

Kring Nieuw Holland



Circle New Holland
A Masonic study circle with a difference

Newsletter articles
From the Year
2007

Edited for the Kring by Bro. Fred Vandenberg

BROTHER MOZART AND "THE MAGIC FLUTE"



Wolfgang Amadeus' Mozart
1756 – 1791

Wolfgang Amadeus Mozart was twenty-eight years of age when, in the autumn of 1784, he joined a Masonic Lodge. As a pianist, little Wolfgang had been an infant prodigy, exhibited by his father throughout Europe, but he was now a recognized and admired composer living in Vienna. The very year of his initiation his first great opera, *The Marriage of Figaro*, had been produced in Paris. This was, however, before the days of copyright law and the earnings of genius were meagre.

During the eighteenth century, Freemasonry in Vienna had a political as well as a benevolent side. It counted as its members many highly placed politicians and ecclesiastics whose ideal was the regeneration of humanity by moral means. It was hated by the Catholic

Church and certain despotic political authorities who deemed it dangerous, both to religion and the well being of the state. The Church, however, even as today in certain Latin countries, did not consider it expedient to challenge high-placed persons nominally its members but also of the Fraternity.

The Empress Maria Theresa had been one who was opposed to Masonry and, in 1743, had ordered a Viennese Lodge raided, forcing its Master and her husband, Francis I, to make his escape by a secret staircase. The Emperor Joseph II (1780-90) was favorably inclined to the Fraternity, although the clergy did their best to get the Lodges suppressed.

Such was the Masonic milieu when Wolfgang Mozart became a Master Mason. He must have been greatly moved and inspired by his experience. Almost immediately he composed his *Freemason's Funeral Music* and his music for the opening and closing of a Lodge. He now composed his opera, *Don Giovanni*, and his three great symphonies - the E flat, the G minor and the C major, as well as a great number of concertos and chamber-music works.

His last great opera, *The Magic Flute*, opened in Vienna on the evening of September 30, 1791. Mozart conducted the first two performances, when he was overtaken by his last illness. He lingered on while the opera had an unprecedented run of more than one hundred consecutive performances.

It is said that in his sick bed, watch in hand, he would follow in imagination the performance of The Magic Flute in the theatre. Then he died after its 67th performance.

day, The Queen of the, Night was clearly the unfriendly Empress Maria Theresa; the good Sarastro was Ignas von Born, an eminent scientist and Masonic leader; the hero Tamino was the good Emperor Joseph and the heroine Pamina, the Austrian people themselves.



Poster of the premiere of " Die Zauberflöte" on 30 September 1791

The Magic Flute makes no mention of Freemasonry as such, but it has always been accepted as a Masonic opera. Musicians assert that even the music has much Craft significance, beginning in the overture with its three solemn chords in the brass.

In keeping with the fashion of the time, the plot is half-serious, half-comic, a fantasy of magic and mystery laid in a never-never land called Egypt. It depicts the ancient mysteries and presents much Craft symbolism. To the Viennese of that

The first program credited the libretto to the actor-producer, Schikaneder, but it is now thought that it was written by Giesecke, the friend and intimate of Goethe and Schiller, who probably desired to remain anonymous for political reasons. The opera has remained popular through the years and is included in the present repertoire of the Metropolitan Opera Company.

Highlights from Die Zauberflöte (The Magic Flute)

The sources and influences of The Magic Flute are many, the most obvious being Lulu, or the Magic Flute by Christoph Martin Wieland, one of a collection of fairy stories published in 1786 under the title Dschinnistan. This had already inspired several Singspiel productions by various companies with such titles as Kaspar the Bassoon Player, or The Magic Zither. But the oriental decor and magical effects taken from this source provide only one level of Mozart's work, for underlying them are pervasive references to the mysteries of Freemasonry.

Mozart, a Freemason since 1784, and Schikaneder, a fellow Mason of a different lodge, had embodied much of Masonic teaching and

symbolism in their opera. In using the symbols and, by many accounts, references to the actual rituals of Freemasonry, they may have intended to make subtle demonstration of the society's high-minded purposes. It seems at least possible, in other words, that the opera was intended in part as a defense of the Masons. (For two centuries there have been rumours and speculation that Mozart was murdered by the Masons for revealing their secrets, but this seems unlikely for several reasons. His collaborator and fellow Freemason, Schikaneder, lived for another two decades. Mozart's close personal identification with Masonic tenets and his frequent contact with high-ranking leaders of the society are well-documented in his letters, and it is improbable that he would have defied the society's strictures, or that he would have been unaware of what he could use in a public work and what could not be revealed.)

The number three had a deep significance for the Masons, and it keeps occurring throughout *The Magic Flute*: Three Ladies, Three Boys, three temples, and so forth. A drawing of Schikaneder's revival production of 1794 shows that in the opening scene the Three Ladies kill the serpent by cutting it into three pieces.



Etch of the Serpent cut into three pieces. (1795)

The opera's home key of E-flat (redolent of virtue, nobility, and repose) was often used by Mozart for his Masonic compositions because of its signature of three flats. Prominent in the Overture is the three-fold repetition of the Masonic rhythmic motto (short-long-long), also heard in Act II of the opera itself.

Also Masonic in origin is the inscriptions on the three temples: "Wisdom," "Reason," and "Nature." Freemasons in the audience would have recognized the symbolic armour of the guardians during the initiation trials, the earth-air-water-fire symbolism of the trials themselves, the Ladies' silver spears, Papageno's golden padlock, Sarastro's lion-drawn chariot, Tamino's death-like swoon, and the Queen of the Night's defeat by the powers of light.

In his admirable book *The Magic Flute, Masonic Opera*, Jacques Chailley makes a convincing argument that the trials of the opera's second act (as well as much that leads up to them in the first act) are modeled on actual Masonic

initiation rituals. Even an apparently unrelated incident like Tamino's fainting spell in the opening scene, for instance, is interpreted as a reference to the beginning of such rituals, when the initiate is made to lie face down as a symbol of death to old habits of thought and action.

The Story of the Opera

Act 1

Pamina, daughter of the Queen of the Night, has been kidnapped. Prince Tamino is chased by a snake and falls unconscious. The Ladies-in-Waiting of the Queen kill the snake and compete over keeping Tamino for each other. Tamino awakes and meets Papageno, the Queen's bird catcher, who boasts of his defeat of the snake. The three ladies reappear and punish him for lying by putting a padlock on his mouth. They show Tamino a picture of Pamina that fills Tamino's heart. They tell him she is a prisoner of Sarastro. Tamino vows to free Pamina and the Queen herself comes to reinforce his determination with her depiction of her motherly desolation. She promises Pamina to Tamino when he sets her free. The three ladies remove the padlock from Papageno's mouth and give him a set of chimes. To Tamino they give a golden flute. These instruments will enable them to escape the perils of liberating Pamina. They will also be accompanied by three young children.

Monostatos, a Moor at Sarastro's service, is pursuing Pamina with unwelcome advances. Papageno appears and Monostatos takes flight.

Papageno recognizes Pamina. He advises her not to fear. She will soon be rescued. Papageno laments that nothing like this ever happens to him. Pamina assures him that he will soon find a girlfriend.

The first finale takes place close to three temples. This is where the three children have led Tamino with the advice to be patient, silent and to persevere. Tamino is refused entrance to the temples. A priest appears and tells Tamino that Sarastro is not a tyrant as he has been told, but a noble character of wisdom. Tamino's desire for knowledge awakens and he plays his flute as wild animals listen.

