THE GEOMETRIC MUSIC OF "THREE HIERARCHS" CHURCH FROM IAȘI

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Abstract: In order to emphasize the links between science and art, we analyse the "Three Hierarchs" Monastery church, Moldavian architecture masterpiece of the 17th century, build by the Voivode Vasile Lupu. The artistic project which reunited in a perfect harmony `quotes`of the geometrical decorations belonging both to the Balcans Christian and the Islamic culture, which were gathered harmoniously in a common body, stable and unitary. The study of the consecutive structures of the "flowers of the numbers" that build up the visual engines of the 61 rosettes carved in stone, that highlight the sculpted decorations of Trei Ierarhi church, has the aim to associated the geometric models with musical/vibrational structures derived from these.

Keywords: Baroque, art, geometry, sculpture, scheme, composition, symbol

The inscription of "Three Hierarchs" Church records that the sacred place was consecrated on May 6,1639, but the vastness of historical sources demonstrate that the church was far from being completed at that date. Due to the lack of local skilled craftsmen, capable of carrying out the construction work and, especially, the carved stones that would've had to dress the exterior of the building entirely in a fascinating geometric and decorative craftsmanship, Voivode Vasile Lupu asked the Boyard Andreias, "Mayor and the county of the honourable citadel of Bistrita"¹, to send craftsmen builders to work with limestone. From a different documentary² source results that in 1642, the Romanian prince thanked Boyard Andreias for sending the moulders, asking him to procure a tile craftsman as to teach the secrets of his work to the local craftsmen. Also from the correspondence of the Princely Chancellery of Vasile Lupu results that the ruling prince asked that the Tsar Mihail Feodorovici from Moscow to send to study several local craftsmen to specialize in carving sophisticated stone ornaments that were to cover the facades of the church. Following further requests made by Vasile Lupu "the

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¹N.Iorga, *Documente românești din arhivele Bistriței*, vol I, p.62, *apud* Dan Bădărău, Ioan Caproșu- "Iașii vechilor zidiri", ed. Junimea, Iași, 1974, p. 176.

² Eudoxiu Hurmuzachi, *Documente*, vol XV, supl. 2, p.1072.

Tsar sends to Iaşi two painters to paint the church, Sidor Pospeev and Iacov Gavrilov. The latter died shortly in Iaşi and the Tsar replaced him with the painters Deico Iakovliev and Pronka Nikitin; the Russian painters worked on the "ThreeHierarchs" Church from February 1642 and finished painting it in August of the same year"³.



Vasile Lupu proved to be a strong and visionary character, in full harmony with the spirit of the luxurious and exuberant era in which he lived, succeeding to write a glorious page in the history of Moldova and, especially, of the city of Iaşi. "What is distinctive in general for "the new men" of the seventeenth century: the need for pomposity, entertainment, brightness, thirst for prestige and grandeur reaches paroxysm during the reign, behavior and deeds of Vasile Lupu (1634-1653), voivode who, according to Miron Costin, "was too much for Moldova, as a man of high and imperial spirit more than a Prince"⁴. Once anointed as Voivode of Moldova, Vasile Lupu has followed his founder vocation and completed the Sfântul Ioan Botezătorul Church in the Citadel of Suceava, building which was began during the reign of his predecessor, Miron Barnovschi. Later, he built a number of churches of smaller sizes and artistic value, such as Sf. Atanasie in Copou, St. Gheorge in Serbesti, Bacău County, etc., constructions which bring no change in the usual way of achieving churches in Moldova during his time. But the most important architectural achievement of Vasile Lupu would remain the "ThreeHierarchs" Church, a work of extreme originality for the time of its construction, which he raised in the very center of Iaşi, to the delight of the

³ Dan Bădărău, Ioan Caproșu, *op.cit.*, p. 178.

⁴ Vasile Florea, Istoria artei românești, ed.Litera internațional, București, 2007, p. 224.

locals and contemporaries from everywhere, but, at the same time, the generations that followed, until today.

A thing worth mentioning and which is clear from the numerous remaining documents is that the Vasile Lupu directly involved in the organization and well running of the work of all the constructions during his reign, proving not only an unpredictable artistic sense but and a real vocation of founder-builder. We are inclined to believe that it was the ruler who oversaw and decided the architectural configuration and the jointing of the sculptural elements that organize the decorative-geometric stone of the facade, completely covering the building, bringing sparkle and originality to the construction. Art historian Vasile Drăguț points out that the "ThreeHierarchs" Church is a work of exceptional artistic value because of the unique characteristics conferred by the carved ornamental decorations: "What makes "ThreeHierarchs" an unique monument is the decoration of the facades. Starting from the ornamental idea of the dome of Dragomirna Church, the facades of "ThreeHierarchs" Church are entirely covered with real carved lace.

From the base to the cornices, the facades are divided into several registers, each with a different type of decoration, but overall uniform: different types of interlaces and rosettes, zigzags and intertwines, chains of links and vases with flowers, double twisted rope and strips of marble engraved with Mascheroni, an entire universe of ornaments, mastered by talented craftsmen who knew the rules of the geometrical science of composition of Islamic art and, above all, an elaborate colouring with *lapis lazuli* and a real waste of gold foil over the entire facade decoration conferred an appearance of unparalleled wealth to the church founded by Vasile Lupu that really one was able to tell about it "that makes the mind wonder"⁵.

