## Church Architecture Styles: Italian Renaissance

Fig. 1

By the 14th century the city of Rome had been littered with ancient Roman ruins for at least nine centuries. The knowledge of Roman architectural principles and engineering know-how had begun fading from memory with the collapse of the Western Roman Empire in 476.

It would not be until the 14th century that interest in studying and relearning classical architecture was once again stimulated.

Francesco Petrarca ("Petrarch" in English), d. 1374, was an Italian intellectual and poet and one of the first 'humanists.' [2]

He rediscovered some letters of the ancient philosopher Cicero and it was that discovery that is generally considered the start of the rebirth (renaissance) of classical learning.

Fig. 2 Petrarch

Petrarch was also drawn to ancient Roman civilization by the classical ruins that were everywhere in Rome. The antique buildings, even in their ruined state, inspired him. His contemplation of Cicero's philosophy and his contemplation of the ancient ruins led him to judge Roman civilization as enlightened. Petrarch considered "dark" the time between the period of ancient Rome and the 14th century, as the light of classical learning had been lost during those centuries

Inspired by Petrarch, many Renaissance artists/architects from the 14$^{th}$ through the 16$^{th}$ century went to Rome and traipsed among the classical ruins, sketching, measuring, and trying to rediscover the architectural theories and skills of the ancient Romans. One of these was Leone

Baptista Alberti who, in addition to studying the ruins, studied and promoted the theories of Vitruvius (ca. 80-15 BC), an ancient Roman theorist and architect.

Fig. 3 ( L) A 1684 depiction of Vitruvius presenting his architectural theories to the Roman Emperor Augustus ca. 20 BC. (R) The human proportions of a column and capital.

Vitruvius[3] had taught that architecture should imitate nature by employing the proportions of the human body in determining designs. As a bird builds a nest in proportions based on its use by a bird, so human architecture should be constructed according to human proportions.

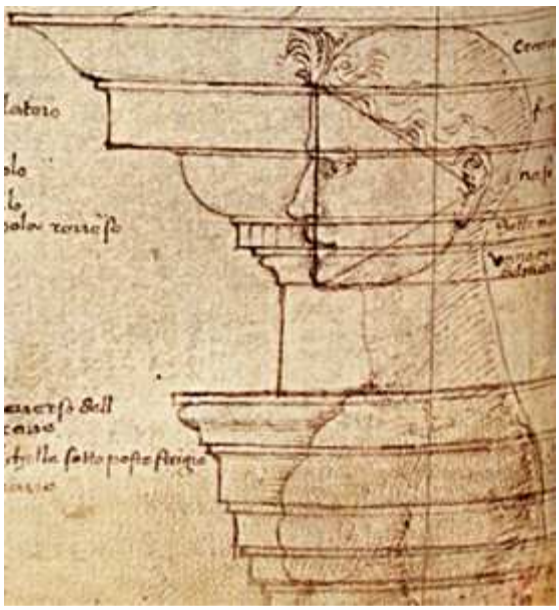

Fig. 4 The proportions of the parts of a classical order determined by the proportions of the face, head, and upper torso of a person.

Vitruvius, in Book III of his treatise *De Architectura*, described the human figure as being the principal source of proportion among the Greek classical orders (Doric, Ionic, Corinthian) of architecture. His thoughts of basing architecture on human proportions was later graphically and famously represented by Leonardo da Vinci in his *Vitruvian Man*: the human body inscribed in a circle and a square which were understood as THE fundamental geometric patterns of the cosmic order.

Fig. 5 Leonard's illustration of *Vitruvian Man.*

With this rediscovered 'truth' in mind, Alberti uttered the condescending term 'Gothic' as a synonym for ‘crude’ in describing the (then) modern French Gothic style, currently popular across Europe. Georgio Vasari, a few years later after Alberti’s quip, referred to the Gothic style as forms to be avoided in architecture, calling them “monstrous and barbarous”. Gothic architecture, to both Alberti and Vasari, was a debased style, one that departed from classical truth and beauty. Both advocated for the use of classical Greek and Roman forms.

How is it that a Roman arch, for example, could be considered more true or beautiful than a Gothic pointed arch?

