

# **Wren's St. Paul's: Axis Mundi of the New Jerusalem**

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## **Abstract**

This paper investigates Sir Christopher Wren's use of geometric symbolism in the design of St. Paul's Cathedral. It also briefly describes the origins of these principles and the ways by which this material came to the attention of Wren's colleagues – and presumably, Wren himself. Further, it is suggested that the use of such principles was consistent with the symbolic intentions for the cathedral acting as London's 'axis mundi'.

## **Keywords**

Axis Mundi, Christian Cabala, Tree of Life, New Jerusalem, Sacred Geometry

## **Introduction**

Following disasters of; plague, civil war and conflagration, London, the governmental and spiritual center of England, began a renovation that promised to establish the ideal Christian City. Christopher Wren, professor of astronomy, Royal Surveyor and founding member of the Royal Society, was uniquely qualified to contribute to these physical and spiritual objectives. His design for the new St. Paul's accomplished this by acting as a traditional 'Axis Mundi'. The design also incorporated geometric ordering principles derived from neo-Platonic/Pythagorean sources, Masonry, Hermetic traditions and the Hebraic Cabala – most specifically in the use of the Sephirotic 'Tree of Life'. All of these traditional sources were actively studied by some of Wren's closest colleagues, most notably Robert Boyle.

## **Axis Mundi**

According to Mircea Eliade in The Sacred and the Profane, "Revelation of a sacred space makes it possible to obtain a fixed point and hence to acquire orientation in the chaos of

homogeneity, to ‘found the world’...”(Eliade, p.23). The establishment of a ‘fixed point’, separate from ‘chaos’ is necessary to ‘founding the world’. Eliade describes the ‘cosmicizing’ function of the fixed point through various examples; European, Scandinavian, Vedic and, in this case, Australian Aboriginal (Arunta tribe), “From the trunk of a gum tree Numbakula fashioned the sacred pole (*kauwa-auwa*) and, after anointing it with blood, climbed it and disappeared into the sky. This pole represents a cosmic axis, for it is around the sacred pole that territory becomes habitable, hence it is transformed into the world. For the pole to be broken denotes catastrophe; it is like ‘the end of the world,’ reversion to chaos.”(Eliade, p.33)[see illus. I.] He continues, “Such a cosmic pillar can be only at the very center of the universe, for the whole of the habitable world extends around it. Here, then, we have a sequence of religious conceptions and cosmological images that are inseparably connected and form a system that may be called the ‘system of the world’ prevalent in traditional societies: (a) a sacred place constitutes a break in the homogeneity of space; (b) this break is symbolized by an opening by which passage from one cosmic region to another is made possible (from heaven to earth and vice versa; from earth to the underworld); (c) communication with heaven is expressed by one or another of certain images, all of which refer to the *axis mundi*: pillar (cf. The *universalis columna*), ladder (cf. Jacob’s ladder), mountain, tree, vine, etc.; (d) around this cosmic axis lies the world (= our world), hence the axis is located ‘in the middle,’ at the ‘navel of the earth’; it is the Center of the World.”(Eliade, p. 37)[see illus. II.]

Following the break with Papal authority, the ‘cosmos’ for the English no longer centered around Rome and St. Peter’s, but London and the old gothic St. Paul’s. Its center spire acted the role of axis mundi for this world, symbolizing the center of London, England, and the universe. Illustrations contemporary with the Gothic edifice show Hermes, the classical ‘messenger of the gods’, floating directly above the center tower, further suggesting the tower’s role in communicating between the realm of the divine and the realm of the earthly. [see illus. III.] Consistent with the definition offered by Eliade above, this axis mundi served as a visual ‘fixed point’, making it possible to ‘acquire orientation in the chaos of homogeneity’. When the spire (pole) was broken (felled in the Great Fire of 1666), it denoted a catastrophe of cosmic proportion. The symbolic connection between heaven/earth/underworld had been severed. For the Arunta in Eliade’s example, “...when the pole was broken, the entire clan were in consternation; they wandered about aimlessly for a time, and finally lay down on the ground together and waited for death to overtake them.” (Eliade, p. 37)

While the Great Fire did not result in mass suicide, it did result in a focussed response to quickly reestablish the ordering symbol of St. Paul’s. The importance of the task was underlined by the King’s involvement in the process, the designs being reviewed by his ministers after royal warrants were issued specifying the nature and intent of the work. Similarly, the speed with which this enormous project was accomplished helps to illustrate the great symbolic importance of this structure to its society. In previous eras, a design and construction project of this magnitude would have spanned several lifetimes (typical of gothic cathedrals, for instance). St. Paul’s was finished (despite several delays in the design process) in 1710, a mere 44 years after the Great Fire. Special taxes were

levied on trade to help fund the St. Paul's project with the cooperation of London's merchants. The willingness by powerful and influential parts of society to make such sacrifices indicates the collective importance of re-forming both physical and spiritual order.

