

Mother Iuliania (Sokolova)



The Iconographer's Labor

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TABLE OF CONTENTS

Chapter 1. To the Beginning iconographer	1
Chapter 2. Iconography is the art of tradition	5
Chapter 3. Making an icon board	11
Chapter 4. Drawing	28
Chapter 5. Transferring the drawing onto the icon board	36
Chapter 6 . Iconographic anthologies	40
Chapter 7. Gilding	45
Chapter 8. Painting the image	49
Chapter 9. Varnishing with olifa	72
 APPENDIX	
The face of the Savior according to the ancient document	75
The outward likeness and the inward virtue of the Theotokos	77
Descriptions of traditional garments in iconography	79
 DRAWINGS	 83

1. To the beginner iconographer

Those who wish to learn the technique of iconography—even long before they learn how to draw, and long before they get to know all the materials and methods—must understand the sacred nature of this art, its towering purpose, and its inseparable ties with the life of the Orthodox Church. Iconography is not just art, it is the art of the Church.

An icon is a book about faith. Using the language of lines and colors, it reveals the dogmatic, moral, and liturgical teaching of the Church. The purer and more elevated the life of a Christian is, the easier it is for his soul to understand the language of icons.

An icon is a special sacred object. The face painted on it receives the name through an inscription, according to the rules of the Church. Thus an icon becomes directly connected to the depicted person, a part of him or her. One might say, it goes back to its prototype, and becomes immersed in the depicted person's grace. Therefore, the improper or negligent use of an icon offends not the painting but the very subject whose name it bears: its prototype. In other words, from the outset, an iconographer must be imbued with reverence while icon-painting; he or she must see and recognize it as a holy labor.

It is also necessary to cultivate respect for the people who over the centuries have tilled the land of iconography, who have toiled to develop the language of the icon, and who have created its high, lofty, and true church style. Among them, first of all, we know the Holy Apostle and Evangelist Luke, and after him, we have had countless painters among holy men and Fathers of the Church.

The icon is a prayer expressed as an image, and as such, the icon is understood mainly through prayer. Its purpose is to be in front of the faithful who are praying; its *raison d'être* is to promote prayer. Therefore, whoever toils in the field of iconography must never forget about prayer. Prayer will explain much about the icon without words. Prayer will bring clarity and closeness. Prayer will show what is spiritually and irrefutably true.

Whoever is seeking external beauty or prettiness in the icon is deeply mistaken. Church art has a different understanding of beauty. The beauty of the spiritual is above physical beauty, and the goal of the Christian life is to ascend to the very Source of beauty, who is God. Nature is only a means of knowing God. Through the contemplation of nature's beauty, man is called to glorify God the Creator, and to develop the beauty of man's own inner image, growing and becoming renewed in Christ as a new creature. This new being is a transfigured, redeemed person prepared for eternal life in Christ. But it is very difficult for man to have spiritual consciousness here in this world. Therefore the Church has established a kind of intermediary, a bridge from this world to the spiritual realm, creating a symbol as a visual representation of the truths of faith. At the same time, the Church has developed special forms idiosyncratic only to this art. Thus we have the phenomenon of the icon which goes back to the ancient times. In the icon, we *"do not worship the painted face but ascend to its very Prototype."* (St. Basil the Great)

The icon expresses one single, unchangeable, and catholic truth; it is important to keep this truth undistorted. The distortions are introduced into an icon through a lack of skills, incompetence, ignorance, or willful arrogance of an iconographer, who is brazen enough to deviate from the iconographic tradition and to bring into the image of the Church *"his philosophizing, which is philosophizing according to the flesh."*

The icon, according to the Church, can be made only by "clean hands." That is how the local Council of the Russian Church, called Stoglavny,¹ prescribes an iconographer to follow the moral rules: an iconographer must be

"...humble, meek, reverent; not be an idle talker, not a reveler; not quarrelsome, not envious; not a drunkard, not a thief, and not a killer. One must especially keep the purity of soul and body. One must go to priests and consult with them on all things and also go to confession often. Furthermore, one must live according to the priests' counsel in fasting, prayer, and abstinence with humility." The Council focused attention on the painters' proficiency and their seriousness towards their work. The Council commanded *"to paint the images of our Lord Jesus Christ, of the Most Pure Theotokos, and of the saints with great diligence as to their image and likeness, and paint them by following the best examples of ancient painters. However, they were cautioned to not paint the Divine images according to their own fantasy and imagination. And if any of the students violated these rules of righteous living, that is, by living in filth, drunkenness, and outrage, then they were excluded from this profession and decreed them not to touch it. For it is said, 'Cursed be the man that doeth the work of the Lord with neglect.' (Jeremiah 48:10).*

*The untrained folks—those who have been painting icons without proper schooling, with arbitrariness and willfulness—must be firmly reprimanded and directed to learn from good masters. Whomever God has given this talent, must paint; whomever God has not given this talent, must cease at once so that the name of God would not be besmirched by poor painting, because they do not know what they are doing, and do not also realize the sinfulness of their actions."*²

So this is the mandate of Stoglavny Council (1551) to the icon painters.

A beginner iconographer must work from the known historic prototypes. The ancient icon has a connection with the world that is inaccessible and invisible to us, which is the world of the

¹ The Stoglavny Council (Russian: Стоглавый Собор; translated variously as Hundred Chapter Synod, Council of a Hundred Chapters, etc.) was a church council (*sobor*) held in Moscow in 1551. It was convened to discuss the ritual practices that had grown up in Russia which did not conform with those of the Greek Church. The decrees issued by the Synod ruled that they were all correct. By decisions of the Stoglavny Sobor, church ceremonies and duties in the whole territory of Russia were unified, and norms of church life were regulated with the purpose of increasing the educational level of the clergy to ensure they would correctly fulfill their duties, such as creation of schools for preparation of priests. The church authorities' control over the activities of book writers, icon painters, and others, was firmly established.

² Paragraph 43 of the Stoglavny Council.

transcendent. It is not given to everyone to comprehend this world - and comprehend correctly! - and even more so to transmit its images back to us as a valid art form. However, there were—and perhaps there are even now—the people who, in purity of their heart which enabled them to contemplate the precious truth, have received a creative gift to translate into visible image that which not available to sensory perception.

The Church of Christ labored for eight centuries,³ through and by the efforts of its iconographers, working out the artistic forms of the icon. As a result, we now have images on the one hand approaching the world immaterial as closely as possible, and on the other connecting that world to our extremely limited understanding of the transcendent realm. Therefore, in contrast to secular art, which can only be taught through the study of nature and live models, iconographers can only learn through copying historic icons, in which the invisible is revealed to us in visible forms.

By copying an historic icon, a student aligns himself with it internally and comes into contact with the world which that icon embodies. Gradually, the student begins to sense the reality of that world, recognize the truth behind the image, and comprehend the depth of its content. Subsequently, the student is greatly taken by the clarity of its forms, by the holistic grounding of the whole, and by the holy simplicity of the artistic expression. However, it takes time to get to that point, and often a very long time.

When selecting an icon to copy, please keep in mind that along with icons of high artistic quality, there are many so-called "primitive" icons which were produced by local - often rural - craft workshops. They should not be used as models for studying iconography. In the matter of what to copy, it is always a good idea to consult experienced teachers of iconography because among the various icons of different eras and schools, not every icon can serve as a reliable model for a beginner.

Printed reproductions can help in drawing and composition; they can also be quite helpful in the study of modeling faces and garments. However, the colors in such images are always distorted, and therefore should not be copied literally. The best purpose a reproduction can serve is to demonstrate how the colored forms are placed; the colors themselves (for example, red, blue, or green) can be copied only after working with actual historic icons.

While working on an icon, one can fall into error and unwittingly go astray. This can happen at the beginning as well as further into the work. Anyone who has studied secular art, nature, and anatomy might have difficulty getting used to the peculiarities of an iconographic drawing. Such students, upon finding "irregularities" and "distortion," instinctively follow an impulse to correct them a little here and a little there, to fix such "aberrations." It seems to such a student that "this just cannot be." We must not trust our secular knowledge and feelings, for in iconography, we must develop a sense of inner vision. On the contrary, a secular painter requires a well developed external vision to perform his tasks. It is necessary to take it all "on faith," all that is

³ Presumably, Mother Iuliania refers to the first eight centuries of development of sacred iconography prior to the Eighth Ecumenical Council.

yet unclear and even barely acceptable, and faithfully replicate what one sees in the original historic icon. Understanding comes with time.

Later, when the originality of the historic iconographic image is absorbed internally, when all the methods of artistic rendition of the icon are ingrained in memory, we may be tempted to indulge in our own creative improvisation, to incorporate our own input, in our own individual way, even in just small details. If one takes this path without having a proper grounding, eventually he or she will bring a lot of nonsense into an iconographic image. In a true icon, there is no such thing as random choice.

The Church accepts creativity, but only when it contains catholic truth. This is only possible if the artist, having mastered the technique, not only has the gift of spiritual vision, but also is given a gift to creatively realize his spiritual vision.