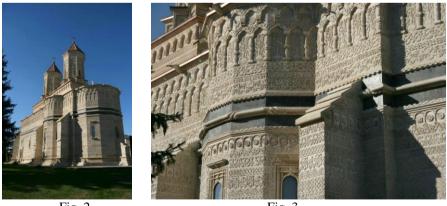


Fig. 2

Fig. 3

⁵ Vasile Drăguț, Arta românească. Preistorie, Antichitate, Ev mediu, Renaștere, Baroc, ed Meridiane, București, 1982, pp.352-353.

What must be remembered is the aspect of permanent conflict between Vasile Lupu and Matei Basarab, ruler of Wallachia. VasileLupu, after the death of his son John, which has to became the ruler of Moldavia, reconciles with Matei Basarab in 1644, through the mediation of Varlaam. the Metropolitan Bishop of Moldavia. In a sign of sealing the peace established, the two princes builta monastery in eachother's country: Stelea -a replica of "Three Hierarchs" Church built by Vasile Lupu in Târgoviște and Soveja church, built by Matei Basarab in former Putna county. The logic of stylistic differences between Three Hierarchs Church and other constructions of Vasile Lupu remains unknown. We suppose that the appearance of Three Hierarchs Church, with its unprecedented pomp, is a possible reply of the vain Moldavian ruler in front of the brilliant edifice of Curtea de Arges church, founded by Prince Neagoe Basarab in 1517.

We believe that the unity of the decorative sculptures, in their visual richness and diversity of origin, is due to a preliminary plan, carefully studied and probably supported by Vasile Lupu himself, given the thoroughness with which he pursued all phases of execution of the buildings he founded. A novelty factor, in explaining the process of achieving this original artwork, is that the Moldavian ruler was well aware of the power of the impact of the overlapping geometric decorations specific to the Islamic and pre-Christian art and architecture as the Greek mosaics from Zeugma- Turkey or the ancient Jewish mosaics from Khirbet Beit Lei ⁶(Israel), over a Moldavian classic architectural structure. Cosmopolite personality and prone to understand the laws of beauty, it is likely that Vasile Lupu has found and appreciated the qualities of "vibration" and deeply "musical" of sophisticated geometric arabesques which define the art in the East and Islamic peoples, from India, Armenia, Kazakhstan, Turkey and Syria until the distant south of Spain.



Fig. 4



⁶ https://en.wikipedia.org/wiki/Khirbet_Beit_Lei

It is very possible that Voivode, in fact the creator of the [plan] concept for this stone "installation" may have premeditated, meticulously and strategically, the details for the re-contextualization of different geometric decorative elements, borrowed from a very wide area, coordinating their unification in an amazing synthesis, competing (especially at the time when it was "launched") the most spectacular works of the Islamic art. It is also possible that Vasile Lupu took into consideration the guaranteed success of the integration of a Christian church "dressed" in Islamic decoration, understanding the doctrine unity - mathematics and symbolism, of the geometric abstract art of the servants of Allah and of the one which lies at the base of the Byzantine architecture and painting or folk art, as old as the world, from the ceramics, clothes and carpets of the Moldavian peasants and those from everywhere.

The same structure of the flower of life and of the tree of life, and even the same configuration of the regular polygons and the orthogonal cross, is noticeable everywhere. About the origin of the decorative motifs involved in the project of the sculptures stone from the "ThreeHierarchs" Church, Vasile Drăguț would note: "Previous researches have failed to identify the origin of this or that motif, establishing an appropriate paternity, as Islamic, Armenian, Georgian and so on, but one must notice that nowhere in the world of the Middle East, from where most of the decorative elements of the "ThreeHierarchs" Church originate, such an overall composition was obtained and - very important fact –in the case of the monument in Iaşi, is about subordinating the whole decoration to an architectural composition which is traditional for Moldova "⁷.



The authors of the book "Iaşul vechilor zidiri", history researchers with high academic training, state that "Vasile Lupu was interested of the buildings he ordered, not only as a good supervisor, but he appreciated these as an artist,

⁷*Ibidem*, p. 353.

knowing the value of the sculptors working in stone; and he was interested about them everywhere in Moldova, seeing them on the spot."⁸

As the result of an error stated in the travel memories of Paul of Aleppo and transmitted by a number of researchers of the "Three Hierarchs" history, it was considered that the author of the architectural plans of the entire monastery has been the great chamberlain Enache, the court architect of the Moldavian princes. But Enache died before 1636 and was buried at St. Sava new church (whose founder he was, as mentioned by the above mentioned historians⁹) and the Trei Ierarhi church was built between 1637 and 1642.

Even if the name of the architect who conceived the plans for the "ThreeHierarchs" Church is not known, with a clearly classical Moldavian architecture – it is evident the direct involvement of Vasile Lupu in the detailed coordination of the work and the achievement of all construction stages. The Moldavian ruler is likely to have wished that the "ThreeHierarchs" Church to be his burial place, but his destiny was to die in Tsarigrad (Constantinople), as a dethroned ruler.

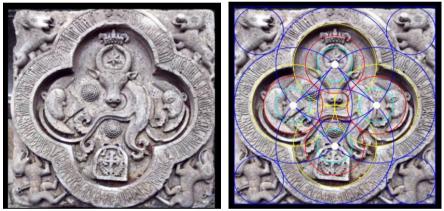


Fig. 8

The architecture of the Trei Ierarhi church is one of the few models of architectural and decorative configuration to shelter the relics of saints. Vasile Lupu, improving the exceptional vividness of his building, brought the relics of the Saint Paraschiva (in 1641) and placed them in a niche, at the right side of the royal seat.

