

## *Pythagorean and Hermetic Principles in Freemasonry*

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Doric Lodge 316 A.F. & A.M of Ontario, Canada - Committee of Masonic Education

*That which is below is like that which is above, that which is above is like that which is below – to do the miracles of One Only Thing.*

- The Emerald Tablet (Smaragdine Table, Tabula Smaragdina)  
Text attributed to Hermes Trimegistus, translated by Sir Isaac Newton

**M**asonic lectures suggest that our usages and customs correspond with those of ancient Egyptian philosophers, as well as Pythagorean beliefs and systems. Pythagoras and his followers are renowned to have derived their knowledge from Egyptian and other Eastern influences, including Babylonian, Phoenician and Indian. The Egyptians are said to have revealed secrets in geometry, the Phoenicians arithmetic, the Chaldeans astronomy, the Magians<sup>1</sup> the principles of religion and maxims for the conduct of life.

Accurate facts about Pythagoras as a historical individual are so few, and most information concerning him so faint, that it is impossible to provide more than just a vague outline of his life. Pythagoras is attributed to have founded a school of science and philosophy, a fraternity of thinkers, mystics and mathematicians who saw in numbers the key to understand how the entire universe works. They studied the philosophical meanings of numbers and their relationships (a field related to number theory, a cornerstone part of mathematics which contains questions unsolved to this day). The fraternity went as far as to attribute virtues to numbers, such as:

- One was attributed to the Monad, or Singularity. The source of all numbers. Perfect, essential, indivisible.
- Two, or Dyad, represented Duality and Polarity, or a Line (between 2 points). Plurality, loss of unity<sup>2</sup>, “otherness” and separation.
- Three made the Triad, or Plane (uniting 3 points). By virtue of the triad, unity (“One”) and diversity (“Two”) of which it is composed are restored to harmony. Considered to be the most beautiful number, as it is the first to equal the sum of all the terms below it, and the only number whose sum with those below equals the product of them and itself ( $3+2+1 = 6 = 3 \times 2 \times 1$ ) – to the Pythagoreans not just a mere coincidence, but a clear sign of Divine symmetry and harmony.

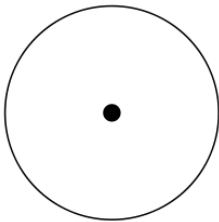
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<sup>1</sup> ‘Magian’ is a term used since the 4th century BCE to denote a follower of Zoroaster. Zoroaster or Zarathushtra was an ancient Iranian prophet, philosopher and religious poet, and founder of Zoroastrianism, a doctrine based on the human struggle between truth and lie, Free Will, creation and existence. Along with Hinduism, Zoroastrianism is considered to be among the oldest religions in the world.

<sup>2</sup> Loss of unity also relates to Free Will, one’s power to decide between different paths and its consequences – two people lost their primordial unity with God after making a decision which caused them to be forced to leave the Garden of Eden in the Book of Genesis.

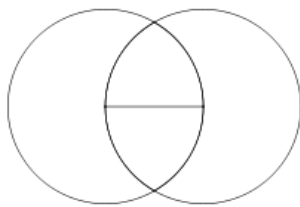
Aristotle wrote about these philosophers 'the so-called Pythagoreans, who were the first to take up mathematics, not only advanced this subject, but saturated with it, they fancied that the principles of mathematics were the principles of all things'.

In addition to the relationships between numbers and their meanings, the Pythagoreans expressed them in geometrical forms. These forms were used to further explain the metaphysical teachings of their philosophy, for example:

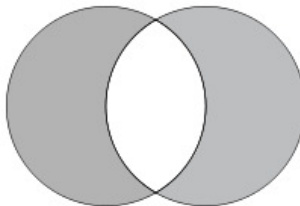


The Monad was a symbol referred by the Greek philosophers as "The First," "The Seed," "The Essence," "The Builder," and "The Foundation". According to the Pythagoreans, it was a term for God or the first being, or the totality of all beings, Monad being the source or the One meaning without division. The dot, or point, symbolizes the residual state after the removal of volume - the Centre, the source, the principle of emanation and the termination of return. It denotes the creative force and the end of all things. According to Greek philosophers, from the Monad evolved the Dyad; from it numbers; from numbers, points; then lines, two-dimensional entities, three-dimensional entities, bodies, culminating in the four elements earth, water, fire and air, from which the rest of our universe is built up.