He leaves before Papageno enters with Pamina, who has been followed by Monostatos. Papageno, by playing on his magic chimes, stops the threatening Moor. A chorus is heard singing praise to Sarastro as he enters. Pamina explains that she was trying to escape from the Moor. Sarastro assures her that he understands her predicament. Monostatos drags Tamino in, denounces him to Sarastro but, instead of a reward, he gets a flogging. Sarastro commands Pamina and Tamino to endure the trials of initiation.



Etch of Tamino between the wild animals (1795)

Act 2

Sarastro informs the priests that Tamino and Papageno must go through severe tests to be worthy of entering the Temple of Light. Sarastro prays to Isis and Osiris that the two may be worthy of their goal. They are warned not to fail in their vow of silence. The three Ladies try to get them to abandon their quest, but they remain silent.

Pamina is discovered lying asleep. The Moor steals towards her. The Queen gives a dagger to her daughter with the command to kill Sarastro. Monostatos threatens to reveal this plot if Pamina will not give him her love. Sarastro enters and dismisses the Moor who hopes to have better luck with the Queen. Pamina pleads for mercy for her mother and Sarastro assures her that vengeance is not on his mind.

Tamino and Papageno are again urged to keep silence. Papageno finds himself chattering with an old woman who claims to be his sweetheart. The woman disappears. The children bring the flute, the chimes, food and drink. Pamina enters, and is overjoyed to see Tamino. Unaware of the vow of silence, she is distraught over his lack of response. The priests sing a chorus of praise to Isis and Osiris. Sarastro tells Pamina and Tamino to say their last farewell to each other.

The old woman comes back and threatens Papageno with dire consequences if he does not swear to be true to her. He swears and she reveals herself to be young and

attractive, but Papageno is warned off by a priest who says he is not worthy of her yet.

The three children sing of the joys of the rising sun. Pamina contemplates suicide but is restrained by the children. Tamino arrives for the trials of fire and water, flanked by two armed guards. Pamina joins him. Meanwhile, Papageno intends to commit suicide instead of facing life without a mate. Elsewhere, Monostatos leads the Queen and her Ladies who are making an unsuccessful bid at revenge on Sarastro.



In the end. some are rewarded and some are not...

Brigid Brophy, in her fine study, *Mozart the Dramatist*, points out the origins of Masonic practices in the Eleusinian mysteries and Orphic myths of the ancient world. She documents the libretto's heavy debt to *The Life of Sethos*, a novel published in Paris in 1731 by the abbé Jean Terrasson Purporting to be a translation from an ancient Greek source, this book recounts the initiation of its Egyptian hero into the mysteries of Isis. As Ms. Brophy points out, "Terrasson does not (but then one would not expect him to) explicitly connect his Isiac mysteries

with Masonry; indeed, it is possible that the real influence was the other way about and the Masons borrowed hints for their own ritual from Terrasson's fictionalized Egypt."

Mozart and Schikaneder were also well-acquainted with the works of Shakespeare. Many fascinating parallels between *The Magic Flute* and *The Tempest* are noted in *Mozart on the Stage*, by János Liebner. Sarastro, the opera's controlling force, is similar to Shakespeare's Prospero. Each plans the union of two chosen lovers but makes the way arduous in order to strengthen the bond. Monostatos and Caliban are very similar creations, symbols of our baser nature to be overcome and cast off. The unworldly innocence of the Three Boys finds its counterpart in Ariel, Prospero's sprightly servant and messenger.

Each succeeding era has seen *The Magic Flute* in its own way, and each of these interpretations has validity. Whether the opera is viewed as a light-hearted fantasy, Enlightenment allegory, veiled Masonic ritual, or a lost battle in the struggle for feminine equality, it speaks anew of magic and maturation to each successive generation.

Freemasonry in Crisis

Since the Masonic lodges operated openly in Mozart's Vienna and numbered among their members many of the highest officials of the realm, we may ask ourselves why two Masons, Mozart and

Schikaneder, felt it necessary to compromise Masonic silence and portray so many of the society's secret symbols and beliefs in a public entertainment like *The Magic Flute*. If they, as the eminent scholar H. C. Robbins Landon have written, "Risky a long shot - to save the Craft by an allegorical opera," what was the peril by which the once-powerful society was threatened? What forces ultimately caused their attempt to be futile, ending in the complete suppression of Masonry only four years later?

The answers are to be found in the revolutionary cross-currents of that turbulent era, and in the involvement of many of the Masons, even many of the highly placed aristocrats, in activities that threatened the thrones of Europe.

Freemasonry evolved from some of the craftsmen's guilds of the Middle Ages (which helps explain its name and why its adherents refer to it as the Craft), but its rise to prominence began in the mid-eighteenth century. Its espousal of Wisdom, Beauty, Knowledge, and Truth made it attractive to adherents of Enlightenment philosophies (with their de-emphasis of traditional religion in favor of individual moral advancement), which included most of the best minds in Europe and America. Viennese Masons included Mozart, who joined in 1784, his friend and admirer Franz Joseph Haydn, initiated in 1785, and Mozart's father Leopold, who

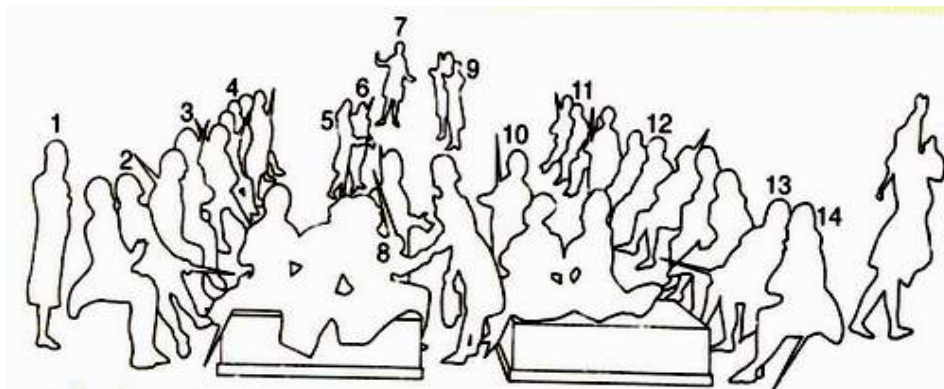
joined at his son's instigation in 1785 and advanced to the third degree of membership in just sixteen days.

The head of Mozart's lodge was Prince Nikolaus Esterházy, Haydn's patron and a high-ranking diplomat in the imperial government. Freemasonry thrived in the empire

despite the enmity of the Roman Catholic Church (a Papal Bull condemning the Craft in 1738 was simply ignored in Austria and its territories) and that of the powerful Empress Maria Theresa (whose younger son, the future Leopold II, had reputedly been elevated to the Eighteenth Degree of the Scottish Rite of Masonry).



A Painting of Wolfgang Amadeus Mozart in the Loge



1. Johann Nepomuk, Count von Esterhazy, treasurer and councilor. 2. Ignaz Alberti, Printer. 3. Karl Ludwig Giesecke, actor. 4. Christian Friedrich Wappler, bookseller. 5. Ludwig, Count von Lehrbach. 6. Ferdinand Harrach, Field Marshal. 7. Johann, Count von Esterhazy, Wor. Master. 8. Prince Nikolaus Esterhazy. D.C. 9. Anton Niering von Lowenfels, Orator. 10. Wenzel Tobias Eppstein, councilor. 11. Ignaz Faber, Frater from the Franciscan Order. 12. Johann Lambert von Hanotte, canon and prelate from the Augustine Order in Liège. 13. Emanuel Schikaneder, theatrical director. 14. Wolfgang Amadeus Mozart.

