

# Branding Identity in Architecture: Christian Churches of Ancient Russia, Hindu Temples of India, and Company Offices of the 21st Century

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**Abstract**—The systemic understanding of creation of architectural and environmental facilities with the corporate identity of a particular brand is a relevant issue of the Russian modern architectural education. Further and advanced training programmes have been developed and implemented in two structural subdivisions of the Moscow Institute of Architecture (State Academy): the Faculty of Specialized Training (FST, MARCHI) and the Higher School of Environmental Design (HSED, MARCHI). Students learn the basics of creation of branding identity: understanding of target audiences and their preferences, the psychology of products or services offered, the brand’s mission, basics of symbolism and subconscious perception of colour and plastic elements by the audience, as well as the unified principles of construction of architectural and environmental spaces to visualize the ideology based on historic examples: the building of Hindu temples represents the energy body of the lying Purusha, and its structural parts represent mandalas in the form of ideal chakras; Christian churches and cathedrals of Ancient Russia (10-15th centuries) were built as the material shell around “The Life Giving Pillar” and represent in the plans geometric layouts of theological concepts of Trinity and Heaven on the Earth; architectural solutions of the 21st century (buildings of such major brands, as Adidas, Nike, Apple, Greenpeace, Coca-Cola) visualize the brand’s mission by using the shapes of the products and branded elements. That is, MARCHI’s educational programmes show the expanded historical perspective of creating spatial planning and colour solutions based on the customer’s philosophy, choosing building and finishing materials, creating branded elements for the decoration of facades and interiors.

**Keywords**—*brand identity; philosophy; branding; design; architecture; symbolism; Christian church; “The Life Giving Pillar”; the quadrature of circle; Hindu temple; Orthodox cathedral*

## I. INTRODUCTION

The systemic understanding of creation of architectural and environmental facilities with the corporate identity of a particular brand is a relevant issue of the Russian modern architectural education. Since branding means the promotion and popularization of a particular company or community

that offers any services, goods, knowledge to people, the architect’s task is to create the space that tells the audience about the customer’s ideas to the fullest extent possible on the conscious and subconscious level. The programmes implemented in two structural subdivisions of the Moscow Institute of Architecture (State Academy) — Higher School of Environmental Design and the Faculty of Specialized Training — show the students the expanded historical perspective of formation of architectural facilities that reflect the brand philosophy. For this purpose, religious buildings, such as Christian churches of Ancient Russia and Hindu temples, are studied and analyzed.

## II. CHRISTIAN CHURCHES OF ANCIENT RUSSIA

According to the study conducted by Marina E. Vengerova, the architect, chief specialist and lecturer of the Higher School of Environmental Design of MARCHI, at the Department of History and Theory of Architecture and Urban Planning within her PhD thesis, *Geometric Proportioning of Ancient Russian Churches of 10-15th Centuries from 2012<sup>1</sup> to 2019*, the unified principle of

<sup>1</sup> For the first time, the results of the research work of Marina Vengerova were presented to the general public under the exhibition project “Visible World” and “Invisible World” in Paintings of Anna Kozlova-Messerer, Aleksandr Messerer and in Scientific Research of Marina Vengerova”, which was held in Moscow in Pokrovskie Vorota Cultural Centre from April 19, 2012 to May 20, 2012. Available at: <https://www.pencioner.ru/news/chto-gde-i-kogda/besplatnyy-dosug-iz-mayskoy-afishi-pokrovskikh-vorot/>. Later, it became a travelling project and included two more exhibitions, in particular, in the Federal State Budgetary Institution of Culture “Kirillo-Belozersky Historical, Architectural and Art Museum-Reserve” in August-September 2014. Since February 2013, new materials of the research work, *Geometric Proportioning of Ancient Russian Churches of the 10-15th Centuries* have been annually presented at exhibitions conducted by the Higher School of Environmental Design, MARCHI, Moscow Architectural Institute (State Academy), Moscow. The results of the research work were presented at the competition, *The Image of an Orthodox Church in a Modern Architectural Solution* organized by the Union of Architects of Russia and the Union of Charitable Organizations of Russia in the Central House of the Architect in Moscow in September-December 2013. Since October 17, 2016, Marina Vengerova has been attached to the Moscow Architectural Institute (State Academy) to prepare the PhD thesis. About thirty materials were published on the basis of the thesis, *Geometric Proportioning of Ancient Russian*