In Hindu and Tibetan teaching, the dot (Bindu) is once again the 'fleck' or 'seed' of manifestation. The symbolic meaning of the point in the centre of the circle is further revealed in the Masonic third degree of a Master Mason.

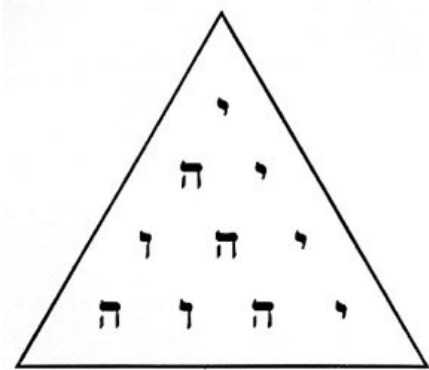


The Dyad, used by the Pythagoreans for the number two, represents the principle of "twoness" or "otherness". The symbol also represented Matter, or the manifestation of the Divine Will in our material world. The central part, or intersection between the two circles, is called the Vesica Pisces ("bladder of a fish" in Latin) - see image below.



This symbol, also attributed to the Pythagoreans, is sometimes elaborated in the form of a fish and adopted by Christian and other spiritual traditions. The mathematical ratio of its width to its height was believed by the Pythagoreans to be 265 to 153. The actual ratio is the square root of 3, however the Pythagoreans' calculation is amazingly close to  $\sqrt{3}$ . The number 153 also appears in the Gospel of John (21:11) as the number of fish Jesus caused to be caught in a miraculous Draught of Fish, and the fact that the number of fish captured was important enough to be mentioned in the scriptures suggests that some symbolism may be associated with this passage.





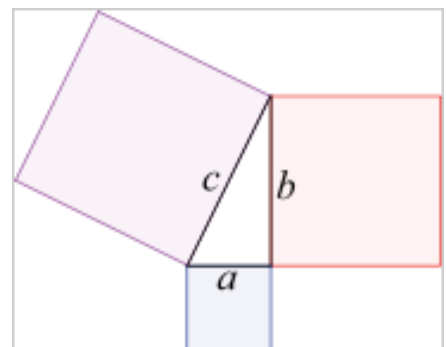
Pythagoras is attributed to the creation of the *Tetractys*, a sacred and mystical figure showing the relationships between the first 10 numbers. The Tetractys symbolized the four elements (earth, air, fire, and water), and also represented the creation of space and reality: the first row represented a point (the Monad, singularity), the second the notion of one-dimension (two points connecting a line), the third row contained a plane defined by a triangle of three points, and the fourth row represented the three-dimensions (a tetrahedron or pyramid defined by four points).

The Pythagorean fraternal oath also mentioned the Tetractys:

*"By that pure, holy, four lettered name on high,  
nature's eternal fountain and supply,  
the parent of all souls that living be,  
by him, with faith find oath, I swear to thee."*

The Pythagorean system had a great impact on future philosophic traditions, such as Cabbalism, Rosicrucianism and early Freemasonry, all of which claimed to have evolved out of Pythagorean ancestry. A Hebrew Tetractys has the letters of the Tetragrammaton (the four lettered name of God in Hebrew scripture, shown above) inscribed on the ten positions of the Tetractys, from right to left. Canadian author Manly Palmer Hall dedicated an entire chapter of his work *"The Secret Teachings of All Ages: An Encyclopedic Outline of Masonic, Hermetic, Qabbalistic and Rosicrucian Symbolical Philosophy"* to the mystical and philosophical qualities of Pythagorean numbers (the book contains 50 chapters and was published in 1928 when he was only 27 years old), and Pythagorean symbolism is regularly referenced in Masonic teachings and education.