But although a succession of Austrian emperors took a benign view of Masonry's espousal of the enlightened notion that all men are perfectible through Reason, they naturally smelled treason when certain of the Masons went a step further and argued that in a fully enlightened society there was no need for monarchs. Masonry's insistence on shrouding its inner workings in secrecy worked against it, for the code of silence allowed treasonous sects to flourish within the Craft and at the same time caused government officials to imagine Masonic excesses much greater than those that actually occurred. In the end, the emperor felt he had no choice except to ban Masonry outright.

Probably the most virulently anti-monarchic sect of Masonry was the Illuminati, founded in Bavaria by Adam Weishaupt, a university professor, in 1776. Weishaupt joined the Masons the following year and soon allied the Illuminati with them. The sect's original aim was to fight evil and defend good causes, but this was soon expanded with anti-clerical and anti-royalist sentiments. The Illuminati operated for only a decade and probably never had more than 2000 members, but they panicked the royalty, who became suspicious of all Masonry.

The crowned heads had good reason to connect Masonic Lodges with revolutionary activities. Many

of the leaders of the American colonies' revolt against their British king in 1776 were Masons, including George Washington, Benjamin Franklin, and Thomas Jefferson. In France Masons were behind the push for republican government that led to the French Revolution (which, incidently, went much further than those high-minded aristocrats had foreseen and claimed most of them among its victims).

The Austrian emperor heard first-hand reports of the uproar in Paris from his sister, the French Queen Marie-Antoinette.

Austrian attempts to control the Masons included Joseph II's decree of 1781, forbidding any order to submit to foreign authority. This led to severing Masonic ties with the Grand Lodge of Britain and setting up Austria's own governing body, the Grosse Landesloge von Österreich. In 1785 another imperial edict centralized the country's lodges and limited their autonomy. The proliferation of local lodges was reduced (only three remained in Vienna), and the members of each were limited to 180. Regular reports of lodge meetings and attendance had to be submitted to the Emperor's police.

In 1790 Joseph II died and was succeeded by his brother, Leopold II. With the French Revolution in full cry, the Austrian government was becoming exceedingly alarmed about treasonous sentiments in the land and especially in the Masonic orders. That same year a lodge of

Illuminati was uncovered in Prague, and names of high officials were increasingly mentioned in secret police reports to the emperor. As Landon points out, Austria was fast becoming a police state.

This was the demoralizing situation for Austrian Freemasons when Mozart and Schikaneder decided that their Singspiel would be more than merely light and entertaining, that it would demonstrate the probity and superiority of Masonic teachings. They may have had hopes of saving the Craft from total suppression, but those hopes were in vain. Leopold II died just six months after The Magic Flute's premiere and he was succeeded by

his son, Francis II. The imperial government under the young and inexperienced Francis became dominated by conservative advisors and consequently swung even further to the right. In June of 1795 an order came down to close all Masonic lodges and other secret societies and Freemasonry ceased to exist in Austria for more than a century.

Fred.

References:

"Bro Mozart and the Magic Flute"

by Newcomp Condee

"Die Zauberflote" by M.van den Berk

West Bay Opera

The Rosslyn Chapel



Part one, of a Three part series on the Rosslyn Chapel

The Inside Story
By Ian Robertson

Rosslyn Chapel was built by Aliens! It has a Star – Gate situated in its North – East corner. Its vaults (built by the Knights Templar) hold secret scrolls, the mummified head of Christ, the Ark of the Covenant, the Holy Grail and countless other lost treasures. These are some of the many claims to have appeared in print over the last 20 years or so.

Can any of these fantastical claims be right? If you do want to know the ‘real deal’ about Rosslyn Chapel then you may want to check out what the locals have to say about it! I’m not suggesting that all the locals know facts from fiction, but it is a distinct help.

Mark Oxbrow and myself grew up a few miles from this ‘Cathedral of Codes’. It has captivated us both from our first respective encounters with it. No matter what you have read about it, nothing quite prepares you for your first visit. It is breathtaking and quite unique from any other churches of this period.

Over the many years we have visited the chapel on literally hundreds of occasions. The sheer exuberance of carved detail means that we still find carvings tucked away that we never noticed before. This is just part of the incredible magnetism of the place.

The chapel sits just 7 miles south of Edinburgh. Its founder was Sir William St Clair, Earl of Rosslyn and Prince of Orkney. He created the building between 1446 and 1484. He started work on the structure when he was about 50 as a public statement of his spirituality and in thanks to God for the good life that had been bestowed upon him by his creator. The St Clair’s were an extremely religious family, and devout Roman Catholics.

Today it is the Chapel building that attracts the crowds, but some do venture down to the glorious ruined castle.

Few take the walk through the undergrowth, to the far side, to visit an old Yew tree that stood for 800 years.

The picturesque woodland in the glen below the chapel is all that now remains of a once vast forest that extended down to the borders between Scotland and England.

Bronze Age rock carvings along the side of the river Esk deep in this glen, attest that human settlements have existed here since ancient times. The origins of man – made caves above the river on the opposite bank from the chapel and castle are now lost in antiquity.

One of these, Wallace’s cave, is named after the great Scottish hero who is said to have taken refuge thereafter the battle of Falkirk in 1298.

This landscape has always been a mysterious and magical place, steeped in ancient myths and legends that have been in existence centuries before people became interested in the ones included by Dan Brown in *The Da Vinci Code*.

The name Rosslyn is derived from two Celtic words: Ross, meaning a promontory or rocky outcrop, and Lynn, meaning a fall of water.

The Real Legends



A drawing of the Rosslyn Castle before 1700.

The old traditional tales of Rosslyn include the story of a Dark Age Princess called Pantheoria who settled here with a King Donald. Nearby a mysterious 'Maiden Castle' once stood, that legend states existed long before the present castle was built. This legend has parallels with Arthurian romances.

Other tales, as we discovered, also mirrored different themes from the Grail traditions – but amazingly, in a completely different way from what we first expected.

The majority of the various theories offered up over the last 20 years including Dan Brown's, miss the mark completely when they describe the tales of Rosslyn.

Another tradition describes the river Esk far below, running red for three days after thousands fell in the bloody battle of Rosslyn in 1303. In recognition of this particular event some local place names still describe the aftermath of the battle.

Stinkin' rigg is so called from the stench of the dead soldiers bodies that rotted where they fell. Shin-bane (bone) field was named from the fact that local farmers constantly uncovered the bones during the plowing season.

An enchanted white lady haunts the castle and the surrounding woods. She is the guardian of the lost treasure allegedly worth millions of pounds. Is this treasure wisdom, power and wealth or a great library? Well, it's actually all of the above if you put the different accounts

together. Only someone that is pure of heart (sound familiar?), the legend continues, can discover this treasure.

Surprisingly, these tales, down through the ages, have always been associated with the castle not the chapel!

Hidden treasures in a secret chamber beneath the chapel are all relatively modern.

So what is under the chapel?

As a private family chapel built in the 15th century, what was always destined to lie beneath the church was a family vault for the St Clair's. The legend states that when a member of the house of Rosslyn dies a mysterious glow surrounds the chapel, as if it were on fire!

