

The Secret Initiatory Tradition within Freemasonry

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Good evening. As most of you know, my name is Rob Holston, PM of Austin Lodge #48 in Davisburg, and tonight I will be presenting to you what I believe to be some of the more overlooked esoteric elements of our ancient Craft.

Those who lecture often employ the useful tactic of self-deprecation and in this respect I shall follow in their footsteps. For those of you who have not had the pleasure or displeasure of hearing me speak, I must warn you that my style is primarily academic, hence somewhat dry, and also rather pedantic. This lecture is still very much a rough stone, and any mistakes contained are wholly my own fault. This is also the first time I have employed slides, so please bear with me if I end up confused at some point. With that said, I now present to you "The Secret Initiatory Tradition within Freemasonry"...

QUOTES:

"The ritual of Freemasonry has spiritual purpose, but that purpose can be understood only by those who are prepared to apply the discipline of its secret teaching to their own spirits." -- Br. Robert Lomas

"Wisdom hath built herself a house, she hath hewn out seven pillars." -- Proverbs 9:1

"Mathematics possesses not only truth, but supreme beauty -- a beauty cold and austere, like that of sculpture, without appeal to any part of our weaker nature, yet sublimely pure, and capable of a stern perfection such as only the greatest art can show." -- Bertrand Russell, Principia Mathematica (1903)

"Mathematics shows us that some propositions are right, and some are wrong; it indirectly teaches us about morality; there is no moral relativity in mathematics." -- B. Russell?

"These be the sciences seven, who uses them well he may have heaven." -- Halliwell Mss.

"From these [7 liberal arts] all other sciences and crafts in the world sprung; Geometry is the first cause of all the other sciences; Geometry is the science by which all reasoning men live; among all the crafts, masonry has the largest share of this science of geometry." -- Cooke Mss.

INTRODUCTION:

Brethren, from the time I was a wee lad I would often ask myself, "what would Swedenborg think?". Well, I'll tell you what Swedenborg thought about Geometry: in his "Philosophical and Mineralogical Works", published in 1734, he outlines his philosophical method of experience, geometry, and reason, and tells us that "Geometry is the means whereby the inner order of the world can be known".

Indeed. I believe, as many of our masonic scholars do, that the 7 Liberal Arts were included in Masonic ritual for a far greater purpose than that of secular education alone. Being that their original purpose in antiquity was philosophical, their grand purpose was as a preliminary study for theology. Their connection to the pre-Flood Pillars, an ascent up a ladder or flight of winding stairs, and the Art of Memory, including the use of the imagery of Solomon's Temple, strongly binds them to our most peculiar Craft.

According to Stevenson, English masons were peculiar in one respect by the 15th century: their mythical trade history, contained in the Old Charges, was unusually elaborate; this lore was to make a significant contribution to freemasonry through its emphasis on morality, its identification of the mason craft with geometry, and the importance it gave to Solomon's Temple and ancient Egypt in the development of the mason craft;

If our Old Gothic Constitutions are useful for anything, they, like so much mythology, serve as pointers to possible historical truths; one of the most central and enduring of these pointers is the idea of the 7 liberal arts, which was later embedded within the additional symbol of the winding staircase, or a staircase in general, or even a ladder; its associations with mystical ascent are obvious to the initiated.

There are several Masonic legends beginning around 1350 CE regarding the 7 Liberal Arts that share similarities to earlier legends from the Near East. One Hebrew legend informs us that: "Eve instructed her son Seth and his siblings to record on monuments of stone and clay their knowledge so it would survive come fire or flood. Another legend tells of Zoroaster, who was said to have inscribed all 7 Liberal Arts on pillars to preserve them from destruction. Later medieval versions claim that after the Flood, one pillar was found by Hermes Trismegistrus, and the other was found later by Pythagoras.

Handfield-Jones informs us that, "In the first known Mss. Constitution, the Halliwell Mss., there occurs a passing reference to Noah and the flood. From then onwards from the Cooke Mss. every Masonic Constitution contains allusions to Noah, not however to the flood and ark but to his finding two great pillars inscribed with the 7 Liberal Arts. The date of the Halliwell Mss. is about 1390 but like the Cooke Mss. it bears evidence of being derived from an earlier document written around 1350 CE. Here therefore as early as 1350 we have the Noah story appearing in association with Masonry, but the flood and ark take secondary place to the Two Pillars found by Noah after the flood." We shall now trace chronologically the history and development of these symbols.

THE 7 LIBERAL ARTS (Sapta Liberalia Studia):

We know that the formulation of the Sapta Liberalia Studia, i.e., the 7 Liberal Arts began in antiquity. They were taught as early as Plato, and it is considered likely that they were fully formed by the time of the Pythagorean school (about 530 BCE), although solid evidence is lacking.

in classical antiquity, the liberal arts denoted those subjects of study that were considered essential for a free man to master in order to acquire those qualities that distinguished a free man from a slave, the later of whom formed the bulk of the population in those days; these studies led up to the study of Philosophy & Theology, and hence, the system was a preparation to become a true philosopher, and philosophy was seen as the meta-study that united together all the branches of learning; their aim

was to prepare the student not for gaining a livelihood, but for the pursuit of science in the strict sense of the term, i.e., the combination of philosophy and theology known today as scholasticism; in Medieval universities, the 7 Liberal Arts were generally studied for 6 years, the student usually beginning his training around age 14, and ending in a Master of Arts degree;

Our first historical reference to an origin for Geometry occurs around 450 BCE in the works of Herodotus, where he informs us that geometry originated with king Sesostris of Egypt. This is the earliest known legend of the origin of geometry, although we know it to be mythical, since Sesostris reigned around 1840 BCE, 800 years after the Great Pyramid was built, and thus far too late to have actually invented geometry. Much later, Josephus either confuses or conflates Sesostris with the biblical Seth.

By the time of Plato (around 380 BCE), the subjects that would become the standard Liberal Arts in Roman and Medieval times already comprised the basic curriculum in the "enkuklios paideia", or 'education in a circle', of late Classical Greece.

In "The Republic", Plato proposes a course of education which appears to be the Pythagorean course perfected; the pinnacle was philosophy, which signified the science of the eternal as ground and prototype of the world of sense; this progress to philosophy is the work of our highest cognitive faculty, the intuitive intellect (which the Greeks called "nous");

In The Republic the Liberal Arts are treated as subjects meant to prepare one for the highest type of knowledge.

In "The Statesman", Plato identified architects (and also kings) as exemplifying a distinctive kind of practical knowledge, a knowledge which is imperative and executive rather than purely critical and mathematical, as being concerned with commanding rather than just ascertaining scientific facts or calculating mathematical truths; he divides episteme (science) into praktike ('science of action') and gnostike ('science of mere knowing'); his argument is the first known attempt to distinguish what is now recognized as 'technology', as distinct from more purely rational science; Plato boldly envisaged praktike and gnostike as constitutive of the unity of science as a whole, thus anticipating Aristotle and the modern division of knowledge into 'know how' and 'know that';

According to Pont, "Plato must be credited yet another philosophical innovation: the first theory of architecture and the first formal curriculum of preliminary architectural studies. The Platonic vision of architecture and architectural didactics has informed the oldest surviving treatise on the western art, that of Vitruvius."

In his "Rhetorica" (330 BCE), Aristotle is first to coin the compound term 'technologia', thereby establishing this new department of science within the general system of knowledge; the first art to be explicitly designated a technology was rhetoric; By this time also the Ars Memorativa, i.e. Art of Memory, was considered an integral part of Rhetoric, and did not become associated with Dialectics (Logic) until much later, around 1600 CE.

In "Libri IX Disciplinarus" (written sometime between 60-30 BCE), Varro treats of the 7 liberal arts, adding to them medicine and architectonics; This is the earliest reference to the 7 Liberal Arts being associated directly with Architecture.

In "De Architectura" (written around 25 BCE), Vitruvius recommends the study of the Liberal Arts to all architects. By this time in the Roman world, the 7 liberal arts had become an academic preliminary to training in architecture within the collegia; he draws a distinction between the 'practical' side of architecture (called in Latin 'fabrica') and the 'theoretical' side (called 'ratiocinatio'); 'fabrica', as used by Vitruvius, does not denote making, practical building, or the art of construction; he makes it clear that fabrica is also an intellectual process which he calls 'meditatio'; fabrica primarily means "frequent and continued contemplation (meditatio) of the arts associated with building"; fabrica yields the kind of professional knowledge and experience that is derived from thoughtful study of, though not necessarily practical engagement in, the various constructive arts; in essence, fabrica is not 'hands-on' knowledge at all, though it can be, and normally is, acquired through direct involvement in building and related crafts; fabrica parallels Plato's practice and ratiocinatio parallels his gnostike; 'ratio' has connotations of exact science and speculative theory; fabrica/practice encompasses empirical knowledge, professional skill, and experience, while ratiocinatio/gnostike encompasses mathematical science and speculative theory; Vitruvius outlines a sophisticated system of aesthetics in analyzing the concept of venustas (Latin for 'beauty'), and this system was drawn principally from the Greek [Pythagorean] theory of music; Vitruvius' ordering of the quadrivium was arithmetic, geometry, astronomy, and music, with music, also called harmonics, as the pinnacle;

According to Krautheimer, Vitruvius' architect is "a strangely ambiguous being... both a practitioner and a theoretician, and in the latter capacity a walking encyclopedia: versed not only in draftsmanship, geometry, and arithmetic but also in history, philosophy, and science, with a good smattering of musical theory, painting and sculpture, medicine, jurisprudence, astronomy and astrology."