proportioning architectural forms were first identified in Ancient Russian churches of the 10-15th centuries [1], [2], [3]. The centre of the church building is “The Life Giving Pillar”, the place of the Ascension of the Saviour in front of the Holy Gates to the altar located in the centre of cross-dome church spatial structures – in the cross centre under the central dome (“Fig. 1”). This is a place for meeting with God, they say, “He will come back in the same way you saw him go” (Acts 1:11). Chronicles contain the evidence of a special empirical choice of the place for churches and dimensions. Thus, Robert Ousterhout described the pillar ascetic Lazarus of Galicia (11th century) who pointed out the location of the future building with his right hand, and Saint Nikon (10th century) who walked in procession through Sparta with prayers searching for the place for the church of Saint Photinus and laid three stones in the place indicated by God [4]. Ancient Russian chronicles also tell many stories about the heaven signs given to the saints to indicate the place for church construction. In the Old Testament, the Divine “pillar” called fire or cloudy, which specifies its immaterial nature, was seen at the entrance to the Tabernacle (Deut. 31:15). Besides, there are fifteen indications of the similar pillar in the Bible<sup>2</sup> (Ex. 13:21, 13:22, 14:19, 14:24, 33:09, 33:10; Num. 12:5, 14:14; Neh. 9:12, 9:19; Ps. 98:7; Wis. 18:3; Sir. 24:4; 2 Esdr 1:14; Rev. 10:1) [5]. The Ancient Russian iconography shows us the image of the inner spirit of the three-nave Christian church in the form of a hollow tower covered with airy translucent fabrics as three zakomars. This can be seen on the mark of “The Transfer of the Relics of the Holy Passion-Bearers Boris and Gleb” icon of the 14th century, which is stored in the State Tretyakov Gallery in Moscow (part A of “Fig. 1”). “Oration 20. On the Ordination of Bishops and the Dogma of the Holy Trinity” by Gregory the Theologian (4th century) describes the Holy Trinity as the river flowing from the heaven as the image of the Father and divided into two equal arms on the earth as the image of the Son and the Holy Spirit.

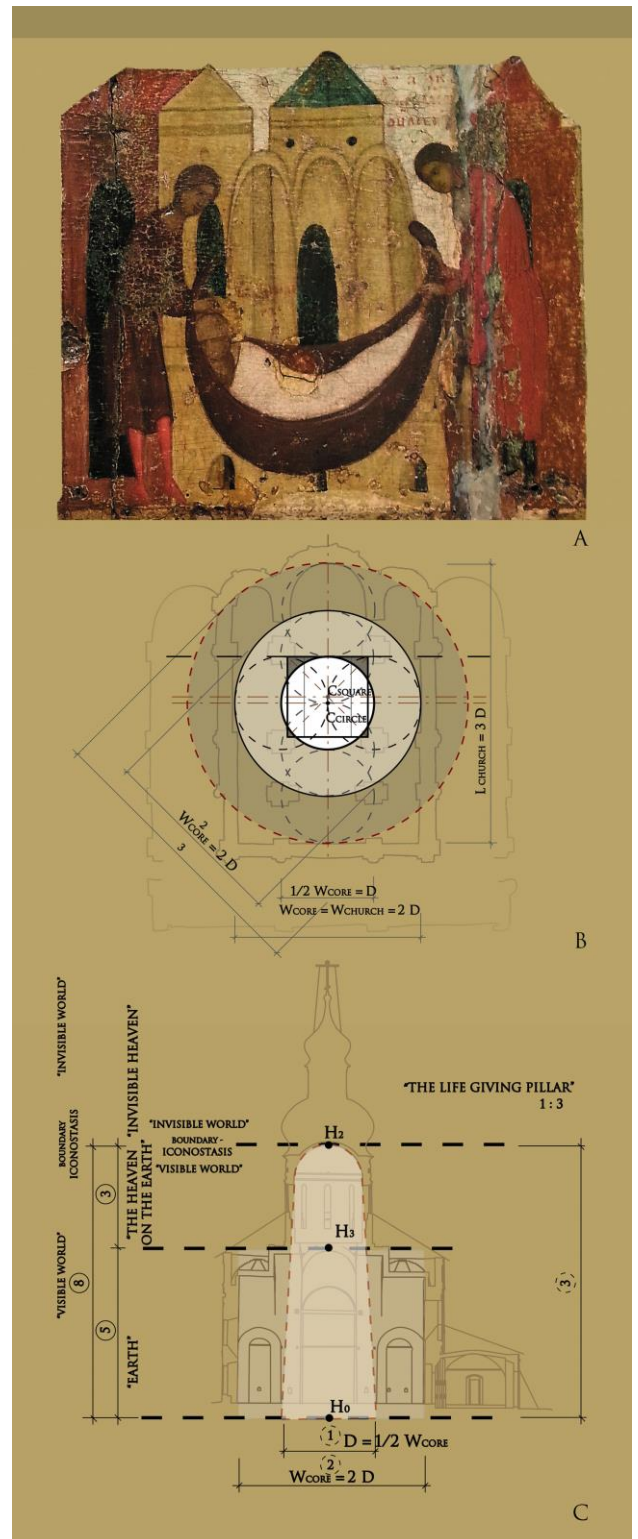


Fig. 1. Image of “The Life Giving Pillar” in Ancient Russian icon painting and architecture.

