

USE OF HISTORICAL PAINTING CONCEPTS BY MODERN METHODS IN THE RESTORATION OF ARCHITECTURAL MONUMENTS

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Abstract

The article presents a scientific overview of examples of monumental painting in recreated and restored objects in recent decades. Examples of monumental painting in the figurative concept of Kyivan Rus fresco, baroque painting and academic painting of the period of classicism and historicism of the 19th century are selected. The technologies of such monumental painting are described, while preserving the figurative concept, but on the basis of modern materials and technologies, which makes such paintings more resistant to negative external influences and more durable. The article is illustrated by the works of recent years by the authors S. Baiandin and Y. Huzenko.

Keywords: Monumental painting; Historical figurative concepts; Reconstruction of destroyed objects; Modern materials and techniques; Durability; Longevity

Introduction

One of the specific problems associated with the historical heritage on the territory of Ukraine is that a significant part of the outstanding architectural monuments, mainly churches and cathedrals, were destroyed in the 1930s, during the Second World War or already in the post-war period. Since the number of such objects is in the hundreds, the re-creation of at least the most important of them is justified, based on the experience of the re-creation of the Old Town in Warsaw [1], which became the canon and legislative justification for such actions, if the monuments meet the following criteria;

- they are significant for the history of the nation, its culture and national identity;
- they are masterpieces of the style of architecture and art;
- there is a sufficient amount of documentation for them – photographs before destruction, drawings, drawings, surviving fragments, historical descriptions.

In recent decades, the Church of the Mother of God Pyrohoshcha in Kyiv has been revived, from which only the foundations remained, St. Michael's Golden-Domed Cathedral with a bell tower, from which only the foundations and part of the frescoes and mosaics in museum expositions have survived, decorative elements and high relief of St. Archangel Michael from the pediment of the cathedral, Assumption Cathedral of Kyiv-Pechersk Lavra with preserved ruins and the St. John the Theologist's side-altar, Assumption Cathedral in Kaniv with the preserved

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side-altar, St. Volodymyr's Cathedral in Chersonesos, which stood in ruins. The need to revive and restore these churches for the period of their maximum prosperity was due to their unique importance for Ukraine and the entire Eastern Orthodoxy, their outstanding architecture, importance in the urban structure of cities and the availability of all the necessary documentation. The problem of recreating such objects is close to the conclusions and judgments expressed in the articles by P. Spiridon and I. Sandu [2], P. Spiridon *et al.* [3], L. Pujia [4], Florescu *et al.* [5] and V. Petrušonis [6]. Such objects are important both as monuments of architecture and as works of art, if we talk about the variety of decorative means used both initially and in the process of restoration or reconstruction of such unique objects [7-9].

The reconstructed mentioned temples had different stylistics – St. Michael's Cathedral and Assumption Cathedral, originally built during the period of Kyivan Rus, were subsequently expanded and rebuilt during the Baroque period, which led to a combination of Kyivan Rus fresco and baroque painting, the interior of St. Volodymyr's Cathedral in Chersonesos was decorated with the so-called "academic painting".

The figurative concept of the frescoes was explored by Y. Asieiev [10], Y. Asieiev *et al.* [11], S. Vysotskyi [12], N. Kondakov [13], V. Miasoedov [14], M. Karger [15], V. Lazarev [16]. Aspects related to the tasks of restoration, restoration technologies, including restoration of ancient Russian frescoes were studied by M. Orlenko and Y. Ivashko [7], P. Gryglewski *et al.* [8], D. Ainalov and Ye. Redin [9], V. Shchavinskyi [17], L. Tolmachevskaya [18], P. Rappoport [19], L. Kalenichenko [20], L. Kalenichenko and O. Pliushch [21], Yu. Strilenko [22], Yu. Kuks and T. Lukianova [23-25], D. Kaporikov [26], M. Orlenko [27-30]. Problems of reconstruction of destroyed churches in post-totalitarian states were studied by M. Orlenko *et al.* [28].