According to Pont, "In his true cultural context, Vitruvius was an heir of the Pythagorean-Platonic worldview in which architecture, along with all the other arts, was traditionally modeled on or construed in accordance with musical canons"; "Vitruvius echoes Plato in insisting that the architect must be qualified in the knowledge of practical building as well as the intellectual refinements of 'theory and literature'; and his remarks presuppose a similar distinction between the craft of building in general and scientific or mathematical architecture in particular. So, while they are almost three centuries apart, Plato and Vitruvius appear to be in broad agreement on the definition of the architect, the nature of his professional formation, and the implicit conception of the art itself. These solid continuities of doctrine cannot have been accidental, given the Roman admiration of almost anything Greek and, especially, the prestige of the [Platonic] Academy which was still flourishing in Vitruvius's time."; "like Plato, Vitruvius does not attempt to define architecture as such in his opening paragraphs but confines himself to characterizing the professional architect by his appropriate formation and distinguishing him by the knowledge and skills he should ideally possess.";

It was not until about 400 CE that the subjects crystallized into the specific 7 liberal arts as we know them, although all 7 subjects were attested and taught much earlier. It was at this time that they were modified to exhibit Christian ideals as it was accepted into the Latin West.

Christianity taught men to regard education as a work for eternity, to which all temporary objects are secondary; in consequence, labor, which among the classic nations had been regarded as unworthy of the free man, was now ennobled, while learning, the offspring of leisure, lost nothing of its dignity;

Around 400 CE, St. Augustine of Hippo, a great admirer of Pythagoras and Plato, writes, "mathematics was not invented by man, but its truths were discovered; they

make known to us the mysteries concealed in numbers, and lead the mind upward from the mutable to the immutable; they become for the mind a source of that wisdom which has ordered all things by measure, weight, and number". he wrote extensively on the 7 liberal arts and regarded memory as one of the 3 parts of the soul (the others being understanding and will) and taught that through exploring the memory men could find a memory-image of God embedded in their own souls; what had begun as a utilitarian technique for improving the memory had come to be seen as being of importance in religion not just as a valuable method of imprinting religious truths on the mind, but also as something that in itself had moral value and would lead to knowledge of God; His comments on the theories of Pythagoras and Plato show his love for architecture and music and his great effort to reconcile the knowledge of the pagans with that of Christianity. In "De Musica", he wrote about the theory of the number relationship of Pythagoras and in it declared that without the predominance of the numbers and their relationship the universe would become chaos. He wrote in detail about the Pythagorean Tetracyts and related it to the Old Testament passage "Thou has arranged everything according to measurement, number, and weight".

Around 420 CE, a pagan writer named Martianus Capella wrote his "De Nuptiis Philologiae et Mercurii" (The Marriage of Philology and Mercury), a work which preserved the basic structure of the ancient pagan educational system based on the Liberal Arts. This is the earliest known depiction of the 7 Liberal Arts as a unified course of study. This work also contains an interesting allegory where the 7 Liberal Arts are depicted as handmaids presented by Mercury to his bride Philology. According to Stahl, this marriage of Mercury and Philology has been taken to symbolize the union of eloquence and learning, the marriage of the trivium and the quadrivium. Capella also mentions Harpocrates (Horus the Child/Dawn Sun), the God of Silence, and associates him with the 7 Liberal Arts and the Art of Memory; [Harpocrates is a rare but recurring symbol on early masonic medals from 1733 on];

Proclus, in his Commentary of Euclid (written sometime between 431-485 CE), states that "[Pythagoras] discovered a mean or intermediate stage between the mathematics of the [Egyptian] temple and the mathematics of practical life, such as that used by surveyors and business people; he preserves the high aims of the former, at the same time making it the palaestra of intellect; he presses a religious discipline into the service of secular life without, however, robbing it of its sacred character, just as he previously transformed physical theology into natural philosophy without alienating it from its hallowed origin";

Proclus is basically saying that Pythagoras was renowned for having converted geometrical investigation into a form of education for free men; [the Cooke Mss. quotes Proclus, or rather misquotes him, but replaces Pythagoras with Euclid; and so perhaps the Halliwell Mss., which is called "The Constitutions of the Art of Geometry according to Euclid" would be more accurately entitled "...according to Pythagoras"];

The first known Christian writer to use the specific term 'Seven Liberal Arts' was Magnus Aurelius Cassiodorus, in his "De Artibus ac Disciplinis Liberalium Artium" (written sometime between 480-525 CE). This curriculum was adopted and basically remained fixed all throughout the Middle Ages, its ultimate expression taking form at the Cathedral School at Chartres around 1140 CE.

St. Isidore of Seville, in 633 CE, standardized the Cathedral School curriculum throughout the Latin West on the 7 Liberal Arts, thereby permanently institutionalizing them. Within Isidore's writings we also find reference to the pre-Flood Pillars of Seth,

those pillars mistakenly being called the Pillars of Lamech in the Cooke Mss, which quotes from Isidore.

In 782 CE, Charlemagne renews the Cathedral Schools and brings in the Saxon monk Alcuin, headmaster of the Cathedral School at York (which was famous for the 7 liberal arts), and he decrees that all Cathedral Schools must teach the 7 Liberal Arts; Charlemagne installed Alcuin as Master of the Palace School at Aachen, and during his time the 7 liberal arts become known on the continent as the Methodus Hybernica (i.e., the "Irish method"); while in Aachen, Alcuin designed Aachen Cathedral for Charlemagne, which he describes as being "another Temple of Solomon"; in a letter to Charlemagne, Alcuin refers to himself as both "Flaccus" and "Mannon Graecus" [these names being referenced in certain of our Old Gothic Constitutions and connected with our York legends and you may read Cryer for an excellent commentary on this]; Alcuin knew the work of Vitruvius and taught it to Charlemagne's builders; This same St. Alcuin also wrote of his belief that the "7 pillars" in Proverbs 9:1 mentioned at the beginning of this lecture, was an allusion to the 7 Liberal Arts.

In 819 CE, the 7 Liberal Arts were individually defined by Frankish Benedictine scholar Rabanus Maurus, archbishop of Mainz, Abbot of Fulda, and student of St. Alcuin of York; Maurus was considered the most learned man of the era and Mainz & Fulda the greatest seats of learning in the Frankish empire;

In 845 CE, John Scotus Erigena moved to France where he took over the Palatine Academy at the request of king Charles I the Bald; he was one of the earliest scholars to introduce neoplatonism to the west, and tried to fuse reason with faith; he is the first to use the term 'mechanical arts' as a generic term the way we use the term 'technology'; he was the first to dignify them as equivalent to the 'Liberal Arts', and was first to identify these activities as having 'spiritual significance', that they "are man's link with the divine; their cultivation a means to salvation"; this is the first time we see technology and religion conjoined; Erigena was very popular among the Benedictines, and especially among the later Cistercians; interestingly, he is also one of the earliest writers to speak of a *spiritual Temple of Solomon*;

Between 910-940 CE, the rabbi Saadya Gaon claimed that "much knowledge on the secrets of nature is demonstrated only by means of geometry". Interestingly, he also wrote an allegory of a spiritualized Temple of Solomon as a symbol of the macrocosm. This allegory is one of the earliest references besides that of Erigena of which I am aware that attempts to 'spiritualize' Solomon's Temple.

Between 970-990 CE, Gerbert d'Aurillac, archbishop of Rheims (and later Pope Sylvester II) wrote much on the 7 liberal arts; Salhab asserts that Gerbert's reintroduction of the emphasis on these liberal arts in Europe was inspired by the educational institution of Cordoba in Islamic Spain; during this period much Jewish and Islamic knowledge is seeping into the Latin West.

By 995 CE the School at Chartres was under the leadership of Fulbertus, and by 1006 CE he becomes Bishop of Chartres; his students were some of the first in Christian Western Europe to read the works of Pythagoras, Plato, Aristotle, and Cicero; he taught the **7 Liberal Arts as the 7 steps of initiation based on the ancient Egyptian model**; it is interesting to note that in the 980's he was educated at Rheims under Gerbert d'Aurillac; he also greatly advanced the Marian Cult, and from 1020-1028 CE he overseen the rebuilding of Chartres in the Romanesque style, laying the foundations still

in use there today;

By 1050 CE, the fledgling University of Paris is teaching the 7 liberal arts, and this is possibly the earliest they were taught outside of the cathedral schools, monastic institutions, and private guilds;

In 1114 CE - the neo-platonist Bernardus, intellectual heir to Fulbertus, becomes head of the Cathedral School at Chartres; Bernardus declared Plato's "Timaeus" of equal importance as the Bible, a position that did not make him particularly popular.

In 1116 CE, Adelard of Bath writes on the 7 Liberal Arts; he translated many mathematical and astronomical works into Latin, including Euclid's Elements (1120 CE);

Sometime around 1120 CE, Hugo of St. Victor writes his "Didascalicon", speaking on the 7 Liberal Arts and the Art of Memory; Hugo followed the ideas of John Scotus Erigena and likewise elevated the Arts, saying "this is what the arts intend: to restore within us the divine likeness";

Right about 1141 CE, Under Thierry, who followed in the footsteps of Bernardus, the West Facade of Chartres Cathedral is built; carved above the Right Portal are the 7 Liberal Arts and their corresponding Figures, such as Euclid for Geometry; it is believed that these stone carvings on Chartres Cathedral were the first such personifications of the 7 Liberal Arts. It was at this time that the 7 liberal arts, as a means to the knowledge of god, finds visible expression in the cathedral at Chartres.