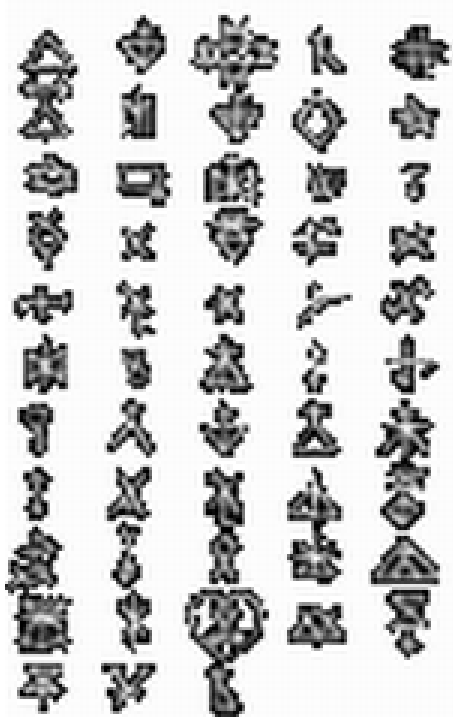
More legends exist of ghostly pipers, phantom dogs, hoards of rats and other strange tales surrounding the 'chapel amidst the wood' as this beautiful building was once called, all of which we have examined in depth.

The most famous legend, which Dan Brown includes in *The Da Vinci Code* (and the only one that he got right about Rosslyn) is the story of the Apprentice Pillar.

This pillar is the most ornately carved pillar in the whole building.



The story goes that Sir William St Clair tasked his Master Mason with carving the most exquisite pillar. The Master set off immediately to Rome to study architecture for inspiration. Even though he was a master craftsman of some skill, he felt that he needed more training. When he returned he found this column, just as you see today, already sculpted by his young trainee who had seen it in a dream. The Master became so enraged he killed his apprentice with a blow to his temple from a stonemason's mallet. For his heinous crime, he was taken out and hung.



Masons marks found in the chapel

The story is said to be carved into the chapel itself, and has certainly been recorded as long ago as 1677.

High up in the North West corner, is a badly worn head of a man. It's said to be a portrait of the Master Mason, forced to look upon the work he so envied for all eternity. Just across to the left of it is another head with a gash carved on his right brow. This is a portrait of the apprentice with his mortal wound. And just to the left of the head is a woman, the boy's mother, said to be lamenting the untimely dead of her talented son.

People have drawn parallels between this story and the murdered mason theme in the third degree Masonic ritual.

One legend which thousands know now, is the claim that the Knights Templar built the chapel, having been given refuge after the Order's suppression. Any suggested connection with the medieval order is sadly the stuff of fiction and alternative theories, but without any foundation whatsoever. In fact, an historical record proves that two members of the St Clair family actually testified against the Templar's at a trial in Edinburgh in 1309!

The Templar connection is with Frances Robert St Clair Erskine, who was a Grand Master of the Freemasons, and also the Grand Master of the Masonic Order of Knights Templar's between 1884 – 1890 and therefore Rosslyn's real Templar connection albeit neo Templar rather than medieval.

Part two

The Secret Story of Rosslyn

By Mark Oxbrow

The Rosslyn Chapel has kept its secrets for five hundred years. It was once said that no-one would ever crack the mystery of the chapel's carvings and that their story was lost forever.

When I first stepped into Rosslyn Chapel I thought I had wandered into the realm of Faerie. The chapel was full of carved stone dragons and green men, unicorns, camels and monkeys, knights and maidens, devils and angels. I was spellbound. There were thousands of carvings; it seemed that every inch of the walls were covered in magical figures, flowers and foliage.

I was fascinated by the chapel and started reading everything I could find about it. I spent months in Scottish libraries, reading books of old legends, ghost stories and traditional tales of Templar treasures, lost gospels and secret heresies. I met Ian Robertson and we began to

piece together the real story of the chapel and castle. Carving by carving, symbol by symbol we studied every stone of the chapel and finally, after more than ten years. We discovered the lost story of **Rosslyn Chapel**.

The chapel can be read as a giant picture book. The story begins in the northeast corner and unfolds as you walk clock wise around the chapel from east to south, south to west, and west to north.

The story is simple and incredibly beautiful. It begins with the first light of dawn, young green men and the birth of Christ, and ends with the Day of Judgment, the dark and the depths of winter.

The chapel has a light half and a dark half, a female half and a male half. In the south we find the light, feminine side of the chapel. At dawn the sunlight floods in through the windows in the east. The east symbolizes the beginning of the day, the spring and the beginning of life.

The south is summer and life and light, the daytime when the sun is high in the sky and the harvest ripens in the field. The south door is known as the Ladies 'door' where the women of Rosslyn congregation would enter the chapel.

Around the south door are depictions of women, a virgin martyr baring a palm leaf, Veronica holding her veil and a maiden with flowing hair who carries the cross behind a Christian knight.



East side of the chapel

As you step across the chapel to the north side you walk from day to night, light to darkness, feminine to masculine. You are greeted in the north aisle by the devil, a folk devil with goat's horns and ass's ears.

In the North you will find Christ upon the cross, the resurrection and the breaking of the seventh seal ushering in the Day of Judgment.



The Angel carries the wreath of thorns placed on the head of Jesus. The Angel also has the Passion Cross on his head, indicating that he witnessed the Resurrection of the Christ.

The north door is 'the Bachelors door', where the men would enter the chapel. On the north wall are scenes from Hell; a horned demon eating a sinner, skull faced creatures, falling mermen, dead green men and fiendish monsters.

As you come full circle to the end of the north aisle you find yourself back in the northeast corner. The year turns, winter to spring, death to rebirth, and the cycle begins again.

Part three

Rosslyn Chapel or Temple ?

By Lesley Crossingham.

Sir William St Clair, third and last St Clair Prince of Orkney, founded Rosslyn Chapel or the Collegiate Chapel of St Matthew in 1446.

It was never fully completed, but what has been created is utterly fascinating. The chapel is an amazing cornucopia of stone masonry. Every square inch has an angel or an intricate scene from the Bible. However, it also has a million mysteries.

As we enter the chapel through the northern door, you will feel the presence of ancient wisdom. So let us for the moment sit in the choir and look towards the main altar.



You're now looking east and therefore in the direction of Jerusalem. Look above your head to the beautiful barrel-vaulted roof. You will see it is divided into five compartments of different designs separated by elaborately carved stone bands, known as ribs. From east to west these compartments contain engravings of 1) daisies, 2) lilies, 3) flowers, 4) roses and 5) stars.

Many have speculated over the meaning of these five sections. They are clearly a journey that begins with the daisies. The word daisy comes from "day's eye". This little flower symbolizes our base nature. Then we see the lilies, often associated with purity and the first spring of wisdom. Lilies have also been associated with the Virgin Mary and her calling to bring forth a higher order. They were also used on the pillars of King Solomon's Temple.

Flowers often are associated with a confusion of the soul choosing between the higher and lower order.

We are now half way through this journey, and then we consider the rose. This bloom has been associated often with Mary Magdalene. She is often called the apostle of the apostles.



Our skyward journey ends when we are asked to contemplate the stars. Stars are beautiful, just as flowers, yet they are of another world and a higher order. Stars signify the final step of the journey into oneness and inter-galactic eternity.

These five compartments have often been compared to the five trees in the Kingdom of Heaven, quoted in the Gospel of St Thomas: "In Paradise there are five trees that do not change from summer to winter. Their leaves do not fall; whoever knows them will not taste death". (Logion 19)

The final section of the stars leads towards the altar. Here, if you look carefully at the last compartment of the roof, among the stars you will see four angels, the Moon, the Sun and the dove of the Holy Spirit. Look towards the bottom right hand corner of the north side, and you will see the face of Christ, surrounded by little stone hearts, his hand raised in benediction.

As you sit there, you will realize that the choir is forty-eight feet long, eighteen feet wide and forty four feet in height. It stands between thirteen pillars, which form an arcade of twelve pointed arches. Five arches on each side and two behind the main altar. There are five clerestory windows with single lights.

Above the altar is the large east window, which has two lights.