From their publications, one can make judgments about the traditional figurative concepts of the Old Russian (Russian-Byzantine) fresco, its subjects, the system of images and techniques of execution in different historical periods.

An analysis of existing publications and a generalization of the author's experience in performing paintings of different periods in restored and re-created objects (practical – by S. Baiandin, theoretical – by Y. Ivashko and A. Dmytrenko) made it possible to formulate the main objectives of the study:

- describe modern methods that provide for the preservation of the figurative concept of a certain period, however, the implementation of paintings with modern materials and methods, and their application in recreated, restored and new objects.

Examples of the restored objects are the Assumption Cathedral in Kaniv, fully recreated – St. Michael's Golden-Domed Cathedral, partially recreated with the restoration of the preserved side-chapel – Assumption Cathedral of Kyiv-Pechersk Lavra, a new one – Cathedral of St. Spyridion of Trimythion in Odessa.

Materials and methods

To generalize the practical experience of making paintings in objects of different historical periods, the authors used such general scientific methods as the method of historical analysis, the method of cultural analysis, the descriptive method, and the method of comparative analysis. The rationale for the conclusions was the specific murals performed in unique buildings for various purposes and different periods, which led to the difference in figurative concepts.

The method of historical analysis made it possible to analyze the traditional painting techniques used in churches on the territory of Ukraine, the method of cultural analysis and the method of comparative analysis made it possible to analyze changes in the figurative concept of religious painting at different historical periods, the descriptive method was used to describe modern technologies of monumental painting in temples of different periods.

Results and Discussion

A brief historical overview of the styles development

Religious painting of Kyivan Rus from the pre-Mongol period to the present day testifies to numerous transformations that affected both the figurative system of the temple while maintaining the general canonicity, and the technique of performing temple monumental painting.

The construction of temples of the pre-Mongol period took place in three stages:

- a) *the second half of the 10th century – the middle of the 11th century.*
- b) *the second half of the 11th century – 1130s.*
- c) *the second half of the 12th century – 1240.*

Characteristics: the baptism of Rus, borrowing the experience of stone construction from Byzantium, centralized power and the flourishing of the state during the times of Volodymyr and Yaroslav made it possible to conduct large-scale church construction.

Churches: Church of the Tithes (Desiatynna), St. Sophia Cathedral, St. George Church, St. Irina Church. Churches are large-scale, large, pyramidal compositions, with ancient Roman masonry of the "opus mixtum" type with alternating stones and plinths on a pink solution, decorated with frescoes and mosaics, with marble floors. Churches and cathedrals were multifunctional buildings. In addition to religious services, they were used to receive ambassadors, the solemn ceremony of the beginning of the reign of the prince, the largest libraries of that time were located here. A typical scheme is a three- or five-nave, multi-pillar, multi-domed church with galleries, the smaller domes on the façade rise pyramidally to the main one.

In wall fresco painting – the borrowing of the technique and figurative concept of the Byzantine fresco with emphasized static figures and the absence of a second-plan line (Fig. 1) and the gradual appearance of the so-called "secular fresco" depicting churchwardens with families, scenes of hunting and entertainment.



Fig. 1. Mary and Elizabeth. Fragment of the fresco in the chapel of St. Joachim and Anna of St. Sophia Cathedral. Photo from the stocks of Y. Ivashko

Characteristics: the final decline of the state due to strife, the small scale of the churches, no frescoes and mosaics. The period was interrupted by the Tatar-Mongol invasion. Masonry of squares – large hewn stone (Halych) and red plinths (Chernihiv). The churches are four-pillar one-domed.

Churches: St. Basil's Church in Ovruch, St. Panteleimon's Church in Halych, St. Paraskevi's (Piatnytska) Church in Chernihiv. There is no wall fresco painting.