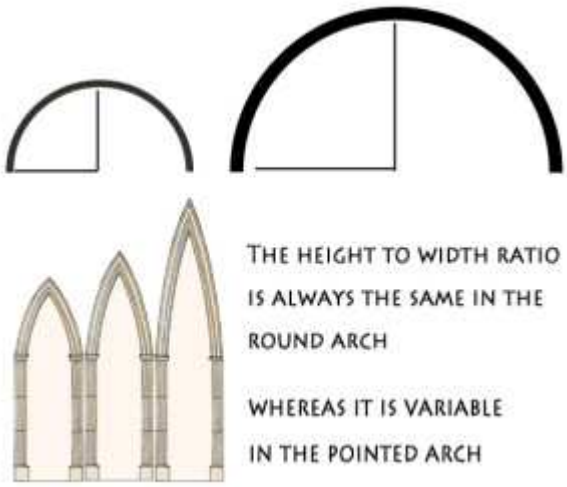


Fig. 6

The round arch is half a circle and the circle is one the fundamental geometric forms of *Vitruvian Man*. In addition, the ratio of half a circle to a whole circle is constant and stable, unchanging, no

matter the size of the circle. The height of a round arch is always one half the span or diameter of a circle. Implicit in the round arch, the reasoning goes, is an underlying sense of cosmic order; a sense of calm, peacefulness, correctness, regularity, perfection --beauty.

The Gothic pointed arch on the other has no inherent, essential order. The proportion of the height of the arch to the width of the span is variable. The peak of the arch could be raised to any height over a span. The result is unpredictable, unsettling, irregular, and suggestive of imperfection, of not being based on any essential, unchanging, stabilizing truth.

Also, the pointed arch, rising in two opposing movements that collide, seems to create a sense of tension whereas the round arch seems to communicate a sense of calm by its smooth continuous curve. Tension is the antithesis of calming truth.

Consider the differences in the possible Christian interpretations of the two kinds of arches. One style of arch, the round arch, suggests the perfection and peacefulness of the redeemed status of man FOLLOWING the Incarnation while the other, the Gothic pointed arch, suggests the unstable, fallen or un-redeemed status of man BEFORE the Incarnation. The Roman round arch would therefore seem to be more appropriate for the Christian church building which, after all, represents the “new Jerusalem”, where sin and death are no more, where stability and peacefulness has been restored.

But, Greek and Roman architecture had been created for a pagan society and used in constructing pagan temples. Was celebrating ancient Greek and Roman architectural expressions a celebration of pagan beliefs? No, it was not. To the Renaissance thinkers, writers, artists and theologians the ancients might have been pagan but in their own way, through rational thinking, had been searching for God, for truth. The truth they discovered on the way --granted to them, after all, by God-- should, finally, be Christianized (or 'baptized', if you will) and used to glorify God.

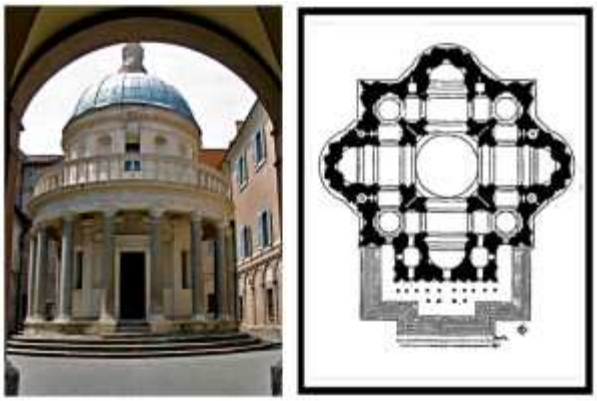

Fig. 7 Circular and square plans --centralized plans, in general-- were very popular with Renaissance architects as the circle and square were believed to be the fundamental geometric patterns of the cosmic order. (L) *The Tempietto*, Rome,1502 by Bramante; (R) Michelangelo's plan for *Saint Peter's Basilica* in Rome.

The Renaissance style of church architecture therefore employs classical Greek and Roman architectural forms and motifs as they were believed to be the most appropriate for Christian churches (as well as all buildings). They were reflective of God's original cosmic order before

the fall of man and were appropriately derived, by human reason, from the proportions of the human body --man being God's most important creation.

Fig. 8 The Italian Renaissance style makes use of antique columns, entablatures, cornices, niches, niches with statues, domes, round arches, temple-like fronts with pediments and tall attached columns or flat pilasters. The decoration in the interior is often restricted to a few contained shapes. A subtle limited palette of colors normally predominates. Pictured here is the interior and exterior of *Il Redentore,* in Venice; Andrea Palladio, begun ca. 1566

Fig. 9 Pazzi Chapel, in Florence, 1429 - ca. 1461; Filippo Brunelleschi

(more)

Fig. 10 *Saint Peter's Basilica*, begun 1506 and completed 1626, was the result of the work of a succession of famous Renaissance artists: Bramante, Raphael, Michelangelo, and Maderno. It was Maderno who designed the facade toward the end of the Italian Renaissance. The Baroque artist Bernini would eventually complete the complex with his key shaped piazza and colonnaded walk ways (not shown here).