As with all stained glass windows in all Christian cathedrals, the Rosslyn windows above the altar depict the resurrection.

The Rosslyn Chapel

Now enter the north aisle. Here you will see a monument to George, 4th Earl of Caithness surmounted by an artichoke and bears the coat of arms and family motto, “Commit thy verk to God,”

To the right of the tomb you will find the burial stone of William St Clair who died fighting the moors in Spain in 1330.

Here you will also find carved dragons. Dragons seem to be a strange inclusion in a “Christian” church, however as we continue to explore their inclusion it will become clearer. Here also are carved depictions from the Bible. You will see the scene of the prodigal son feeding the swine. The devil looking somewhat miffed as a couple turns away from him to look at an angel holding a cross.



As you walk down the aisle, to the right of a door is a small wall pillar rising up from the stone ledge. At its top is a plaited crown of thorns. To the left is another small pillar and above it a representation of the crucifixion. You will notice that the cross is surrounded by nine

figures representing those who stayed with Jesus.

As you turn your back, look at the pillars directly to your left and right. At the top of the left pillar facing the crown of thorns is a carving of angels rolling away the stone from Christ’s tomb. On the right pillar is a group of two female figures and one male figure. Most believe it is Mary Magdalene, Mary the mother of Christ and Joseph of Arimathea.

Now let us walk forward to the Lady Chapel and the Sacristy. This chapel extends to the full width of the chapel. You will notice there are four altars before you and to your right. They were dedicated in 1523 to St Matthew, the Blessed Virgin, St Andrew and St Peter. Above the stained glass windows are dedicated to the twelve apostles, they were added in Victorian times.

Separating the Lady Chapel from the choir are angels singing and playing instruments, including the bagpipes, in celebration. But what may surprise you is a beautiful depiction of the Green Man. Over one hundred have been counted in the interior of the building, a profusion of pagan fertility symbols not unexpected in a place so influenced by the Celtic tradition.



In Celtic times the Green Man symbolized the capacity for great goodness and also for significant evil. The “Green Man” is the eternal, never dying legendary figure that features in so many Celtic myths.

As you wander the Lady Chapel you will look up and in the corner you will see the death mask of Robert the Bruce, carved out of stone. This may not surprise you, until you discover that Robert the Bruce was excommunicated by the Pope, so why would his image be placed in a then “Roman Catholic” chapel?

The answer leads back to the Templars. Shortly after his excommunication, Bruce opened the doors of Scotland to the Knights Templar who were being persecuted in France and other parts of Europe.

Scotland became a refuge for their society and for their relics.

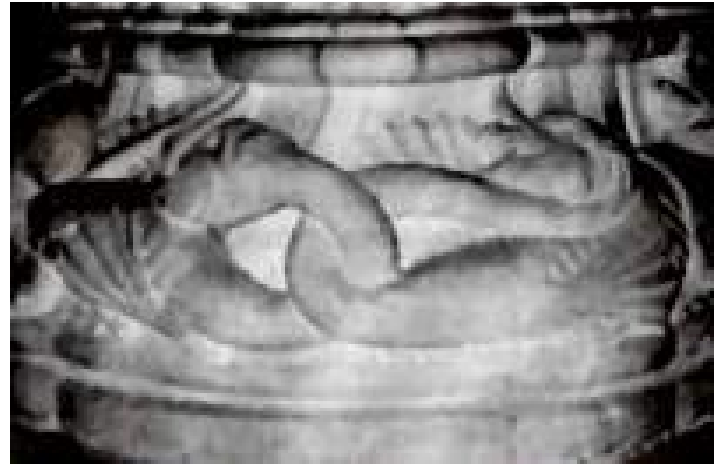
Now let us turn our attention to the south aisle. As you enter you will see a figure holding a cup and to the right an angel is holding a scroll. Look above these figures and to arch above for it contains one of the greatest mysteries of the chapel. As you draw closer you will see an amazingly intricate design of North American Indian corn. Corn is considered sacred to Native American Indians. The Hopi people still use corn in all their ceremonies.

The mystery is that it was not known in Europe until after Columbus “discovered” America in 1588. The carvings in the chapel were inscribed more than a hundred years before Columbus.

Walk towards the altar and there you will see two magnificent carved columns. The one on the left is called the Master’s Column and the other the Apprentice Pillar. These two columns are as different as dark and light.

As any student of ancient history will tell you, Solomon’s temple also had two columns. The Temple was constructed by Hiram of Tyre, to whom the Mason’s trace their ancestry. It is said that Hiram cast two bronze pillars, each eighteen cubits high and twelve cubits around. Hiram made pomegranates in two rows encircling each network to decorate the capitals on top of the pillars. It is interesting to note that the High Priest in Jesus day wore tiny golden pomegranates to edge their ceremonial robes.

The Rosslyn columns have no pomegranates but rather vine leaves intertwining. However, it is the Apprentice Pillar that is fascinating, for its resplendent swirl of stone. At the base are eight dragons, called the Neifillim by the Scandinavians. Out of their mouths comes a vine that curls up the column in the exact shape of DNA. Of course, many centuries, before it was discovered in the laboratory.



The legend of Rosslyn tells us that the second column was created by an apprentice in the absence of the master. The master stone mason was so incensed that he killed the poor apprentice with a mallet blow to the head.

There is much speculation about the meaning of this story. Some make reference to the New Testament when Jesus tells of the cornerstone that was discarded or neglected. Indeed the intricate carving of the second column is compelling. Towards the top is a carving of the story of Abraham, his son Isaac and the sacrifice of a goat. And yet, there is something extremely feminine about this column. Unlike the master’s column, which is straight, strong and masculine, the second column curves voluptuously with the mysteries of creation.

The question we find ourselves asking is why would they include dragons or the myths of the Scandinavian sacred tree in a Christian building?

In the chapel, you see dozens of angels, but most importantly, you see several angels holding the ancient shield of the St Clair family. It is what is called an “engrailed cross”.

The traditional cross is cut into curves or little holy grails all along the edges.



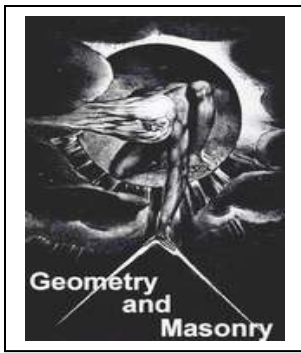
The engrailed cross symbolizes the combined energy of both the male and female wisdom. The cross is clearly the male aspect; the grail has always been the feminine aspect. In the ancient Arthurian myths based on the Fisher king, it is always a maiden that carries the grail, and even more interesting, according to the legend the name of the King is Anfortas. This was a symbolic style corrupted from *In fortis*

(Latin: In strength). This is exactly the same meaning as the name Boaz.

The mysteries of Rosslyn Chapel are an open book. The secret is not an obscure etching on the floor, or, I believe, hidden manuscripts in a tomb. The secret is in broad sight and easily read for those with an open mind.

This magnificent chapel is slowly crumbling due to neglect and the damp Scottish mist. However, it is clearly a temple dedicated to the balanced male/female Christ consciousness. It is a testament to the secret wisdom of the Golden Mean.

The Golden Mean is a sacred measurement found throughout nature. It is emulated in the construction of all spiritual temples, stimulating and awakening within, both student and master, a hidden perfection. The Golden Mean can be seen and sensed in all great temples and is illustrated beautifully in the great pyramids. More in next month's Geometry & Masonry.



article
By
W.Bro.
Harvey
Lovewell

The address to the Immediate Past Master and the depiction on his jewel refer to the 47th proposition of Euclid. It also refers to “our brother Pythagoras”.