## **London as 'New Jerusalem'**

In his inaugural address as Professor of Astronomy at Gresham College, Wren echoed the belief that London held special astronomical/cosmic importance, "...a City particularly favored by the Celestial Influences, a Pandora, on which each Planet hath contributed something...the Sun looks most benignly on it, for, what City in the World so vastly populous, doth yet enjoy so healthy an Air, so fertile a Soil?" (Wren) His own plan for the reconstruction of the City employed wide thoroughfares radiating from interrelated centers of physical and spiritual importance. Like the others, the radiating patterns from St. Paul's were intended to spread the purifying/ordering influence of the center, much as the Copernican sun spread its purifying influence as rays of light. This plan proposed to establish a new, reformed order out of the medieval labyrinth of narrow, dark alleys and streets. It is a design which had both practical and symbolic intentions, providing 'order' out of 'chaos'.

*In seeking to enact the imperial roles of the British Solomon, Constantine and Christ, the Stuart monarch naturally promoted solar iconography...according to Agrippa, 'Moses' face did shine such that the children of Israel could not behold him by reason of the brightness of his countenance.'* (Hart, p.157)

Wren's solar/apollonian plan was as much a product of the new 'Natural Philosophy' as it was a reconstruction of a fallen order. In a parallel way, England had been in the process of reconstruction/reformation ever since its break with Rome more than a century before. This break necessitated the establishment of a new conduit to divine authority, as the old Papal authority had been denied. As a result, the monarchy took on special importance. No longer was the 'divine right of kings' conferred by the Pope as an intermediary. In contemporary illustrations, King James is shown inspired by divine light [see illus. IV.] and Queen Elizabeth is pictured as 'Cosmic Mother' [see illus. V.] and given a hermetic role in Spenser's 'The Faerie Queen'. Inigo Jones, atop his design for the west façade added to old St. Paul's [see illus. VI.], placed statues of King's James and Charles in lieu of saints, apostles or Christ, indicating the new spiritual status of the monarchy. Contemporary civic rituals include periodic royal processions from palace to cathedral. These rituals established the crown as head of the church, unlike those before the break with Rome in which the monarch was to indicate his/her subservience to the church. The monarch's entrance was primarily a rededication of the church by his/her presence, rather than a rededication of the monarch's civil authority by the church. Inigo Jones also designed theatrical scenery for outside performances. This scenery included framed views of the surrounding city and its landmarks, incorporating them as important parts of the allegorical context of the story. Old St. Paul's is one of these framed landmarks.

The break with papacy also necessitated a remaking of theology. The break signaled not only an end, but also a beginning. It provoked a vigorous series of debates and discussions by the clergy and others on fundamental matters of theology. The generally held view, stated crudely here, was that the old church was corrupt and the current reformation was being undertaken in order to form a more perfected institution, based on purer, more true links to the origins of Christianity. Once this perfected Christian society was established, the implication was that fulfillment of 'The New Jerusalem' was possible.

*The European Platonic Renaissance was thus fused with national magical legend (Albion) and projected first by the Elizabethan and later, more coherently, by the Stuart Court as a vital sign of the status of Britain as God's chosen land, home of the purified faith of Protestantism. (Hart, p.11)*

### **Christian Cabala, Masonry, Hermetic Symbolism**

*In the (1620) sermon written by the king himself, the Bishop of London... proclaimed St. Paul's at the center of a royalist New Jerusalem, for 'Here hath the Lord ordained ...the thrones of David, for judgement: and the charre of Moyses, for instruction;' adding that, 'This Church is your Son indeed, others are but Synagogues, this is your Jerusalem, the mother to them all.' Following the cabalistic themes within this sermon, the influence of a Christian Cabala...could be expected in Jones' subsequent work of the restoration of the seat of David and Moses...In what later became an important Masonic ceremony, William Land led the laying of four foundation stones at the cathedral. (Hart, p.106)*

*...the Christian Cabalist hoped that through such divinely inspired intellectual magic, pre-Christian or otherwise, the conditions on earth for nothing less than the second coming would be created, a necessary prelude to the Apocalypse and final establishment of the heavenly Jerusalem. In reflecting this 'Christianized' cosmology, Hermes was pictured in the pavement of Siena Cathedral and in the frescos painted by Pinturiccio for Pope Alexander VI in the Appartamento Borgia in the Vatican...this figure of 'Mercurius Trismagistus came to personify links between Christian magic and art in the Renaissance. (Hart, pp. 2-3)*

The 15<sup>th</sup> century Florentine Neoplatonist scholars/philosophers Ficino and Pico were highly influential on the 16<sup>th</sup> and 17<sup>th</sup> century English mystics/philosophers. Among their legacies was an introduction of the 'Cabala' as a discipline consistent with Christianity. In fact, for the more liberal English theologians, being of Hebraic origins, it provided a 'pure', uncorrupted instrument for understanding the world, and promised to serve in their attempt to create a more Just, Beautiful and True world in preparation for Christ's second coming – with London as the site of the event.