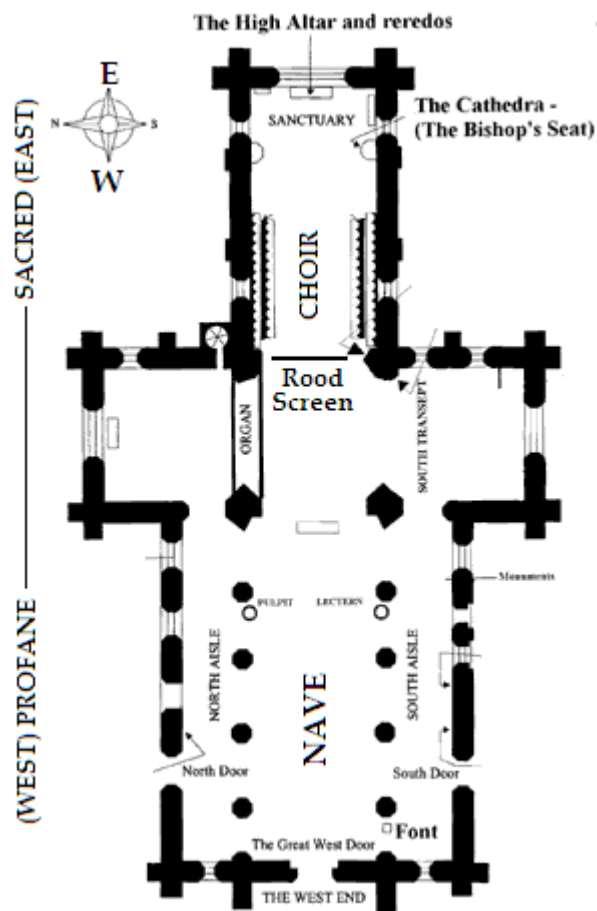
Freemasonry also honours Pythagoras by adopting the so-called Pythagorean Theorem (or the 47th Proposition of Euclid) as the jewel of the Past Master, hanging underneath the Square. This theorem states that in a right-angled triangle the square of the hypotenuse is equal to the sum of the squares of the other two sides ( $a^2 + b^2 = c^2$ ), dictating the exact and predictable proportions, or harmony, between the three sides of the triangle. It denotes advanced knowledge of the Craft and the experience that is associated with a Past Master of a Masonic Lodge.



## As Above, So Below

Mathematics, sacred geometry, religious symbolism, Masonic philosophy – these and many other sciences and arts mark the intellectual and spiritual efforts of man to appreciate, relate with and understand the Divine, or what is beyond our physical senses and rational capabilities – it has always been this way ever since we became conscious that there is more between heaven and Earth than dreamt of in our philosophy.

There is a concept of symmetry between the Divine and its material manifestations - one of the keys to Hermetic knowledge. This principle teaches the notion that events, or causes happening on one side of creation are intrinsically related to effects on the other side – what happens in the material world has direct implications in the spiritual realm, and vice-versa. It is usually communicated that *“That which is below is like that which is above, that which is above is like that which is below”*. Correspondences can be found between God and man (made on His image before being expelled from the Garden of Eden, the initial state of bliss and oneness with God), or men and gods (who were depicted as human-like figures, many with human flaws such as anger, deception or envy), celestial influences in human humours and fate in astrology, or even between medieval and renaissance architecture and Christian



cosmology. For example, a cathedral build in the Romanesque or Gothic style was, in itself, a means of instruction for a largely illiterate population, and it incorporated a representation of much of the traditional Western metaphysical system, thus<sup>3</sup>:

*The Nave* represented the Earth, the habitation of the church militant, the residence of incarnate humanity. According to the medieval conception the Earth was the totality of the physical existence. Today we would say that the Nave represents the physical universe;

*The Choir* represented Paradise and Purgatory, it was the world of angels, the residence of souls awaiting birth or, after death, awaiting judgement in the planetary or astral spheres;

*The Sanctuary* represented Heaven, the abode of the triumphant; it was the world of archangels, the celestial sphere in the medieval cosmology;