The Masters jewel is the square, two sides 90 degree apart which will form the base needed for the 47th problem (in many jurisdictions the square has the dimensions of 3:4, the Pythagorean dimensions)

As the Master serves in his position, he becomes more complete, and therefore the 47th problem of Euclid is dedicated on his jewel when he leaves office.

The 47th proposition of the first book of Euclid.

The Pythagorean Theorem states that for any right triangle the sum of the squares of its two legs equals the square of its hypotenuse ($a^2 + b^2 = c^2$). Or we could frame it as the sum of the square of the horizontal and the square of the perpendicular equals the square of the hypotenuse. This is what became known as Euclid’s 47th proposition. The drawing below illustrates this.



We also know this formulation was known before Pythagoras – there is evidence in

ancient Egyptian work, ancient China (the Chou Pei manuscript), and the megalith builders.

Chou Pei

The oldest existing Chinese texts containing formal mathematical theories were produced during the Han period. *The Arithmetic Classic of the Gnomon and the Circular Paths of Heaven* (*Chou Pei Suan Ching*) is dated before the 3rd century B.C. and contains various modern mathematical principles such as working with fractions using a common denominator, and proofs of many geometrical theories. The text contains an accurate process of division for finding out the square root of numbers. In fact, the Chou Pei presents the oldest known proof of the right-angle triangle theory in the *hsuan-thu* diagram. This theory, commonly known as the “Pythagorean theorem,” shows that the sum of squares of the legs of a right triangle is equal to the square of the hypotenuse or $(Ax^2) + (Bx^2) = (Cx^2)$.

Regardless, it is attributed to Pythagoras and two hundred years later Euclid compiled his “*Elements of Mathematics*” where this particular 47th proposition is found in book One.

This theorem has been called the root of all geometry and the *cornerstone of mathematics*. The practical applications alone are worthy of the high esteem that Masonry affords it. And this is the interpretation of the lecture that is most considered when masons speak of it but the meaning of this hieroglyphically emblem does not stop there.

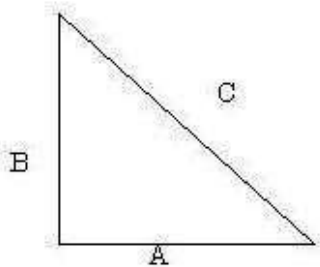
The emblem we are usually presented is the 3,4,5 right triangle in this fashion: the vertical line is of 3 units, the horizontal is of 4 units, and the hypotenuse is of 5 units. Not only is our attention called to this geometrical figure in the Master Mason degree, it is also prominent in the *Scottish Rite* in the 20th

degree- **Master of the Symbolic Lodge** and the 25th degree – **Knight of the Brazen Serpent**.

Geometry treats of the powers and properties of magnitudes in general, where length, breadth, and thickness, are considered, from a point to a line, from a line to a superficies (surface of a body) and from a superficies to a solid.

By this science, the **architect** is enabled to construct his plans, and execute his designs; the **engineer** to mark out ground for encampments; the **geographer** to give us the dimensions of the World, and all things within, to delineate the extent of seas, and specify the divisions of empires, kingdoms and provinces; the **astronomer** is enabled to make his observations, and to fix the duration of times and seasons, years and cycles. In fine, **geometry is the foundation of architecture, and the root of mathematics.**

Many readers may feel like they have been returned to Geometry class. A simple illustration will probably refresh our memories:



$$A^2 + B^2 = C^2$$

The proposition is especially important in architecture. Builders have, since ancient times used this theorem in constructing buildings by a process known as “**squaring a room**”. As theorem states that 3 squared + 4 squared = 5 squared, a builder starts by marking a spot and drawing a line, say **line A**. This line is given the **value of 3**. The builder then marks another point, say point **B** and

draws a line from it at a right angle to line **A**, and it is given the **value of 4**.

The distance between line **A** and **B** is then measured, and if the distance between **A** and **B** is 5, then the room is squared. By inverting the process, a “**squared**” (or rectangle) room can be obtained.

Before the advent of GPS and Laser measuring tools, engineers who tunnel from both sides through a mountain used the 47th proposition to get the two shafts to meet in the center.

The surveyor, who wants to know how high a mountain may be, ascertains the answer through the 47th proposition. **The astronomer** who calculates the distance of the sun, the moon, the planets, and who fixes “**the duration of times and seasons, years, and cycles**”, depends upon the 47th proposition for his results.

The navigator uses the 47th proposition in determining his Latitude, his Longitude, and his true time, land is surveyed, roads run, bridges built, all with the 47th proposition to show the way.

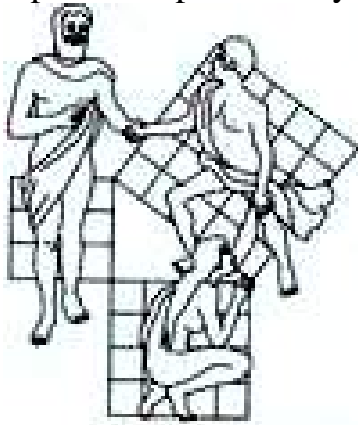
In some Lodges, using this principle, a candidate symbolically “**squares the Lodge**” by being escorted around the Lodge **three times** during the Entered Apprentice ritual, **four times** for a Fellowcraft ritual, and **five times** for a Master Mason ritual, which completed his journey.

The Mystical Symbolism of the Pythagorean Triangle

Earlier in this paper I made reference to the fact that the Egyptians were in possession of the knowledge of the 47th Proposition.

According to **Plutarch (46-120 C.E.)**, the Egyptians attributed the sides of the triangle in this fashion.

The **vertical line** was of 3 units and attributed to **Osiris**. The **horizontal line** was of 4 units and attributed to **Isis**. And the **hypotenuse** was, of course, 5 units and attributed to **Horus**, the son of Osiris and Isis. It is noteworthy that Plutarch studied in the Academy at Athens and was a priest at Apollo's temple at Delphi for 20 years.



In the myth of Osiris and Isis, Osiris is killed which makes Horus **the Son of a Widow** and links him with Hiram!!

The units of the triangle's side are significant. The three units of the **Osiris** vertical have been attributed to the three alchemical principles of **Salt, Sulphur and Mercury**. All things are manifestations of these three principles according to Alchemical doctrine.

The four units of the horizontal line of **Isis** relate to the so-called four elements: **Earth, Air, Water and Fire**. These are of course the four Ancients.

The ascending **Horus** line with its five units represents the five kingdoms: **Mineral, Plant, Animal, Human**, and the **Fifth Kingdom**. This is the Path of Return. The ascending line finally connects back up with the Osirian Line. **The Fifth Kingdom symbolizes the Adept as one who has consciously reunited with the Source of all Being.**

The 47th problem has been referred to as “the foundation of Freemasonry”. Why one of

many possible solutions to a particular geometrical problem should become emblematic of Freemasonry probably has more to it the long standing tradition of Sacred Geometry, but the importance of the symbol is largely unknown.

Noted cabalist **Alan Bennet** speculated that the three squares represented the magical squares of **Saturn, Jupiter, and Mars**. Masonic author Albert Pike, in his *Morals and Dogma* repeats Plutarch's comments and suggests that the triangle represents matter (Isis), spirit (Osiris), and the union of the two (Horus).... And indeed, the sum of the two smaller squares equals the larger.

Pythagoras is credited with the discovery of the **Golden Rectangle**. The Golden Rectangle is built on the “golden ratio” or “golden proportion”, which is determined by the irrational number known as **Phi**.