*Above all, the formation of Fludd's philosophy was religious. It was built upon the wisdom of Moses, which he drew from his interpretation of the Bible...along the way prepared by Ficino and Pico, which therefore included the mainstays, Plato and Hermes Trismagistus...One of Pico's major contributions to the Renaissance Christian*

*Neoplatonist tradition was the addition of the Hebrew mystical tradition known as Cabala. He saw it as a true and deeper interpretation of the Mosaic laws that God gave to Moses, which could only be passed down orally and in secret to worthy initiates.* (Huffmann, W., pp. 101-102)

A combination of esoteric and exoteric associations point to Wren's knowledge of and dedication to such mystical influences as found above. First, he was a staunch royalist at a time when being so could mean one's life. His uncle, the Bishop of Ely was imprisoned in the Tower for 18 years by the Parliamentarians during the Civil War. His father was Dean of Windsor and Registrar of the Order of the Garter. The family was several times compelled to flee to new places of hiding during the Civil War. With such ecclesiastical relatives, Wren was also in direct contact with the central theological discussions of his day and knew well the important symbolic role the monarchy played in them. Second, as a founding member of the Royal Society, dedicated to the promotion of the new 'Natural Philosophy', he was in contact with many peers who saw themselves as intermediaries between traditional world views and the new ways of understanding the world. For instance, several of the members also belonged to the 'Cabala Club' which investigated the Hebraic discipline introduced by the Neoplatonists. Fellow Royal Society member and close associate Robert Boyle, most famous as one of the 'fathers' of modern chemistry, kept many painstakingly prepared notebooks of cabalistic and hermetic studies.

In The Byrom Collection, Joy Hancox documents a collection of diagrams, geometric figures and texts from the 18<sup>th</sup> c. mystical poet and social activist John Byrom. The collection is interesting enough by itself, but in her investigations, Hancox discovered a nearly identical set of documents from a collection belonging to Boyle who died shortly before Byrom was born, suggesting a line of continuity at least spanning the two men's lives. Other evidence suggests earlier origins than Boyle. The collections contain studies of the Platonic solids, various illustrations of the 'sephirotic' 'Tree of Life' of the Cabala, and an image directly linking this 'Tree of Life' with Christian significance,

*Some of Boyle's drawings contained the pattern of the Tree of Life, which also occurs in the Byrom Collection. The most striking of Boyle's cabalistic designs had, superimposed on the Tree, the figure of Christ suspended as if from a cross. Solemn and mysterious, this was the clearest example I had yet seen of the Christian element in the Cabala.* (Hancox, pp. 233-234) [see illus. **VII.**]

Hancox goes on to examine the collection's content in relation to such as; the 'cosmati' mosaic floor in Westminster Abbey [see illus. **VIII.**], the plan of King's College Chapel [see illus. **IX.**], Cambridge (also the subject of a book by Nigel Pennick), the designs for the Elizabethan theatres around London, the design of the Temple Church, the reconstructions of Solomon's Temple and the philosophical/mystical treatises of John Dee, Roger Bacon, the Rosicrucians, the Templars, and Robert Fludd.

There are no currently documented direct links between Wren and this material. However, it would be unlikely that a subject matter so closely studied by one of his

closest associates would have been unknown to him. In addition, Wren was a generally circumspect person. Keeping this knowledge secret would be no more surprising than the fact that he kept the final design of St. Paul's a secret from both King and Bishop until its construction. In addition, neither he, nor his son, Christopher who wrote his biography (*Parentalia*), made any mention of his membership as a mason. Yet, there is a prominent, full-page allegorical illustration [see illus. X.] entitled, 'The Mysteries that here are Shown are only to a Mason known' in the book. In addition, there are several overtly Masonic symbols incorporated into the fabric of St. Paul's.