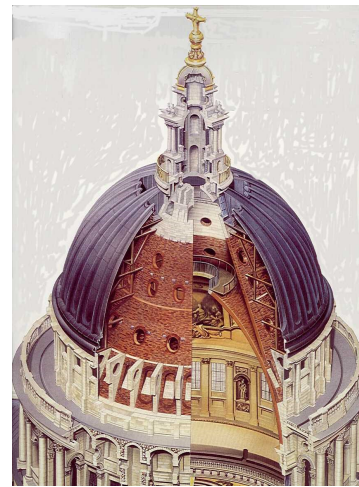
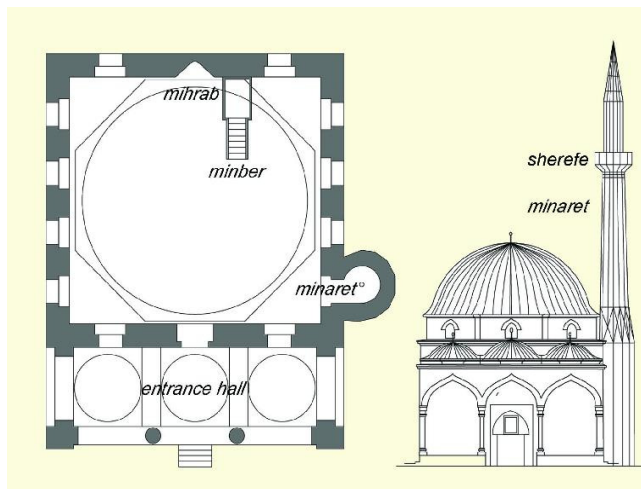
<sup>3</sup> Extract from 'Freemasonry – A Journey through Ritual and Symbol' by W.Kirk MacNulty.

*Divinity Itself* was present through the mystery of the sacrament reserved in the Tabernacle on the altar. In some traditions the abode of Divinity is called the 'World Without End';

*The Rood Screen* separated the Nave from the Choir and permitted the ordinary worshipper only glimpses of the events taking place beyond in the same way that the threshold of consciousness veils ordinary awareness from the Divine;

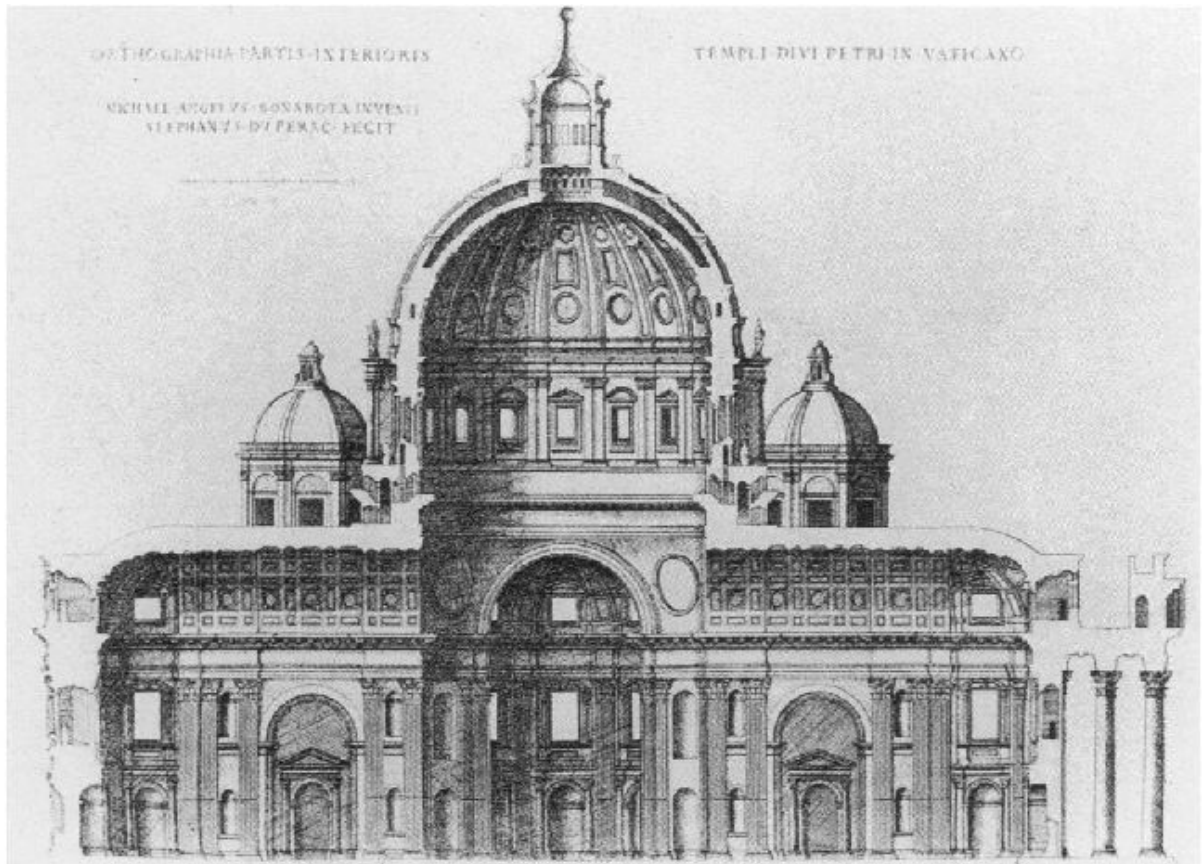
*Three Aisles*, accessed by three doors in the west wall, extended the length of the cathedral building and suggest an idea which finds way into Freemasonry as the Rule of Three.