<sup>a</sup> fragment of the icon “Lives of Saints Boris and Gleb”, the Fourteenth century, the State Tretyakov Gallery, Moscow;

<sup>b</sup> plan of the Cathedral of St. Boris and St. Gleb on the Smyadyn Hill near Smolensk, 1145;

<sup>c</sup> cross section of the Cathedral of the Assumption of the Blessed Virgin Mary of the Kirillo-Belozersky Monastery, 1497.

Churches of the 10-15th Centuries. The research results were presented at more than ten scientific conferences, twenty exhibitions and competitions. More than twenty public lectures were given, including in the Union of Moscow Architects, the Central House of the Architect, Moscow, on December 3, 2013, and in the Friends Society of the State Historical Museum, Moscow, on February 13, 2014.

<sup>2</sup> See details on the Divine Pillar described in ancient Russian chronicles and the Bible in the study: [6].

Gregory the Theologian writes that this can explain the unity of the Holy Trinity, i.e., it is actually single, but at the same time it has three hypostases (faces). The saint also emphasizes that mathematics cannot be used to describe the theological image of the undivided Trinity: the Father, the Son and the Holy Spirit. If we can add, as in arithmetic, we can divide, but the Holy Trinity is undivided, although it has three hypostases (faces). So, to describe the God's eternity

and perfection, Gregory the Theologian proposes to use geometry with the circle as an uncountable figure. It is impossible to calculate its area, and God is also uncountable. These very basic concepts formed the basis of the study conducted by Marina Vengerova with regard to the unified principle of proportioning Ancient Russian churches of the 10-15th centuries.