In Kyivan Rus, a peculiar technique was used for the simultaneous presence of frescoes and mosaics in the interior of the temple, which was a departure from the Byzantine tradition. The main role in the ancient Russian fresco of Kyivan Rus was played by colour spots.

Thus, if we talk about the development of the figurative concept of fresco in the 1st – 2nd periods of Kyivan Rus, it should be noted a gradual moving away from the static and canonical convention of religious images towards greater picturesqueness, a combination of religious and secular images in the murals of temples, in the appearance of portrait painting in temples – a tradition that was continued in the Middle Ages (on the lands of Western Ukraine, not affected by the invasion of the Tatar-Mongols) and the Baroque, when churches and cathedrals of the Cossack Baroque decorated the galleries of donators, sometimes surrounded by saints and angels.

The changes also affected the actual technology of performing fresco monumental painting.

Initially, the earliest technology consisted of adding a filler made of a fine fraction of quartz sand, crushed white stone or crushed bricks to the lime ground coat, at later stages, which also covered the Middle Ages, the filler is no longer added to the lime soil, and the only anti-shrink additive is an organic additive – linen. Consequently, the technology of painting the fresco gradually changed, which ensured a greater smoothness and uniformity of the surface for the fresco, however, later technologies, although they excluded the addition of filler, were laborious due to the specific long-term preparation of the lime base for the fresco.

Historically, different artists painted different parts of the image – some were engaged in gilding halos and backgrounds, others – in painting faces, arms and legs (the so-called "lichniki"), figures with clothes, entourage (the so-called "dolichniki"). In the 19th century, the technology of icon painting was enriched with the term "roskrysh" ("discovering"), that is, laying the basic tones with paints – egg tempera on natural pigments, first on the background, then on elements of the landscape, plants ("herbs"), architecture ("chambers"), clothes ("dolichnoie"). After that, the dark tone "sankir" outlines the outlines of the faces and parts of the figures that are not hidden by clothing (the so-called "lichnoie"), the contours of the drawing are re-outlined, the "whitening" of "dolichnoie" and "ochering" of the "lichnoie" with gradual highlighting of the volumetric parts of the image. The final stage of work on the face is "revival" – the application of accent light points, spots and lines, after which the images of clothes, hair and halos are covered with melted gold paint, or gilding is performed "for an assist", that is, strokes of gold or silver leaf were applied to the folds of the clothes, first of all, Christ in glory in the scenes of the Resurrection, Ascension, Transfiguration, Dormition of the Most Holy Theotokos, in the Deesis rank, the wings of angels, domes. Gilding "for an assist" replaced the "whitening" and symbolized the presence of Light from the Light, that is, the Divine Light.

Although the term "roskrysh" is widely used only in the 19th century, it only terminologically summarized the process of icon painting that had existed since pre-Mongol times. This term means the sacredness of the process of creating a painting by analogy with the sequence of the creation of the world by God the Father, since first the background of the icon is prescribed (symbolizes light), then the landscape – relief, water bodies, living creatures and clothes of figures (the so-called "pozem"), then the faces of images. It was believed that the image, the icon is not drawn by the artist-icon painter, but appears on the surface, reveals itself and becomes revealed in the process of "roskrysh" ("discovering") and the subsequent stages.

In the following centuries, if we talk about the Baroque style, there was a final departure from the Byzantine canonicity of the image of the temple and church painting towards the picturesqueness of not only secular, but also religious subjects. The image of the Byzantine church is replaced by the image of the baroque church, when a fundamentally different type of plan appears in the form of a Greek equal-pointed cross, the domes appearance, the solution of the plane of the walls are changing. The paintings become brighter, more festive, the saints are given the features of ordinary people, sometimes in costumes of that time or against the background of Ukrainian landscapes, stern faces are replaced by faces with pronounced emotions, static figures are replaced by figures in motion, special attention is paid to ornaments, elements of architecture and decor. However, starting from the 1760s, wall painting was used less and less; it was replaced by painting of icons of multi-tiered iconostases.