The monastery ensemble contained several buildings, including monk cells elegantly constructed and finished, the dining room (*trapeza*) with Gothic architecture, which would become the home of the Vasilian Academy, during Gheorghe Asachi (early 19th century) and a space dedicated to the

⁸ Dan Bădărău, Ioan Caproşu, *op.cit.*, p. 179.
⁹*Ibidem.*

printing press brought by Vasile Lupu from Kiev. All this building ensemble was surrounded by a wall guarded by a bell tower - tower on which was located an inscription - a beautiful emblem of Moldavia, containing the classic heraldic data of the country: the bull head, the sun and the moon, framed in an aggregate formed by four circles - "the Flower of the four", which, in turn, was included in a quadrilateral, having in the corners the representation of the heraldic lions of the royal houses of Moldavia¹⁰.

Within the perimeter of the four circular structures there is an inscription in Slavonic language, proving the paternity of the construction: "The true believer and lover of Christ, I, the voivode Vasile, ruler of Moldavia by the Grace of God, and his lady, Theodosia, and his beloved son, voivode Ioan, began to build the bell tower in the year 7146 (1638), April 20"¹¹.

To illustrate the impact that the foundation of Vasile Lupu produced in his time, we felt welcome to include a consistent fragment from the detailed and expressive description, equivalent to a television report of our times, which was left to us by archdeacon Paul of Alep in 1653, a Syrian prelate who accompanied the Patriarch Macarius of Antioch, in his travels through the Romanian Countries: "The monastery is as beautiful as possible: looks like a castle, being surrounded on all sides by stone walls. Above the gate there is a tower for bells and for the city clock which is made of iron and has big wheels. The bells are hung up on wooden beams. The clock engine fills half of a room.

It has a rod of iron that enters through the roof and goes up to the top of the great bell and on which is applied a heavy iron hammer. When it comes the time to beat, a big piece of wood gets out the tower arch, having springs, which triggers the small bells, which are also called alarms, to announce the people to listen when they will beat the hours. This rod is pulled down through the wheels: the hammer rises suddenly and falls on the rhythm of the bell producing a sound that is heard throughout the city. The church is in the middle of the monastery.

¹⁰Dan Bădărău, Ioan Caproșu, *op.cit.*, p. 187

¹¹ N. Grigoraș, "Inscripția turnului clopotniță al mănăstirii Trei Ierarhi din Iași", în *Anuarul Institutului de istorie și arhelogie*, Iași, I (1964).



As for the holy church, at the centre of the Monastery, it is entirely made of chiselled stone and, on the outside, it is embellished with unmatched mastery that surpasses all wisdom: there are no plane surfaces, only sculpted ones. Above the cornice the church is surrounded by two stone girdles, also carved. The church has two tall spires. The access is ensured through two doors, one towards south and the other towards north, as is the custom of their churches. Above each door there is a tall window with latticed members, similar to the former ones. This is a crossed arch and on top of it there is the face of the Trinity. Over the door that leads from the threshold to the inside of the church there is the icon of the Last Judgment, more beautiful that I saw in the church of Vaslui. The Turks are painted as their custom is, with their turbans and their clothes. On the other walls (of the threshold) there are human faces and images of all the creatures of the world, from man to animal, wild beast, birds, trees and plants, all of them eye-catching pictures. Then there are young men and girls and many people that thank the Lord in His holiness with drums and psalms; then lords and judges according to their ranks – all is made of gold and lazulite. After that, you enter the church trough the west door and above it there is the icon of the Tree Hierarchs. The door is carved all around with great mastery: through this door you can get into the narthex; in this walls there are niches where there are the Bey's children's tombs and those of his wife's, the first lady. The tombs are covered with a lot of silk and gold brocade carpets and above them there are silver votive lights, that burn night and day and candleholders with wax candles.

Here (in the narthex) there are four bared windows, two on each wall, and the portrait of the Bey and of his wife, the dead Lady, mentioned above, as she [died while he] was still alive; and the portraits of the three children, dead one after another, in beautiful clothes, and on their tall fur hats there was a sable stripe.

On the western wall, where the door is, there is the effigy of the church, in the Bey's hand, and on it the three hierarchs are painted; he

presents it to the Redeemer which blessed him and around him there are apostles and angels. A chandelier hangs from the arch of the narthex, an object gifted by the founder of the church. Here (in the narthex) there are a lot of beautifully worked icons.

From there on you get into the choir between two big pillars, chiselled in the shape of green pistachio trees, carved in green stone, through which there are gold threads, from top to bottom. The Bey's throne is behind the first pillar, turned towards the east, as it is the custom, with stairs to the throne and a canopy over it. The throne is covered with gold plates wonderfully worked. Its interior is coated with red and the stairs and the floor are covered with red cloth. There is a cross above the canopy, and above it there is a magnificent gold rose.