The elaborated interconnections between elements in architecture and the Divine are explained by the need to worship in a proper, dedicated place. Architecture is the only form of art generated from a concrete need for survival – from the elements, enemies and beasts – and later to house divine entities and their symbols. All monuments – in fact, *all things* that carry some spiritual significance – have their unique symbolism, related to the noblest of human values, the search for meaning and faith in the Divine, from the ancient pyramids and Palaeolithic monoliths being aligned with the cardinal points and distant celestial stars, to mosques and cathedrals with angular foundations (related to matter and man, drawn by the set square) and a perfectly round dome above (a Divine attribute, designed using a compass).



Although the Divine presence is in all things and all places, the temple is built for meditation, contemplation and worship. The notion of a round, celestial canopy *above* representing Heaven (designed with a compass), a square altar *below* for man's worship on Earth (built with a set square), and a Divine connection in-between is well communicated in the main Masonic symbol, and echoes the ancient Hermetic maxim – "*As above, so below*".





Regardless of where we look, this connection and its symbolism represent one of the oldest principles in Craft Masonry, established well before the Grand Lodge era, from the dawn of mystical Traditions. It is surprising that the references to the esoteric (internalized, veiled and to be discovered only within oneself) meanings of this powerful connection between Divine and human are mostly faint in our teachings, and that their marks in our symbolism are limited mostly to their exoteric surface (externalized in ritual, simplified by words, dogmatic in nature).

### ***Man as a Temple: Connecting the Microcosm and the Macrocosm***

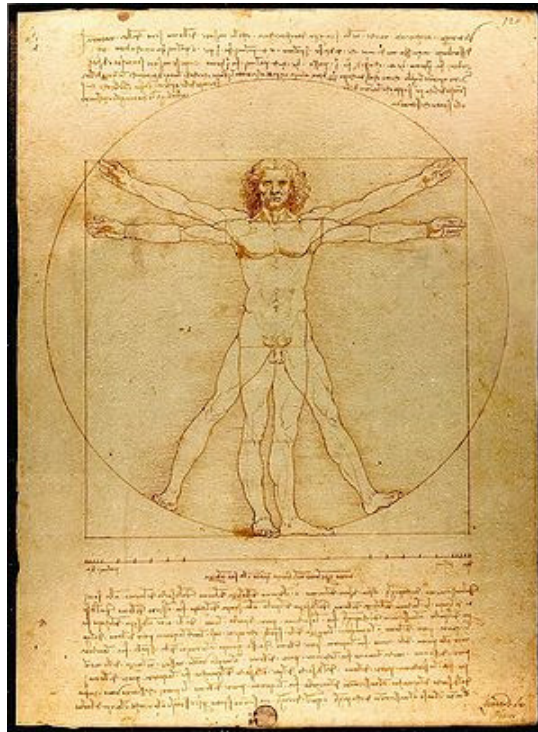
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How rich and enlightened were the views of the architects, philosophers and Masons (operative *and* speculative) who understood the whole of the creation as an integrated continuum originating from divinity, and extending to its material manifestations, and finally to man. Another Hermetic maxim adopted by many philosophers teaches Divine omnipresence, omniscience and omnipotence in geometrical terms - "God is an intelligible sphere, whose centre is everywhere, and whose circumference nowhere"<sup>4</sup>.