## **The Tree of Life**

*...after the creation of primal man, Adam Kadmon, the ten sephiroth (those aspects of the hidden God such as knowledge, strength, justice, mercy, etc., which were revealed through the process of emanation) burst from his face in an undifferentiated mass...the lights of the first three sephiroth were contained in bowls, but the lower sephiroth proved too strong and the bowls or vessels shattered...the shards of the shattered vessels fell down and became the dregs of the material world, trapping sparks of light. These sparks were the souls in exile. The work of redemption, or restoration (tikkum), consisted in freeing these sparks from their exiled state and reuniting them with the divine light...souls rise up the ladder of creation, becoming progressively more spiritual until finally freed from the cycle of reincarnation... (Coudert, p. xx)*

Originally written by Lady Anne Conway, a contemporary of Wren, the 'Principles of the Most Ancient and Modern Philosophy' sets out the 17<sup>th</sup> British understanding of the 'sephirotic tree' and its redemptive role for a flawed world. Through study and meditation of the tree [see illus. XI.], the soul may rise up 'the ladder of creation' toward redemption. Similarly, the 'tree' of St. Paul's was intended to be a redemptive instrument for an entire nation. Wren's use of the tree, it is argued here, was esoteric but precise.

The tree's most commonly used form, according to Halevi in his book Kabbalah: Tradition of Hidden Meaning consists of three vertical 'pillars'. [see illus. XII.] The left most is the 'pillar of severity'. It contains three of the ten sephirot, each with their own designated qualities. The right most is the 'pillar of mercy', also containing three sephirot. The central vertical contains the remaining four sephirot. This simple structure then gives rise to an elaborate set of patterns and relationships between the sephirotic qualities which the initiate must study. One such relationship is the central four sephirot acting to justify the left and right – severity and mercy being mediated by beauty. Similarly, in entering Solomon's Temple, one had to pass between the two towers, Joachin and Boas, passing between severity and mercy on the path to divine presence.

## **Wren's Use of the Tree**

According to this author's investigation, Wren seems to have employed the Sephirotic 'Tree of Life' in two ways. One, as a direct ordering device – a kind of 'ghost geometry' which helped to establish the physical dimensions and relationships of the building's

section from crypt to cross (the 'Axis Mundi') and the West Front. Two, as a symbolic rubric by which the fabric is given meaning.

The West Front, similar to Solomon's Temple, is composed of two identical towers flanking the entrance. [see illus. XIII.] They are identical, that is, except for the fact that one (the right) contains a clock and the other a 'blind eye', or oculus. It might seem that this is a mere accident, except that Wren here has duplicated the same device as used by Inigo Jones in the earlier edifice. [see illus. VI.] When the diagram of the tree is superimposed on the façade, this blind eye corresponds to the sephirot of 'Judgement' ('justice is blind'?). Similarly, the right tower's clock aligns with the sephirot denoting 'Wisdom'. Behind this clock/sephirot is the Cathedral's library. An analysis of one of the early versions of the design shows this fit. [see illus. XIV.] Various of the façade's major features align with the structure of a superimposed tree diagram.

The section is a complex fabric which defies simple geometric analysis. Only after several failed attempts did this author attempt to employ the tree diagram in any literal way. The apparent idiosyncrasies of parts and relationships (the angles of the conical drums, the positions of the inner and outer domes' multiple center points, the major vertical positions of levels and openings from the crypt floor to the pinnacle orb as well as the major horizontal modulations) are all rationalized by the tree diagram. [see illus. XV.] It does appear to be the section's 'Mother Diagram'. The basic tree diagram with a superimposed 'extended tree' inside make it possible to reconstruct the section from scratch – a good test of the theory that the tree diagram was at work in the design process. [see illus. XVI.]

## Conclusion

Consistent with his society's need to resurrect itself and the theological/mystical knowledge of his time, Wren employed the geometric instrument of the Christian Cabala, the Sephirotic 'Tree of Life' in his design of St. Paul's. The 'Tree' was intended to serve as a new 'Axis Mundi', reconnecting the realms of underworld (crypt), earth (the Cathedral) and heaven, making it possible for London to 'rise from the ashes' of fire, civil war, and plague. In doing so, it was to become the center of a justified world, helping to fulfill the promise of the New Jerusalem.