Baroque in Ukraine also has its own periodization. There are three Baroque periods:

1 – early (1648–1680) (architects Baptist, Tomashevskiy), objects: the church in Subotiv, Khmelnytskyi's house, St. Nicholas' Cathedral in Nizhyn, Trinity Cathedral in Chernihiv (the border of the early and high baroque), the Cathedral of the Mhar Monastery, Hustynskiy Monastery, Artemikha's house in Kyiv;

2 – high (1680–1740) (architects Zarudnyi, Startsev, Schedel, Aksamitov, Meretin, J. de Witt, P. and M. Poleiovskii, F. Kulchytskyi), objects: St. George's Cathedral of the Vydubyskyi monastery, St. Catherine's Cathedral in Chernihiv, the church in Sokirintsy, the Great Lavra Bell Tower, the Sofia Bell Tower, St. George's Cathedral in Lviv, Pochaiv Lavra Cathedral, All Saints Church above the Economic Gate;

3 – late (1740s – late 1770s) (architects Hryhorovych-Barskyi, Kovnir), objects: a temple in Kozelets, Pokrovska church in Podol, Samson fountain in Podol, Kovnirovskiy building in Lavra, a bell tower in the Far Caves Laurel.

The early baroque is distinguished by the lack of formation of style signs, the preservation of the Renaissance features, high baroque – this is a period of flourishing of style signs, including in wall painting, when pear-shaped domes with an interception – "kovnir" spread, at the stage of the late Baroque the domes become semicircular without interception, the symmetry of the composition, the decor and a large number of bright paintings with the influence of the traditions of secular painting disappear, the transition to the more restrained traditions of subsequent classicism is felt.

The main difference between the monumental church painting of Ukraine of the Baroque period from the Old Russian period is in a different direction of borrowing, no longer from Byzantium, but from Catholic Western Europe, where baroque painting reached heights in achieving the effect of maximum pomp, festivity, picturesqueness and detail of religious subjects, a feature of which becomes rich polychromy, multi-figuredness, the complexity of the compositional construction of the image, dynamism and attention to the drawing of details. Consequently, in the religious painting of Ukraine there was a sharp departure from the conventionality of Byzantine images as a symbol of a certain church dogma towards realism and giving maximum vitality, naturalness to images, secular motives and folk images. The images of the saints are as close as possible to the view of the artist's contemporaries, they are often dressed in Ukrainian clothes of the 17th – 18th centuries and next to them you can see images of churchwardens with families, Zaporizhzhia Cossacks, prominent metropolitans (murals of Assumption Cathedral and the Trinity Gate Church of the Kyiv-Pechersk Lavra, Hustynskiy and Exaltation of the Cross monasteries, St. Michael's Church in Pereiaslav). Consequently, we can talk about a direct and immediate influence on religious Orthodox painting of the secular genre: portrait, landscape, historical, battle. These tendencies intensified against the background of the requirements for artists to be equally good at mastering the original skills of both the religious and the secular genre, which was prescribed in the charter of the painters' guild. Especially in small towns and villages, the tendencies of monumental painting of churches acquire a pronounced folk-style character associated with the so-called "folk icon".

As already mentioned, during the Baroque period, a characteristic feature of the temple figurative concept became the appearance of church portraits and galleries of church teachers and faithful rulers (for example, in the altar part of Assumption Cathedral of Kyiv-Pechersk Lavra there were images of 85 historical figures from the pre-Mongol princes of Kyivan Rus to Peter I, in the church In the village of Starohorodtsiv, not far from Oster, there was a painting on the theme of the Cossacks with the Tatars, and in Intercession Church of Pereiaslav, Metropolitan F. Prokopovych with the Cossack elders is depicted.