In conclusion, we should say that

"...faith, humility, and purity were organic traits of iconographers. The church artists augmented these qualities with a feat of an unceasing prayer, which would lead them to ever greater enlightenment, and finally, to holiness. An iconographer would not consider his talent as belonging to him but viewed it as a gift from God, given freely. It is for God that an iconographer would have to cultivate, bear fruit, and to return all, humbly, to the Master and Giver of life, leaving nothing to himself, not even as little as a signature on the icon. And not to receive praise, which is only harmful and distracts the artist from glorifying the One and Eternal. Humility is not an obliteration of the individual it is his enrichment and edification, ingathering, and return. Christian humility is a joy, renewal and participation in the podvig⁴ of Christ. The Christian achievement—"a light yoke of Christ"— is full of bright joy."

Archpriest Alexei Ostapoff⁵

⁴The Slavic word "podvig" is difficult to translate. Close equivalents are "feat," "heroic action," "self-sacrifice," "spiritual accomplishment," "endeavor," and "ascetic exploit of heroic obedience."

⁵ Archpriest, Professor of the Moscow Theological Academy Alexei Ostapoff (1930-1975), taught ecclesiastical archeology, history of the Russian Church, pastoral theology, and other subjects.

2. Iconography is the art of Tradition

The technique of iconography is complex and unique. The sequential process of painting an icon is an age-old practice developed over time by ancient painters. Nearly unchanged, this technique is used by modern iconographers and should not be changed; therefore, beginner iconographers should follow these practices with rigor.

This book offers the description of all the materials needed for iconography as well as the techniques which enable one to paint icons according to ancient Tradition.

Even so, the technique of iconography has had its historic development. For instance, as new materials were invented,⁶ iconographers learned about them and used them in their work. Likewise, today, as circumstances dictate, we might use materials which were not specified in ancient manuals. However, if we depart from Tradition on these counts, the most important part of Tradition should be preserved in keeping the established structure and sequential architectonics of the iconographic image. The uniqueness of the image and the methods of its actualization are not coincidental. All the qualities of the image stem from the inner being of the icon; this inner being, consisting of the very core of its design – just as naturalistic paintings in all their forms and technical actualization stem from their outward being, their objectives, and their purpose.

A brief comparison of the two arts should clarify for us the exceptional spiritual foundation of the icon and its traditional visual forms and techniques.

What is creativity, in essence and form? Our understanding of things and phenomena of life are always deeply personal. All our judgments, definitions, actions, words, and conclusions come from the same place, which is "ego" – the self, with all its feelings and passions. All things—whatever we do, all that we create from any material available—reflect our personality. Therefore, the fruits of our creation bear a psychological imprint on them; they are just as personal as we are. Everything we see as artists, we process through our awareness and our temperament. We give our assessment of the whole, and this "self," this core personality, is the foundation and the spiritual essence of our artistic work.

Any given painting can be classified by its genre; these can be landscapes, portraits, still life, etc. Artists select a genre according to their inclinations, a genre close to them, in which they see an opportunity to fully express themselves. Because, to put it this way, they use images and objects of the external world to create the impression of spatial depth on the flat canvas. By doing this, they usher the viewer into a realistic world filled with recognizable impressions of nature, people, buildings, and objects. Paints and lines do not have meaning by themselves; neither should they. They are only auxiliary elements that help the viewer to conjure the illusion of three-dimensionality and three-dimensional objects, that is, to create an illusion of reality.

⁶ In the 17th century, shell gold made its way to Russia, and new pigments were also brought in from other countries.

However, the methods and materials which artists use would carry an imprint of their individuality even when such artists—consciously or not—follow the tastes, conventions, and aspirations of their time.

To conclude, in every painting of a remarkable artist, the very essence of his work is the irreplicable individuality of the artist. We seek this individuality and cherish it in every line and every brush stroke. In point of fact, we admit that in every painting of a great master we see a bit of his self-portrait, regardless of the genre in which he works. This is equal to saying that a painting is a spiritual snapshot of a painter. That being so, we can also conclude that if in the core of an artist's creativity lies the ever-changing and mercurial artistic personality, then his creative output cannot have anything that is changeless and steadfast. Truly, fine art has always been like that, in both external manifestation and technical execution. Remarkably, even the supports for the paintings such as canvas turned from a wooden board to a flexible surface. Even the supports correspond to the capriciousness of this kind of art.

Now, let us consider the icon.

In a narrow sense, we call the image made on a flat wood panel "an icon." However, defining this art, we have in mind not only icons painted on boards but also on walls, on metal, on ecclesiastical objects. Such images may not only be painted but also engraved and embroidered or made with mosaics and so on.

First and foremost, the icon is not a stand-alone and independent art form. Iconography is a part of the Church's life, one of its institutions. "I am not of this world"⁷ said the Divine Founder and Head of the Church. "My kingdom [i.e., the Church] is not of this world."⁸ Therefore, the nature of the Church and all of her institutions are not of this world. Their purpose and ultimate goal is the same as that of the Church: the salvation of the world. That is to say, the goal is the cultivation and nurture of the person in time for eternity, bringing the person into a grace-filled union with God, *theosis*.⁹

Therefore, when the Church established iconography as an ecclesiastical art, she wanted to express in images her teachings, her history, her dogmatics, her catechism, her theology, and her prayers as the breath of spiritual life. The Church also wanted to preserve for us the experience of the Fathers and teachers of the Church who have reached the grace-filled dispassionate union with God, who not only reached, but also left us a description of their arduous path in their manifold writings. At the same time the Church has taken special care of those among her spiritual children for whom verbal exposition of theology are unavailable or difficult to understand.

⁷Gospel of John 8:23

⁸ Gospel of John 8:36

⁹ Theosis (deification) is a transformative process whose goal is union with God. According to Eastern Orthodox teaching, theosis is the purpose of human life. St. Athanasios expressed this teaching thus, "God became man so that man might become God."

*"The world sees not the saints like the blind sees not light."*¹⁰ The worldly view, accessible to all, is narrow and one-sided; the vision of the Church differs from the worldly view as she sees the unseen. Likewise, in the temporal stream of time the Church sees the fount of eternity. Wherefore, in the iconographic image the Church shows what eludes the conventional view of reality.

But how to express "grace" or to show the person "deified"? It is not within man's capability to do that. That being so, the Church toiled for centuries to work out a way in which the invisible is hinted at or marked with a symbolic designation. The art of the Church, with the use of special forms, colors and lines, employs a special, unique, and established visual language in this image. When approached and considered thoughtfully and deeply, this image fits perfectly what the holy Fathers tried to convey to us in their writings. Clearly, such image cannot be painted as one wants and with whatever one wants. There cannot be anything accidental, personal, arbitrary, or capricious. The iconographic language was worked out with the teachings of church in mind, for its people, and taking account the church's history, under the grace-filled guidance of the Holy Spirit, who always abides in the Church.

The icon expresses a singular, once and for all established truth, and this truth is not subject to change. This steadfastness of its foundation requires the same solid and stable constructive forms of the image itself, as well as the means of its actualization. These are traditions of iconography.

The basic techniques that are typical of this art, naturally stem from its content:

1. An iconographic image is the image that abides in a two-dimensional plane, a flat surface. (The plane is here a symbol of eternity.) Could such notions as prayer, dispassion, theology, work within a framework of three-dimensionality of this world? Why should there be an illusion of space when the objective is to approach the highest Truth? Therefore the iconographer unfolds his composition strictly subordinating it to the two-dimensional plane of the icon board (or a wall, in case of frescoes).
2. The means of painting—the line and the colors—are not reduced to a utilitarian role. Exactly the opposite: they are actively involved in creating the image. The ancient painter had an uncanny mastery of line, to a perfection. In old icons, we see the lines that are soft or angular, languid or delicate, and even monumental or luscious. The line is always subject to some kind of internal, highly developed sense of rhythm. It is of particular importance in the contours of the figures and of individual planes.
3. From its earliest beginnings, egg tempera was chosen for iconography, and this is not by chance. After all, for his paintings, an artist may choose to work with

¹⁰Metropolitan of Moscow Philaret (Drozdov) 1782–1867 was the most influential figure in the Russian Orthodox Church for more than 40 years, from 1821 to 1867.

water color, gouache, or oil; yet, he will choose the paint that fits his objectives for the particular painting. From history we know that egg tempera was widespread in Byzantium, and this technique—along with Christianity and images of the Church—was absorbed into the national cultures which were of the Byzantine sphere of influence. Even in the Latin West, the artists of the Renaissance, although gradually retreating from the conventions of the ancient iconography, continued to use egg tempera for quite a while, well into the 15th century, despite the fact that their attention was entirely dedicated to the study of nature. Consequently, once the technique of oil painting was invented, its advantages quickly attracted the interest of the artists. Bold brushstroke, impermeability, physicality and vividness of colors could not be more suited to the expression of the material world. Egg tempera was no longer suitable for this art and quickly became a thing of the past. It only remained an indispensable technique for the images of the Church, and here is why.

