidable. For those who have fully committed themselves to the call of the Sun (one's higher self) there is only one choice, to kill out the desire for (mundane) life in order to really 'live' in the life of the spirit. For those who have embarked on the initiatory journey, the act of dying to oneself, of supreme renunciation and inner transformation, is a painful but necessary act.

To ride and tame the bull symbolises the ability to re-polarise one's lower nature while the act of killing the bull coincides with the release of the solar force within the adept. As a reminder that this 'new life' is in a delicate state of balance, we also see in the scene, a snake, a dog and a scorpion threatening this 'solar release'. These animals are the chaotic forces of the adept's inferior nature which are in a state of latency but always ready to regain the upper hand.

The Seven Initiations into the Mysteries of Mithras

As in many esoteric teachings, the number seven assumes an important role in the mysteries of Mithras. In the Mithraic complex at Ostia (Italy) we find references to various mithraea with names like: *seven spheres, seven gates* and *seven rungs* (this



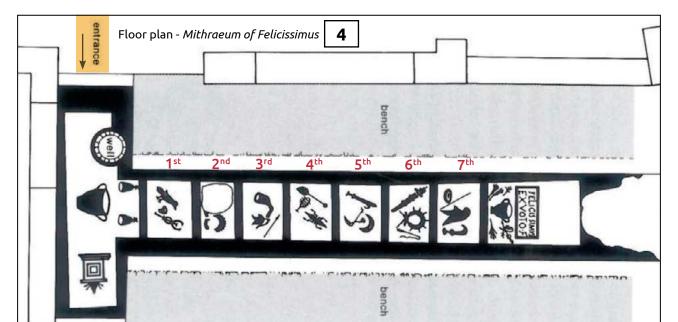
last one is known as the *Mithraeum of Felicissimus*).

The seven initiatory grades were associated with the seven planets and their tutelary deities, seven metals, seven musical



notes and possibly seven colours. All these 'secret' correspondences (with Pythagorean, Platonic and Orphic origins) were taught in the Mithraic mysteries.

The figures on the mosaic floor of the *Mithraeum* of *Felicissimus* (**image 4**) present us with clear indications regarding the various degrees of the Mithraic initiations. I will try to give some indications regarding the esoteric meanings of these symbols. As



we proceed with the interpretation I would like to invite the reader to think of these symbols not only as allegorical concepts but also as real inner experiences and trials undertaken by the initiate.

The first figure that we see at the entrance can be interpreted as a circle or a wheel. This circular figure could allude to the doctrine of the cycle of rebirth (or transmigration as taught in the Mithraic mysteries). Being located at the beginning of the initiatory path, this symbol reminds us of the unique opportunity that is given to the neophyte to 'escape' from the wheel of samsara. Ultimately, this is the goal found at the end of each initiatory journey.

The second figure, found at the entrance, is that of a vase (or krater), a symbol of the primordial matrix in which the germ and (karmic) seeds of all life forms have been deposited.

Finally, still at the entrance, we find a burning altar, a clear reference to the sacredness of the fire (let us not forget the Persian roots of the Mithraic cult), a concrete manifestation of a spiritual presence.

Let us start now, in an ascending scale, with the interpretation of the various degrees of initiation as symbolised on the rest of the mosaic floor.

<u>1. Corax-Raven (symbols: raven, cup and</u> caduceus. God/Planet: Hermes/Mercury - Metal: Quicksilver)

This bird appears in various contexts on many iconographic scenes and cultic objects. This degree symbolises the need for the neophyte to strip himself of any form of personal pride. In this initial phase, the adepts of this grade performed the function of servants, assisting during Mithraic feasts (**image 5**). At this stage, it was also important to be able to harmonise within oneself - aided by intelligence, the psychic currents of opposite polarity (male and female). The symbol of Mercury's caduceus refers to this.

2. Nymphos-Chrysalis (symbols: Oil lamp and Diadem. God/Planet: Venus - Metal: Copper)

In the Mithraic mysteries, the term Nymphos referred to the 'chrysalis' or the 'larva' of a bee. Here the neophyte is beginning his inner metamorphosis from 'worm' to 'chrysalis' and eventually to bee (or butterfly). The symbol of the snake, which is also associated with this grade, has the same symbolic value. While the first stage was related to the element 'air', this one is linked to the element 'earth'. This stage involves a test of purification in order to awaken 'spiritual love' as the best guide in the inner journey. For this reason, this initiatory grade has been related to the image of Eros (love) and Psyche (soul-butterfly) as found in the Mithraeum of Capua (**image 6**). Venus is related to both love and bees.