By about 1200 CE, we find an amusing French reference that the Doctors of Law were becoming angry with the Masons and Carpenters for adopting the title of "Magister" (i.e., Master), originally meaning a "Master of the 7 Liberal Arts", a title the Doctors felt they had no right to. [Though, in my own opinion, it seems the builders had more right to it than the lawyers];

In 1302 CE, Dante begins writing his "Divine Comedy", in which we find reference to the 7 Liberal Arts. Flanders informs us that in the Divine Comedy we encounter the 7 Liberal Arts in the Inferno, the fire enveloping the castle of pagan learning being unique because within, though there had been separation from God, there had been no opposition. Entering the castle of seven walls by the gates of the 7 Liberal Arts, Dante found himself among the representatives of the greatest thought of the past. In his "Convivio" (1304 CE), Dante associates the 7 planetary heavens with the 7 Liberal Arts. In the Convivio, Dante states: "To see what is meant by this third heaven, I say that by heaven I mean science, and by heavens, sciences." And on this Guenon informs us that "these regions are in reality so may different states; and the heavens are, literally, spiritual hierarchies: that is to say, degrees of initiation. Accordingly, to the 7 planetary spheres -- the first 7 of Dante's 9 heavens -- corresponded the 7 Liberal Arts respectively; and precisely these same designations are depicted on the 7 rungs of the left upright of the Ladder of the Kadosh in Scottish Masonry."

Around 1350 CE we arrive at the time of the original document that both the Halliwell Mss. and the older part of the Cooke Mss. are based on.

in 1363 CE, Higden's "Polychronicon" was published; it contains a number of our masonic legends that we find in the Cooke Mss. and other Old Gothic Constitutions, including the legend of Lamech's Pillars, the legend that Hermes found one of these

pillars, and the legend that Zoroaster had inscribed the 7 Liberal Arts on pillars.

around 1440 CE, during the beginnings of the Florentine Academy, the idea that scholars were noble by virtue of the liberal arts became popularized.

As an interesting aside, it is around 1450 CE that we find the first written reference to masons being students of alchemy.

around 1460 CE, we find in a Latin treatise entitled "On the Quintessence" a claim that the 7 Liberal Arts were given to "Hermes, the prophet and king of Egypt, father of the philosophers, after Noah's flood";

In 1578 CE, Boderie writes his "...la revolution des arts et sciences", in which he claims that Pythagoras taught sacred geometry, and that this same system of Pythagorean sacred geometry was known to and used by the medieval cathedral builders.

In 1604 CE, the "Garden of the Planets" at Edzell Castle in Angus (SE Scotland) is created by Sir David Lindsay, Lord Edzell, son of the 9th Earl of Crawford; the Garden was a walled enclosure with carved panels, representing the 7 planetary deities (on the east wall; inside vesicas), the 7 liberal arts (on the south wall; under circular arches), and the 7 virtues (on the west wall; inside rectangles); these carvings appear to be the work of an Aberdeen mason; according to McLean, the Mantegna Tarocchi (1465 CE) includes all the garden images amongst its symbols;

in 1605 CE, Kepler writes that "the archetype of the world lies in geometry, and specifically in the work of Euclid, the thrice-greatest philosopher";

In 1617 CE, the Fruchtbringende Gesellschaft (Fruit-Bringing Society) is founded; J.V. Andrea, who most scholars consider the author of the early Rosicrucian texts, was a member; like the earlier Florentine Academy, they believed scholars were noble by virtue of the liberal arts;

In 1636 CE, Descartes codifies his new system of analytical geometry, thereby taking the first major step forward in geometry beyond Euclid.

In 1721 CE, John, Duke of Montague, is elected 5th GM of GLE; during this time the Duke of Montague makes a statement in which he says "We will declare what doth belong to every Free Mason, to keep firm good faith, if you take heed thereunto, it is well worthy to be kept, which is contained in the seven liberal sciences.";

In 1723, James Anderson writes in the first edition of his "Constitutions": "Adam, our first parent, created after the image of God, the great architect of the universe, must have had the Liberal Sciences, particularly Geometry, written on his heart."

And in 1738, Anderson publishes the second edition of his "Constitutions", in which he adds "Pythagoras was not only the leader of a new religion, but also of an Academy or Lodge of perfect Geometry in which he explained the secrets of this science. This remarkable theorem of Pythagoras, which is the foundation of all of Freemasonry, but also of all the materials in their dimensions when used for building construction, is regarded by Freemasons as his own invention".

Now that we have provided a cursory review of the development of the Liberal Arts, we

must travel back again to around 1000 CE to revisit...

THE CATHEDRAL SCHOOL AT CHARTRES:

We cannot speak of the 7 Liberal Arts and its connection to our Craft without a foray into the Cathedral School at Chartres.

Querido tell us:

the founders of the Chartres School saw world citizenship as the goal of their Liberal Arts curriculum. For them, true education was based on understanding the mysteries of personal and social transformation, expressed through the subtleties of alchemy, music and sacred geometry, and resulting in active service in the world.

Chartres School was dedicated to birthing the divine human through adoration of the divine feminine. This belief was memorialized in stone and glass in the sweeping [post-1194 CE] Gothic architecture of the Cathedral, which they viewed as a form of sacred writing. No one has ever been buried in Chartres Cathedral. It is completely dedicated to the theme of birth, rebirth, and renewal. Over 400 images of the feminine grace its walls and stained glass.

The Seven Liberal Arts as developed by Fulbertus and the original Chartres School were comprised of a theme of basic instruction, a guiding planet, and a historical personage who represented that particular stage of learning.

The Liberal Arts were also designed as initiatory rites with each Liberal Art preparing the student for the next higher level. Thus the student moved from the first Liberal Art up a ladder of learning until he or she reached the seventh and highest level. The goal for both students and teachers alike was to participate in an alchemical process of transmutation leading to the capacity to embody the divine human. The process was a training through which students gained an ever deeper understanding of cosmic harmonies. The connection between all the Liberal Arts was a love of wisdom; hence the notion and meaning of the term philosopher as "lover of wisdom." For the ancients, philosophy was not an intellectual exercise but a way of life. (Querido)

Much of the Greek knowledge of the Classics, mathematics, science, and invention taught at Chartres came from Moorish Spain. The Classics were translated, not from Greek, but from Arabic, and the translations were often made by Jewish scholars working under the protection of the rule of Islam. (Wallace-Murphy)

The school flourished at a time when medieval thought was directed to the resurrected ancient philosophy of Plato. At this time the Scholastics tended to regard Aristotle as merely the founder of abstract logic and formal intellectualism, whilst honoring Plato as the pre-eminent thinker in antiquity, especially revering his doctrine of Ideas.

Fulbertus, and his intellectual successor Bernardus, were Platonists who taught a "return to Nature". The source of inspiration for both Fulbertus and Bernardus was Plato's "Timaeus", in which the great philosopher tells us that the universe is imbued with a great soul. This Cosmic Soul, Plato further relates, is structured according to musical ratios that form a musical scale, which orders the relationship of the celestial spheres, and is experienced on the microcosmic scale by humans as musical harmony. Plato therefore intimates that the principle of harmony is at the heart of the created

universe.

Outwardly, the master and pupil were developing skills of rational discourse and critical thinking that most educated men effected to achieve at this time. However, the medieval students of the mysteries at Chartres were also developing and bringing into fruition the clairvoyant organs that allow direct experience of the supernatural world. The pupil was set a task by which the base and polluting aspects of their personalities were purged from their souls. This purification process excised those elements that prevented the soul from realizing the Divine within and without, and thereby allowing it to be harmoniously reorganized and enabling it to acquire higher organs of perception. Just as good crops require proper nourishment then so does the burgeoning soul need certain feelings and disciplines of thinking and activity to nourish the spiritual organs. During the course of initiation, the pupil attained the seven ascending degrees of initiation that ultimately lead to the conscious involvement of the pupil in the spiritual reality underpinning the world of the sense. The initiation process nurtured within the souls of these students a clairvoyant capacity that enabled them to discern the disposition, thoughts, sentiments, and motives of other souls. It also provided a deeper penetrating insight into the laws that permeate all Nature, revealing the sublime unity in Nature that is the mainspring of all creation. Moreover, it was from this exalted state that the initiates apprehended the spiritual realities underpinning the tangible world of the senses. Moreover, it was from this condition of enlightenment that the initiates of Chartres recognized the primacy of Mother Nature in the divine plan for the enlightenment of mankind.

Gerbert (later Pope Sylvester II), around 980 CE, published a book named "De Geometria" which became greatly important to the School at Chartres.

From 1141 CE, under Thierry, the cathedral school at Chartres became the center of the liberal arts in Europe; Luscombe states "the Chartrains attempted to establish the existence of God by numerical speculations, to synthesize Platonic cosmology and biblical revelation, and to compare the Platonic world soul with the Holy spirit, and God was considered to be the form of all being."; Klibansky informs us that the purpose of the medieval quadrivium [at Chartres] was "to obtain, through knowledge of the structure of the created world, knowledge of the creator. As the world is ordered according to number, measure, and weight, the sciences of the quadrivium are the instruments which the human mind has at its disposal for recognizing the art of the creator."

Worrel tells us, "the masters of Chartres considered geometry to have an anagogic function, that is, its ability to lead the mind from the world of appearances to the contemplation of the divine order, or, in other words, that number may guide the intellect from the perception of created things to the invisible truth in God";

Another very pertinent concept we find at Chartres is that God is the architect of the universe; and, as masons this is particularly close to our heart. Simson tells us, "The teachers of the school of Chartres identify the Platonic world soul with the Holy Ghost in its creative and ordering effect upon matter; and they conceive this effect as musical consonance. The harmony it establishes throughout the cosmos is represented, however, not only as a musical composition but also as an artistic one, more specifically, as a work of architecture. ...to the theologians of Chartres, the notion of the cosmos as a work of architecture and of God as its architect has a special significance, since they assume a twofold act of creation: the creation of chaotic matter and the

creation of cosmos out of chaos. Since the Greek word kosmos signified ornament as well as order, it was plausible to view matter as the building material, the creation proper as the 'adorning' of matter by the artful imposition of an architectural order. In the Platonic cosmology, moreover, the masters of Chartres could detect the design and method according to which the divine architect had built the universe, the cosmic temple,..." This dominant view is also thought to have caused a sociological phenomenon. Here is another fact that should be of particular interest to freemasons in search of their roots. It is interesting to realize that clerics were mostly responsible for building, and the term architectis was not used very often. But: "... the revival of the term in the mid-thirteenth century coincided exactly with the sociological change that transformed the humble master mason into the architect of the thirteenth century, no longer considered a mere craftsman but the 'scientist' or theoreticus of his art." It was then considered that only he who had mastered the seven liberal arts was entitled to the designation 'architect'. And: "... it was the School of Chartres that dramatized the image of the architect ...by depicting God as a master builder, a theoreticus creating without toil or effort by means of an architectural science that is essentially mathematical. The Platonists of Chartres, moreover, also defined the laws according to which the cosmic edifice had been composed. ... And in submitting to geometry the medieval architect felt that he was imitating the work of his divine master." (Simson)

OUR RITUAL AND THE 7 LIBERAL ARTS:

Now we shall move again to the present, and ask ourselves: What does Masonic ritual tell us in regards to the Liberal Arts?