Firstly, the lofty nature of the sacred image implies the use of the best materials, which should be durable and resistant to the effects of time and environment. So far, we now know that the paint based on egg yolk, possesses such strength that seems to be impervious to the ravages of time.

Secondly, egg tempera because of its inherent properties makes it possible to underscore the flatness of the image, which is a prerequisite for the creation of an iconographic image. Likewise, it allows for the amplification of the expressiveness of the lines. This paint may produce an extraordinary strength of tone, while at the same time remaining light and transparent.

For painting an icon, we have defined methods of using egg tempera. Namely, first we fill the entire plane with colored areas. The task of an artist-iconographer is to find the balance between these color areas; this task cannot be performed perfunctorily. Just as it is impossible to write a symphony without experiencing it internally, so it is impossible to create a color harmony without getting into its very substance. Only direct contact with the lofty world of divine realm (for every icon painter in his measure) can breathe life into an icon's color harmony, which then will be transmitted to the viewer even when he or she is non-religious.

Here is what we find in one of the modern descriptions of the icons:

"Ancient iconographers reached remarkable heights in the art of harmonizing the colors of the icons: fiery cinnabar, shining gold, pure white tone, dazzling lapis lazuli, delicate shades of pink, purple, lilac, and silvery green. All of this was done through the juxtaposition or thoughtful coordination of color chords. This harmony of tones and colors generated a music-like image which in its melodiousness and quiet centeredness elicited the sense of lightness in the

*viewers. In this spiritual state, all conflicting passionsdissipate, and a very special sense of harmony arises."*¹¹

This was written by a person who views icons as works of art. However, for a Christians in ancient times, the icon was a powerful tool used to aid concentration in prayer and for promoting calmness of soul amidst life's upheavals. That being so, the icon was written for Christians. Furthermore, in the faces of the icons, and in the compositions' entirety, we can only be amazed by the atmosphere of peace and dispassion, even in such images as "Beheading of St. John the Baptist," "Crucifixion," "Descent from the Cross," or the lives and passions of martyrs.

One can find in icons images of the earthly life such as mountains, vegetation, and buildings. When an iconographer painted them, he never checked their forms against their realistic counterparts. Their somewhat abstract forms only helped him with even greater vividness and fullness to bring forth what was most important: the calm rhythm of the inner life of the spirit, undisturbed by any worldly vicissitudes.

All of the above tells us that the icon is the God-revealed truth, theology expressed not in words, but figuratively. This can be seen, for instance, in the icons of the Holy Trinity or the Resurrection of Christ. The icon reflects the centeredness of prayer and the peacefulness of dispassion in communion with God, which is the ultimate destination of the spiritual path. One might say, it is the meaning of the Christian life, and not only of a Christian, but also of any person. It is astounding that all of this is presented in the icon as the most vivid reality by means that are physical and real, without any hints at illusion. Instead, only lines and colors are used but in such a way that in the simplest of forms we perceive the precious truth of eternal life.

In traditional iconography, all of these details of the image are painted by this technique of building the form and by applying lights and shadows, and are applied to mountains, buildings, garments, and faces, etc. These methods of painting are as traditional as other procedures involved in the making of an icon, such as making icon boards, gilding, and final olifa varnish.

To sum up, iconography is the art of Tradition. This Tradition was worked out in ancient times and has been passed on from generation to generation, to this very day.

Iconography is the art of a flat image, but by the depth of its content, it far exceeds the most talented realistic painting. The latter only ushers the viewer into an illusory world of three-dimensional vast spaces. The best a realistic painting can do is to open to the viewer the loftiest thoughts and feelings of the artist who painted it.

Like any fine art—just as it is with drawing and painting—one must study iconography. This study begins with the simplest of tasks, then gradually moves to more complex and difficult ones.

Learning the language of the icon is similar to learning an actual language. A child first learns letters, then he or she is given a book to read, then at some point writes words and sentences, and

¹¹ The source of this quotation could not be determined.

eventually complex paragraphs. Likewise, iconography has its own grammar and semantics, its own "school," its own teaching and training methods, in which the student is given special tasks to master. This system of sequential learning is a very traditional approach tested by many generations of iconographers.

It is important to clarify that in terms of content, form, and composition, the iconographic image is the same for the icon and for the fresco. Some of the techniques, of course, vary depending on the medium, whether it is on a gessoed board or plastered wall.

In the following chapters, we shall discuss the materials and the techniques of painting an icon on a gessoed board.

3. Making an icon board

The technique of iconography is complex and inherent to the art of the icon itself. The sequential procedure of how an icon is painted was developed in great antiquity. This has been passed down from generation to generation and therefore should not be changed. The beginner iconographers should strictly and unswervingly abide by its technical guidelines just as the generations of iconographers before them did. If, due to circumstances, it is necessary to modify some of the materials or techniques, the painter must at all costs be fearful of deviating from the most important principle: the traditional nature of the icon's image and the sequence of its construction.

Each icon is composed of four main layers:

1. The first layer is the support: the wooden panel or a piece of canvas.
2. The second layer is *gesso*:¹² powdered chalk and glue.
3. The third layer is the painting itself: the drawing, the lines, and the paint. (Traditionally, the paint used in iconography is egg-yolk based). Besides the natural egg-based emulsion, other binders such as casein/oil emulsion,¹³ polyvinyl acetate,¹⁴ and others are possible.
4. The fourth layer protects the painting from the environment: a thin film of solidified vegetable oil (specifically, boiled linseed oil known as "*olifa*"¹⁵).

In accordance with this structure, making an icon consists of four main stages: selecting the supports, applying gesso, painting, and varnishing the paint layer with *olifa*.

SELECTING THE SUPPORTS

Boards for icons are made from wood such as basswood, pine, spruce, alder, larch (in the northern regions of Russia) and also from fir, cypress, beech (in the southern regions). Preference should be given to cypress, linden, and alder.

Cypress boards do not warp from exposure to atmospheric changes, and they are resistant to woodworm infestation due to its strong smell. Linden and alder boards are lightweight and are comfortable to work with. Unlike easel painting, icons often need to lie horizontally¹⁶ to be

¹² Gesso is Italian for "chalk," from the Latin "gypsum," from Greek "γύψος."

¹³ Factory-produced ready-made tempera (in tubes), sold in art stores.

¹⁴ Commonly referred to as wood glue, or carpenter's glue, or Elmer's glue in the US. It is a type of thermoplastic.

¹⁵ It must be pointed out that using boiled linseed oil alone as a varnish is a fairly new practice. Ancient recipes included some resin dissolved in oil (see: *The Painter's Manual* by Dionysios of Fourni). At some point, siccatives (driers) were added to the recipe, and resins were taken out. Changes in the varnishing recipes improved the drying times but also introduced a new set of problems such as yellowing and darkening.

¹⁶ This is not universal. Many iconographers indeed use easels in their work. One of the reasons for this requirement to work horizontally is Mother Iuliania's method of *petit lac*, which will be described in the chapter on painting.

painted; a lightweight board is easy to turn sideways and upside down at the iconographer's convenience.

Other species of wood (birch, aspen, spruce, pine, and other low-cost species), though they are often used, are not very practical. They are either too resinous (resin can exude from the board, even after an extended drying time, sometimes even from the front side), or too low in density (birch, aspen) and are thus susceptible to changes in temperature and humidity, resulting in warping and cracking.

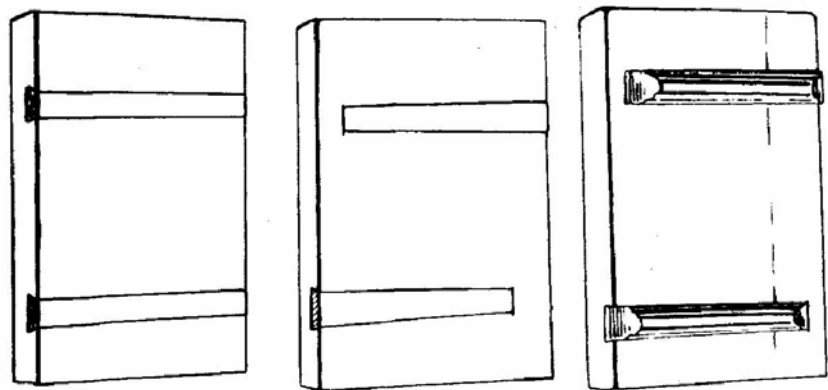
Oak boards are completely unsuitable since the grain's peculiar structure causes cracks in the gesso.

An icon board must be made of dry, well cured wood. In ancient times, drying was done outdoors, and it took a very long time. Currently, wood drying is accelerated by artificial means at lumber yards, but the expediency of this innovation unfortunately does not translate into quality and the results do not compare to those of the old ways.

SPLINES

The board can be made either from a whole piece of wood or from several planks joined together. Both methods require insertion of narrow wooden splines into the back side of the board, positioned across the wood grain to prevent it from warping. The grooves (or we can call them slots) are cut in such a way that they widen from the side towards the center. Splines are made to a specific size and shape for each board from wood that is harder than the board (for instance, oak) and inserted into the slots.