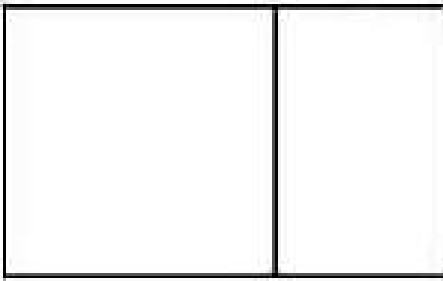
To put it simply, a golden rectangle is a rectangle divided in such a way as to create a square and a smaller rectangle that retains the same proportions as the original rectangle. To do this, one must create a rectangle based on this ratio.

To find the Golden Ratio, one must divide a line so that the ratio of the line to the larger segment is equal to the ratio of the larger segment to the smaller.



A is to B as B is to C

To get a golden rectangle, you simply turn the larger segment of the line into a square.

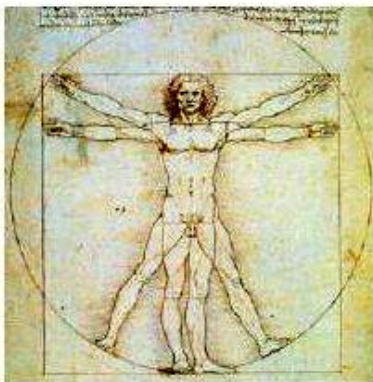


If you add a square to the long side of the “golden rectangle”, you’ll get a larger golden rectangle. If you continue to add squares in this way, you’ll see the basis for nature’s logarithmic spiral patterns.

The golden proportion appears in numerous places in nature and in art and architecture. It forms the basis for Leonardo Da Vinci’s “Divine Proportion,” the ideal illustrated in his drawing *Vitruvian Man*.

The face of the Parthenon in Athens is a perfect golden rectangle. The shell of the nautilus is a famous example of a spiral based on the golden mean, as is the spiral of the human DNA molecule.

Vitruvian Man. Although made famous by Renaissance artist Leonardo Da Vinci, the figure known as the *Vitruvian Man* is actually named for the man who created him, the Roman architect *Vitruvius*, a proponent of the Sacred Geometry of Pythagoras, designed temples based on the proportions of the human body, believing them to be perfect. This perfection, wrote *Vitruvius*, was due to the fact that the extended limbs of a perfectly proportioned human fit into both the circle and the square.



According to Pythagorean tradition, the circle represents the spiritual realm; the square, material existence, so the human body represented the perfect marriage of **Matter and Spirit**, which was reflected in its proportions. Leonardo was one of many artists who attempted to depict *Vitruvius* perfect man, and the only one who succeeded; his version is considered the most accurate depiction of the human body.

From this, one can see that man for many centuries has had some kind of relationship with geometry, especially the ratio **Phi** which equals 1.618. Most ancient buildings have been constructed using this ratio being that which appears most harmonious.

Euclid (about 300BC) in his “*Elements*” calls dividing a line at the 0.6180399 point **dividing a line in the extreme and mean ratio**. This later gave rise to the name **Golden Mean**.

There are no extant records of the Greek architect’s plans for their most famous temples and buildings (such as the Parthenon). So we do not know if they deliberately used the golden section in their architectural plans. The American mathematician Mark Barr used the Greek letter **Phi** to represent the golden ratio, using the initial letter of the Greek *Phidias* who used the golden ratio in his sculptures.

Luca Pacioli (also written as Paccioli) wrote a book called “*De Divina Proportione*” (**The Divine Proportion**) in 1509. It contains drawings made by Leonardo Da Vinci of the 5 Platonic solids. It was probably Leonardo who first called it the **section aurea** (Latin for **the golden section**).

So, in Plato’s *Timaios*, the elements became a shape in the form of the five bodies, also called **Platonic bodies**.

You first see **fire** which forms the primary antithesis with earth. Then we see **air**, without which fire can not exist, and **water** which forms the liquid part of earth, and without which no life could be possible on earth. Then we see the fifth element, which should according to Plato be in the centre of the elements, and which is called the **Quintessens**, or to put it more mathematical; the **dodecahedron**.

The solution is that the dodecahedron was not made public. Also in the middle Ages and Renaissance the knowledge of the dodecahedron, and with it the connection of the pentagram was passed on only to the most prominent architect and his closest colleagues. Furthermore they had discovered that the dodecahedron, through connecting certain edges etc. held in itself all other bodies.

The **dodecahedron** became thus the basis for obtaining all other bodies and was not without reason for Plato, the symbol of **the all all-embracing Universe**.

How then does this golden ratio apply to geometry and how is it formulated?

The Fibonacci series is formed by adding the latest two numbers to get the next one, starting from 0 and 1.

0 1 –the series starts like this.

0+1=1 so the series is now 0 1 1

1+1=2 so the series continues 0 1 1 2 next is

1+2=3 so we now have

0 1 1 2 3 and it continues as follows...

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987,

If we take the ratio of two successive numbers in Fibonacci's series, (1,1,2,3,5,8,13,...) and we divide each by the number before it, we will find the following series of numbers:

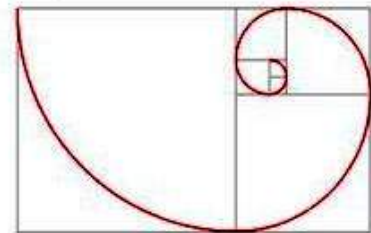
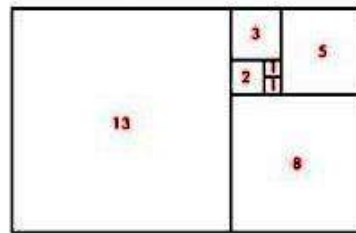
$1/1 = 1, 2/1 = 2, 3/2 = 1.5, 5/3 = 1.666..., 8/5 = 1.6,$

$13/8 = 1.625, 21/13 = 1.61538...$

The ratio seems to be setting down to a particular value, which we call the **golden ratio** or the **golden number**. It has a value of approximately **1.618034**.

The geometric proportions of the pentagram are those of the golden section, *aurio section*: **golden mean**.

The **Fibonacci Rectangle** (or Golden Rectangle) is used to create the **Fibonacci Spiral** which can be seen throughout the natural world.



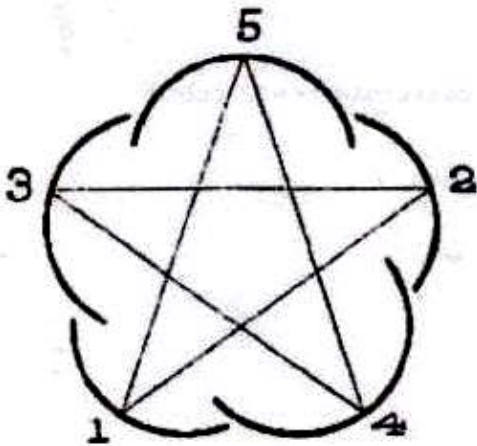
The pentagram was frequently found on potsherds and tablets (which have been dated to as early as **3500 BCE**) in the location of the Kingdom of Uruk (at the mouth of the Tigris-Euphrates valley). The symbol was found accompanying signs relating to the foundation of written language. There is also evidence that the pentagram was used in **ancient Mesopotamia** to indicate the seal of royalty, and power which extends to the four corners of the earth.

The ancients regarded the rose as the symbol of secrecy and silence. The confessionals in old churches have the symbolic rose carved upon them; the vaulted ceiling of the council chamber bears it, and the lodge room of medieval masonry is decorated with it. What occurred there was **sub rosa**, not to be divulged.

The pentagram, so easily seen in the rose, was the secret **shibboleth** of the Pythagoreans; and the Celtic

Druids adorned their priestly robes with it. The Christians considered it even a more powerful sign than the cross for banning the evil one; it is found in many windows of the [fine old Munsters and Cathedrals](#). Could the five pointed star also represents [the five points of fellowship](#)?