3. *Miles*-Soldier (symbols : a spear, a Phrygian cap and helmet. God/Planet: Mars - Metal: Iron)

As attested in Tertullian's writing *De corona* and also in a mural from the *Mithraeum of Capua* (**image 7**), the neophyte is offered a crown which he has to reject. This grade refers to the idea of renunciation of worldly success and the commitment to the inner battle. While rejecting the crown, the neophyte is invited to repeat the ritual formula 'Mithras is my only crown'. The soldier renounces the 'material' crown in order to fully embrace the metaphysical battle between the forces of light and darkness.

<u>4. Leo-Lion (symbols: thunderbolt, sistrum, fire-shovel. God/Planet: Zeus/Jupiter - Metal: Tin)</u>

It is likely that this was the first degree of initiation proper, while the previous three referred to



probationary stages (as accepted disciples). At this stage the initiate, as symbol of rebirth to a new life, received a 'new' name. The initiates of this degree were in charge of the ceremony of the 'ritual fire' and formed a separate hierarchy with their own temple (*Leonteum*). They performed ritual purifications through incense offerings. Fire is seen here as the symbol of eternal life, light and the invisible sun.

<u>5. Perses-Persian (symbols: dagger, key, crescent</u> moon - God/Planet: Luna/Moon - Metal: Silver)

The fifth degree is often represented by the figure of *Cautopates* (**image 8**). His symbol is the owl and he presides over sunset. He is seen holding a burning torch pointing downwards, to show to the initiate his next test, the entrance to the underworld. This world is the hidden world of psychic and unconscious forces. This is the astral world of the occultists of which the initiate must become fully conscious and learn to master. This initiation relates to the ability to see and to act in the darkness (inner and outer). Apart from the nocturnal symbol of the Moon, another attribute of the Perses is that of a silver key which opens the 'doors of the underworld'.

<u>6.Heliodromus-Courier of the sun (symbols: seven-</u> rayed crown, torch, whip - God/Planet: Sun -<u>Metal: Gold</u>)

The descent into hell is followed by the ascent to heaven. The seven-rayed solar crown symbolises the power of spiritual ascension as indicated by the torch-bearer *Cautes* (**image 9**). In some images the adept is seen ascending towards the sun on a solar chariot while lashing the horses. The whip as an attribute of this sixth degree symbolises complete self-mastery. This initiation occurred at dawn when the cock crowed. The rite was presided over by the Pater (the hierophant of the mysteries), who placed the 'solar crown' on the head of the initiate.

<u>7.Pater-Father (symbols: Mithras cap, sickle,</u> sceptre, sacrificial Bowl - God/Planet: Saturn -<u>Metal: Lead</u>)

We find frescoes (**image 10**) where the *Paters* are depicted seated on a throne holding the sceptre (symbol of magical/spiritual power) and a parchment (symbol of knowledge). In the Roman Tradition the god Saturn, who presided over the Golden Age, is also the origin (Pater) of the divine genealogy. The sickle here symbolises the reaping of time itself, thus uncovering the dimension of the eternal which is achieved only by the highest initiates. A fitting and final symbol associated with the seventh degree is that of the mysterious Leontocephalus (image 11). The lion-headed body of the adept is entwined (seven times) by a snake. He has four wings on his back (mastery over the four directions of space) and he holds two keys (life and death, silver and gold)and a sceptre.

Agostino Dominici



The Timeless Wisdom of **Rumi**

Jalāl ad-Dīn Muhammad Rūmī was a 13th century Persian poet and Sufi mystic born in the year 1207 in what is now Afghanistan. His poems are meditative, vibrant variations on a theme - the human being's relationship with the divine. A prolific author of tens of thousands of poems and prose works, his writing can be compared to fellow mystic poets and spiritual icons ranging from Lao Tse to Kahlil Gibran. His gift is in describing the indescribable - the One, the Source, the All - God.

I have been an avid reader of Rumi for the last several years, but in the past few weeks of Covidinduced lockdown, I have gained a new reverence for his verses. In his voice there is a sense of stillness, calm, and connection to something both otherworldly and familiar. To me it seems that Rumi was a man who deliberately devoted his life to exploring the depths of his spirit and returning with gems of truth.