"On the mind all our knowledge must depend. What therefore can be a more proper subject for the investigation of Masons? By anatomical dissection and observation we become acquainted with the body, but it is by the anatomy of the mind alone we discover its power and principles. To sum up the whole of this transcendent measure of God's bounty to man, we shall add that memory, imagination, taste, reasoning, moral perception, and all the active powers of the soul present a vast and boundless field for philosophical disquisition, which far exceeds human inquiry and are peculiar mysteries known only to nature and to nature's God." [FC Middle Chamber Lecture]

"Geometry, or the fifth science, is the one which Masonry is more particularly founded. In fine, geometry is the foundation of architecture and the root of mathematics." [FC Middle Chamber Lecture]

"I now direct your attention to the letter G, which is the initial of geometry. Geometry, the first and noblest of sciences, is the basis on which the superstructure of Masonry is erected. By geometry we may trace nature through her various windings to her most concealed recesses. By it we discover the power, the wisdom, and the goodness of the Grand Artificer of the Universe." [FC Middle Chamber Lecture]

In the 1730 publication of "Masonry Dissected", we find the following catechism: Q: Why were you made a Mason? A: For the sake of the letter G. Q: What does it signify? A: Geometry. Q: Why Geometry? A: Because it is the root and foundation of all arts and sciences.

"The study of the liberal arts, that valuable branch of education which tends so effectually to polish and adorn the mind, is earnestly recommended to your consideration, especially the science of geometry, which is established as the basis of our art. Geometry, or Masonry, originally synonymous terms, being of a divine and moral nature, is enriched with the most useful knowledge; while it proves the wonderful properties of nature, it demonstrates the more important truths of morality." [FC Charge]

an older and much more forceful FC Charge provides us the following injunction, "you are now permitted to extend your researches into the hidden mysteries of nature and science"; this word "permitted" conveys a most profound message. It warns us that knowledge without morality may be a curse rather than a blessing; this older Charge also states, "you are *expected* to make the liberal arts and sciences your future study, that you may the better be able to discharge your duty as a Freemason."; notice here the term 'expected' is used instead of our weaker modern ritual's use of 'earnestly recommended';

an old Scottish FC ritual states, "For he who can claim even a superficial knowledge of these [the 7 liberal arts] can well claim to be an educated man and is thus on the high road to the acquisition of that genuine culture which is only attained by the building up of character through knowledge.";

"...he who will so demean himself as not to be endeavoring to add to the common stock of knowledge and understanding, may be deemed a drone in the hive of nature, a useless member of society, and unworthy of our protection as Masons." [MM TB Lecture - Beehive]

"The 47th Problem of Euclid...teaches Masons to be general lovers of the arts and sciences." [MM TB Lecture - 47th]

an old MM degree states, "you were led in the second degree to contemplate the intellectual faculty, and to trace it, during its development, through the paths of heavenly science, even to the throne of God Himself."; from this we can claim that our forebears had no thought beyond referring us to the hidden mysteries of nature and science that we might find therein the handiwork of God Himself;

The Master's injunction then to "make the liberal arts and sciences your future study" and "to extend your researches into the hidden mysteries of Nature and Science" are not to be accepted lightly, but to be regarded as a considerable personal challenge to us to use "the intellectual faculty". By expending energy in the quest for, and contemplation of, truths, we undertake that process of education "by which means alone we are rendered fit members of regularly organized society"

CONCLUSIONS:

I shall conclude this section with some fitting words from Br. Worrel, who states: "one can see that just a short look at the old tales and legends surrounding the seven arts emphasize their importance. Although we don't know for sure, it seems probable that the 7 Liberal Arts had larger parts in the ritual the earlier we go. If nothing else the candidate was certainly very aware of the legends and stories surrounding them so that

the ritual would probably have had much more meaning to him than maybe it has to us. Being steeped in the lore would have triggered deeper responses because the language of myth and symbol is that of the soul. This is a glaring reminder of just what we have lost in modern masonry. To strip Freemasonry of its stories and myths will destroy it. The rituals will become meaningless formalities destined to be changed and shortened for the sake of convenience."

Brethren, it matters but little whether or not masonry is a lineal descendant of any particular mystery tradition; what we CAN assert is that we are the ideological and spiritual heirs and guardians of such traditions; for if a thing looks like a duck, acts like a duck, and quacks like a duck, it may as well be considered a duck, and our masonry most certainly looks as such and is full of quacks!

SECTION 2:

The Legend of the Pillars:

It was Josephus who first mentions the story of Two Pillars, and attributes them to the children of Seth. The version contained in our Cooke Mss. (~1420 CE) is based on Higden's Polychronicon, in which the English translator, Trevisa, in 1387 CE, makes the mistake of attributing the construction of these pillars to the son's of Lamech.

We shall now trace the history and development of this Two Pillar symbolism:

Our first encounter with Twin Pillar symbolism comes from about 2000 BCE in Palestine, where we find Twin Pillars at the entrance of Megiddo Temple, approached by 7 steps.

Next, in Egyptian writings dating to 1550 BCE we find mention of 2 "Pillars of the Gods of the Dawning Light", also known as the Pillars of Thoth, associated with a legend that claims one was found at Heliopolis and the other at Thebes, and that they were later moved to a secret temple.

Next, from 1237 BCE in central Anatolia we come to a royal seal of king Tudhaliyas IV of the Hittites flanked by 2 proto-Ionic Pillars. It is also interesting to note that the king is sporting a Phrygian Cap and looking quite smurfy.

Meanwhile, back in the Palestine of 1020 BCE, we find in the city of Khirbet Qeiyafa a pre-Davidic cult shrine of elaborate neo-Hittite architectural style with an entrance flanked by Two Pillars.

Biblical legend claims that King Solomon's Temple was constructed around 967 BCE. It was at this time that Jedidiah ben David commissioned master builders from Tyre in Phoenicia (modern Lebanon), who are sometimes known as the Dionysian Artificers, to oversee the work. The Temple followed the model of Moses' Tabernacle, which, incidentally has a layout similar to an Egyptian temple, but with the addition of its Two Pillars and its annex surrounding the Temple, which are elements most likely borrowed from the older neo-Hittite Ain Dara Temple (1300 BCE) in Syria.

A bit later, around 900 BCE, we find textual evidence in Phoenicia of the god Melik-Kart (meaning "King of the City" [of Tyre]). Temples to Melqart were famous for having 2 Pillars inscribed with letters flanking their entrance.

In the Shabaka Inscription at the House of Ptah in Memphis, Egypt, dating to 721 BCE, we find an interesting reference to Two Pillars, the Northern Pillar being called Horus, and the Southern Pillar called Set.

A bit later, Greek legend claims that Solon, around 600 BCE, had visited Egypt and seen the Pillars of Thoth there.

the Greek historian Herodotus, writing around 450 BCE, also claims to have seen the 2 Pillars of Thoth in a secret Egyptian temple, and that one was gold and the other emerald. He renamed them the "Pillars of Hermes".

By 300 BCE, Bolos of Mendes, in Egypt, mentions ancient texts hidden within great Pillars.

Travelling forward a bit, we enter the Italy of 30 BCE, where we find on a tabletop in a workshop in Pompeii a mosaic now known as the 'Memento Mori'. Much like a Masonic tracing-board, it presents a Hellenistic visual allegory presenting death as the great leveler who cancels out all distinctions and differences of wealth and social class. This image can be interpreted as having 2 Pillars, the one on the left symbolizing royal power and wealth using the sceptre, while the one on the right symbolizes priestly austerity and poverty using the pilgrim's staff. From this image, which is contemporary with the likes of Varro and Vitruvius, we see a more developed symbolism that has more or less carried into modern times.

In 79 CE, Pompeii was entombed by the devastating eruption of Mount Vesuvius. Within Pompeii was found a 'collegia loggia', evidencing 2 Pillars at its entrance, along with interlaced patterns, known as 'Solomons Knots', decorating the inside walls. These Solomon's Knots later reappear in the decorations of the Magistri Comacini in northern Italy.

Sometime between 80-94 CE, the Hasmonaean scion and historian Flavius Josephus writes his 'Wars of the Jews' and 'Antiquities of the Jews' while in Rome. He is the source of the legend that 'the posterity of Seth' invented astronomy and made 2 Pillars, one of brick and one of stone, to preserve their knowledge from destruction by the forthcoming Flood, and that one of these Pillars remains in Egypt ("Syriad") to his day. He also claimed that the Grecian style (which today we call the neo-Hittite style) was used at Solomon's Temple.

Later, around 300 CE, Iamblichus, in his "On the Mysteries of the Egyptians", writes quote "the ancient Pillars of Hermes which Pythagoras and Plato knew...and from thence constituted their philosophy".