On the right of the throne, on the south wall, there is a large arch with beautifully carved white marble pillars. You climb white marble stairs and, in the middle, there is a coffin padded with red both inside and outside, closed with silver nails. It also has a wonderful silver lock, which they had opened for us so we worshiped and we got the blessing from the new Bulgarian Saint Paraschiva's relics, which the Beyhad brought from Constantinople from the patriarchal church, from the room of the saints, before which we had bowed, as mentioned before. Saint Paraschiva too seems to be alive, covered in carpets, silk and others like this. Above there are silver votive lights that burn day and night. On the wall of the dome her work is painted, as well as her death and how the Turks brought her all the way there (to Iași). The images are impressive, as when the Bishops brought her there, a kapuğu-bašewas also among them, to increase the greatness and the pride of the event. The choir is exactly like that in the Church of the Lady (meaning Golia Monastery). The entrance also has two arcades, one towards the south, the other toward the north. The stalls are made of cypress and ebony wood, from Tsarigrad, chiselled and carved; the bishops' pews are at the front. In each choir there is a pew embellished with ivory and ebony and others like this, a delight for the watchers, covered with red cloth. The dome of the choir is very tall. On the ceiling there is the image of the Redeemer, may He be blessed !



The domes of this church are very tall and from them there hang a large chandelier, long about four to six meters, gilded with silver - an awe-inspiring sight. Inside it, there is a sort of pavilion and on the wall of each choir there are latticed windows.

In front of the chancel doors there are four copper candle sticks, different in their shape and aspect, then another two large ones made of silver. The "Symbol" is made the same, the iconostasis is composed of four ranges of icons, an unmatched thing. The icons of the Lord's, of the Mother of God, of the Three Hierarchs' and of Saint Nicholas. Icons are equally wonderful, casted in gold and silver.

The sanctuary is of extraordinary elegance and beauty: the arches of the vault are different from one another and covered with gold and silver plates; it has three windows with bars, and pillars at the front are also covered in gold. On the cupola there is Mother of God's icon. The icons inside the sanctuary and on its walls are beyond count and they are worked in gold and lazulite. In front of the entrance in the sanctuary there is a large silver votive light.

Generally speaking, one can tell that neither in Moldavia, nor in Romanian County, nor in the country of the Cossacks one can see a church that could be compared to this, in terms of painting, architectural beauty. May God keep it safe for evermore. Amen.

Above the refectory there is a stone vault. At a short distance from the Monastery, near the baths, on the shore of the great lake, called pond or fishery, there is the magnificent college built by the Bey."¹²

¹²Al. Lapedatu, André Lecomte de Nouÿ, op. cit., p. 39-43.



Witness to the echo generated by the finishing of the church in 1639, but also in the following decades, both among the local people and Romanian Christians from all over Romanian territories and of the people that were passing through the animated city of Iasi, but also among the Mohammedan Turks or of other Islamic countries, stand the memoirs of a Turkish pilgrim, Evlia Celebi. The wonder and enchantment of the Ottoman traveller was probably great when he encountered the Moldavian's voivode's artistic project which reunited in a perfect harmony `quotes` of the geometrical decorations belonging to the artistic culture of his religion, transposed on a 'ghiaur'(Christian) place of worship, erected on a Christian monastery, two steps away from the Princely Court of Moldavia: "It can be described neither in words, nor in writing. Recently built, the shiny marble stones glitter and glimmer... as if they were the leaves on an illuminated parchment. On the stones of the outside walls of this church - continues the Turkish traveller there are, as embellishments, figures and ornaments. Especially the flowery models on a stone are so surrounded by ornaments carved with sun disks, line braids, stone lace and ornate inscriptions, that the one that watches them is amazed at the way in which the master sculptor carved the marble with his chisel."13

¹³ Răzvan Theodorescu, Piatra Trei Ierarhilor, Meridiane, Bucharest, 1979, p. 27.



Between 1804-1806, the belfry endowed with a mechanical clock and with four bells that announced the precise time to the entire city, was restored by a team of Greek monks. In a document of that time they claim that they have erected the tower from the corner stone and that they changed the pyramidal roof - covered with tiles, with a tall roof, after the Ukrainian baroque fashion, which make it even taller and more spectacular. In this hypostasis, the tower resists until the 1886 restoration, when the team of French restorers - which included the French expert architect Lecomte de Noüy, decided to eliminate the tower from the architectural complex of the monastery and to rebuild a series of buildings from the old monastery assembly. From that time on a long series of polemics was launched regarding these radical decisions, the details of which are not the object of this study. When comparing the engravings made by J. Rey (1845) and the photographs previous to Lecomte de Noüy's restoration, I believe the result consistently moves away from the original form (especially at the level of the roof of the church and towers), but the new architectural vision, even if it remains an invasion and a breaking of the fundamental rules of monument restoration, which are imposed by law today, add additional stylistic unity to the edifice.



Fig. 18 Fig. 19 Fig. 20

The stylistic resemblance between the Trei Ierarhi, Golia and Dragomirna churches, can be noticed both at the level of the construction formulas of the domes, as well as of the decorative elements. The thing that distinguishes the decoration plans of "ThreeHierarchs" Church from the other two churches is the complete covering with decorative structures of carved stone on the surface of the frontages and the introduction of some elements of a clear oriental inspiration, a fact unseen by then in Moldova. As opposed to the church from Curtea de Arges, where the decorations and arabesques are even more capricious and opulent, influencing also the architectural structure of the edifice, in "ThreeHierarchs" Church we can see a classic Moldavian architecture, on the surface of which the master stone masons invited by lord Vasile Lupu could freely and unconditionally expressed the intention to embellish it, with the declared purpose to surprise the watcher trough the luxuriant density of the registers with geometrical and floral decorations. All the exegetes of this large decorative filed of the frontages and towers of "ThreeHierarchs" - the most spectacular aspect of the edifice - expressed similar opinions concerning the happy and unitary combination, as a general result of some independent "variations" on the same theme: horizontal string courses /registers that follow one another from the bottom of the church to the roofs of the two spires, use decorative elements from very remote areas, cultures and ages, in space and time, which were gathered harmoniously in a common body, stable and unitary. The risk of the endeavour that belongs as intention to the lord Vasile Lupu, was certainly that of obtaining an artificial and heterogeneous hybrid. The thing that gives unity to the whole is precisely the predominantly linear and angular aspect of the motifs used and the quantity of geometric information, with vibrant proprieties.