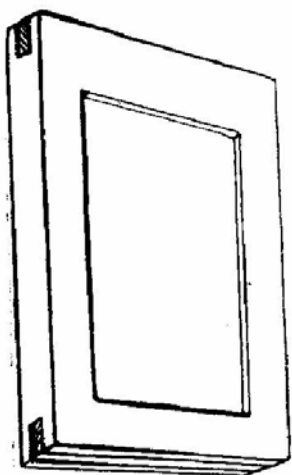
The most common types of splines are "through-cut" and "counter-cut," while their shape can be "relief" or "flat." Grooves may be straight or "swallow-tail."



Through-cut, flat;
Straight groove

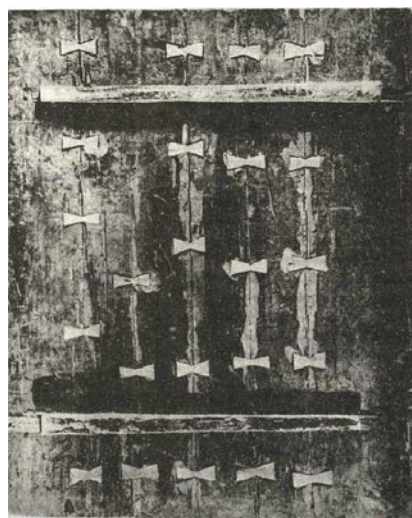
Counter-cut, flat;
"swallow-tail" groove

Counter-cut, relief



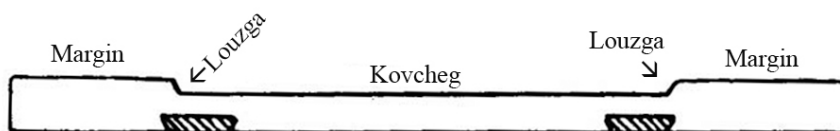
The purpose of the back splines is to counteract warping of the board. However, they do not always serve their purpose. We account for that fact that icon boards dry slowly, shrinking in size while the grooves widen with time. Thus, after a while, the splines become loose and fall out. At the end of the 17th century, board makers came up with an innovation: **side splines**. They are inserted into the sides of the board, and it is nearly impossible for them to fall out.

Splines should never be glued to the board.¹⁷ However, to keep the splines from falling out, they may be glued to the board at the very tip only, or nailed to it with only one small nail. Such measures may prevent the shrinking board from cracking due to fluctuations in humidity which cause constant expansion and contraction of the board. Sometimes a composite icon board (that is, one made of several joined planks) contains complex joinery like "dovetail joints," "swallow-tail joints" or "fantails," and their purpose is to hold adjacent planks together. Such joinery, seen here on the left, is used when an old and excessively bowed board is selected for a new icon.



RAISED BORDER ("KOVCHEG")

On the front side of the board nearly the entire surface is carved out, leaving the sides untouched in the shape of a raised border. The raised border is called "margin," and the recessed area is called "kovcheg"¹⁸ or "trough." The transitional area between the margin and the kovcheg is called "louzga."¹⁹

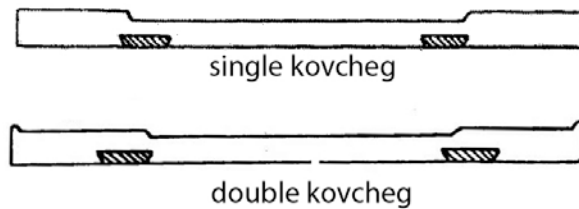


The depth of the recessed area in smaller icons should be around 2 or 2.5 millimeters, and no more than 3 or 4 millimeters for large icons. Sometimes icon boards are made with a double "kovcheg."

¹⁷ Gluing the splines to the board, especially if they are made of two different types of wood (hard and soft, respectively) will tear the board as the two types of wood expand and contract at different rates.

¹⁸ Kovcheg (Russian: Ковчег) means an Ark; it also has a simpler connotation, that of a "container."

¹⁹ Meaning uncertain. The word itself means "husks" or "skins."



Let us again compare an icon with an academic painting. The latter is placed in a frame to create a fully integrated impression by separating the painting from its environment. This separation directs the viewer's eyes into the self-contained world opening somewhere behind the frame as if seen through a window. Similarly, the icon margins play the role of the frame. The margins isolate the image of the icon from our physical world and focus the prayer of the faithful.

The size of the board, the relationship between its height and width, and the size of the margins are very important; if these proportions are not thought through, even good work will not make a good impression.

Centuries ago, the carpenter who made icon boards and the artist-iconographer worked in tandem. The carpenter was just as much of an artist, in his own field, as an iconographer in painting. The iconographer would tell the carpenter, "The margins should be elegant, wider, or more narrow." What that meant was that the iconographer fully trusted the carpenter's artistic judgment on how to accomplish what was desired.

Different eras show a great many variations in the methods of cutting the board and making splines; however, the shape of the splines, the proportions of the boards, and the widths of the margins varied just as much.

All these features of an icon board are of great importance when establishing the time frame when it was made. In ancient times, the board was made with an ax and adze; to this day, experts use the term, "a hewn board." Often, even rip-cuts²⁰ were made with an ax. Boards made in such a way rarely cracked and almost never warped, especially when they were split radially i.e., rift hewn.²¹ In time, however, sawing replaced hewing.

²⁰In woodworking, a rip-cut divides a piece of wood parallel with the grain and leaves the wood grain intact along its length. Cross-cutting, however, cuts perpendicularly to the wood grain, shearing the wood fibers.

²¹Rift hewing is a technique of making boards from logs radially so the annual rings are nearly 90° to the faces. When rift-hewn, each piece is cut along a radius of the original log, so that the saw cuts at right angles to the tree's growth rings.



An old icon board, late 13th - early 14th century.

- A. Markings left by rip-hewing with an axe.
- B. Dove-tail joinery.
- C. Discoloration of the wood made by a missing wooden brace previously nailed to the board.

Even though the saw was known to the Slavs in the 10th century; it was most likely only used for cross-cutting. Rip-cuts with a saw (that is, making several planks out of a single log with the use of a saw cutting parallel to the grain) have been mentioned in written sources only since the 17th century.

The best evidence of how the board was made is the markings left on the surface by the tools used to make the board. For instance, an axe leaves characteristic notches, and we can date an

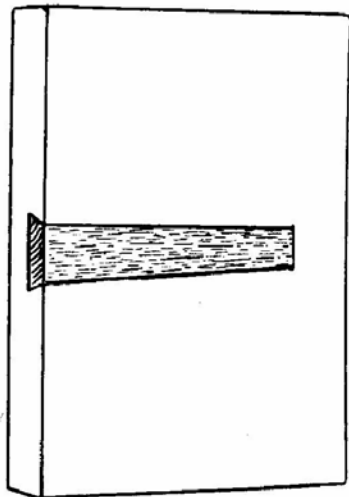
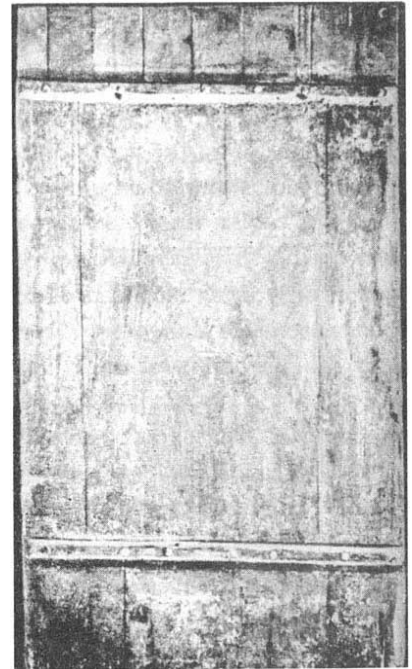
icon by the presence of such markings. In a similar fashion, the icons from the 11th to 16th centuries bear markings left by use of the drawknife.²²

The back side of an old icon could have been subjected to repeated modifications throughout its existence; however, the tool marks on the front side reveal the most accurate information about the age of the icon. Of course, one can see these telltale signs only if the paint layer is severely damaged in places by the loss of the gesso.

The traditional method of flattening the board made of several joined planks was first to plane each plank along the wood grain; then, when the planks were assembled into one board, it was planed again, against the grain to flush the joins. Unevenness of the wood surface on the back of the icon was of little importance, so cross-grain planing of the back was never done.

The manner of joinery and the shape of the splines can also tell us about the history of an icon. In the 12th -13th centuries, splines were not inserted into the grooves as was done in subsequent centuries; instead, they were affixed to the board with wooden dowels or forged iron nails at the sides or back of the icons.

In the 14th century, if a board was made of one big plank of wood, splines were not used. When a board was made out of several joined planks, splines were fastened to the back of the board with forged iron nails.



Icons in which the splines were cut into the back side appeared in the late 14th century.

In the 15th-16th centuries, splines were inserted in to the back side of the icon, and they protruded high above the surface; smaller icons would have only one spline.