Sometime between 350-390 CE, Ammianus Macellinus claimed that before the Flood the Pillars of Hermes were hidden in caves near Thebes in Egypt.

No later than 810 CE, George Syncellus, quoting Manetho (d. 240 BCE), states Hermes was the son of Thoth and recorded the sciences on Pillars before the Flood.

Sometime between 1040-1188 CE at the entrance to Wurzburg Cathedral in Germany are erected 2 Pillars. If you are facing East, about to enter the cathedral, there was (they have now been moved inside) a bipartite Pillar on the right/south labeled Jachin and a tripartite Pillar on the left/north labeled Boaz. This is the earliest occurrence of these names being applied to the Pillars.

Also, sometime between 1070-1200 CE in Scotland, 2 Pillars similar to those at Roslin Chapel are known at the Benedictine Abbey of Dunfermline.

In 1174 CE, when the Synagogue of Worms in Germany is rebuilt, one Pillar features a carved reference to the Jachin and Boaz Pillars.

By 1200 CE, the Cosmati are creating 'Twisted Columns' (aka 'Solomonic Columns') for the Lateran cloister in Italy. These Solomonic Columns are virtually identical to the later Prince's Pillar at Roslin Chapel in Scotland.

In 1363 CE, the Polychronicon was published. The legend of the Pillars of Lamech's Sons derives from this text, which borrowed the story from the works of St. Isidore of Seville (d. 636 CE). It also states that Hermes found one of these Pillars after the Flood. This is the legend cited by our Cooke Mss.

Around 1390 CE, in England, we find our earliest Old Gothic Constitution, known as the Regius Mss. Its story about Abraham teaching geometry to Euclid is taken from the Sopher Yetzirah. The author recounts the prediction given to Eve by the archangel that the Lord will inflict a judgement by water or fire on the children of Adam and that to preserve the astronomical discoveries of Seth they should be carved on 2 Pillars of marble and baked brick, this account being taken from Josephus and the apocryphal Hebrew "Vita Adae et Evae". Adding touches from the Hermetic literature, the author states that the 2 Pillars were set up by the sons of Lamech, who engraved upon them the 7 Liberal Arts, which were later discovered by Hermes and Pythagoras.

Sometime between 1460-1480 CE in Scotland, are carved the Pillars at Roslin Chapel. The Prince's Pillar is in the twisted, Solomonic style.

Between 1516-1526 CE in Spain, the HRE Charles V adopts the 2 Pillars of Melqart (now called the Pillars of Hercules) with the motto "Plus Ultra" ("there is more beyond") as his device. The fame of this device spread throughout Europe and encouraged a whole rash of symbols based on the 2 Pillar archetype, sometimes with clear references to the Pillars of Solomon's Temple.

Sometime between 1550-1600 CE in England appears the original document of which the Harleian Ms. No. 2054 (~1625-1650 CE) is a copy. In the Entered Apprentice catechism is contained the earliest masonic reference to the 2 Pillar words J & B.

In 1564 CE, John Dee publishes his "Monas Hieroglyphica" in Belgium. On the frontispiece, the Monad is between 2 Pillars, the left displaying the sun and labeled fire and the right displaying the moon and labeled air.

In 1578 CE, Francis Thynne publishes his "Homo Animal Sociale" in England, in which he mentions the sons of Seth writing the wisdom of Kabala on 2 Pillars prior to the Flood. He also refers to certain "notes, signs, tokens, and characters".

Sometime between 1578-1590 CE, the French poet Guillaume de Salluste Du Bartas writes a work known as "The Columns", which deals in part with the legends of the Freemasons as found in the Old Charges. It is also interesting to note that he also called king James VI of Scotland a "New Solomon" after they met in 1587 CE.

Shakespeare's "Loves Labours Lost" of 1598 CE, contains, in a coded manner, a reference to Boaz symbolizing the feminine/lunar.

On the frontispiece to a Francis Bacon work of 1605 CE, we see 2 Pillars, where Jachin = sun/wisdom/science and Boaz = moon/intellect/philosophy.

On the frontispiece to J.V. Andreae's "Mythologiae Christianae...", published in Germany in 1619 CE, we see 2 Pillars, the left topped by Theologia (cross and cup) and represented by Mathematica (armillary sphere and hexagram), Physica, and Grammatica, and founded on Truth, the right topped by Politica/Justice (scales and sword) and represented by Historia (symbolized by a terrestrial sphere), Mechanica (symbolized by interlaced set square and compasses with plumb line), and Agricultura, and founded on Good/Right. It also contains an IHS where the H has a cross above it, making the appearance of a Triple Tau.

On the title page of Francis Bacon's "Great Instauration", published in England in 1620 CE, we find he adapted the Pillars of Hercules inscribed "Plus Ultra" with a ship venturing boldly out beyond them.

In 1650 in England, Ashmole publishes his first book, "Fasciculus Chemicus". The frontispiece depicts 2 Pillars, the left covered with the instruments of peace and creativity: a mason's square and compasses, a globe, alchemical instruments, and mathematical and geometrical diagrams, while the right illustrates trumpets of war: a cannon, drum, pike, sword, standard, breastplate and helmet; the left pillar is topped by the masculine sun, the right by the feminine moon.

In 1652 CE in England, Anne Finch, Viscountess Conway, writing to her father-in-law, alludes to the 2 Pillars of our Craft legends.

And lastly, in 1691 CE in Scotland, Robert Kirk publishes "The Secret Common Wealth"; in an appendix entitled 'A succinct account of my lord of Tarbott's relationes in a letter to the honorable Robert Boyle' concerning Second Sight, Kirk relates that 'the Mason Word, which though some make a mystery of it, I will not conceal a little of what I know; it's like a Rabbinical tradition in a way of comment on Jachin and Boaz the two pillars erected in Solomon's Temple; with an addition of some secret sign delivered from hand to hand, by which they know, and become familiar one with another'.

We can conclude from all this that the basic symbolism and associations of the Two Pillars has been consistent in the main over the last 2000 or so years, from at least the time of the Roman builders.

One of the central ideas of the Two Pillars was not the pillars themselves, but the fact that the Seven Liberal Arts were written upon them, or later held within them. Our Seven Liberal Arts are embedded within the additional symbol of a Winding Staircase, or a staircase in general, or even a ladder. Its associations with mystical ascent are obvious.

The Ladder and Stairs:

What does our ritual tell us about the Ladder and Stairs?

"the ladder that leads to fame within our mystic circle" [EA Apron Presentation]

"the covering of a lodge is a clouded canopy or starry-decked heaven where all good masons hope at last to arrive by the aid of that theological ladder [implying the ladder of virtue] which Jacob in his vision saw ascending from earth to heaven" [EA Lecture Part 2 - Tracing Board]

"The door for the middle chamber was in the right side of the house; and they went up with winding stairs into the middle chamber, and out of the middle into the third." (Kings 6:8)

Jacob's Ladder and the 7 Virtues are covered in the EA, whereas the 7 Liberal Arts and the Winding Stair are covered in the FC; Jacob's Ladder symbolized the ascent of man from the material to the spiritual; The Winding Stairs symbolizes the ascent of man from ignorance to knowledge, from darkness to light;

in a Masonic context, the 7 liberal arts are contained within another symbol, that of the winding staircase;

Let us now trace the history and development of these symbols:

Our first encounter with Ladder symbolism takes us to the Egypt of 2400 BCE, where the Pyramid Texts of Unas, the earliest known initiatory writings in the world, make mention of a "Ladder of Set and Horus" in relation to the 'Heliopolitan Ascension', a funerary and solar-oriented rite concerned with the initiates relationship to the sun god Re.

Around 2070 BCE in Babylonia, a sculpture from the 3rd Dynasty of Ur depicts a 7-rung Ladder, suggesting initiation leading from lower to higher realms of consciousness. Above it is the conjunction of a sun and crescent moon.

Much later, between 400-350 BCE, Plato, who studies at Thebes for 11 years, reworked the Egyptian educational system of 10 goals into the 4 Cardinal Virtues of Wisdom (right thoughts and actions; Prudence), Fortitude, Justice and Temperance.

Next, sometime between 200-160 BCE, we find the development of esoteric Judaism, which includes exegetical expositions on the Merkavah, which is composed of 7 gates.

Next, in the apocryphal Old Testament book "Wisdom of Solomon", written between 200-1 BCE, we find a reference to the 4 Cardinal Virtues in a Jewish context.

Sometime between 1-50 CE, the Jew Philo of Alexandria links Jacob's Ladder to the Virtues.

Sometime between 50-62 CE, the "3 Theological Virtues" of Faith, Hope, and Charity/Love are attributed to St. Paul.

Between 100-150 CE, the apocryphal "Ladder of Jacob" is written. It links Jacob's Ladder to Merkavah mysticism.

Between 100-200 CE appears the Chaldean Oracles, a work attributed to Zoroaster, and said to have been revealed to the Chaldean Julian the Theurgist. This text was regarded by later neo-Platonists as a sacred text, sometimes even above Plato himself. It describes certain ascetic conduct and rituals that will free the higher soul from the lower soul's vehicle/garment and help it achieve a mystico unio with God via passage of the soul through 7 Heavens or Gates.

Between 200-250 CE, the early Church Father Origen likens Jacob's Ladder to the ascetic's Ladder of Virtue. Origen also tells us that "Celsus [177 CE] also describes some Persian mysteries, where he says: These truths are obscurely represented by the teaching of the Persians and by the mystery of Mithras which is of Persian origin. For in the latter there is a symbol of the two orbits in heaven, the one being that of the fixed stars and the other that assigned to the planets, and of the soul's passage through these. The symbol is this: There is a ladder with seven gates."