At the end of the 17th – beginning of the 18th century the changes affected the painting technology itself, when the fresco was gradually replaced by tempera painting. The spread of the practice of painting Cossack Baroque churches demanded a significantly larger number of monumental painters with the skills of painting. Therefore, at the Kyiv-Pechersk Lavra, a school

for the training of icon painters appeared, which taught according to the developed program – at first, European baroque prints were copied, then lessons in drawing from life, mastery of the genre of landscape painting, coloristic were carried out, special attention was paid to the ability to convey figures in motion and in portraits to convey the inner world of the person being portrayed. This leads to the identification of two main pictorial directions of the Baroque period – religious and secular, and the secular direction directly influenced the religious one.

The antagonism of the folk-style genre of monumental baroque art was academicism, which spread in Ukraine mainly from the beginning of the 19th century and was based on following the traditions of classical art with its canons. In contrast to the religious painting of the Ukrainian Baroque, with its striving for the maximum approximation of the image to its era, academicism resolutely denied any adherence to modernity, advocating timeless aesthetic ideals and plots not related to the reality of life. Academism contrasted itself with realistic art. The term "academic art" in church painting denotes murals based on conservative traditions that depict biblical and church subjects without connection with modernity, according to the canons of the past and in the historical environment. The images of figures, the rules for constructing compositions follow the ideals of the ancient classics, that is, the "high genre". Unlike the Baroque period, the artists of the 19th century achieve the maximum canonicity of the biblical characters' images, they strive to give them a solemn and majestic appearance, they do not strive for the individuality of the manner of artistic writing.

Painting in the interiors of the reconstructed temples of the pre-Mongol period of Kyivan Rus

Assumption (St. George's) Cathedral in Kaniv was built in 1144, in the second period of Kyivan Rus, by the Kyiv prince Vsevolod Olhovich, and consecrated in the name of Assumption of the Mother of God. This is the oldest temple of the pre-Mongol period in the Cherkasy region, originally built as a three-nave, six-pillar, cross-domed, single-topped temple with narrow arched windows in the upper parts of the walls, similar in style to those of the Kyiv St. Cyril's Church, the original Assumption Cathedral of the Kyiv-Pechersk Lavra and the Church of the Assumption of the Virgin in Pyrohoshcha, decorated with ornamental frescoes in small façade niches and on protruding portals. The church, which served at the same time as protection from enemy raids, survived after the Tatar-Mongol invasion, although it was destroyed, rebuilt as a defensive church in the 16th century, but was burned in 1678 by the Crimean Tatars and Turks, was in ruins for a long time, the first restoration the work was carried out in the Catherine's era in 1781–1787. After reconstruction in 1805–1810, it acquired an Empire style with gables and towers. The cathedral was a place of pilgrimage from all over Ukraine. In 1963, divine services were stopped there and a museum of folk applied art was placed. Today it is an architectural monument of national importance.

Research of the parts of the cathedral preserved after the destruction carried out in 2003 by S. Baiandin and Yu. Huzenko did not record the preserved frescoes, which are mentioned in historical sources. The project for the reconstruction of the cathedral provided for decorating the interior of the cathedral with frescoes based on the existing concept of Russian-Byzantine frescoes. These murals were made in 2003–2007 and included the following subjects: painting under the dome space, the vault of the altar of the St. George's side-chapel – Christ Pantocrator (Fig. 2), the conch of the altar of the St. George's side-chapel – St. George the Victorious (Fig. 3) at the zenith of the arch preserved after the explosion of the St. George's side-chapel – the Archangel (Fig. 4).

The iconographic system of paintings was developed in strict accordance with the Byzantine canon.

Today, there are two common ways to make a fresco. The first one is *alfresco*: paints and pigments, rubbed with a chime on a marble slab with the addition of "lime milk" as a diluents – lime dough diluted with water, which are applied to a wet lime-sand soil on a previously applied drawing. Paints are applied with local colours, highlighting clothes, faces, architectural objects.