Pentagram: from the Greek, “pente”, meaning five and ”gramma”, a letter; the pentagram is a five pointed figure formed by producing the sides of a pentagon both ways to their point of intersection, so as to form a five pointed star. **Pentalpha:** The triple triangle, form the Greek words meaning five and, *alpha*, the letter A.



Anti-masonic Baphomet claim

One of the arguments used by anti-masons to support their claim that Freemasonry is satanic is to refer to the Masonic use of the pentagram. The short answer to this accusation is that the pentagram is not mentioned in any Masonic Ritual or lecture and is not contained within the lessons or teachings of Freemasonry.

True in essence, this response will not satisfy anti-masons who can point to the many books about Freemasonry that include the pentagram, or at least the five-pointed star, in their iconography, and the writings of such spurious, irregular or pseudo Masonic authors

as Count Cagliostro, Eliphas Levi and Aleister Crowley.

Although the pentagram, as a geometric figure, is of interest to freemasons since it is also a representation of the **Golden Ratio** its esoteric significance is only of historical interest.

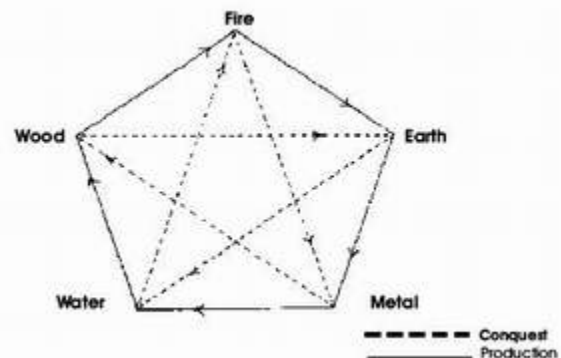
It also isn't satanic. The claims of Levi and Crowley that there is any esoteric significance to the relative position of the star points is demonstrably not based on any observable astronomical event or on any published precedent.

Symbols mean what the users want them to mean- and meanings change. Although **Venus** is termed the bright morning star or Lucifer; and the pentagram is claimed by Levi to represent the **Baphomet**; and the celestial motions of Venus sketch a pentagram in the sky; it does not follow that the pentagram represents Lucifer or that Lucifer equates with the Baphomet.

The Pentagon & the Five Elements.

We can also trace the use of the pentagon to early **Chinese Taoist thinkers**. In 135 BC, Dong Zhongshu identified the order of the five elements in a way quite different from modern Chinese sequence of **Metal, Wood, Water, Fire and Earth**.

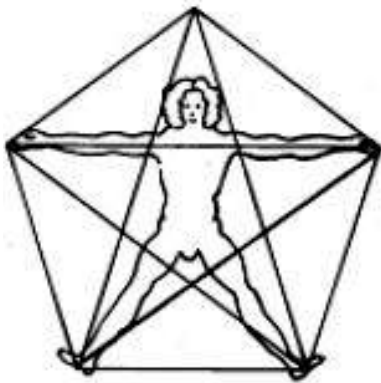
In this order of Mutual Production, Wood produces Fire, Fire produces Earth, Earth produces Metal, Metal produces Water and Water produces Wood.



In the earlier order of Mutual Conquest given by [Zou Yan](#), Wood conquers Earth because Wood is harder than Earth and the roots of a tree can penetrate the Earth; Metal conquers Wood because one can cut Wood with a Metal axe; Fire conquers Metal because it can melt it; Water conquers Fire because it can extinguish it; Earth conquers Water because it can absorb it, and made into a dam, can constrain.

[In Taoist thought, the five elements became associated with every conceivable category possible to classify into fives.](#)

[In the Cathar lexicon of symbols](#), the geometric figure of the five-sided Pentagon and the five-pointed star, are both symbols of consciousness without limit as a pentagon engenders a pentagram, which engenders a pentagon, and so on to infinity. The Pentagram also reproduces the divine proportions of the human body.



In this short article I have tried to show the interrelationship that exists between Freemasonry and Geometry, the relationship of the Golden section, Golden mean, or Golden proportion to geometry and masonry.

This is of course by necessity. Due to the complexity of the subject to cover fully would take many hours of discussion. I do hope however that the subject of this article stimulates the reader to research the subject themselves.

GLOSSARY

Alchemy; a power or process of transforming something common into something special.

Aleister Crowley; was perhaps the most controversial and misunderstood personality to figure in the new era of modern day witchcraft. Known by the popular press of his time as “The Great Beast” and “The Wickedest Man in the World”, Crowley was a powerful magician, poet, prophet and famed occultist. He was also a one-time witch, though most of the elders of the craft would discredit him the title.

In 1899 Crowley is reported to have become a member of one of “Old George Pickingill’s” hereditary covens situated in the New Forrest, although apparently he was not welcome for long.

It is alleged that he obtained his ‘Second Degree’ before being dismissed due to his contemptuous attitude towards women.

Baphomet; is an idol or image of uncertain provenance, depicting a being of heretical worship.

The name first came to public consciousness during the suppression of the Knights Templar.

Cathars; Cathars and Albigensians. ... Also known as the Albigensians, the Cathars were a medieval sect practicing in the Languedoc region of southern France.

Count Cagliostro; was a notorious celebrity of the 18th century. Cagliostro claimed to be a healer and an alchemist. One of his most famous dupes was his marriage to a 14-year-old girl, who he claimed was really 50 but due to his powers had been magically rejuvenated.

Eliphas Levi; is the pseudonym of Alphonse Louis Constant, a French occultist and author whose work greatly influenced many of the early revivalists of the 19th century. His father

sent him to a church in St-Sulpice there to be educated and trained as a priest. While he was there he became intrigued by a lesson received from his headmaster, who during the course of the lesson explained his belief that animal magnetism was a vital energy of the human body

controlled by the "Devil". This sparked his curiosity and surreptitiously he began to study all that he could find out about magic and occult. He was ordained as a priest, and was later thrown out of the church and excommunicated due to his left-wing political views and writings, also because he refused to observe his vows of chastity.

Euclid; 300 B.C. Greek geometer; founded a school in Alexandria; wrote *Stoicheia* (Elements), which remained definitive source of geometrical reasoning and methods until 19th century.

Gnomon; the remainder of a parallelogram after the removal of a similar parallelogram containing one of its corners.

Horus; The Egyptian god of light and the son of Osiris and Isis.

Isis; an Egyptian nature goddess and wife and sister of Osiris.

Plutarch; Greek biographer & moralist; best known for *Parallel Lives*, character studies of

famous Greeks and Romans from age of Theseus and Romulus to his own.

Pythagoras; 500 B.C. Greek philosopher & mathematician; generally credited with theory of functional significance of numbers in the objective world and in music.

Superficies; Surface of a body.

Dong Zhongshu; (born c. 179 BC, Guangchuan, China-died c. 104 BC, China) Confucian scholar. As chief minister to Wudi of the Han dynasty, he dismissed all non-Confucian scholars from government. He established Confucianism as the empire's unifying ideology (136 BC) and set up an imperial college, instrumental in the later establishment of the Chinese civil service. As a philosopher, he made the theory of the interaction between heaven and humanity his central theme. He merged the yin-yang concept with Confucianism and believed that one of the emperor's duties was to preserve the balance of yin and yang. His *Chunqiu fanlu* is one of the most important philosophical works of the Han period.

Zou Yan; (Tsou Yen), who lived around 300 B.C.E. Zou Yan's thought were the wu xing, or "five phases"