The Renaissance style that developed from this philosophy was used by a variety of patrons for a variety of purposes. Institutions, including the Church, used the association with ancient Rome to enhance their claim to authority. Wealthy individuals and families used the style in designing their palaces and villas -- even churches they sponsored-- so as to present themselves as educated. Merchants and cities wore the style as a badge of success.

One of Leone Baptista Alberti's first architectural works was the rebuilding of an old church belonging to the tyrant of Rimini, Sigismondo Malatesta . Sigismondo intended the rebuilding of the church more as a memorial to himself and his family than as any symbol of rendering glory to God. In solving the usual problem of designing a facade for a basilica, Alberti seized upon the triumphal arch design used by ancient Rome to honor victorious generals. It seemed appropriate in a church bent on honoring a secular ruler more than God. The lower level of new facade of the church therefore resembles a three portal triumphal arch. (What we see today of the rebuilt church is actually only a fragment of Alberti's design.)

Fig. 11 Alberti's design for the rebuilding of Sigismondo's church in Rimini. *Tempio Malatestiano*, ca. 1450

Fig. 12 Alberti's design for the facade of *San Andrea* (15th c.) in Mantua. Note the play on the classical triumphal arch theme (what amounts to three triumphal arches!) in the bottom zone and a classical temple pediment above. The barrel vaults, multi-story classical order pilasters, heavy cornices and niches are all characteristics of Italian Renaissance church architecture.

Fig. 13 Ancient Roman structures like these inspired Alberti's work.

(more)

Fig. 14 The interior of Alberti's *San Andrea* with classical barrel vaults, dome and giant pilasters.

The Italian Renaissance style, like the French Gothic style, underwent numerous adaptations when it encountered local traditions in building. It even meshed with aspects of the Gothic in some places.

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[1] Romanesque style builders had returned to the idea of masonry Roman vaulting but little else that we would consider Roman. Even in that their efforts had been tentative, not really understanding Roman engineering techniques.

[2] Humanism is a philosophical and ethical stance that emphasizes the value and agency of human beings, individually and collectively, and generally prefers critical thinking and evidence (rationalism, empiricism) over established doctrine or faith (fideism). [http://en.wikipedia.org/wiki/Humanism]

[3] His book *De architectura* was rediscovered in 1414 by the Florentine humanist Poggio Bracciolini. To Leon Battista Alberti (1404–1472) falls the honor of making this work widely known in his seminal treatise on architecture *De re aedificatoria* (c. 1450) [http://en.wikipedia.org/wiki/Vitruvius]

**Photo Credits:** Fig. 3 (L) By Sebastian Le Clerc [Public domain], via Wikimedia Commons, http://en.wikipedia.org/wiki/Vitruvius (R) Public domain. Fig. 4 Scanned from Trattato di architettura di Francesco di Giorgio Martini by Francesco di Giorgio, http://leonardodavinci.stanford.edu/submissions/clabaugh/history/architecture.html. Fig. 5 Leonardo da Vinci [Public domain], via Wikimedia Commons, http://en.wikipedia.org/wiki/Vitruvian_Man. Fig. 6 Bernard Dick. Fig. 7 (L)By Space Odissey (Flickr) [CC-BY-2.0 (http://creativecommons.org/licenses/by/2.0)], via Wikimedia Commons, http://en.wikipedia.org/wiki/San_Pietro_in_Montorio (R) Michelangelo's plan, Léon Palustre [Public domain], via Wikimedia. Fig. 8 (L) Interior of Il Redentore, Venice.<br>From English Wikipedia. Photo taken by Necrothesp, 13 May 2004 {{GFDL}} (R) By Il_Redentore.jpg: Wknight94 derivative work: Alberto Fernandez Fernandez (Il_Redentore.jpg) [CC-BY-SA-3.0 (http://creativecommons.org/licenses/by-sa/3.0)], via Wikimedia Commons. Fig. 9 By Gryffindor [GFDL (http://www.gnu.org/copyleft/fdl.html) or CC-BY-SA-3.0-2.5-2.0-1.0 (http://creativecommons.org/licenses/by-sa/3.0)], via Wikimedia Commons Interior of the Pazzi Chapel. Fig. 10 Maderno's façade, with the statues of Sts Peter (left) & Paul (right) flanking the entrance stairs By Jean-Pol GRANDMONT (Own work) [CC-BY-SA-3.0 (http://creativecommons.org/licenses/by-sa/3.0) or GFDL

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