Between 200-400 CE, both the Merkavah and Hekhalot traditions were associated with actual building practices and were evidently taught in the building guilds. These architectural motifs provide a clue to the symbolism of Synagogues from this period, which are the prototypes of the first Christian churches. The Merkavah tradition included an element of Ladder-climbing, was performed in 7 graduated stages, and was also a form of group mysticism. The Merkavah tradition later culminates in the Sepher Yetzirah (Schuchard).

Between 360-390 CE, Gregory of Nazianzus speaks of Jacob's Ladder as the ascetic's Ladder of Virtue.

Between 370-390 CE, Gregory of Nyssa gives Jacob's Ladder a mystical meaning by claiming Moses climbed it to reach Heaven where he entered the "tabernacle not made with hands".

Between 375-400 CE, John Chrysostom wrote that Jacob's Ladder was a gradual ascent by means of Virtue to Heaven by improving our manners.

In 405 CE, Aurelius Prudentius writes "Psychomachia", in which he refers to "7 Virtues", with Temperance being the keystone. These virtues were the counters of 7 deadly sins.

Between 500-600 CE in Ethiopia is written the Garima Gospels, the earliest known illuminated manuscript. It contains an unusual depiction of King Solomon's Temple with a Staircase.

Around 600 CE, John Climacus of Sinai writes the "Ladder of Divine Ascent", with the first 7 steps being the 7 Virtues.

Around 700 CE in India, Bhavabhuti writes the play "Malati-Madhava", in which he describes a tantric practice where a Kapalika attains the power of spirit flight via activation of the 7 chakras.

In 858 CE, John Scotus Erigena reveals that through graduated stages of illumination,

the initiate can be regenerated, angelized, and deified, a process "symbolized by entrance into the outer porticoes of the Temple of Solomon" (Schuchard).

Between 1165-1185 CE in France, the Norbertine monk Herrade von Landsberg writes "Hortus Deliciarum", which depicts Jacob's Ladder, whose rungs are the 7 Virtues.

Between 1271-1291 CE, bishop Durandus mentions the Winding Staircase of King Solomon's Temple.

Between 1274-1305 CE in Spain, Gikatilla writes "Gates of Light", in which he identifies the 7 Heavens of the Sepher Yetzirah as the 7 Planetary spheres.

Between 1525-1536 CE in Italy flourishes the Franciscan friar Giorgi of Venice. The development of Christian Kabala coalesced in his work, and these influences were completely integrated into his Neoplatonism in which was included the whole tradition of Pythagorean numerology, of world and human harmony, even of Vitruvian theory of architecture, which, for him, had a religious significance connected with the Temple of Solomon.

A wall painting in England, dated 1545 CE and found in a context associating it with masons and carpenters, depicts Noah, his 3 sons, his Ark, and a Ladder leading up to God.

And now, moving into the timeframe of our modern Masonic ritual, we find in England that the Post Boy Sham Exposure of 1723 contains a reference to a Scaliger/Ladder-Bearer.

In 1724 in England, an article in the London Daily Post ridicules the Masons and mentions a drawn sword at the door and a Ladder in a dark room.

1724/1742 - In England, the Hogarth Painting shows a masonic candidate carrying a Ladder with his head between two rungs.

in 1730 in England, Pritchard is the first to mention the "7 Winding Stairs" in a ritual context.

In 1758 France, the Emperors of the East & West in Paris adopt the Order of Kadosh's Grand Elect degree as their 24th degree (Grand Elect Knight Kadosh). The earliest description of this degree is by Le Franc in "Le Voile Leve Pour Les Curieux", where he mentions that during the ceremony the Duc d'Orleans had to cast himself bodily from a Ladder, and that the degree begins in a dark cave, where the candidate must ascend a ladder, from which he falls, and that this ladder had 7 steps being Charity, Candour, Mildness, Truth, Perfection, Patience, and Discretion.

And, lastly, by 1760 in England, Jacob's Ladder of 7 Rungs appears on breast jewels.

To conclude this section, the staircase/ladder is a symbol of upward movement; the Jungian psychologist Edinger classifies this type of image under the term Sublimatio (from Latin "sublimis" meaning "high"); the alchemical definition of sublimatio is the basic chemical operation of turning material into air by volatilizing it, it then turns into air and reformulates in a higher place; distillation is related but is applied to liquids;

according to Edinger, "the crucial feature of sublimatio is an elevating process whereby a low substance is translated into a higher form by an ascending movement"; according to Jungian interpretations, sublimatio is an ascent that raises us above the confining entanglements of immediate earthly existence and its concrete, personal particulars; it can manifest as a mystical experience which usually overturns ones life and washes away many of the petty things we once felt were so important, consequently freeing us, or volatilizing our consciousness, where we can view things 'from on high'; sublimatio is an 'extraction process', where the spirit (quicksilver) is extracted from matter, and thus it overlaps with 'separatio', both producing a 'purified state'; in the largest sense, sublimatio refers psychologically to the redemption of the Self from its original unconscious state; the 7 liberal arts were thought of as achieving the same ends, as they were considered a way of purifying the soul so that it could ascend to the spiritual realms;

Alchemically, sublimation is the process of transformation directly from a solid to a gas without becoming a liquid, and this transition requires the use of heat; sublimation is a technique used to purify compounds; it is associated with both ascending and descending, and is often symbolized as a ladder; it is a process in which an ascending action results in change to a higher form; the ability to think abstractly places an emphasis on speculation, and thus on sublimatio; meditation/contemplation can occasionally shift people into sublimatio, and it is believed by many that sublimation can facilitate a mystical awakening; the ultimate sublimation is death itself;

George Ripley, in his *Compound of Alchemy* (1477), uses language more indicative of the mystical implications of sublimation, indicating that the process has a double aspect in the spiritualization of the body and the corporalizing of the spirit. He writes, "And sublimations we make for three causes, the first cause is to make the mind spiritual. The second is that the spirit may be corporeal, and become fixed with it and consubstantial. The third cause is that from its filthy original, it may be cleansed..."

Eliade comments, "the preeminently shamanic technique is the passage from one cosmic region to another, from earth to the sky or from earth to the underworld...the essential schema is always to be seen...there are three great cosmic regions, which can be successively traversed because they are linked together by a central axis"; "a ladder with seven rungs is documented in the Mithraic mysteries...an ascent to heaven by ceremonially climbing a ladder probably formed part of the Orphic initiation...the symbolism of ascension by means of stairs was known in Greece...Jacob dreams of a ladder whose top reaches heaven...Mohammed sees a ladder rising from the temple in Jerusalem to heaven...in Sufism, to ascend to God, the soul must mount seven successive steps, the Yogis of India envision a 7 step ladder, as do the Jewish Merkavah mystics."

According to Br. Mackey, this ladder [Jacob's], so remarkable in the history of the Jewish people, finds its analogue in all the ancient initiations. Whether this is to be attributed simply to a coincidence-a theory which but few scholars would be willing to accept-or to the fact that these analogues were all derived from a common fountain of symbolism, or whether, as suggested by Brother Oliver, the origin of the symbol was lost among the practices of the Pagan rites, while the symbol itself was retained, it is, perhaps, impossible authoritatively to determine. It is, however, certain that the ladder as a symbol of moral and intellectual progress existed almost universally in antiquity, presenting itself either as a succession of steps, of gates, of Degrees, or in some other modified form. The number of the steps varied; although the favorite one appears to

have been seven, in reference, apparently, to the mystical character almost everywhere given to that number. (Mackey)

Sometimes the ladder becomes steps, sometimes a stairway, sometimes a succession of gates or, more modernly, of degrees; but the idea of ascent from darkness to light, from ignorance to knowledge and from materially to spiritually is the same whatever the form of the symbol.

The similarity of Jacob's Ladder of seven steps to the Winding Stairs with seven or more steps has caused many to believe each but a different form of the same symbol; Br. Haywood says: "Other scholars have opined that the steps were originally the same as the Theological Ladder, and had the same historical origin. Inasmuch as this Theological Ladder symbolized progress, just as does the Winding Stair, some argue that the latter symbol must have come from the same sources as the former. This interpretation of the matter may be plausible enough, and it may help towards an interpretation of both symbols, but it suffers from an almost utter lack of tangible evidence."

Art of Memory:

The Greek philosopher Plato summed up the stand-off between writing and the oral tradition. In Phaedrus, he quoted from Socrates, who spoke about a conversation between Thamus and the god Thoth—Hermes, the god of letters: "You, who are the father of letters, have been led by your affection to ascribe to them a power the opposite of that which they really possess. For this invention will produce forgetfulness in the minds of those who learn to use it, because they will not practise their memory. Their trust in writing, produced by external characters which are not part of themselves, will discourage the use of their own memory within them. You have invented an elixir not of memory but of reminding; and you offer your pupils the appearance of wisdom, not true wisdom, for they will read many things without instruction and will therefore seem to know many things, when they are for the most part ignorant and hard to get along with, since they are not wise, but only appear wise."

Today – and at the dawn of the printing process – we know that many books continue to have illustrations. Cartoons have a particular fascination, as they combine both words and images. Hieroglyphs fascinate us, as they are a visual language: they are images, not physical letters, though the images act as letters. All of this harkens back to the basic concept that memory is in essence a visual tool – and that dry text is not very visual. Still, in the long run, Thoth has won.

Indeed, of all the turning points in Mankind's history, the invention of writing, though often hailed as the greatest benefit ever, also meant the end of an era; and though we may consider the invention of writing beneficial, it also meant that certain knowledge got lost. But, more importantly, Thamus warned that certain knowledge, though now written down, would be read, but would no longer be comprehended. This, for sure, is what has happened to the myths – the information – that existed at a time when the oral tradition was in vogue and writing was either absent or a sideshow. Today, in our written world, we have lost the ability to understand – hear – the voice of the oral ancient world.

We shall now trace the history and development of the Art of Memory:

It was sometime between 514-500 BCE that, according to legend, the Greek lyric poet Simonides of Ceos invented the Art of Memory, and particularly the 'Memory Palace' (aka Method of Loci) technique. He was a contemporary of Pythagoras.