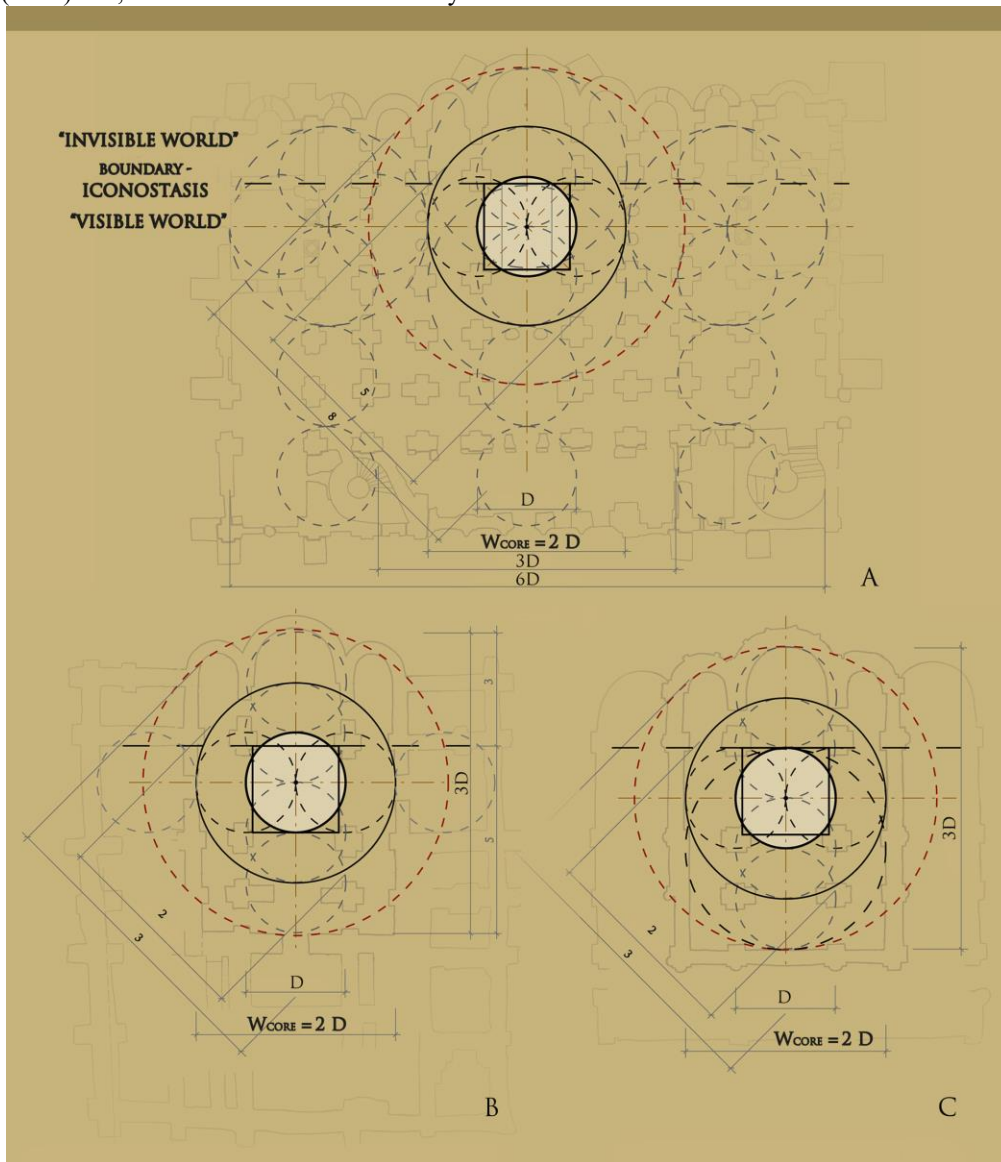


Fig. 2. Analysis of geometric construction relative to the horizontal section of "The Life Giving Pillar": dome square, core width and dimensions of churches, apsidal fillets in the plans of Ancient Russian churches (10–12th centuries).

If we imagine the river as the essence of the Trinity, as described by Gregory the Theologian in geometric figures, we get three equal circles, since all three hypostases in the Holy Trinity are equal and bundled in such a way that the central circle is in the middle as the horizontal projection of the river flowing from the heaven, and two circles which

<sup>a.</sup> the Saint Sophia's Cathedral in Kiev (1037);  
<sup>b.</sup> the Church of the Tithes (Church of the Dormition of the Virgin) in Kiev (989–996);  
<sup>c.</sup> plan of the Cathedral of St. Boris and St. Gleb on the Smyadyn Hill near Smolensk, 1145.  
 point of contact is the center of the median circle, are horizontal projections of two arms of the same river, i.e. symbols of the Son and the Holy Spirit. The same geometric layout in North-South axes passing through the center of the dome square was identified during the geometric analysis of

proportioning of three central naves in the interior of Ancient

Russian Churches of the 10-15th centuries.