This all changed in the 17th century, when splines were made flush with the surface. They were also made of oak with more elaborate shapes. In the late 17th century, splines were inserted into the sides of the icon instead of the back.

The proportions of the boards, the width of the margins, and the

²²A drawknife is an ancient woodworking hand tool used to shape wood by removing shavings. It consists of a blade with a handle at each end. The blade is much longer (along the cutting edge) than it is deep (from cutting edge to back edge). It is pulled or "drawn" (hence the name) toward the user.

depth of the *kovcheg* area are also characteristics used to date icons. Ancient icons, as a rule, had a *kovcheg*. The icons from the 14th-15th centuries were elongated in shape with narrow margins. If an icon was 1.5 meters in height (60 inches), its margins were 4 or 4.5 cm (1.5 or 1.7 inches), and on the boards of a smaller size the margins would decrease to 1.5 to 2 cm (0.6-0.7 inches).

At the end of the 16th century, particularly in the icons of the Moscow masters, we observe a change in dimensions. The proportions of the height to the width remain as before; however, the sides of the *kovcheg* come very close to a square, and the margins get wider, sometimes getting as wide as 5 or 6 cm (2 or 2.3 inches), and the depth of the *kovcheg* is barely noticeable, even to the touch. A double *kovcheg* becomes a popular and common feature.

In the second half of the 17th century, boards were usually made without the *kovcheg*, on a flat board, but the margins would be painted a different color than the background.

In the 17th century, we see icons with tops shaped like a triangle with rounded sides. Such icons belong to the upper tier of the iconostasis. This decorative shape of such an icon row gives the iconostasis a finished form. An example of such an iconostasis is the Cathedral of the Holy Trinity–St. Sergius Lavra.

In the 18th century, margins on the icon disappear altogether, and they were framed like paintings (frames were also painted around wall paintings). Such frames were done in the Baroque and Rococo styles. The Baroque style is an aggregation of plant motifs— leaves, flowers, fruits— combined with various geometric figures such as an ellipse, spiral, and various bent lines. Rococo, on the other hand, sometimes required an artificially bent icon board (concave or convex) whereas the decorative elements were based on one motif only, namely the shape of a sea shell in profile, which was reminiscent of a human ear. This style does not have a clearly defined frame; rather, *kleimos*²³ were placed asymmetrically creating an unbalanced design.

By the end of the 18th and early 19th centuries, a new style took root, called Imperial. Some influence of this style is found in icons and the shape of the board, which was sometimes elliptical, or triangular, etc. Mostly this appears in the shapes of the Royal Doors,²⁴ but sometimes also in the iconostasis.

In the first quarter of the 20th century, a new style appeared, called "Modern." The awakened interest in the art of the catacombs and in Russian antiquity was behind the emergence of this style. Icons were made with a figurative shape at the top. This shape is stylized like onion domes on the churches, or arches of traditional Russian architecture, etc. However, what was vital during the catacomb and Byzantine eras, and what was the expression of the soul of the

²³Kleimos (from Slavonic Клеймо, "stamp, brand") are small miniatures, generally rectangular in shape, placed on the margins of some icons as a visual hagiography. These can be the life of the saint, or major events of the theological narrative. Usually, the *kleimos* are read clockwise from the upper left corner.

²⁴The Royal Doors are the central doors of the iconostasis in an Eastern Orthodox church.

Russian people in the 14th–15th centuries, in the 20th century began to look like a primitive and shallow imitation of the past.

In the 20th century, the spirit of the medieval Russian art was not understood, and it was mostly a distortion of the true historic style, a fake that marred the true art. At that time, the spiritual state of the Russian people was at its lowest level, and such imitations can only be viewed as soulless simulacra and random, incoherent attempts to find a true artistic expression. Therefore, the resurgence of this modernized ancient style was an attractive novelty at first, but as with any fashion, it waned and was quickly outdated.

PRIMING THE BOARD FOR GESSO

Priming the board is as follows. If the board's front surface is very smooth, it should be scored. For this purpose one may use a serrated scraper, similar to an ordinary scraper but with small sharp teeth. Scoring the surface of the board will leave numerous grooves that allow the fabric (*interlagger*) and the gesso to adhere to the board better. One can easily make such a tool at home. Find an old saw blade and a block of wood that is comfortable to hold. Drive the saw blade into the wood block, deep enough to leave just the teeth sticking out. Alternatively, very simply score the surface with a sharp object such as an awl, a knife, or a scalpel. Do not score too deeply as deep scratches may cause cracking of the gesso later.

If the board has holes, dried-out knots, or big dents (especially if it is a board of an old disintegrated icon that is beyond repair), repair these defects. The dried out knots and deep holes can be repaired with a well fitting wood plug. Another way of fixing these is to make a paste out of sawdust and wood glue, and fill the holes. One can also fill these with a thick mixture of chalk and rabbit skin glue, after first priming the holes with hot glue, and then letting them dry. If there are burn marks, these have to be scraped down to fresh wood and patched.

If the new board has wood knots on the front surface (and these are quite frequent on cypress boards) they need to be pried out, and the holes filled with the wood-filling paste described above. Wood knots are notorious for drying out and rising out of the wood; with time, they protrude from the surface of the board; if we leave them in, they will eventually break through the painted layer.

For the next step, we need glue. Usually, iconographers use organic glues of animal extraction such as hide glue, gelatin, and fish glue.

Hide glue is made by boiling animal bones, hide, and tendons. It comes in great many varieties such as hide glue, rabbit skin glue, bone glue, carpenter's glue,²⁵ painter's glue, granular glue (which is a kind of carpenter's glue but manufactured differently). These all differ in gluing power and elasticity. Old iconographers preferred rabbit skin glue for their gesso, a glue of great

²⁵ Not to be confused with the modern PVA-based wood glue.

strength and clarity. It can be obtained today as well, but it has to be tested first for its quality. The same can be said about granular glue. This one is more commonly known as carpenter's glue, available in granules or sheets. This glue can be transparent or opaque, depending on whether it has been clarified, darker or lighter. This glue softens and swells even in humid air, then gets infested by mold, losing its adhesive qualities. This happens very quickly in water solutions. Rabbit skin glue is the most resilient to spoiling of all these hide glues.

Instead of glue, iconographers may use gelatin. It too is made by boiling animal parts. Gelatin comes in two varieties, food-grade gelatin (colorless) and industrial gelatin. The adhesive power of gelatin is inferior to that of hide glue.

The best variety of fish glue is made from fish maw (swim bladder) of cartilaginous fish such as beluga, sturgeon, and others. First, we treat the fish maw with an alkaline solution, wash it, and dry in the sun. This glue has a high strength and elasticity; it is also nearly colorless. Lower grades of fish glue are made from fish guts, skin, scales, bones etc. We must be careful using this glue for gesso. Because it has the highest adhesive power of all animal glues (exceeding both hide glue and gelatin), with careless use, it can cause cracks in gesso.

CHALK

For gesso, we also need chalk; it should be well sifted, without lumps, grit, or sandy particles. Gypsum, plaster, or whitewash should not be used instead of chalk. Gesso made of chalk possesses uncommon depth and transparency. Besides, conservationists observed that gesso made of gypsum is far more susceptible to disintegration in adverse conditions than when made with chalk. With time, gypsum becomes porous and dispersant. So-called "whitewash," a pre-fabricated powder used for painting walls, is utterly unsuitable for gesso.

Only high-grade, clear, and finely ground chalk should be used; however, if only low-grade, dirty, and coarse chalk is available, with a lot of inclusions, grit, and debris, it is always possible to clean it by elutriation.²⁶ This process is done as follows: take two jars, and fill one of them with chalk by about a third, and then add water to it, filling the jar about half full. Slowly stir the mixture to eliminate the lumps. As the water turns white, organic debris will float to the top, and sand will settle to the bottom. The floating inclusions should be collected off the top and discarded. The liquid is poured off to the second jar through a piece of cheese cloth used as a filter. This thick chalk "dough" should be de-lumped by kneading and thorough mixing; no clumped pieces of chalk should remain in it. After that, fill it with water, stir, and filter it again. This process is repeated several times, every time discarding the heavy sediment at the bottom of the jar. Make sure that fine sand does not float up and mix with the chalk. Filter this 3-4 times, after which the clarified mixture is left to settle for 24 hours. During this time, chalk settles to the bottom, and the water clears. Gently and carefully, pour the water off without disturbing the

²⁶Elutriation is a process of purification by washing, straining, or decanting; this process separates the light and heavy particles.

chalk. Here is an easy way of doing this: make a wick out a piece of cheesecloth and lower one end of it into the jar with liquefied chalk, almost touching it. Lower the other end of the wick into an empty jar and place it below the jar with chalk. Leave it for a few hours; the water will decant itself into the empty jar. The remaining chalk is left to dry. This is how we make a piece of soft and clear chalk which will easily disperse in water.

We can also use ready-made dry chalk sold in chunks or lumps. It has to be pulverized first using a grater and then elutriated as described above, because such chalk may contain grains of sand and coal.