Around 400 BCE, a Greek work called "Dialexis" ("Talks") is written, making mention of

the Art of Memory.

Around 330 BCE, Aristotle wrote extensively on the subject of memory, and mentions the technique of the placement of images to lend order to memory. His works "On the Soul" and "On Memory and Reminiscence" proved influential in the later revival of the art of memory among the medieval scholastics.

Between 145-70 BCE flourished Metrodorus of Scepsis; celebrated for his memory; considered a key figure in the development of the art of memory; Pliny the Elder tells us he perfected the system of Simonides; Quintilian tells us he used a memory scheme based upon 360 places in 12 zodiac signs.

In 90 BCE is written "Rhetorica ad Herennium", which was attributed to Cicero but actually of unknown authorship. It is the oldest surviving Latin book on Rhetoric. Book 3 of this work contains the first known description of the 'method of loci', a mnemonic technique; it also provides the first complete treatment of 'memoria' (memorization of speeches); this is the primary source for the 'architectural mnemonic'.

In 55 BCE, Cicero writes "De Oratore", a text on Rhetoric. Book 2 claims Simonides of Ceos introduced the art of memory; Cicero classifies memory as one of the 3 parts of Prudence (the others being intelligence and foresight).

In 95 CE, Quintilian writes "Institutio Oratoria", a text on Rhetoric. Book 11 discusses the Art of Memory.

Around 420 CE, Capella mentions Harpocrates (Horus the Child/Dawn Sun), the God of Silence, and associates him with the 7 Liberal Arts and the Art of Memory.

Between 1000-1037 CE, the persian polymath Avicenna is active; he mentions the importance of the art of memory; the art begins taking a prominent role within islamic scholarship.

During the period 1100-1500 CE, the Scholastics used the art of memory as a method for recollecting the whole universe and the roads to heaven and hell.

In 1120 CE, Hugh of Saint Victor writes on the art of memory in his "Didascalion".

Around 1130 CE, the Jewish poet and physician Judah Halevi writes "The Kuzari". He was influenced by the Islamic "Brethren of Sincerity"; his combination of visualization and mnemonic techniques later emerges in the 'Art of Memory'.

Around 1250 CE, St. Thomas Aquinas promoted the art of memory when he defined it as a part of the virtue Prudence (as per Cicero) and recommended its use to meditate on the virtues and to improve ones piety; Aquinas learned the art of memory from his teacher Albertus Magnus.

Between 1298-1314 CE, the dominican monk Giovanni di San Gimignano writes "Summa d exemplis", an enormously popular work on the art of memory;

In 1335 in England, Thomas Bradwardine writes "De Memoria Artificiali", in which he discusses the memory training current at this time.

In 1435, the Art of Memory is recorded as being used by an Italian singer.

In 1482 in Italy, Jacobus Publicius' "Oratoriae artis epitome", printed in Venice, is the first printed treatise on the art of memory; a handwritten copy of it exists from 1460 CE (prior to its printing) made by Thomas Swatwell, a monk in Durham;

In 1520 in Germany, the dominican monk Johann Host von Romberch writes "Congestorium artificiose memoriae" on the art of memory;

In 1530 in France and Italy, Giulio Camillo is the first person to bring the new type of 'hermetic' Art of Memory to prominence. He constructed an elaborate wooden model called the 'Memory Theatre'; it was based on the classical theatre as described by Vitruvius, though with the addition of biblical influences, as demonstrated by the inclusion of the 7 Pillars of Solomon's House of Wisdom (Proverbs 9:1); his "L'Idée del Teatro" was published in Florence in 1550 CE;

In 1578 CE, the dominican friar Cosmos Rossellius writes "Theasurus artificosae memoria", a book on the art of memory; he gives a Dante-esque description of hell as a memory space system arranged around a well at the top of a flight of steps consisting of the punishments for heretics, jews, idolators, and hypocrites; he also advocates the use of the constellations as loci;

In 1579 CE, Giordano Bruno lectures on the "Art of Memory" in Paris. he was an exponent of the 'hermetic' Art of Memory, but his version evidently owed nothing to Camillo; his version had become 'a magico-religious technique, a way of becoming joined to the soul of the world as part of a Hermetic mystery cult';

In 1581 CE in Scotland, Mark Kerr, Earl of Lothian, undertakes the renovation of Prestongrange House, where at this time he supervises the decorative painting of a large ceiling, which features a plethora of complex, bizarre, and phallic emblems; Cowan (1983) suggests that the ceiling functioned as a "memory chart" which used striking images to stimulate the full powers of memory; the Prestongrange designs hint that the Art of Memory was currently known by some Scottish masons; (Schuchard);

In 1582 in France, Bruno publishes 'Calvis Magna', his Great Key to the art of memory, which reveals the influence of Lully and Platonism; also publishes 'Il Candelaio' (The Torchbearer); Bruno possibly based his system on that of Metrodorus, and employed the zodiac as a scheme; his system was also influenced by Ramon Lull, the medieval Ars Notoria tradition, late antique hermeticism, and upon the classical architectural mnemonic; according to Yates, his memory system was intended to fill the mind with images representing all knowledge of the world, and was to be used, in a magical sense, as an avenue to reach the intelligible world beyond appearances, and thus enable one to powerfully influence events in the real world;

Between 1582-1610 CE, the Jesuit missionary Matteo Ricci described the system of places and images in his work "A Treatise on Mnemonics";

In 1583 in Scotland, Shaw reorganized scottish masonry and possibly introduces the Art of Memory;

In 1584 in England, Alexander Dickson, a Scot living in London, publishes a treatise

based on Bruno's first work, outlining the classical art of memory but setting it in a Hermetic Egyptian context much more openly than Bruno had done; it is likely that Bruno and Dickson met while Bruno was in England in 1583; Dickson ends up at the Scottish court by 1592 CE;

Also in 1584 in England, a huge controversy over the art of memory breaks out when the Puritans attacked the art as impious because it was thought to excite absurd and obscene thoughts; according to Culianu, the art of memory was suppressed by the Protestant Reformation due to their working to eliminate pagan influence and the lush visual imagery of the Renaissance;

Also in 1584, a row breaks out between the followers of Bruno and Ramus; the Ramists, who would eventually triumph, advocated a system in which each broad category of knowledge was repeatedly subdivided; Ramus held that this structure absorbed the art of memory into that of logic; today, we call it the taxonomic approach; in a taxonomy, you start with an ordered room, in which we store additional information; the art of memory begins to decay after this time;

In 1590 CE, the Scottish poet William Fowler teaches the art of memory to Queen Anne. He wrote a treatise on the art of memory no later than 1612 CE. He was friends with William Schaw by 1589 CE.

In 1598 Scotland, the 1st Schaw Statutes are written. It is a code of regulations which may be taken as the first attempt at some kind of nation-wide control of the craft in Scotland. It mentions that Wardens are to tryall of the Art of Memory.

In 1599 Scotland, the 2nd Schaw Statutes are written, partly addressed to Kilwinning Lodge. Article 6, relating to Kilwinning, states that "the warden of Kilwinning must elect and choose 6 of the most perfect and worthiest of memory within his bounds to take tryall of the qualification of all masons within those bounds, of their art, craft, science, and antient memory, and the warden and deacon would be held responsible for seeing that this was done"; Article 13, also relating to Kilwinning, states that "the officials of Kilwinning lodge were to take tryall of the art of memorie and science thereof, of every fellow and apprentice, according to other of their vocations, and in case that they have lost any point thereof they were to be fined, the money being paid to the lodge";

By about 1600 CE, the art of memory, usually associated with training in rhetoric, is now a part of dialectics/logic.

In 1617 England, Robert Fludd publishes his "Utriusque Cosmi..."; according to Yates, his memory system may reflect the layout of Shakespeare's Globe Theatre (built 1599 CE);

In 1706 England, Marius D'Assigny writes "The Art of Memory";

And, lastly, a French AASR ritual from 1875 contains the following: "Question: What does the tracing board represent? Answer: It is the emblem of memory, that precious faculty which is given to us to form our judgement in preserving the trace of all our perceptions.

The practice of the art of memory developed to a very high level in the Medieval world.

This practice was done by memorizing a series of places such as that found in a building. In these places you place other images to remind yourself of certain things. We also know that the art of memory was cultivated at Chartres. (Carruthers, *The Book of Memory*, p. 87) Its spiritual employment is illustrated by the reference to the word arca. Basically the word arca means a wooden chest or box mostly used for storage. As Mary Carruthers states in her work *The Book of Memory* :

"But there is another meaning of arca which is associated from earliest times with the process of Scriptural lectio and study. As arca sapientiae, one's memory is the ideal product of a medieval education, laid out in organized loci. One designs and builds one's own memory according to one's talent, opportunities, and energy. That makes it a construction, an edificatio. As something to be built, the trained memory is an arca in the sense understood by the Biblical object called Noah's Ark, the construction of which occupies some detail in Genesis, and the Ark of the Covenant, ..." (Carruthers, *The Book of Memory*, p. 43)

Why we want to practice the art of memory is explained by Avicenna by pointing out that there is a connection between memory and spiritual experiences: "The images produced during dreams and trances will disappear unless they are associated with images that are already in memory storage, already familiar and accessible to recollection. Thus even direct inspiration requires the immediate assistance of human memory, though in a way more mysterious than that of ordinary dreaming or consciously controlled recollection." (Carruthers, *The Book of Memory*, p. 59)