Fig. 21

Fig. 22

As far as the origin of the artist that coordinated the execution of the stone decorations from "ThreeHierarchs" Church, the art historian Gheorghe Macarie states that he was an oriental stone mason (Armenian, Persian) invited by the lord Vasile Lupu together with the skilled carpenters that were to complete the furniture pieces that were to decorate the interior of the church. His task was, as the researcher and professor states, to accomplish the pasteboards for the entire project (very likely with the guidance and approval of the lord, as we previously supposed) and to coordinate the activity of the Saxon masons among which is very likely that there also were local masons. "There are clues that this artist coordinator of the decorative program of Trei Ierarhi also knew the local decorative art – directly or through the collaboration with his local helpers. If the brilliant painters that worked inside of the church, the Russians Sidor Pospeev, Deiko Iacovlev, Pronka Nikitin, Iacov Gavrilov were accompanied by the Iasi painters Nicolae ("the old painter") and Stefan from the capital of Moldavia, if the worship and secular objects made of silver, from Orient or Occident, coexisted with others made in the workshops of Iaşi, why not admit that among the Saxon stone masons there were - as executants or simple helpers - a few local people. Or maybe even Grigorie Cornescu, the very famous master in stone chiselling and carving around 1672 was anticipated three decades earlier by another, local too, that silently had his role in the conception and disposition of the decorative repertoire. If this was the case, the Prince must have certainly used him, and maybe some lords from the court."¹⁴



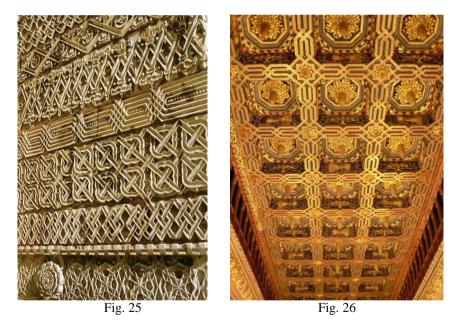
Fig. 23

Fig. 24

We are inclined to believe the theory according to which the master stone mason who conceived and coordinated the execution of the carved stone works was well instructed and had the capacity to adapt to the difficult architectural requirements of the edifice. Moreover, he managed to accomplish the excellent task of synthesizing the motifs integrated by him, picked from different spaces and cultures, together with local popular geometrical motifs. It is well known that the latter category has a greater homogeneity than those specific to religious art, the geometrical motifs on the popular carpets or clothes from Romanian Countries are – in their formal

¹⁴ Gheorghe Macarie, *Barocul – artă și mentalitateîn Moldova epocii lui Vasile Lupu*, ed. Cronica, Iași, 2005, p. 140-141.

and symbolic essence - very similar or even identical to those from the popular art of any other European country or even from the Far East. The carpets with diamond-shaped solar motifs, with geometrically stylized birds or with trees of life are omnipresent in the popular cultures everywhere. The rosettes symbolizing the sun are always polygon flowers, among which the most widely spread, not only in Europe or in Asia, but everywhere, is ,,the flower of life" - the flower corresponding to number 6, the hexagon and the star with six corners. This is the field of investigation which we believe that can explain a series of revelatory aspects on the process of conception and execution of the stone decorative project from "ThreeHierarchs" Church. This way, the fluidity resulted from the collaboration between an oriental stone mason and the Saxon and local ones could be explained. More than that, it is most likely that during the execution of the project and of the pasteboards corresponding to each register/string, the coordinating master had a constant dialogue with all those involved in the execution of the entire edifice, starting with the voivode himself.



The architect André Lecomte de Noüy, who was to study in detail the qualities of the edifice in order to propose his restoration project to the Romanian authorities, fully understood this essential artistic quality of the decorations from "ThreeHierarchs": "Nowhere and in any other age one cannot find such a generosity of ornaments, such a fantastic association between the most varied styles, accomplishing such a harmonious whole. Indeed, from the bottom of the edifice to its top, all the stone works, without

exception, is covered by various sculptures, executed after the byzantineoriental fashion, a true embroidery that wraps tightly the holy sanctuary."¹⁵

This is the analysis perspective that we propose as a new reading key over the artistic value (and not only) of this architectural masterpiece. However, to understand and conduct an objective critical analysis on the French artist's restoration project, we found fit to expose the description that he made of "ThreeHierarchs" Church, the text being published in 1904, in Bucharest: "The plan of "ThreeHierarchs" Church, at least as far as the outer perimeter is concerned, does not present very particular dispositions, except the upper part, the second stellar base of the two octagonal small towers. This plan reproduces quite precisely one of the types adopted by Romanian churches, with prominent absidioles, showing the arms of the cross, the buttresses and the two dominant towers.