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## Illustrations



illus. I (from Cook)



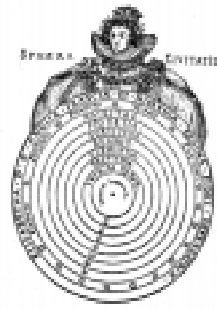
illus. II (from Cook)



illus. III (from Hart, 1994)



IV (from Yates)



V (from Yates)

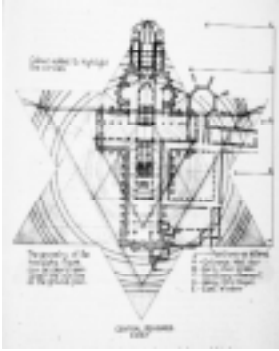


VI (from Hart, 1995)

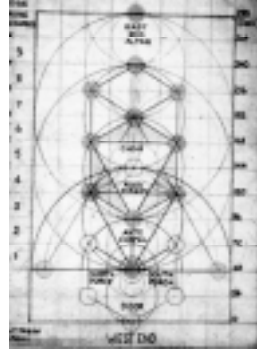


VII (Hancox)





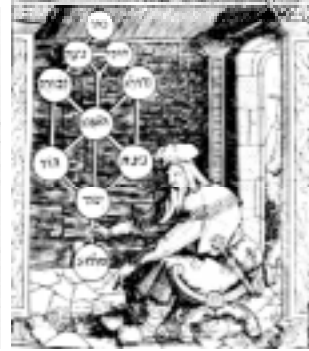
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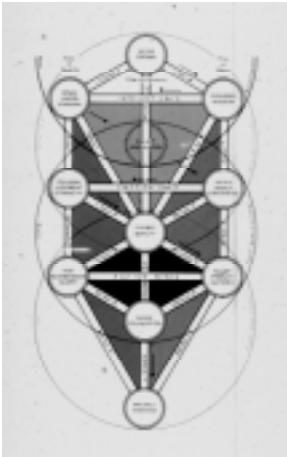
**IX** (from Pennick)



**X** (from Wren)



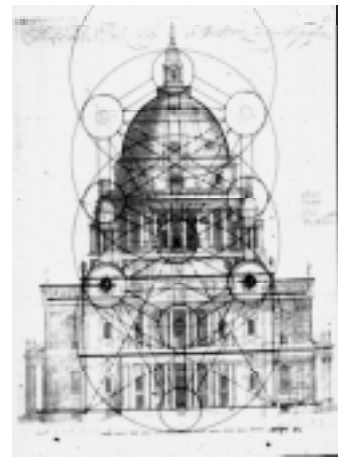
**XI** (from Halevi)



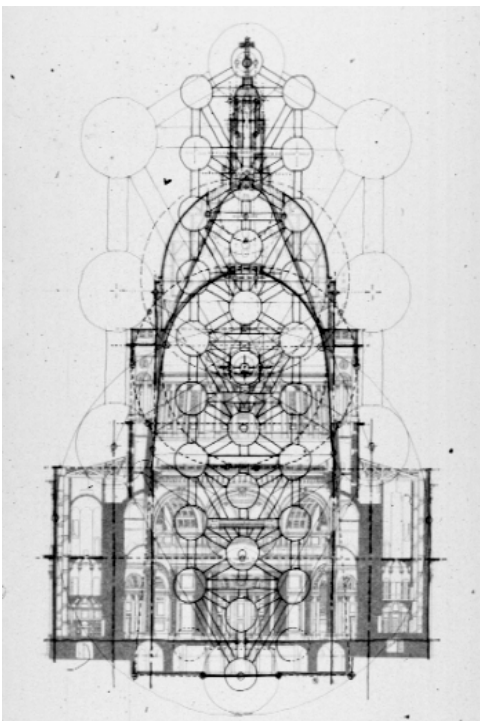
**XII** (from Halevi)



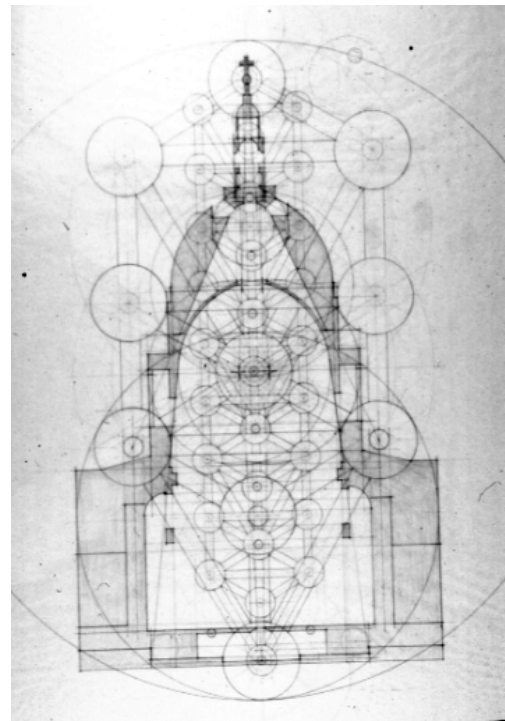
**XIII** (from Fletcher)



**XIV** (by author)



**XV** (by author)



**XVI** (by author)