In Augustine's *Confessions* we read that he finds God through the memory. (*Confessions*, X, 25-6) Not in any image though. It is the Platonic conception that knowledge of the divine is a type of recollection (anamnesis). "In the doctrine of recollection, the soul's education is described as a process of reawakening by means of contacts with the sensible world that functioned as mnemonic prods, reminding the soul of the Platonic Forms. Theurgy should be seen as the development and translation of this epistemological theory into a ritual praxis where the prods of sensate experience were carefully controlled in rites designed to awaken the soul to the Forms." (G. Shaw, *Theurgy and the Soul*, p. 24.) It was something we had "lost" thus something to search for within our soul. There were many systems of training the memory. The development of these systems gradually became extremely elaborate. One example is the treatise on memory by Johannes Romberch, a Dominican. He explains one system as using "...the cosmos as a place system, ...we see the spheres of the elements, of the planets, of the fixed stars, and above them the celestial spheres and those of the nine orders of angels ...This type of artificial memory may be called the Dantesque type, ...because Dante was influenced by such an interpretation of artificial memory,..." (Yates, *The Art of Memory*. pp. 115-116)

Giulio Camillo (1480-1544), who was one of the most famous men of the sixteenth century, constructed a wooden memory theater. It was very elaborate and is explained in the following manner:

"The theater rises in seven grades or steps, which are divided by seven gangway representing the seven planets. ... the solitary spectator' stands where the stage would be and looks towards the auditorium gazing at the images on the seven times seven gates on the seven rising grades. ...we can see that the whole system of the Theatre rests basically upon seven pillars, the seven pillars of Solomon's House of Wisdom. ...By these columns, signifying most stable eternity, we are to understand the seven Sephiroth of the super-celestial world, which are the seven measures of the fabric of the celestial and inferior worlds, in which are contained the Ideas of all things both in the

celestial and in the inferior worlds. ...As Sephiroth in the supercelestial world they are here equated with the Platonic ideas. Camillo is basing his memory system on first causes, on the Sephiroth, on the Ideas; these are to be the 'eternal places' of his memory." (Yates, *The Art of Memory*, pp. 136-137)

And his way of using it is illustrated by the following description:

"Thus, following the custom in ancient theatres in which the most important people sat in the lowest seats, Camillo has placed in his lowest grade the seven essential measures on which, according to magico-mystical theory, all things here below depend, the seven planets. Once these have been organically grasped, imprinted on memory with their images and characters, the mind can move from this middle celestial world in either direction; up into the super-celestial world of the Ideas, the Sephiroth and the angels, entering Solomon's Temple of Wisdom, ..." (Yates, *The Art of Memory*, pp. 138-139)

The result of this practice is nothing short of profound:

"In this atmosphere, the relationship between man, the microcosm, and the world, the macrocosm, takes on a new significance. The microcosm can fully understand and fully remember the macrocosm, can hold it within his divine mens or memory. ...That there is a strong Cabalist influence on the Theatre is obvious. ...For Camillo, it is the correspondence of the seven planetary measures of the celestial world with the supercelestial Sephiroth which gives the Theatre its prolongation up into the supercelestial world, into the abyss of the divine wisdom and the mysteries of the Temple of Solomon." (Yates, *The Art of Memory*, p. 148)

In much of this work the idea is to reproduce the celestial world within. Giordano Bruno's (1548 -1600) work continues the same theme:

"In relation to the fundamental zodiacal images, the planet images, moon station images, houses of the horoscope images of Bruno's list of magic images, move on the wheels of memory, forming and reforming the patterns of the universe from a celestial level. And the power to do this depends on the Hermetic philosophy, that man is in his origin divine, and organically related to the star-governors of the world. In 'your primordial nature' the archetypal images exist in a confused chaos; the magic memory draws them out of chaos and restores their order, gives back to man his divine powers." (Yates, *The Art of Memory*, p. 217)

"...in the Middle Ages and the Renaissance, obsessed with symbolism and imagery, any craft was likely to develop symbolism as arising entirely from the Renaissance art of memory is unconvincing. But through the Second Schaw Statutes the art of memory can now be directly linked to the development of Freemasonry, and the occult overtones the art had acquired contributed to the development of Masonic secrecy and ritual" [Stevenson].

the Renaissance occult memory may be the real source of a Hermetic and mystical movement which used, not the real architecture of "operative" Masonry, but the imagery or "speculative" architecture of the art of memory as the vehicle of its teachings.

·Art of Memory was not merely a rather strange and clumsy term for what had been memorized as has been assumed in the past. It was a technique for memorizing things which had its roots in ancient Greece... becoming, in the Middle Ages and Renaissance something that was highly symbolic and even occult... the three simple words 'art of memory' may be taken as proof that from the first the Schaw lodges were at least

dabbling in occult and mystical strands of late Renaissance thought.” (Stevenson)

Through Renaissance Neoplatonism, with its Hermetic core, the art of memory was once more transformed, this time into a Hermetic or occult art, and in this form it continued to take a central place in a central European tradition. This was effected primarily by Camillo and more especially Bruno.

Br. Worrel's hypothesis is that there actually exists a very deep analogy of structure and mode of operation between the art of memory (in its classical form) and speculative Freemasonry. In other words, in order to derive speculative Freemasonry by analogy from the ancestral art that preceded it, he would say that:

--the Masonic symbols are imagines, the images of the art of memory;
--the Masonic degrees are loci, the place of the art of memory, i.e. basically they are the rooms of the great edifice between which the subject making his way, moves about and goes forward in the keen process of understanding the lesser and greater mysteries;
--the Masonic rite (namely the totality of the open teaching proposed by Freemasonry) is the grand edifice in its entirety. In other words, to continue with metaphors from the building trade, the Masonic rite is that great imaginary and speculative building or architecture of the mind within which the seeker moves as in a temple as huge as the universe and large enough to house and shelter the immensity of the Divine. At each step, the seeker memorizes his freely undertaken obligation to practice virtue. I would say finally that the establishment of “the symbolic use of architectural images would fairly account for the phenomenon, a passage from purely mental realities to their incarnation in the “method” constantly and untiringly sought by Giordano Bruno (but now discovered by the gentlemen masons, adepts of the art of memory).” (Jameux)

Human memory recalls concrete images far more easily than abstract ideas, and it remembers an ordered chain of associations more accurately than a random assortment. Just as Simonides could remember the guests at the ill-fated banquet by picturing them in the setting of the banquet hall, masters of the Art of Memory in the centuries that followed turned the information they wished to remember into striking visual images and arranged them against fixed architectural backgrounds in order to memorize them quickly and effectively.

This concludes the section on the art of memory. The development of this art grew to encompass a mental representation of the entire cosmos as conceived in the medieval world. Its use became as an object of contemplation through the use of will and imagination. Much of the structure of the process was inspired by the Hermetic sciences including Cabala and astrology as well as Pythagorean number mysticism. As the building of this cosmic temple proceeded, it provided the necessary link of the mind with the Divine World. Our journey has taught us that it is the understanding of the Pythagorean/Platonic view of the universe as well as the knowledge of the Hermetic art that provides us with the key to uniting the microcosm with the macrocosm, heaven and earth, and rediscovering that which was lost.

And that, ladies and gentlemen, brings us to the key itself, Sacred Geometry...

PART 3:

Sacred Geometry:

Sacred Geometry is essentially a catch-all term covering Pythagorean and neo-Platonic geometry.

Sacred Geometry is the geometry used in the planning and construction of religious structures and sacred spaces, and the creation of religious art. In Sacred Geometry, symbolic and sacred meanings are ascribed to certain geometric shapes and proportions. According to Calter, in the ancient world certain numbers had symbolic meaning, aside from their ordinary use for counting or calculating. Circles, triangles, squares, and so forth, were related to the numbers (3 and the triangle, 4 and the square. etc.), and in fact carried more emotional value than the numbers themselves because they were visual.

Sacred Geometry may be understood as a worldview of pattern recognition, a complex system of religious symbols and structures involving space, time, and form. According to this view the patterns of existence are perceived as sacred. By connecting with these patterns, one contemplates the great mysteries, and the grand design. By studying the nature of these patterns, forms, relationships and their connections, insight may be gained into the Great Mysteries - the general laws of the cosmos.

The belief that God created the universe according to a geometric plan has ancient roots. Plutarch attributed the belief to Plato, writing that "Plato said God geometrizes continually".

According to S. Skinner, the study of sacred geometry has its roots in the study of nature and the mathematical principles at work therein. Many forms observed in nature can be related to geometry and such correspondences are seen to be further proof of the cosmic significance of geometric forms.

The Pythagoreans approached mathematics from a universalist perspective. We are told by Porphyry that the Pythagorean numbers were "hieroglyphic symbols, by means of which he explained ideas concerning the nature of things". The cosmos evolves from within outward. From the "point" a radiation equal in all directions begins, establishing a circumference, or sphere, within which all activities of the point are circumscribed. *The Pythagoreans declared arithmetic to be the mother of mathematics. This is proved by the fact that Geometry, Music, and Astronomy are dependent upon it but it is not dependent upon them.*

The ancient Greeks assigned various attributes to the Platonic solids and to certain geometrically-derived ratios, investing them with 'meaning'. For example, the cube symbolized kingship and earthly foundations, while the Golden Section was seen as a dynamic principle embodying philosophy and wisdom. Thus a building dedicated to a god-king might bear traces of cubic geometry, while one dedicated to a heavenly god might have been constructed using Golden Section proportions.

The Christian cathedrals used the cross as its major religious emblem, and in geometric terms this was elaborated during the Medieval period to the form of an unfolded cube. Many Gothic cathedrals were built using proportions derived from the geometry inherent in the cube and double-cube.

In summary, Sacred Geometry is the foundation upon which so many of the ancient Mystery Traditions converge. It was this Pythagorean-Platonic emanationist worldview that lived on in the shadows to influence alchemy, kabala, gnosticism, freemasonry, and so many more. And it is this idea that will bring us back around again, to a future that in some ways looks more like the past. This concludes tonight's lecture and I thank you all for your time.