But the eye is first attracted to the rich ornamentation, of such a special nature, an unforeseen mixture of various styles, be it of Byzantine origin, as is the series of arched ceiling pillars covered in scales which border flower vases, in the upper part of the church body; or the smaller arch pillars – the latter motif being reproduced inside, sculpted on the black marble friezes ; or very similar to the German Renaissance, as the two frieze mentioned above, adorned with engravings ; or of oriental origin, as the braids or wreaths that separate the friezes, a similar example being see in Curtea-de-Argeş. This motif, that can be seen all over the interior of "ThreeHierarchs" Church, was often used after that in many churches in the country.

A fourth element that is very characteristic to this church deserves to be mentioned: the gothic element.

Borrowed from the monuments of the Renan school, it is used here in framings, the windows mouldings and the two entrance doors, South and North, as well as the three main spaces that bring light to the exonarthex or the covered entrance. These three ogival openings, separated by the stone works that support the hemstitch-like tympanum, as well as the mouldings of the entrance gates – are all treated in the German gothic style, still in used in 16^{th} century."¹⁶

¹⁵Al. Lapedatu, André Lecomte de Noüy, *op.cit.*, p. 52.

¹⁶ *Ibidem*, p. 52-53.



Fig. 27

Fig. 28

The historians from Iași, Dan Bădărău and Ioan Caproșu (similar to many personalities of the history, architecture and arts from the period of the last radical restoration or from recent times) consider that the French architect André Lecomte de Noüy, despite a careful investigation and understanding of the exceptional qualities of this edifice, he carried out a very invasive restoration project, demonstrating, firstly, a serious misconduct regarding the interior painting, and a free interpretation of the steeples and of the covering: "Through this, the French architect has changed to a great extent the overall appearance of the monument, giving it a supple silhouette, that favours him, of course, but is a categorical and brutal betrayal of the original shapes"¹⁷. Remarkably, in his approach, is that he did not change at all the embroidery of the stone decoration that gives the unmistakable specificity and the inestimable value of the monument. More seriously is the violation of the basic rules of the recovery process of a historical monument, carried out by the French architect when he broke down and after reconstructed - after his own vision very different from the original one - the church of Sf Nicolae Domnesc from Iași, founded by Ștefan cel Mare.

¹⁷ Dan Bădărău, Ioan Caproșu, op.cit., p. 201



A vehement dispute aroused regarding the restorations made by André Lecomte de Noüy, even in the time in which he started his first works.

The scientific researcher Elisabeta Negrău described the entire phenomenon in a well documented articles, highlighting that "his solutions for restoration have fluctuated from reconstructions and partial additions, to tearing down and complete rebuilding. This measure was not encouraged in France, but was experimentally used by the French on the Romanian monuments" ¹⁸ .Following a protest campaign against such practices, supported by historians and important artists of the time such as Grigore Tocilescu and Theodor Aman, the restoration works attributed to the French architect continued through the rubble and reconstruction were stopped. According to the study presented by the emeritus professor architect Grigore Ionescu in his treatise "Architecture in Romania over the centuries", the "ThreeHierarchs" Church's plane has been adjusted after the plan of Galata Church, to which it has been eliminated the burial chamber and the exonarthex was narrowed, as with the Moldavian oldest churches. Regarding the decorative elements, homogeneous related with the architectural structure, both interior and exterior, it is considered that those are decorations took from Dragomirna monastery church.

¹⁸ Elisabeta Negrău, *Câteva probleme privind metodologia cercetărilor de artă medievală și deontologia conservării patrimoniului medieval în România,* (http://acs.org.ro/ro/conservare/249-deontologia-conservării).



The Romanian erudite architect also emphasizes the same unique dominant feature of the value of "ThreeHierarchs", namely the decorative embroidery of stone, highlighting with distinctiveness the origin of the motifs involved in the decorative ensemble: "Unitary as style, but different in drawing from a layer to another, small ornaments, carved in flat relief technique and of course at the same time, after placing stones in construction, they are mostly geometric, of Georgian-Armenian origin. Others are of Arabian-Ottoman origin and some - such as, in particular, those on the marble plaque on which is shaping the median belt of the Western Baroque façade. Highlighting by colouring it with lapis lazuli and polishing gold, this original decoration, the work of stonemason craftsmen of Oriental descending, connoisseur of decorative Caucasian arts, made this brilliant monument, unique in his own way, to highly impress the locals, as all those who at that time or later had the opportunity to see it. "¹⁹

We believe that his theory regarding the building of the sculpture directly on the edifice after installing the stones on the facade is questionable, considering the major risks and the difficulty of such a process, especially regarding the technical data of stone processing at the time. Moreover, it is well known that in practice of stone processing for constructions in the West, the carved plates or blocks or ornaments were executed mainly on ground with great precision of marking the details for the joints (consequently, eventually, to be trimmed after assembling).

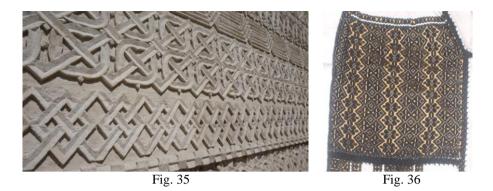
¹⁹ Grigore Ionescu, Arhitectura pe teritoriul României de-a lungul veacurilor, Ed Academiei Republicii Socialiste România, București, 1982, p. 336.