Any artificial, man-made chalk, even if it is very fine, is not suitable for our purposes. However, we can use the chalk intended for the production of tooth paste, just as long as it is pure and sodium carbonate has not been added to it. If even small amounts of sodium carbonate²⁷ are in gesso, it will chemically react with the paint layer producing numerous bubbles, lifting, or even peeling off; iconographers call this effect "a boiling gesso," which makes work impossible.

INTERLAGGIO ("PAVOLOKA")

Another part of the gesso layer is interlagger. This is a piece of fabric glued to the board, and on top of which gesso is applied. In Russian, we call this fabric *pávoloka*.²⁸ The etymology of this word comes from archaic words for wrapping something in a piece of fabric.²⁹ Interlagger, or pavoloka, is made of linen or jute, and it must be open-weave fabric (such as burlap or hessian) so that air is not trapped under it when we glue it to the board. Sturdy cheese cloth is also suitable for this purpose. Dyed fabrics are unsuitable for interlagger.

To apply gesso onto the interlagger, we need a spreader made of wood, steel, or bone. Such spreaders go under different names such as "taping knife," "spatula," "scraper," "spachtel," "spackle knife," "putty knife," and many others.

Pumice stone is used for smoothing the gesso's surface. It comes in two varieties. The first kind is light and porous rocks, of dark yellow color, that break and crumble easily. These pieces of pumice stone must be first cut into rectangles no bigger than a matchbox; it is best done with a handsaw. Take two pieces and rub them against each other, sanding them off to create a smooth surface. Rinse them well, washing off the debris. Collect and keep all the dust remaining after we cut the pieces with the saw; this dust is very useful. Crumble the dust even finer and keep it in a jar. This pumice powder shall be later used to correct the lines of your drawing instead of using a rubber eraser. The latter only smudges and smears graphite over the gesso, unpleasantly

²⁷ Na₂CO₃, soda

²⁸ Pronounced ['pavoləkə], "PAH-voh-luh-kuh"

²⁹ "наволакивание", "паволакивание", "заволакивание" - all these words have a connotation of placing a veil, or a shroud onto something. Also a possible connotation for "pavoloka" is to drag the piece of fabric over the surface of the board (волочить = to drag).

staining it, whereas pumice powder removes graphite lines quickly and cleanly. Just take some of this powder on your finger and rub it over the line, and it will come off.

The second kind of pumice stone is hard to obtain, unfortunately. These stones are of much better quality; they are light, small pressed briquettes of white color. These, too, need to be cut and shaped to the right size. When used for sanding the board, it does not affect the color of gesso.

For the final sanding of the board, use sandpaper of medium to fine grit.

THE PROCESS OF APPLYING GESSO TO THE BOARD

Hot glue preparation

To make gesso, we need to prepare glue first. It is done by breaking the sheets of dry glue - be it hide glue or fish glue - and then crumbling it. Then we add water to the crumbled glue and let it stand for about 24 hours. During this time, the glue absorbs water, softens, and swells. We place this softened glue into a bain-marie,³⁰ or a double-boiler. These are two pots, larger and smaller, placed one into the other. The larger pot is filled with water, and glue is poured into the smaller one. The latter should never touch the bottom of the larger pot. It is important to mention that animal glue should never be boiled directly on a stove as it loses its adhesive qualities.

Sizing the board

When the glue is fully melted, dilute it with hot water to make a 3-5% solution of glue. Take this solution and with a flat wide bristle brush apply it while very hot to the surface of the icon panel. The wood must be well soaked in it, and the glue must deeply penetrate the wood. This step must be done for the following reason. When the wood is porous or old, and we apply gesso to it, the wood may wick off and draw off glue from the gesso, weakening it. Such gesso might have poor adhesion to the board. Only hot, liquid glue soaks into the board well; cooled and congealed glue stays on the surface without penetrating it. If the splines are not on the sides of the board,³¹ the sides are sized with glue as well because moisture from the air gets into the board mostly from the sides i.e., via cross-cut fiber. After sizing the board, it should be well dried. Drying times vary from a few hours to 24 hours, depending on the temperature and humidity. If the wood was too dry and porous, let it dry for a day, then repeat the procedure.

Gluing the fabric (interlaggio / pavaloka)

³⁰ Bain-marie (also known as a water bath), a type of heated bath, is a piece of equipment used in science, industry, and cooking to heat materials gently and gradually to fixed temperatures, or to keep materials warm over a period of time. When the working liquid is water, the maximum temperature of the material in the outer container will not exceed 100 degrees Celsius (212 F). The insulating action of the water helps to keep the contents of the inner container from boiling.

³¹ i.e., sides splines.

When the board is finally dry, we glue a piece of fabric on top of it. Take some hot liquid glue, and dilute it to 15% solution (1 part glue to 6 parts hot water by volume). This should be a strong glue, and when you moisten your fingers in it, the fingertips should stick to one another, which is a good test for glue's strength. A piece of fabric is cut according to the size of the board, including the widths of the sides (provided, there are no side splines). We soak this piece of fabric in the 15% glue solution for about 1 or 2 hours so that glue penetrates the fiber well. Take a wide flat brush, and apply hot 15% glue to the board. Squeeze the excess glue off the fabric just a little, and place it on the board (also catching the sides), spread it flat and straighten it, smooth it out with your hand, and put out to dry. It is important not to stretch the fabric too tight, especially at the *louzga*;³² the fabric shrinks upon drying, and it can lift off at the *louzga* leaving pockets of air underneath.

We may also take another route by gluing a dry piece of fabric to the board. This works best if the piece of fabric is cheesecloth. Apply a coat of hot glue to the board, and place the fabric over it, tucking it to the surface snugly. After that, pass over the fabric with more hot glue; this glue solution should be more liquid so that the fabric is well soaked in the glue solution.

If we have a board of a large size, and especially if the room is cool, there is an efficient way of applying the fabric to the board. Take the dry piece of fabric, and roll it on a round stick like a scroll (you can use a cardboard core from paper towels). Take a wide flat brush, and coat a narrow strip of the board with glue, from side to side. Immediately place the roll on the glue and unroll it, pressing the fabric into the glue-covered surface. Let the sides hang; we will glue them later. Coat the next segment, unroll the fabric more, and thus continue until the entire board is covered. In this way, the board is gradually covered with hot glue without letting it cool down and prematurely congeal, while the fabric is smoothed consistently without constant repositioning and adjusting. When the face side is finished, you can glue the sides by folding the fabric over. It is important not to stretch the fabric over the sides; as the fabric dries, it shrinks and can stretch and detach the central part. Once it is done, apply hot glue (10-12% strength) all over the board, generously drenching the fabric in it. Leave the board to dry completely, after which the next step is to apply gesso to it.

MAKING GESSO

Gesso is made the following way.

Make an 8-10% solution of glue (1 part liquid glue to 5 parts hot water by volume). Pour it into a deep bowl and add some chalk to it and mix it around. The amount of chalk should be only enough to make the solution the consistency of heavy cream; that is, it should be fairly liquid. We coat the fabric with this solution using a wide brush, or it can simply be poured over some areas and smoothed out by hand. It is very important that the gesso fills all the spaces between the fabric's threads and that there are no air pockets left. There should be 2-3 of these very thin

³²Louzga – See section *Raised Border (kovcheg)*.

coats; each subsequent coat is applied after the previous coat is fully dry. Iconographers call this stage "whitewash." It serves as a priming coat for the rest of the gesso which is subsequently applied in thicker coats. Without the "whitewash," the successive thicker layers of gesso may develop cracks.

When doing "whitewash," keep your hands oil-free; tiny amounts of skin oil may diminish the adhesive power of the glue in gesso.

The next step is to add more chalk to the glue so that the gesso solution has consistency of batter. This we apply to the board using a spreader.³³ As gesso is spread over the surface, use the spreader to even out the surface. The coats of gesso must be very thin; so press the spreader rather firmly into the surface. The thinner the coats, the less chance that the gesso may crack. Gesso applied in thick layers can easily crack within hours. Since water evaporates only from the gesso's outer side, the upper layers of gesso begin to shrink and contract as they dry. As the upper layers dry, the layers underneath the surface are still wet and not yet attenuated.³⁴ The result of such uneven drying is that the upper layers begin to crack in a characteristic pattern of rounded edges.

Some iconographers, applying ten or more very thin layers, smooth the surface of the wet gesso with their hand to avoid cracks. However, in our opinion, a spreader is a better tool because it is firm, and it does a better job of evening out the surface. The hand only repeats the unevenness of the previous layers.

When you apply coats of gesso with a spreader, even if you want to even out a problematic area, do not make repeated passes over the same spot. Doing this will not only make it worse but may actually lift the underlying coats as they get wetter with each pass. It is enough to pass over one area 2-3 times and leave it to dry. We can always even this out in the subsequent stages by wet-sanding.