This first application of paints is called "roskrysh" ("discovery"). On areas with exposed parts of the body, "sankir" is applied – a special paint of an umber-ocher colour. Then, for 24 hours, the entire surface of the painting is covered with damp burlap so that the lime-sand base remains wet. This is necessary for the paint layer to adhere to the ground. In a day, you can already continue painting "on-wet". Consequently, this method of painting a mural requires very quick painting while the ground remains wet.



Fig. 2. Christ Pantocrator. Photo by S. Baiandin, 2007



Fig. 3. St. George the Victorious. The scale of the figure is visible in relation to the height of the person. Photo by S. Baiandin, 2007



Fig. 4. Archangel. Photo by S. Baiandin, 2007

The second method is fresco-secco – when paints are applied to a wet ground – lime-sand plaster. Then the fresco is painted and finished on the already dried plaster, which significantly increases the time for painting the fresco.

For Assumption Cathedral in Kaniv, the "keim" technique was chosen to bring the perception of the surface of the painting closer to the matte surface of the fresco.

The sequence of painting a fresco in the Byzantine style included the following stages:
– development of a sketch with watercolours or acrylic paints at a scale of 1:10;

- cartoon drawing: according to a sketch with great detail (ornaments, folds of clothes, faces, elements of architecture), cartoon is made in full size on tracing paper;

- making a "pryporokh" ("powdering"): a drawing made with a pencil on tracing paper is pierced with a needle, forming holes, using needles of different sizes, for piercing silhouettes the thickest needle, for internal shape details – medium, for small details, ornaments, elements of faces, hair – thin. The punctured pattern is cleaned from the back with sandpaper;

- performing "roskrysh" ("discovering"): the stage of applying local spots according to the drawing on the surface of the wall. The first layer is lime-sand plaster, the second is putty, then treatment with a 2% acid solution and application of white ground cover. The paints are mixed with "KEIM FIKSATIV" thinner. It is advisable to use colour for "roskrysh" without using white. "Roskrysh" covers the composition with local spots. This term denotes a technique that was used by icon painters of the 19th century and is reduced to the uniform distribution of paints over the ground-levkas, otherwise – "podmaliovok" ("underpainting");

- reapplication of the pattern with "pryporokh" ("powdering"): tracing paper with a pattern is pricked on the "cover" according to the precisely aligned pattern and transferred with the help of coal, as in the first time;

- drawing the lines of the main drawing according to "roskrysh" and "ochering", "ochering" is performed on faces with light ocher in several steps.

Painting on the facades and in the interiors of churches in the Baroque style

A typical example of the recreation of the figurative of the Baroque on the facades of churches is Assumption Cathedral of Kyiv-Pechersk Lavra, recreated from the ruins by specialists of the Ukrrestavratsiia corporation (Fig. 5). This church was the first stone building of the Pechersk monastery. It was founded in 1073, built in 1075–1077, and in 1082–1089 decorated in the interior with frescoes and mosaics. No traces of them have survived, most likely, after the fire of 1718, the walls were re-plastered. It was on the model of Assumption Cathedral that other churches of Kyivan Rus were built – St. Michael's Golden-Domed Cathedral, St. Cyril's Church.

The cathedral has gone through several architectural periods, when it was modified, completed and renovated. During World War II, on November 3, 1941, it was blown up, and building materials and church utensils were taken to Germany. The cathedral stood in ruins for many decades. The cathedral was recreated in 1998–2000, the general design organization was Kyivproekt JSC, the general contractor was the Ukrrestavratsiia corporation. Considering the total amount of work performed, we are limited to only one aspect, which concerns facade painting in the general style of the Ukrainian Baroque, and those works that were carried out directly by one of the authors – Serhii Baiandin (Fig. 6).