Fig. 33

Fig. 34

On the role played by Vasile Lupu in Moldova's history of the seventeenth century and, especially, about the meaning and echo aroused during those times regarding the building of the always surprising church of "ThreeHierarchs" we mention the brilliant essay "Piatra Trei Ierarhilor" (The Stones of "ThreeHierarchs") conducted by the academician Răzvan Theodorescu and illustrated by Ioan Oprea at highest level of photographic art. In this book I found that idea, which I subsequently share, that the choosing by the voivode of an integral covering of the church facades of a Moldavian architectural style, consisting of geometric arabesques carved in stone and covered with lapis lazuli and gold gilding, with motifs inspired predominantly by the Islamic style, haven't had only immediate aesthetic reasons. It was also pursued a harmonization of the symbolic qualities of the sacred geometry, explicitly present in the geometric and abstract art of the Islamic world, but also in the Byzantine art and architecture and folk art everywhere. For the purposes of the assertion of this thesis which I consider essential for understanding of the "ThreeHierarchs" phenomenon, but also as an introduction to the case studies that are subject of our investigation, we present an excerpt from the book: "ThreeHierarchs" Church, never imitated by posterity, was, of course, a singular experience that appears as an extensive thought and relatively long elaborated unique art of its time, with its volumes and impeccable surfaces - more moved towards the altar, more still towards the porch.



With the plan being - beyond some "muntenisme" (reffering to the Wallachian style), suggestions, common during those times, of the art from the Wallachia –of an autochthon architectural tradition that descended in time to those ages of the Musatini in which many voivodes of the 17thcentury struggled to descend, with continuous vibration, almost dynamic -when you look at it from certain angles -, of some luxurious paraments in which anonymous carvers, with craft genius, have shaped – above and below a belt in the torsade and of a strip of gray marble with carved masks and spindles, in a full and deliberate contrast, stylistic and ethnic with the rest of the work - tens and hundreds of block alternate - meticulously dug and with an almost algebraic rigour of the Islamic decorations, highly cherished at that time, in an increase barely felt, from the bottom to the top, from geometric to vegetal, zigzags and braided lines, lines of intersected circles, accolades and vases of flowers, shields and fruits, finally and again, numerous flowers with petals variously placed, in an astonishing variation, geometrized as well until they are exchanged with the "solar disks" as Evlia Celebi mentioned, in motifs which once carved in stone, give the sensation of a folk ornament carved in the wood of a gate or of a rustic seat from Moldavia, Oltenia or Transylvania, when the same motifs does not become instantly the rosette or "propeller" of our plastic folklore from all time."20

All the great cultural and spiritual traditions of humanity have highlighted the direct relationship between the structures of organization of the natural environment and those that direct the embodiment and the physical, psychological and spiritual evolution of the human being. Both the substances and the attributes of the natural environment that are present in the making of the human body and the processes of birth, growth, maturation and death are subject to the same laws of cyclicity numerically arranged, laws after which the seasons, historical periods, glacial cycles of the planet or the cosmic, of the movements of galaxies and solar systems. These aspects of the

²⁰ Răzvan Theodorescu, op.cit., p. 35-36.

creation of the natural world were a constant source of inspiration and meditation for the artists from all the cultural ages.

A remarkable thing is that people of traditional civilizations have developed and represented the beauties of the natural order in very precise and efficient symbolic structures, often reduced to geometric configurations, structures which are greatly found in the formations of the mineral, plant or animal world. Not incidentally, the humanity since ancient times has gathered with much attention and dedication these formations with elevated symbolic loading and offered them a protective and justified artistic frame. Contemplating the specific qualities of the natural environments, we see that the mineral cannot imitate the complex phenomenon of plant growth, a tree does not possess senses and the ability to move as the animal does - with which it adapts to the environment; finally, the human world has the intellect, of the Self and contains all the attributes of the other natural worlds. We can speak, however, in the case of minerals, about a certain dynamism generated by their own inner forces and energies, even if, in the first instance, they presented to us as petrified forms. Like the specialists in modern physics, the traditional cultures defined the existence of the world as an extensive web of energetic structures with permanent vibrational qualities and functions. Vibration is defined in the terms of modern sciences through the concept of frequency. The frequency, in turn, is described through numbers. And the numbers are subject to geometric projections and transpositions. Most often, the processes of crystalline formation of the stone covers a long period of time, making them invisible to the naked eye, and the degree of refinement and purity of all forms of matter organization, from the coarsest to the most elevated are interpreted by the ancient traditions of metaphysics as immutable symbols of higher levels of Reality.

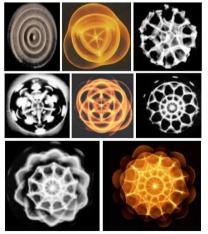


Fig..37

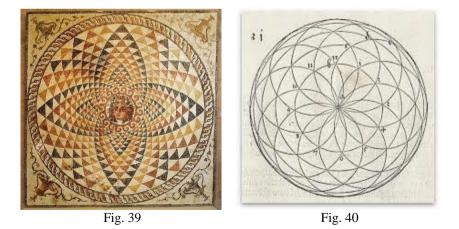


Fig. 38

What is important, in terms of the present analysis, is the aspect of the organization of the polyhedral structures of crystals of various minerals, regarded as the natural standard of all types of harmonic structures of undifferentiated matter and the relationship of this phenomenon with the laws of geometry that coordinates these embodiments and their artistic properties, in relation, firstly, with the visual engines based on the "flowers of the numbers", theory that represents the core of the analysis of the composition of traditional art works. The abstract and geometric art of the Islamic culture represents the immediate expression of this reality and we consider that this is the reason for the fascination it exerts on the viewer prone to contemplation.