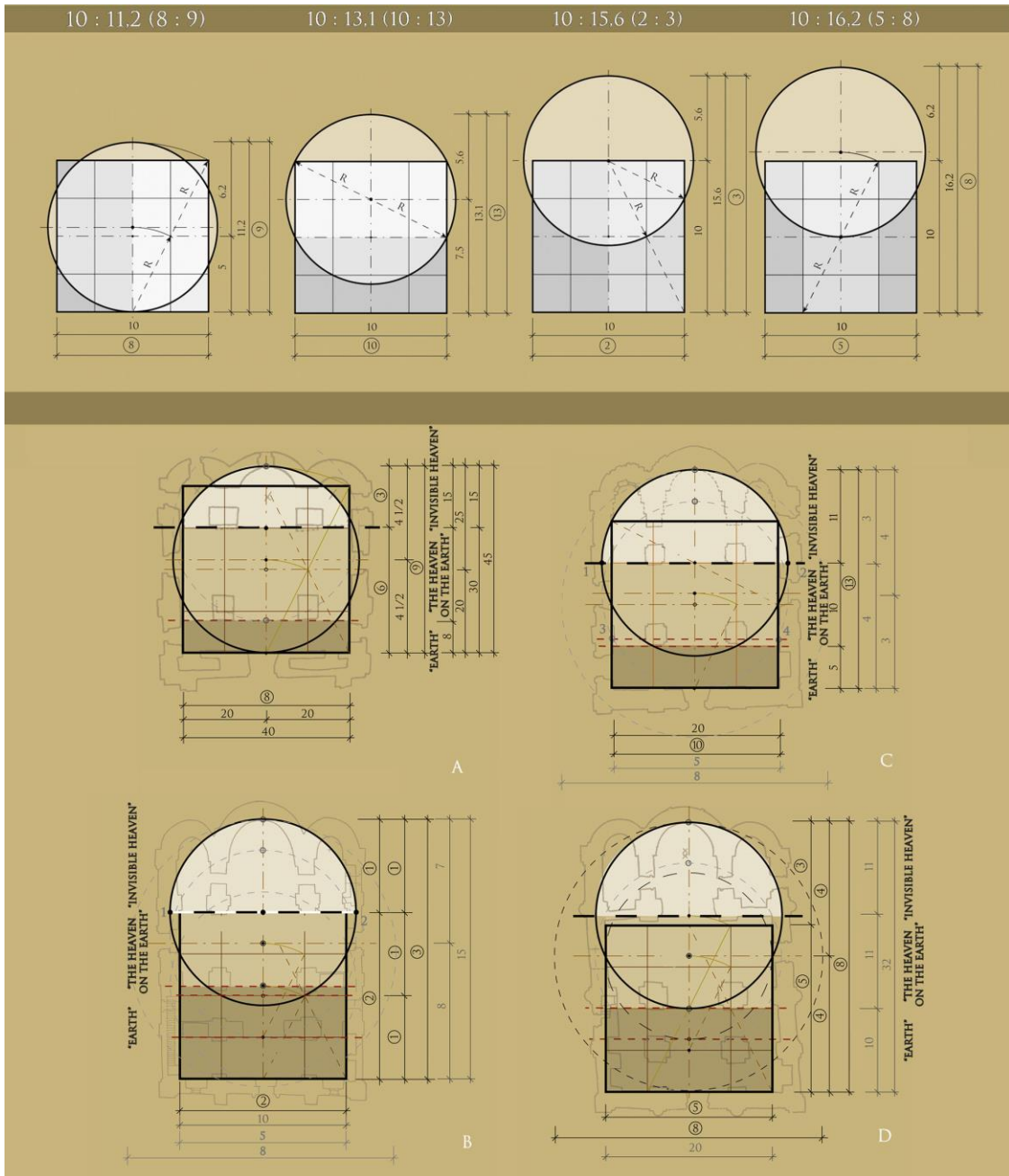


Fig. 3. Geometrical problem of the “Circle of square” in the construction of overall internal proportions of symbolic zones in the plans of Ancient Russian churches.

- a. the St. George’s Church in the selo of Staraya Ladoga (the mid-Twelfth century);
- b. the St. George’s Church in Vladimir (1152);
- c. the Cathedral of St. Cyril’s Monastery in Kiev (the mid-Twelfth century);
- d. the St. George’s Cathedral of the Yuriev Monastery in Kanev (1144).

The area of the central circle is equal to the area of the dome square, and the internal width of three central naves is equal to two diameters of this circle in ¾ ancient Russian churches of the study period (see "Fig. 2"). In the remaining ¼ churches of the 11-15th centuries, the diameter of each of the circles is equal to the diagonal of the dome square. Thus, we see “The Life Giving Pillar” in the interior of Ancient

Russian churches of the 10-15th centuries, which is divided into two more circles on the earth, visualized by light from the drum windows at daytime and light of chandeliers at night, as reflected in geometric proportions like the story about ideology of customers, i.e. Christians.