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<sup>4</sup> *Deus est sphæra infinita, cuius centrum ubique, circumferential nusquam. – Corpus Hermeticus, Liber 24 Philosophorum.*

To find further evidence of this cosmological view we look back at the works of past thinkers and philosophers. Leonardo da Vinci created the famous drawing called the Vitruvian Man around 1487, which depicts a male figure with his arms and legs apart inscribed in a circle and square (see reference above to symbolism on the circle-compass/angle-square as representations of the Divine/material).



The drawing is accompanied by da Vinci's notes, based on the work of the famed Roman architect, Vitruvius Pollio – whence the name derives. The Vitruvian Man is based on Vitruvius's correlations of perfect proportions using a human figure and geometrical rules. Perfect architecture was a continuation of the laws of nature, a system to be applied to the formation of all natural structures, including man. His work *De Architectura* (probably written around 25 BC and dedicated to his patron, the emperor Caesar Augustus) established a system of ratios for the construction of 'perfect' buildings (including man) that exhibited the three necessary principles of *Strength, Usefulness, and Beauty*.

The Encyclopaedia Britannica explains, "Leonardo envisaged the great picture chart of the human body he had produced through his anatomical drawings and Vitruvian Man as a *cosmografia del minor mondo* (cosmography of the microcosm). He believed the workings of the human body to be an analogy for the workings of the universe."

If, like da Vinci and other philosophers imagined, the root of architecture lied within human aspirations to reflect the Divine plan then the sciences of architecture and geometry were indeed sacred.

Another author of Hermetic and Rosicrucian texts named John Dee<sup>5</sup> paraphrased Vitruvius in his *Mathematical Preface* of 1570:

*An Architect (sayeth he) [Vitruvius in his Architectura] ought to understand Languages, to be skilful of Painting, well instructed in Geometrie, not ignorant of Perspective, furnished with Arithmetike, have knowledge of many histories, and diligently have heard Philosophers, have skill of Musike, not ignorant of Physike, know the answers of Lawyers, and have Astronomie, and the courses Caelestiall, in good knowledge.*

Vitruvius' work included many disciplines ranging from mathematics to astronomy, meteorology and musical harmony. In his time, the skilled builder needed to consider everything touching on the physical and intellectual life of man and his surroundings.

The resemblance of these ideas with the Masonic teachings on moral architecture is too strong to be ignored. Masons are instructed to diligently study the seven Liberal Arts and Sciences of Grammar, Rhetoric, Dialectic, Arithmetic, Music, Geometry and Astronomy, and make daily efforts to comprehend them. For centuries we have been searching for ways to understand the works of the Great Architect – by building temples of stone, mind and spirit.

The parallels between spiritual transformation and architecture are indeed significant, and we should not be surprised: the allegory of “temples” made of “stones” is consistently used to teach the laborious path of human enlightenment – the alchemical Philosopher's *Stone* has the power to heal and transform lower beings into a higher state, raising man into a living stone, a “house of fire” embodying God; some Buddhist temples represent the intersection of heaven and Earth; the name of St. Peter, the most devoted disciple of Jesus, is the literal translation for the word “Stone” (Greek: *Pétros*). This is not a coincidence - as the foundation of the Christian church Peter is named in the scriptures as the *spiritual cornerstone* (*Saint* ⇔ *Sacred* / *Peter* ⇔ *Stone*), depicted holding the keys of ascension to Heaven.

The understanding that a stone structure can be used to praise, honour and worship Divinity but cannot *contain* God is also present in most religions: the Koran teaches that “*Heaven and Earth do not hold me, but I am contained within the heart of my servant*”, and in the Gospel of Mark (14:55-58) we find the words attributed to Jesus: “*I will destroy this temple that is made with hands, and within three days I will build another made without hands*”. All these teachings remind us that although Divinity permeates all of creation, its connection is stronger within us, for man was created in His image.