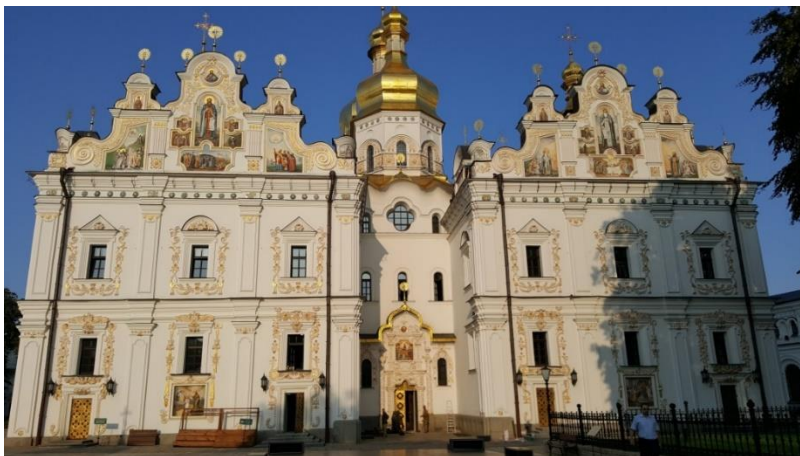


Fig. 5. Facade paintings on the western facade. Photo by M. Hryniewicz, 2018.



Fig. 6. Facade paintings on the western facade. Photo by S. Baiandin, 2000.

The painting was recreated in accordance with the general concept of the restoration of the cathedral as of the period of maximum prosperity in the 18th century. All facade icons and 52 icons of dome drums are painted on flat asbestos-cement slabs.

Asbestos-cement board is an excellent basis for painting with silicate paints based on mineral pigments "keim". The preparation of a slate plate for painting involves the following stages:

- in accordance with a rigid template, the base is cut, the edges and surface are cleaned with an emery cloth and a spatula;
- the front surface is treated with a 2% acid solution and washed with water;
- primer is applied to the front surface – whitewash – twice, and once to the back side of the asbestos-cement slab to evenly distribute the stress on the base and protect the back side from getting wet;
- the drawing is transferred using the "pryorokh" ("powdering") method;
- "roskrysh" ("discovering") is being carried out;
- the drawing is reapplied;
- detailed painting of the image is performed;
- fixing the image with "KEIM FIKSATIV" varnish.

Thus, ocher, being a transparent paint in its properties, gives a soft stretch of tone, forming chiaroscuro on the form. The same "ochering" was carried out on the folds, elements of architecture, using lighter shades relative to the "roof". There can be additionally 2, 3 and 4 such layers after "roskrysh" ("discovering") in accordance with the gradations of color and tone. All these layers work to highlight the shape. At the final stage of painting, "probela" ("whitenings") are applied, the tonality of which depends on the general tone of the form along which they are laid. Then cover the painting with a protective layer of "KEIM FIKSATIV" solution using a brush grainer. The "keim" technique was also used in the murals of the facades and interiors of St. Michael Golden-Domed Cathedral and the bell tower. St. Michael Golden-Domed Cathedral was built in 1108–1113 by the grandson of Prince Yaroslav the Wise, Prince of Kyiv Sviatopolk in honour of the heavenly patron of Kyiv – St. Michael the Archangel. During the Baroque period, the temple was expanded, became multi-domed, and the side chapels of St. Barbara and St. Catherine received a figurative solution in the high baroque style.

The fate of this cathedral, like the entire monastery, also turned out to be tragic: it was destroyed in 1934–1937, only a few mosaics and frescoes, transferred to the museum exposition, and some fragments of decor survived. The complex of the St. Michael's Golden-Domed

Monastery was recreated in 1997–2000, the general design organization was JSC "Kyivproekt", the general contractor was Ukrrestavratsiia corporation.

The author of the article, S. Baiandin, was directly involved in the facade paintings of the bell tower and the paintings of the Catherine's side-chapel. Initially, the oil painting of the Catherine's side-chapel was made in the first half of the 18th century, and modern paintings were also performed according to the iconographic system of the Ukrainian Baroque but using the "keim" technique in order to combine the central volume with fresco paintings and baroque side-chapels (Figs. 7 and 8).