We apply 3-4 such coats with the spreader. To make our last layers even, we recommend wet-sanding the surface with pumice stone. Here is how it is done. Pour some water into a large saucer, and place a pumice stone into it for a minute. Take it out, and shake off most of the water, leaving just a few drops on it. At this point, even out the entire surface of the board with the pumice stone. As the gesso turns into thick slurry, the pumice stone flattens the bulging areas and fills the recesses with gesso. Once this is done, the remaining coats of gesso will go on much more smoothly and evenly.

³³These spreaders have various names such as "taping knife," "spatula," "scraper," "Spachtel," "spackle knife," "putty knife," and many others.

³⁴As water evaporates, gesso shrinks in volume, or attenuates. If the upper layers shrink in volume first, the underlying layers' subsequent shrinkage tears the upper layers.

The sides are smoothed out with pumice stone in the same way; that is, only if there are no side splines.

We must make enough gesso so that we do not run out of it in the middle of the process. Making a new batch of gesso is rife with problems. The proportion of glue to chalk may be different. If the new batch is weaker than the old, it might not cause problems; however, if the new batch is stronger than the old,³⁵ cracking is guaranteed.

Gessoing may take a few days. It is therefore important to make sure the gesso in the jar does not dry out. For this, we place a piece of wet cloth (make sure it does not drip into the jar), and leave it in a cool place. It is not advisable to cover the jar with an air-tight lid; this may cause the gesso to go bad quickly, or separate and liquefy.

It may happen that after gessoing is complete, the surface develops hairline cracks. This usually happens for the following two reasons:

1. The upper layer is stronger in glue content than the layers underneath. In this case, take the remaining liquid gesso and add some water to it (whether it is a tablespoon or only a few drops depends on how much gesso is left). Add more chalk to it; that is to say, make the gesso weaker. Cover the entire surface with it 2-3 more times.
2. Cracks may develop because the water used in the gesso had a high mineral content. Hard water makes gesso brittle. To counteract this, use only soft water for making glue, either distilled or just boiled.

Occasionally, another problem can develop: the interlagger detaches from the board under the layers of gesso. This will look like an area of bulging gesso. To repair this, make a small hole in the bulge, inject some liquid glue into it using a syringe (or use a small brush). Fold a piece of tracing paper a few times, cover the area, and place a warm iron on top for 1 or 2 hours. If the tracing paper sticks to the gesso, wash it off carefully. This detachment of the interlagger happens when the board was not sized properly, or if the sizing glue was not hot enough. It is important to remember that only hot and liquid glue penetrates the wood fiber deeply enough to be effective. It also makes wood fiber firm. The interlagger must be glued to the board only after the board dries completely; otherwise the interlagger may detach in several places. This may happen not immediately, but even later during painting, greatly complicating matters.

WET-SANDING THE GESSO

When the board is coated with gesso and is full dry, it has to be sanded smooth. We use the process called "wet-sanding." Here is how it is done.

³⁵ That is to say, the stronger glue is the one in which the proportion of glue to chalk is greater.

We take the piece of prepared pumice stone, generously soak it in water, and gently rub the surface of the panel in small sections (15 by 15 cm, or 5 by 5 inches) using circular motions as well as side to side. When you feel that the gesso is getting drier under the pumice stone, remove the stone, and level the surface with a slightly wet hand or fingers. This is how we smooth the board's face and the sides. Make sure you do not use too much water in wet-sanding, lest it begins to erode the gesso too quickly and unevenly. On the other hand, if there is not enough water in the process, the pumice stone will start making deep scratches. Even if the amount of water is just right and yet you see that scratches are being made, stop immediately, turn the pumice stone around and examine its working surface. Should you find a piece of debris, a tiny stone, or a foreign inclusion, remove it, and continue with wet-sanding.

After the work is finished, let the board dry well.

During the whole procedure, the pumice stone must be constantly washed in water so that it does not clog up from the drying gesso slurry. At the end of the work, thoroughly wash the pumice stone as the hardened gesso may ruin it.

MAKING A TABLET

A tablet³⁶ is a piece of canvas no bigger than 28 cm by 19 cm (11 by 7.5 inches). It is gessoed on both sides. A tablet can be of a smaller size but not bigger because of the fragility of the support.

The process of gessoing a tablet is as follows.

A frame is made about 80 by 70 cm or 60 by 50 cm (31.5 by 27.5 inches or 13.5 by 19.5 inches respectively). We cut a piece of canvas somewhat bigger than the frame (marine canvas is a good material), and stretch it over the frame. After this, all the procedures described in relation to gessoing a wooden board are performed on this piece of canvas; the only difference is that gesso is applied to both sides of it.

To prevent the piece of canvas sticking to the frame, we gesso only the inner part without getting onto the part which is attached to the frame. To stop the canvas from stretching out while gesso is being applied to it, we can place an additional support under the frame such as a thick piece of glass or a smooth wood panel that fits inside the frame.

Once gesso is applied to that side, leave it to dry somewhat, but not completely.³⁷ About 30-40 minutes later, turn the frame over, keeping the same support underneath, and gesso the other side. The coats must be thin; each new coat is applied after the previous one is completely dry.

³⁶Not all icons were made on wooden panels. In some instances, a piece of canvas was coated with gesso on both sides, and images were painted on it, often on both sides. In the 20th century, these icons were called "tablets."

When the layer of gesso reaches about 3 or 4 mm ($\frac{1}{8}$ or $\frac{5}{12}$ in), its surface must be smoothed out by wet-sanding. We work on one side first, and 20-30 minutes later on the other. While the canvas is still somewhat damp, we carefully cut it from the frame over the piece of glass, and if needed, cut it into separate rectangles with the use of a razor and a metal ruler.

The cut tablets, while they are still somewhat damp, are placed between sheets of glass and are left for several days to dry, with something heavy placed on top of it to create downward pressure. We can also place sheets of smooth white paper between the pieces. When after a few days the tablets are completely dry, we sand them with sandpaper on both sides.

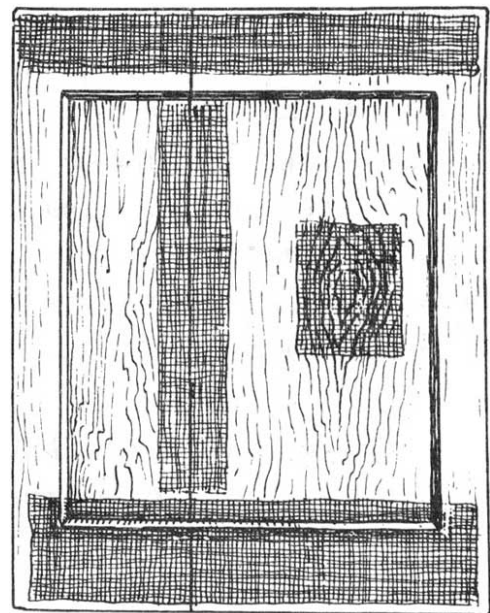
If a frame is not available, we can make a tablet without it. Take a piece of canvas and tack it to a flat wooden panel or a piece of plywood. Before attaching it to the panel, place a piece of clean paper under the canvas. When applying gesso, leave the sides gesso-free at about 2-3 cm (1 to $1\frac{3}{16}$ in) on all four sides of the rectangle. This is done for the sake of convenience when turning the canvas. It is important to note that tacks are placed not just in the corners but also at all sides, at about 4-5 cm distance from each other (about 2 inches). We need to turn the canvas over before it gets glued to the paper. As we turn it over, we also turn over the piece of paper underneath (or replace it with a new piece of paper); gesso will seep through the holes between the threads onto paper.

This method is somewhat awkward because every time we have to turn the canvas over, we need to remove and reposition the tacks; but otherwise the process is the same as described above.

HISTORICAL PERSPECTIVE

Eventually the question arises: when did this practice of gessoing wood before painting begin?

We know that as early as 4,000 years before the birth of Christ, the ancient Egyptians, in their idiomatic understanding of eternity, labored to provide their departed with a preserved body. Without the extant body, as they believed, the soul could not become immortal. A mummified body was placed into a wooden sarcophagus, contoured to the shape of the body. Fabric was then glued over the coffin; gesso was applied; and then it was painted over with egg-yolk based paint, including the face of the deceased.



An icon board with partial interlaggerio

³⁷ Wet gesso is grey and reflective; fully dry gesso is white and non-reflective; in between, there is a phase which gilders call "leathery." The gesso is grey and non-reflective.

The Church inherited this technique as tested by passing of many centuries. The deepest respect for the sacredness of the iconographic image demanded a lasting foundation. On ancient icons, the entire front side was sized with glue and covered with interlaggio. In the 16th century, iconographers started using only **partial interlaggio**; we account for the fact that interlaggio was placed only in the problematic places such as the sides, the center, the joints, and the knots and plugs.

In the late 17th - early 18th century, iconographers stopped using interlaggio; they applied gesso to the board directly, without fabric underneath. By that time, the gesso recipe had changed. In fact, egg tempera was gradually replaced by oil paint. Iconographers started adding vegetable oil or boiled linseed oil to their gesso. There was even an unusual 18th century recipe for gesso that included egg yolk, hide glue, and a generous amount of oil. For such gesso, there was a need to size the board with either hide glue or boiled linseed oil so that the wood did not siphon glue from the gesso.