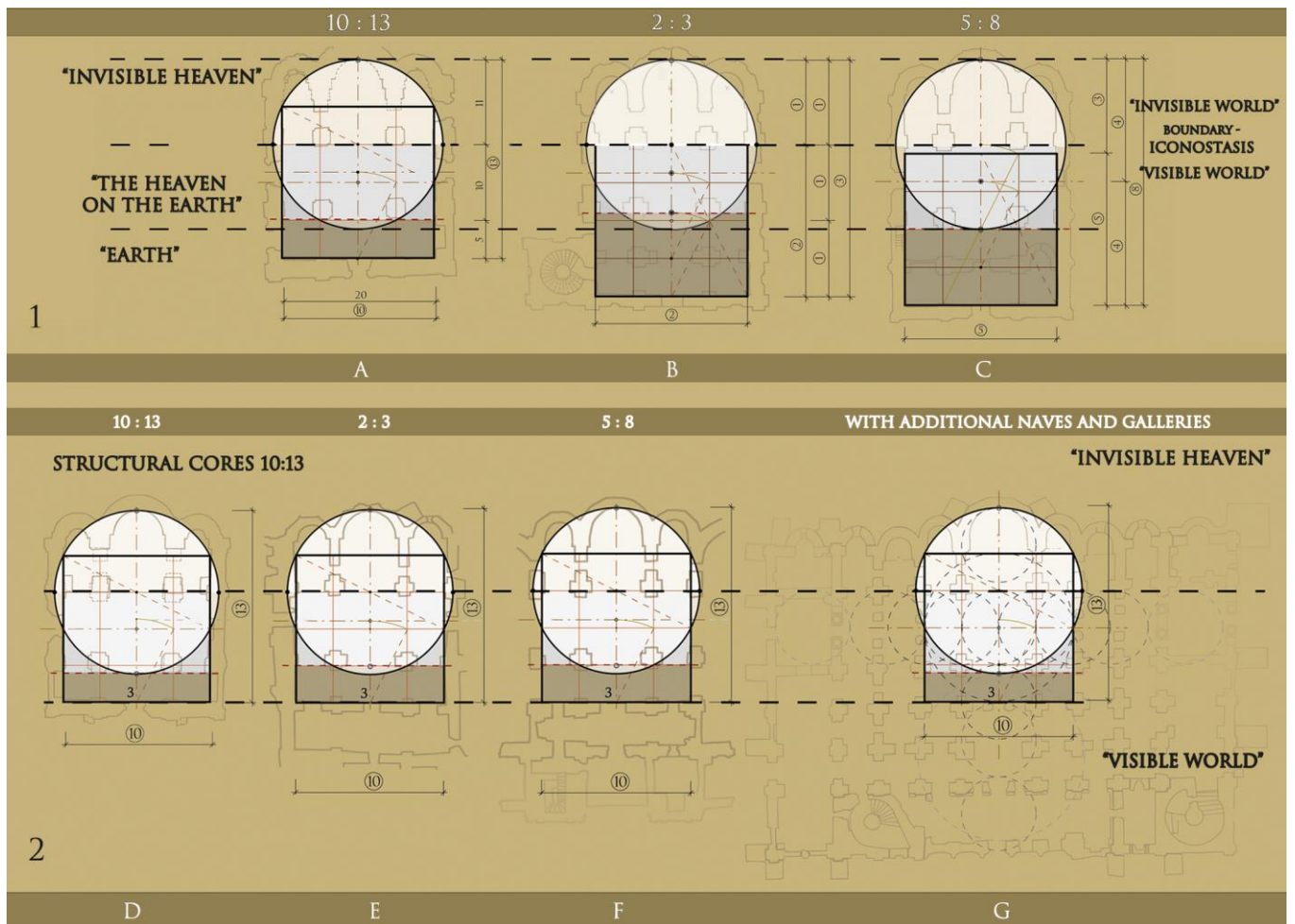


Fig. 4. Geometric analysis of the interior proportioning of three-nave and multi-nave cathedrals with vestibules with the structural core (ancient Russian churches of the 10-15th centuries) revealing the origin of symbolic spaces proportions of the “visible world” and “invisible world”.

- 1) Geometric analysis of the interior proportioning of three-nave churches with common overall internal proportions of 10:13, 2:3, 5:8, through the problem of “quadrature of circle” with the space behind the altar built as half the circle — the “invisible heaven”:
  - A) the St. George’s Church in Vladimir (1152);
  - B) the St. George’s Cathedral of the Yuriev Monastery in Novgorod (1119);
  - C) the Cathedral of the Assumption of the Blessed Virgin Mary of the Eletsy Monastery in Chernigov (the early Twelfth century);
- 2) Geometric analysis of the structural core of the church with the interior width-to-length ratio of 10:13 in the plans of three-nave and multi-nave ancient Russian churches:
  - D) the Church of Sts. Boris and Gleb in Kideksha (1152);
  - E) Cathedral of the Assumption of the Blessed Virgin Mary of Kiev Pechersk Lavra (1073–1078);
  - F) St. Michael’s Golden-Domed Monastery in Kiev (1060’s);
  - G) The Saint Sophia’s Cathedral in Kiev (1037).