In his words:

Losing my Self I became God's interpreter Now, drunk or sober I barely utter a word

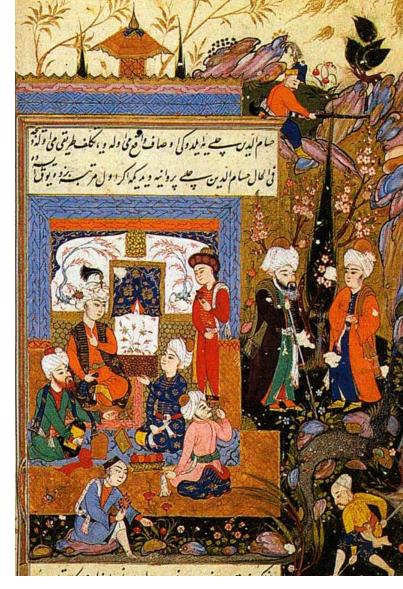
Rumi believed that the individual spirit is a fragment of the Divine Spirit, the allencompassing One. His poems ache with a humble longing to return to this Divinity. But for Rumi, this return is not one fueled by a sense of personal conquest, greed, or lust for attainment. The true spiritual journey according to Rumi is fueled by love. Love is the energy which has the power to deliver us through our various incarnations back to the Source of Life.

> Put your thoughts to sleep Let them not cast a shadow Over the moon of your heart Drown them in the sea of love

This way of thinking was evolutionary in his time, and it is still very far from being assimilated into our collective consciousness. Modern capitalistic thought prizes personal gain and materialistic aquirement as the path to ultimate happiness. This has proven effective in some ways - capitalism organizes society and motivates us to "follow our dreams" by providing a tick-the-box method of progressing through life. Success is measured by wealth and status. Personal growth is measured in promotions and paygrade. Yet, happiness still escapes us. We strive for these external, mental milestones but leave our spirits and hearts behind.

Now, in this moment of global pause, we have an opportunity to re-align with our inner selves and connect with the soul of the world. Rumi was a master of this. In his writing, he comes off as a curious and noble soul who has travelled far and wide on various planes of consciousness, only to return and share his findings in a language of profound and universal beauty.

He described our inner nature as eternal, benevolent, and full of love. These are the qualities



of God, and they exist within every being in this world. My hope is that when we emerge from the long winter of the soul that this virus has imposed on us, we let the grip of our frail, frightened egos loosen so that our souls may come together and bloom. At our core, we are one. Rumi says it best:

The illusion we have created of this world serves only the desires of our mind. The essence of our being is nothingness. From behind the veils the One watches over our being While in the world we are only shadows.

Ian Janko

The three poems above are taken from "Rumi's Little Book of Life", translated by Maryam Mafi and Azima Melita Kolin.



Old Ireland

During the course of the last two millennia, ripple effects from endless waves of invasions and migrations have contributed to the Irish identity of today, although preceding tales of misty legends and epics are still expressed by ancient structures, myths and culture.

Ireland's origins are of vague beginnings, with butchered bear bones carbon dated to around 10,500 BC on its west coast, suggesting indigenous huntergatherers amongst the first settlers.

From around 4,000 to 3,000 BC, more innovative tribes settled in Ireland from across the seas. They were advanced in agriculture, reared livestock and built monuments that have stood the test of time, still admired today for their feats of engineering.

They are ancient eminences situated on high grounds across Ireland, thought to be ceremonial sites with astrological implications. One example is Newgrange, a burial mound decorated with megalithic art, displaying carvings of chevrons, serpentine forms, triple spiral motifs and more.

One winter solstice, in 1967, Professor M.J. O'Kelly observed the rising sun illuminating the burial

chamber, with light travelling down a narrow passageway through a roof box above the mound's entrance. Following this discovery, astrological calculations suggest that this illumination would have occurred at exactly sunrise on the winter solstice 5,000 years ago. Nowadays, this phenomenon takes place approximately four minutes after sunrise.

In Celtic mythology, Newgrange is believed to be an old fairy mound and a portal to the otherworld. Depicted as the home of the 'Tuatha De Dannan', a supernatural race, children of the Celtic mother goddess 'Danu', 'the divine waters from heaven'.

The Celts were the first documented people in Ireland, arriving around the 5th century BC. Migrating in separate influxes from mainland Europe they spread out across the island, forming settlements of tribes with polytheistic beliefs and speaking the Gaelic (Irish) language.