No other philosophical system co-relates moral teachings with the ancient science of architecture more directly than Freemasonry. We have craftsmen degrees, working tools, *rough* and *perfect* Ashlars<sup>6</sup>, pillars and a stairway, columns of Doric, Ionic and Corinthian designs - the language and teachings are there for anyone with eyes to see. It is left up to the individual Mason to unveil the signs and understand the messages, and apply these metaphorical tools to his morals, on his own accord and time.

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<sup>5</sup> John Dee (1527 – 1609) was a noted mathematician, astronomer/astrologer, navigator, and consultant to Queen Elizabeth I of England. He devoted much of his life to the study of alchemy and Hermetic philosophy.

<sup>6</sup> From Old French *aisselier*, evolved from Latin *axilla* - the diminutive of *axis* ‘plank’: a large stone block



## *In Conclusion*

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Vitruvius and Leonardo's analogy of man as the layout of a perfect building, or temple, reminds us that God can also be found inside that temple. Our souls are sparks of divinity that inhabit that temple. *Know ye not that ye are the temple of God, and that the Spirit of God dwelleth in you?*<sup>7</sup>

The drawing itself is often used as an implied symbol of the essential symmetry of the human body, and by extension, of the universe as a whole. We may have been kept separated from the original state of grace by a terrible flaming sword<sup>8</sup>, illuminated from darkness by a forbidden fire stolen from heaven<sup>9</sup> and taught by ancient masters how to write our tragic history and record time during our exile on this existence<sup>10</sup> - but still, we have never lost our inheritance: a desire for perfection and the connection and symmetry with the Divine. Ancient Pythagoreans, medieval alchemists, Rosicrucian philosophers and early Freemasons concentrated their efforts in self-discovery, working to unlock the human potential to be more than what we are now. Today our lodges boast the Pythagorean and philosophical ancestry, and yet we do very little beyond memorizing and repeating the ritualistic words with little attention to their true meanings, which cannot be explained in a Book of Work or any Masonic manual. Quoting W. Bro. Ambarish Singh Roy, "*Ritual for the sake of tradition is worthless. Ritual for the sake of enlightenment is valuable. An understanding of the ritual's meaning is far more important than just memorizing it*".

Ritual memorization and proper execution, social intercourse and visitation, and knowing and complying with Grand Lodge regulations are all critical elements in a Masonic environment. However, we ought to remember that the Masonic journey is one of self-discovery and internal transformation. Masons must be committed to never stop working towards the unachievable perfection, to learn enough about ourselves and to provoke real and continuous change in who we are. As Carl Jung said, '*Who looks outside dreams, who looks inside awakes*'.

This is what our ancestors called 'Enlightenment', and sought with most zeal. The journey can take a lifetime of hard work, and only when one has achieved that goal he can with all honesty call himself a 'Master Mason' in the true spirit of the Craft. Until that happens we must subdue our egos and accept the fact that we are all apprentices, regardless of our rank, age and position. We must also never forget that masons are builders, *not speculative but operative*, and as we build better foundations within ourselves these foundations shall inevitably reflect a positive impact on the world around us.

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<sup>7</sup> I Corinthians 3:16

<sup>8</sup> Genesis 3:24

<sup>9</sup> Prometheus Bound - 5th-century BC - Aeschylus

<sup>10</sup> by Hermes and Thoth, mythological Greek and Egyptian gods attributed to scribing, knowledge and geometry

We would like to conclude by quoting W. Bro. Shawn Eyer, MPS, Worshipful Master of Academia Lodge No 847 (San Francisco, California):

*“Masonic tradition, as expressed in our rituals, directs us toward a brighter perspective. Our emblem [the Mosaic Pavement] vividly portrays an interconnected, orderly universe suffused with Divine wisdom and sustenance. We are free to imagine this vital force as merely poetic, or we may understand it as real as gravity, light or electricity”.*

❖ Authored by Bro. Rafael Etges and edited by Bro. Abiel Klein

- Comments are most welcomed and should be sent to rnetges@yahoo.com

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