The study of the consecutive structures of the tree "flowers of the numbers" that build up the visual engines of the 61 rosettes carved in stone, that highlight the sculpted decorations of Trei Ierarhi church, has the aim to associated the geometric models with musical/vibrational structures derived from these.

All the great traditional cultures have designed numbers as energetic "entities", sometimes even personified, with attributes borrowed from the register of human emotions, forces that permanently shape the entire manifested world, visible but also invisible to our senses. The impartiality and omnipresence of the action of the numbers is closely correlated with the specific aspect of the algorithm of action of each of them, with the internal and external "dynamics" that also conditions the capabilities of each number to interact with other numbers.



The division on classes and value categories, depending on a variety of criteria, was considered for millennia as one of the sacred sciences and the aim brought to the use and assessment of the numbers, that of reducing to the status of "figures", needed only in the usual methods of customary arithmetic or to generate sophisticated arithmetic constructions – a special

status that the modernity has instituted- could not only bring a great loss of the sense of perception that only the careful contemplation of numbers can bring.

The excessive reign of *quantity* eliminated the essential data of the first numbers and consciousness, simple and immediate, that all numbers, no matter how big they might become, are always reducible to their sources, grouped consistently in the first nine numbers of the *alphabet of mathematics*, and inclusively they are reduced, each according to its own "music"/ vibration, to the same source represented and symbolized by the number ONE²¹.



Fig. 41-44

Returning to the *theoretical* aspect of knowledge and use of geometric composition, we can identify (as a *source* of the practice) a

²¹Cristian Ungureanu, Musiqie des sphères. La géometrie secrète de la peinture européenne, ed. Artes, Iași, 2016, p. 77.

long series of areas of traditional thinking, origins, most of them impossible to locate. The most appropriate term of the source is that of *the traditional sciences*, including sacred geometry which was just a field among others which represented the sources of modern science. One of the defining characteristics of traditional sciences was that they related one to another without syncops and inconsistencies that exist between their current equivalents. From this derives the profound inspirational feature for the consciousness of the traditional artist, of the sacred geometry applied as practical platform and - first of all conceptual organization of anatomy in an artwork.



Fig. 45-48

The artist was taught or asked to guess or to recognize the frequency of the structure of numbers, seen as *cosmic ordering forces* both at the structure of the mineral, vegetable and animal world as well as at that of the movement of energetic fluids in nature, of the celestial bodies or its own ages or internal emotions.



Fig. 49-52

The geometrical traditional and the mystical theories of the numbers that were converted into geometric configurations, explained - directly or symbolically - aspects of the cyclical growth rhythms of the living beings, of the planetary motion but also of the consequences of all the systems visible or invisible to our senses, the harmonic type report - as postulated by the recently theory of the fractals, between the very small elements and the macrocosmic ones of our level of Reality, principle valid also in the case of the levels that are higher or lower to us. Communication between the "worlds" was subject to the same rules of sacred geometry and it was possible on the base of the affinity and harmonic resonance.

In terms of the logic of the principles of geometric composition applied in architecture and traditional visual arts, we consider that the entire assembly consisting of the church build by Vasile Lupu at the middle of the 17th century, represents a sum of decorative structures belonging to the Islamic culture, impregnated with symbolic and aesthetic valences of the universal sacred geometry, structures that were masterfully re-contextualised and installed on the architectural structure of a classical Moldavian church.Apart from the immediate aesthetic impact, the web of lines and geometric shapes also represents an extensive vibratory structure designed to induce the viewer a guaranteed effect of "orchestrated" musicality. The circular nuclei of the 61 geometric flowers, placed equidistantly along the entire perimeter of the four facades, at the level of optimal visual perception of a person of average height, they are all centres that stimulate the labyrinthine paths from the carved strips that succeed each other up to the The tripartite structure of each rosette hypothetically roof of the spires. generates a polyphonic and harmonic visual structure which is designed to induce various reading routes through the "circuits" described by the horizontal formations and overlaid, after an inspired scenery of geometrical arabesques. The discs made of stone - universal symbols of the sun, consisting of three categories of concentric "geometric flowers" and regular polygons corresponding to the different numbers from 5 to 16, remember - in equal measure- of the complexity of the carved rosettes on the walls of mosques in Turkey, Syria and Egypt, the floral patterns on the carpets from Buchara and Samarkand but, equally of the floral and geometric-abstract elements present on the vestments and furniture of Moldavian and Maramures peasants or elsewhere in the Balkans. The research of the written materials and archives of images that are offered by the libraries today and the ocean of information that the Internet provides, shows that these symbolic motifs and the processes of their construction are spread not only in Central Europe, South-East or Middle East, but appear in the most remote and unexpected places of the planet, which entitles us to say, like all the advised and recognized researchers that guided us in our investigations of the sacred symbolism, that the roots of the great folk traditions and religious of the world have a common source. The complete analysis of the "visual engines" and geometric patterns upon which the artist drew inspired when he designed the drawings of the decorations from Trei Ierahi Church and the logic of their distribution in the arabesques carpet made of stone that comprises the church body in an impressive vibratory web, is one of the future objectives of my doctoral study that is dedicated to the most important moments in the history of several centuries of fine art in Iasi and Moldavia.

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