There were many tribes in Celtic Ireland, each led by its Chieftain. The tribes had a common culture of language, laws and customs, but were politically disunited, with no collective identity, leading to territorial feuds and rivalry. The judicial system was administered via Brehon law. It is assumed that today's legal system contains remnants of this previous legislation sanctioned by ancient Irish Jurists.

Celtic tribes had an elite caste known as Druids, made up of priests, astrologers, doctors, arbitrators and poets. Druids conducted rituals in relation to the natural world, the cosmos and annual festivals honouring the changing seasons, such as Samhain, Imbolc, Bealtaine and Lughnasadh.

The druidic teachings are elusive, as there is no known direct literature from them. Lore has it that bards were venerated and oral transmission was encouraged from master to pupil. Learning was through mnemonics, as their knowledge was considered too sacred to be written down. Hindu god Shiva, for his capacity to create, preserve and destroy. The Celts were polytheistic, with a tripartite belief which is symbolised in the infinite webbing of the Celtic Knot. The human being was believed to be composed of body, soul and spirit, the world of Earth, Sea and Air, and nature of animal, vegetable and mineral.

Some recent historical accounts suggest that the Celtic tripartite theology may be the reason why the Christian Trinitarian theology was welcomed by the Celtic people with little resistance.

Tradition maintains that in the 5th century St Patrick, born in Roman Britain, spent his first six years as a slave in Ireland before he escaped and returned again years later as a bishop. Having baptised thousands, ordained priests, and



The only written records we have of the Celts are inscriptions of notches from the Ogham alphabet, mostly etched into standing stones at burial sites. They had strong convictions about the afterlife, believing that the soul crossed over the western ocean to imperishable lands.

They had many Gods, the most significant of whom was 'Da Da', who has been compared to the codified certain Brehon laws that contradicted Christianity, he syncretised the new religion alongside the pre-established faiths of Ireland, using the threeleafed shamrock as its Trinitarian symbol.

Around the same time period as St Patrick's ministry in Ireland, Rome was sacked by the Visigoths. The Romans knew Ireland as Hibernia (land of winter) and it was one of the few places in Europe left unscathed by Roman conquest. However, as Rome declined, Ireland was used as a base, where treasures such as ancient classical literature, that would have otherwise been destroyed, were preserved.

Many Christian monks fled to Ireland, escaping the ravages taking place in Europe. As the shadow of the Dark Ages fell on Europe, a Golden age of Saints and Scholars surfaced on the Irish landscapes. Monastic institutions were formed, and scriptoriums, schools and centres of learning were established across the country.

Christian monks artistically transcribed books in great detail, books of Greco-Roman culture and philosophy, fundamental to the later Italian renaissance, along with compilations of the Biblical scripts.

Much of our knowledge of the Irish Celts is largely due to the literary work of these well-versed Christian monks. What was once an oral tradition was eventually transcribed into stories, poems, traditions and myths with all their Irish splendour, preserving the Gaelic language, one of oldest living vernaculars spoken to this day.

This golden age lasted from the 6th to the 9th century, ending when the Vikings arrived. From then on, Ireland was to endure over a thousand years of oppression by colonial forces.

From the late 19th century onwards, a period known as the Gaelic Revival or the Celtic Twilight emerged, a resurgence of Irish folklore, literature and language epitomised by such acclaimed writers as W.B. Yeats, George Bernard Shaw and James Joyce.

Gareth Kinsella

Self-driving Cars and the Transport Revolution

Since the Ford T-model appeared on the roads at the dawn of the 20th century, cars have undergone great changes, not just in terms of form, but also regarding performance and safety. Even the fuel has changed and now more and more hybrid and electric cars are running, but one thing has remained: the need for the driver. Until now.

The next revolution in transport looks set to be cars and trucks capable of operating by themselves, without the need for a human driver. These autonomous vehicles (AVs) or self-driving vehicles began to be developed in the 1950s, but the rapid advances in information technology, especially in the 21st century, gave a boost to the evolution of new technology. With more and more vehicles on the road, in line with the growing population, the need for these computer-controlled cars that can drive themselves is increasing.

The arrival of 5^{th} Generation



Wireless Communications Systems (5G) completes this process and will make these vehicles available in the foreseeable future. Self-driving vehicles need to be constantly communicating with their environment, including other vehicles, and their multiple sensors need large amounts of data every second to navigate properly and make corrections on time. To do this they use radar, sonar, GPS and other sources, and their sensors forward messages to a central computer which makes the decision on whether or not any intervention is needed. This solution enables the human factor to be eliminated, and is expected to result in fewer collisions. On the other hand, labour costs will be reduced, as those people who formerly spent much of their time in front of the wheel can now use their energy for other purposes. If the technology is expanded worldwide, the speed limit can be changed as there will be





no more need for restrictions to avoid collisions. Eventually, traffic can be better controlled and optimized.