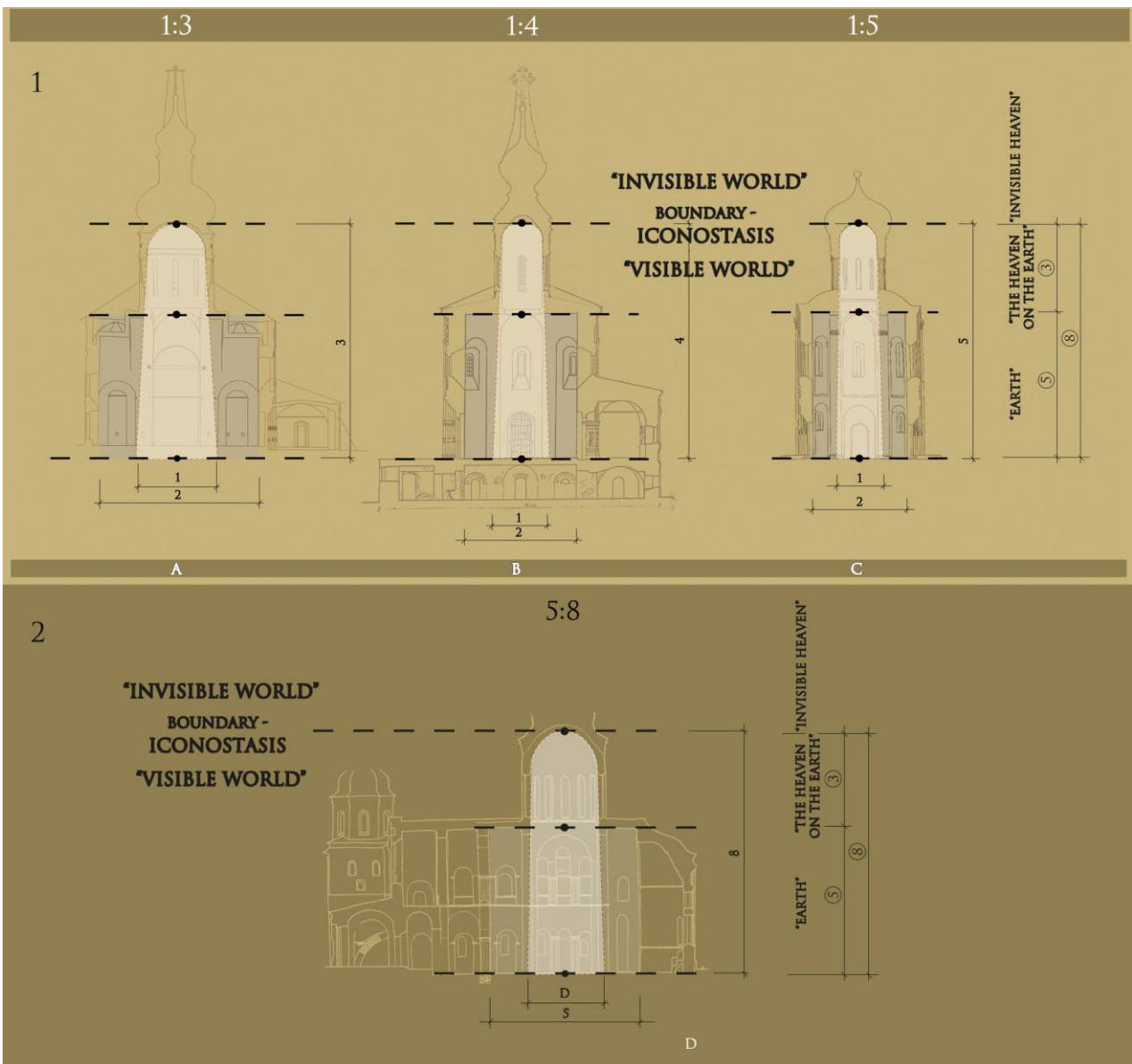


Fig. 5. Analysis of geometric construction of the overall height to the central point of the vault of the central dome in the interior of Ancient Russian churches (11-15th centuries).

- 1) Analysis of height proportioning relative to the horizontal section of “The Life Giving Pillar” equal to the half the inner width of three central naves with the ratio of 1:3, 1:4, 1:5 in North-South axes in Ancient Russian churches of the 12-15th centuries:
- A) the Cathedral of the Assumption of the Blessed Virgin Mary of the Kirillo-Belozersky Monastery, 1497,
- B) the Church of the Deposition of the Robe in the Moscow Kremlin (1484–1485),
- C) The Church of the Intercession of the Holy Virgin on the Nerl River (1165–1167);
- 2) Analysis of height proportioning relative to the side of the temple square equal to the inner width of

three central naves with the ratio of 5:8, as well as the main symbolic height divisions in Eastern-West axes:

- D) The Saint Sophia’s Cathedral in Kiev (1037).

In addition to the geometrical record of the Holy Trinity in the width of three central naves, the record of the geometrical problem of “quadrature of circle” is also observed in the central dome square, as the theological words in The Divine Liturgy of Saint John Chrysostom, Archbishop of Constantinople (4-5th centuries): “The whole earth is full of his glory!”. This proves that the figures have an equal area. The Will is also mentioned in the Lord’s Prayer Our Father in which Christ addresses his Father, “...Thy will be done on earth as it is in heaven”. The Son came to earth to give people an eternal life, as evidenced by geometric figures of the square as the image of the earth and the circle as the symbol of heaven. The second record in the dome square,

typical of  $\frac{1}{4}$  churches, also tells the story about the transformation of the mortal life into eternal, through square rotation around its center till the formation of the geometric figure of the octagon — the symbol of the eighth day, eternity.

The internal dimensions of three-nave churches also prove the use of the “quadrature of circle”. Simple solutions to the problem are overall proportions of 8:9, 10:13, 2:3, 5:8, most typical of ancient Russian churches of the 10-15th centuries (“Fig. 3” and part 1 of “Fig. 4”). According to R. Ousterhout, Hans Buchwald was the first who suggested that simple types of quadrature to be used in the dimensions of the Middle Byzantine churches [7]. Our study is based on the assumptions of H. Buchwald, which were confirmed [8].

A structural core can be identified in the centre of multi-nave cathedrals. It represents a nine-celled simple type of the Middle Byzantine church with proportions of 10:13, which is also constructed with the square and circle equal in area (part 2 of “Fig. 4”). The inner width of multi-nave cathedrals is a multiple of the whole number of diameters of the horizontal section of “The Life Giving Pillar” [9].

The height to the central point of the vault of the central dome is also a multiple of the whole number of diameters of “The Life Giving Pillar” in symbolic proportions: 1:3, 1:4, 1:5, or was proportioned relative to the temple’s square side equal to the inner width of three central naves in the proportion of 5:8 [10] (“Fig. 5”).

Geometric analysis of other common proportions of three-nave churches, such as 10:14, 10:15, 10:12, showed that temples were built as a practical modification of the original layout of the “quadrature of circle” in proportions of 10:13: one of the symbolic zones of the “visible world” from the western wall to the iconostasis or the “invisible world” behind the iconostasis in the altar is enlarged or reduced, depending on the need for large spaces or the desire to emphasize the pillar structure of the building. Besides, other geometrical solutions to the problem of the “quadrature of circle” could apply, which resulted in the interior width-to-length ratio of 20:21 or 2:3.