Using the traditions of academic painting

The traditions of academic painting were applied by the author of the article S. Baiandin and his colleagues in the murals of the church of St. Spyridion of Trimythion in Odessa at 43 Akademika Koroliova Street (2000s) (Fig. 9). Such painting, after varnishing, becomes more saturated in color and density in tone and creates an imitation of oil painting. It is noteworthy that the traditions of academic painting were applied in a new temple, which was built for about 10 years in a residential area of Odessa – Tairove.



Fig. 7. Composition "Queen of Heaven". Photo by S. Baiandin, 2019



Fig. 8. Paintings of skufia. Photo by S. Baiandin, 2019



Fig. 9. The process of making paintings. Photo by S. Baiandin, 2020

In 2016–2017, the painting "Ascension" was performed in the dome of the cathedral, in 2017 – the painting "Ascension" in the vault of the altar, in 2018 – the painting "Evangelists" on

the sails, in 2019–2020 – painting "The First Ecumenical Council", in 2020–2021 – painting "All Saints" (Fig. 10).



Fig. 10. General view of the central part of Assumption Cathedral in Kaniv in the process of making murals. Photo by S. Baiandin, 2006

The execution of the murals can be illustrated by the example of the composition "The First Ecumenical Council" on canvas glued to the surface of the wall with an area of 38 m².

For the base, a linen canvas was used, which was glued on the back side with moisture-resistant BUSTIK-78 glue, which made it possible to determine the degree of canvas shrinkage, which was 7 cm in length 5 m and 1.5 cm in width. The canvas was glued with vertical stripes "joint-to-joint" without overlap. A roll of canvas was glued to a wall previously covered with a layer of glue and pressed down with plastic spatulas for fabric wallpaper. After the canvas was completely dry, insignificant air cavities formed between the wall and the canvas were injected with glue from a syringe and pressed. Then the surface of the canvas was primed with whitewash from CAPAROL – INDEKO PLUS.

The drawing was transferred using the "pryporokh" ("powdering") method; after transferring the drawing, it is additionally traced with a pencil with a graphite core. Laying tones begins with backgrounds and then to individual fragments and details, from the general to the particular. Painting is carried out according to the colour system. The first tone laying is carried out by the glaze method, using a halftone colour scheme of a specific form, which is laid, which allows you to save the drawing drawn with a pencil. The sequence of painting works towards saturation of colour and tonality. In the first layer, it is advisable to use whitewash minimally in colours. For painting we used paints of the CAPAROL company "ALPINA" and "DUFA" – these are full-tone pigments in tubes.

At the final stage of painting, glaze is used – pigments diluted with water without adding white. This makes the whitened colours more saturated.

Before varnishing, the surface is cleaned of powder and dust and vacuumed, after which the painting is covered with matte or semi-matt varnish "ISAVAL" (Spain).

Conclusions

To analyze the applied painting techniques of monumental church painting, four churches were selected that demonstrate three historical stylistic periods and, accordingly, four directions of painting: Assumption Cathedral in Kaniv, which was painted in the figurative concept of an ancient Russian fresco, but with the modern "keim" technique (Fig. 10), St. Michael's Golden-Domed Cathedral, which combines both fresco and baroque figurative concepts, Assumption Cathedral of the Kyiv-Pechersk Lavra in the figurative concept of the high baroque, and the Cathedral of St. Spyridon of Trimythos, which is a modern example of academic painting.

Analysis of the historical concepts and techniques of frescoes, monumental painting of the Baroque and academicism of the period of classicism-Empire-historicism allowed us to reveal the transformation of Orthodox monumental painting of Ukraine from the pre-Mongol period to the present day, allows us to compare the historical figurative concept of different eras and its embodiment today, in restored, re-created or newly built churches. The feasibility of moving away from labour-consuming old techniques is explained by their lower resistance to adverse influences. The use of new progressive technologies is all the more justified in case of complete reconstruction of a previously destroyed object with an interior. At the same time, the overall figurative concept of the interior is preserved.

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