But every coin has two sides, and there are disadvantages to this new revolution. Many driving and transport-related jobs will be lost and those workers will need new employment. Automated cars will make thousands of jobs redundant. And although these cars are designed to operate with no risk and maximum safety, errors can happen. For example, if there is a computer failure, or a wrong decision, or the sensors are not working properly, collisions can occur and passengers will be harmed. In such cases, who will take responsibility? There is also a risk of automotive hacking, when not only personal data can be stolen, but a third party could take over control of the self-driving car. There is also the question of how these cars will react in a critical situation - for example, if a tree falls on the road or a large animal jumps in front of the car. Here, there are also ethical questions that need to be answered when these cars

are programmed. What will the computer choose, to protect the life of the people in the car? Or to protect other lives in other cars on the road, by avoiding collision with them? And even if the traffic system is changed in some countries and becomes selfdriving car-friendly, what about the rest of world, where neither developed telecommunication systems nor automated vehicles are available? In these places, cars could not work without human intervention.

Although the autonomous car revolution is on our doorstep, there are still many unanswered questions, so it may take a while to resolve them and change the traffic rules accordingly. It now seems more likely that the change will happen gradually, first on a smaller scale or in certain cities, then at national or international level. But if this revolution does take place, then transport will undoubtedly be changed forever and a new chapter in the car industry will begin.

Istvan Orban

Myths of the World

HYGEIA



Hygeia, Roman copy from a Greek original, 3rd c. BCE.

Along with "unprecedented", it's probably one of the words that we have heard most in the last three months since the outbreak of Coronavirus: the word "hygiene". We have been reminded again and again of the importance of following the rules of hygiene to prevent the disease spreading or increasing infections.

Through recent discoveries and studies in science, we have come a long way in preventative medicine. We are now able to prevent and tackle many diseases before they get out of hand.

However, we might actually be surprised to learn that the knowledge of hygiene as a method of preventing diseases is not a recent discovery. This knowledge goes all the way back to ancient Greece and maybe even further.

The word hygiene comes from *Hygeia*, who was one of the goddesses related with medicine in ancient Greece. Hygeia is generally known as a daughter of Asklepios, the god of health and healing in Greek mythology. She has four sisters: Panacea (universal remedy); Iaso (recovery from illness); Aceso (the healing process); and Aglaia (beauty, splendour, glory, magnificence and adornment). While her father was more directly associated with healing, she was associated with the prevention of sickness and the continuation of good health. She is also sometimes depicted as a sister or wife of Asklepios.

She was often represented as a virgin dressed in a long robe, with an expression of mildness and kindness, and either alone or grouped together with her father and sisters. Her usual attribute is a serpent, which she is feeding from a cup, chalice or water basin. The serpent is a symbol commonly attributed to Asklepios. It has many interpretations, including the healing process, transformation, renewal, the energy which runs throughout our body or the deep wisdom in ourselves which knows how to heal. The bowl also has several meanings: potion, cleanliness and the fresh, cleansing, nurturing waters of the world. Temples dedicated to Hygeia were frequently located on the sites of sacred wells, which were believed to have healing properties. Today the symbol of Hygeia with the snake and the bowl is used by pharmaceutical organisations.

Her name, 'Hygeia', means 'soundness' or 'wholeness'. Although she was originally the goddess of physical health, she is also considered as the protector of mental health. Health is about maintaining the 'wholeness' of the body, being in harmony and keeping it fit. She was also associated with the goddess of wisdom, Athena. Interestingly, the word "sane" - meaning "of sound mind, mentally sound, free from disorder" - comes from the Latin sanus, which means "sound, healthy". In that sense, her association with Athena does not seem to be a coincidence. After all, wisdom is being able to make sound judgements and therefore represents a healthy mind.

In ancient Greece, Hygeia was brought back to Athens after the outbreak of plagues to remember her and what she represents. Perhaps there is no better time than our current experience of lockdowns and self-isolation to remember Hygeia. We not only have to take care of our physical hygiene, but also our minds, both for ourselves and for others.

Pinar Akhan