So, the “Branding Identity in Architecture” course and architectural design show the students the application of a single philosophical principle of space organization in the Ancient Russian church architecture during five centuries, indicating places for meeting with God with architectural monuments used by believers for prayers and sacraments.

### III. ANCIENT INDIAN TEMPLES

The philosophical understanding of the world order is also reflected in Hindu temples of ancient India, for example, in the complexes (6–9th centuries) located in the valley near Ellora village in India. Thus, temples were built as an image of the lying Purusha, the first “spirit”, the “light” present consciousness, therefore not anthropomorphic elements, but the energy “frame” of a human, as imagined by Hindus (a set of 7 successive human chakras) were used in exterior forms [11], [12]. The main chakras that ensure maximum enlightenment are two chakras in the head area, and the point

of their contact forms the main dominant of the architectural structure, which tells about the perfection of nirvana accessed with the help of mantras and meditations. Believers visualize it as symmetric complex volumes, the image of ideal energy transforming the body to geometrized mandalas.

Successive passage starts from the sexual chakra represented by the entrance to the temple, therefore the lower part of the building was often covered with scenes from the Kama Sutra, revealing the human’s clearest feelings as the first invisible elements on the path to perception of intangible God. Abstract forms are used in the upper parts of the building, which represent symmetrical structures in plan — the path from material to spiritual like from human shapes to abstract energies. Then passing the hall through the “solar plexus”, i.e. the “abdomen”, visitors enter the widest dance hall marked by bloomed fractal on top of the roof (the heart chakra), and then move to the last hall in the temple with the low ceiling, but marked by a high dominant of the whole complex on the facade — a tower symbolizing visitors’ eyes fastened on the “heaven”. This tower is like a connection of the third eye’s chakra and the “upper” chakra, responsible for space connection, which helps a human being learn the truth.

Later Hindu temples had a courtyard around with gates as the image of the Purusha’s feet. Architectural forms of the entrance elements also show perfect symmetrical geometric patterns, visualizing not the human body but Purusha’s conscience. In addition to the main interpretation, a human being has twelve energy channels passing through the whole body, including several channels in the legs. Therefore, the complex of the Hindu temple is an image of structurally perfect energies passing through the whole body of mythological First-Man.

So, the students are shown that the “invisible world” is visualized in religious buildings, both in Christianity (Ancient Russian temples of the 10-15th centuries) and Hinduism (temples of the 6-9th centuries). It is inaccessible to the human being and can only be seen by dedicated people of each faith with their inner spirit. They can feel the God’s presence, which is subsequently visualized by architects in geometric forms that are rarely found in the material world to emphasize their difference.

### IV. BRANDING IDENTITY IN THE ARCHITECTURE OF THE 21ST CENTURY

Students are then offered to find out what was used by brand creators to promote their mission, which means the corporate identity philosophy. If the main entity in religion is God, the trade is based on products or services offered to the consumer. Therefore, the main objects or elements in each architectural structure designed for a particular company are its distinctive features as of entry into the market.

The famous Duck shop built by farmer Martin Maurer in Riverhead in 1931, now located in a different place (Long Island, New York), expressly visualizes the products offered: eggs and duck meat. Plans of the Nike’s running track in Manila (2016) show the image of the trainers’ print. Facade solutions of the main entrances to Adidas offices or stores, for example, in Amsterdam, by architect Hollandse Nieuwe

(2008); Sao Paulo, Brazil, architect Patr ́cia Anastassiadis (2005), etc., feature three stripes, which differ the brand's product from market competitors. The interior of the Greenpeace's headquarters in Amsterdam designed by architect Hollandse Nieuwe (2014) tells a straight story about the horror of the post-industrialization world, through the rusty floor beams, etc. The Greenpeace activists fight against polluting industries. They need regular donations to achieve their mission. The Coca-Cola exhibition pavilion at Expo Milano 2015, by architect Giampiero Peia (2014), was decorated with design elements resembling the branded bottle: the interior lighting fixture and wall d ́cor, the form of sun blinds on the south facade. Entrance pavilions or skylights in Apple's sales offices resemble the proportions of the company's products, such as a computer casing, the famous cube, Mac-mini, a smart speaker, for example, in stores in Istanbul, by Foster + Partners (2014), on Fifth Avenue in New York, architect Bohlin Cywinski Jackson (2004-2006, 2011), in Shanghai, architect Bohlin Cywinski Jackson (2010), in Chongqing, China (2014), etc.

## V. CONCLUSION

Consequently, it becomes evident to the students that over thousands of years the architects of the past and present have visualized in buildings their understanding of fetishes, Gods, the world order — everything that they and their customers deemed necessary to tell [13]. Such a broad aspect covering both the history of architecture and modern trends of recent years seems reasonable to be included in training courses on visual identity in architecture and environmental design, as well as can be used for the analysis of architectural heritage from the same position of close connection of philosophy and different arts within a certain time and territory, united by the same ideology.

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