In the 19th century, some iconographers added white pigment to their gesso.

Rural icon ateliers (cooperative iconography) later in the 19th century simplified the process of icon production. Among their production we commonly find icons in which, instead of fabric, paper was used for interlaggio, fully or partially (that is, in problematic spots only), on top of which they then gessoed.

4. Drawing

After the icon board is finished, the next step is to prepare the drawing. One will need the following materials:

1. Tracing and regular white paper

These are needed for the drawing and then to transfer the drawing to the board.

2. A small hand-bridge

This instrument is used as an aid when making straight lines. The bridge can easily be made out of a sturdy and stiff wooden ruler with two felt pads attached at both ends underneath. With these soft pads, the hand-bridge can be placed on the painted surface of the icon and not risk scratching the painted layer.

3. Brushes

In icon painting, only squirrel and kolinsky brushes are used. These should be round and tapered at the end. The tip should be sharp and taper off to only 1 or 2 pieces of hair. A brush which has lost its pointed tip is unsuitable for work.

4. An awl, bodkin, or any home-made instrument with a sharp and firm needle tip

This is used for incising (scratching) parts of the drawing into the gesso. There is no need to incise the entire drawing; however, it is necessary to do so in places where we lay down gold. We also scratch over those lines which will be subsequently covered with dark or opaque colors. The latter will inevitably obscure the drawing and we might lose the lines; the incisions will help to find these lines easily. One can make this instrument easily by driving a thick sewing needle into a wooden stick and leaving the sharp end sticking out at about 1.5 or 2 cm.

5. Evaporated beer, garlic juice, or honey

To transfer the drawing from an old icon, we need to prepare a dark paint made of black or brown dry pigment (such as bone black or umber). Evaporated beer, garlic juice, or honey are used as binders and retain tack needed for the transfer.

Evaporated beer³⁸ is prepared the following way. Take about 500 ml of beer (either dark or light), pour it into a bain-marie, place the pots on a heat source, and slowly evaporate it. The process should take about 5-6 hours. Beer will gradually turn into a thick, stringy mass. When it is still warm and liquid, pour it off into a small glass jar where it will cool down and become solid. It can now be stored away. When you need it, add a few drops of water and rub the surface with a wet finger, reconstituting it. Take out whatever amount you need onto a palette or a small saucer. Adding more water as needed, apply it with the brush in places of gold details

³⁸ Evaporated beer is called "souslo" (сусло) in Russian; it is also known as "beer glue."

such as “assist.”³⁹ However, at the present stage we shall use evaporated beer to transfer our drawing; for that, we add black or brown pigment to it.

Another choice of binder, **garlic juice**, is made the following way. Take a bulb of garlic, preferably picked the previous season. Fresh garlic is too watery, and its juice has low adhesive qualities; we suggest using garlic that has been kept in storage through the winter. Extract the cloves, clean off their husks, and grate the cloves into a paste. Gather this paste onto a piece of cheesecloth (folded twice), and squeeze out the juice into a small wide jar. Cover it with a piece of cheesecloth and let it dry completely; it will become solid. When needed, reconstitute it with water in the same way as described with evaporated beer. It is also used as assist when painting gold details.

Neither evaporated beer nor garlic juice should be stored in an air-tight jar as both may spoil and get moldy. In fact, in open jars, these two substances may remain fresh for years. Old masters, who knew the traditional materials well, always preferred evaporated beer to garlic juice.

Honey, with added pigment, can also be used to transfer the drawing from an old icon. However, for this task, the honey must be fresh and not crystallized.

6. Egg for egg emulsion

Tempera is egg-yolk based paint in which egg emulsion serves as a binder. Egg emulsion can be mixed with dry natural pigments as well as with synthetic tempera sold in tubes.

Egg emulsion is made the following way. Take a fresh chicken egg, break it at the wider end, making a hole big enough for the yolk to pass through without breaking the membrane. Discard the egg white, and gently clean the yolk of its chalazae and the remaining albumen. Break the membrane, and release the liquid yolk into a small cup. Clean the remaining egg shell of egg white, and fill two thirds of it with kvass⁴⁰ (do not use the sweetened variety). Pour the measured kvass into the cup with egg yolk, and gently and thoroughly mix it while avoiding making bubbles. If kvass is not available, it may be substituted with a solution of vinegar (1 part vinegar, 1 part water), or even just with water alone, in the same quantity ($\frac{2}{3}$ of the empty egg shell) as described above.

7. Pigments

These can be dry pigments or synthetic tempera in tubes.

³⁹ This is also called the “assist” technique. For the sake of clarity, *assist* refers to the glue itself. Historically, the technique of painting gold lines over the garments was called “chrysokontilia” or “linokopia” in Greek. The Russians inherited the word “linokopia” from the Greeks but mispronounced it as “inokop” (инокопъ). Eventually, not just the glue but the entire method of painting golden rays on garments became commonly known as “assist.”

⁴⁰ **Kvass** is a traditional Slavic fermented beverage made from rye bread. It has been a common non-alcoholic drink in Eastern Europe since at least the Middle Ages. Kvass has some acidic content which slows down spoiling of egg emulsion. Many iconographers use beer in their emulsion instead of kvass, since the latter is not always available.

NATURAL EGG TEMPERA

Dry pigments are mulled and mixed with the egg emulsion - or as the Russian iconographers say, *created*⁴¹ - in large wooden spoons.⁴² The spoons' handles should be cut off as they may stand in the way. Neither plastic nor glazed porcelain cups or jars are suitable for this task as we need the inner walls of these vessels to be rough textured, and not smooth. If the walls are smooth and sleek, it is impossible to disperse the pigments well enough; the rough surface of the wooden spoon, on the other hand, helps to break up the smaller lumps and to make the pigment finer. For every paint, there should be a dedicated spoon.

Here is how the egg tempera paints are "created." Place some of the dry pigment into a wooden spoon, no more than half a teaspoon. Add egg emulsion (also a little, only about half a teaspoon), and mull it with the index finger. It should not be just mixed around but rather vigorously rubbed thoroughly with the finger against the rough surface of the spoon. The paint is mulled better if egg emulsion is added in small portions, a few drops at a time. In the resulting paint, there should be no grains or lumps of pigment remaining. The paint should not separate, i.e., with the pigment settling at the bottom and emulsion at the top; indeed, it should be one homogeneous liquid. It is as if we create a new and undivided substance, and this is probably the reason why iconographers still use this archaic term, "creating" paint.

The consistency of the "created" paint should be like a thick heavy cream. Not all the paints yield themselves to such a method of preparation. Ochres can be forged this way because they are soft and malleable pigments. However, other pigments may be too hard to be prepared this way; these must be ground with a glass muller on a glass plate. Such hard pigments are white,⁴³ various siennas, umbers, cobalts, and cadmiums. To "create" paints out of these pigments, we need a flat slab or plate (ceramic tile is good for this purpose, but only unglazed, matte) and also a muller. These are made of glass, and the base should be rough and flat.⁴⁴ Place some dry pigment onto the grinding plate, add a few drops of emulsion, and grind it all with a muller. The muller should be moved in circular patterns; slightly lift up the side closest to the thumb so that the muller does not stick to the plate. Add more emulsion as you go. If you have less pigment to grind, the process takes less time and effort. When the pigment is well ground, it can be gathered

⁴¹ In her text, Mother Iuliania used the archaic word "творение" (creation). It cognates with *making, forging, manufacturing*.

⁴² In the West, large wooden spoons are difficult to come by. Instead, small ceramic cups with rounded bottoms can be used; however, it is important that the inner surface should not be glazed. Unglazed oriental tea cups are good for this purpose.

⁴³ In her text, Mother Iuliania did not indicate the nature of the white pigment, whether she meant lead white, titanium white, or antimony white. Most likely, she meant lead white, which had held the uncontested place of the best white pigment for centuries. Titanium white was invented in the late 18th century, but it was not until 1921 that American and Norwegian companies began to develop titanium white as an artist material. This pigment reached Russia only in 1930s, and at that time it had only 25% of its current brightness and opacity.

⁴⁴ Modern pigment makers sell factory-made glass mullers of various sizes. Instead of ceramic tile, a large sheet of tempered glass may be used, thoroughly sanded with silicon carbide or purchased from a glass maker as "sand-blasted" or "frosted" glass.

with a razor blade, spatula, or a palette knife, and stored in the wooden spoons. White pigments require dedicated mullers and plates as these pigments can be easily contaminated by other colors. All other pigments can be ground using the same plate and the same muller; however, they need to be washed thoroughly after each grind before proceeding to the next color.

The paints are best used not right away but the following day. We account for that fact that they become stronger overnight, and that there is a kind of infusing or fermenting process taking place which amplifies the paint's bonding qualities to gesso as well as its stability. To leave the paint open overnight, we need to pour a little cold water on top of the paint. It has to be done in such a way that it only covers the paint but does not mix with it. This will prevent the paint from drying out. A well-mulled, thick paint does not mix with water. The following day, before we begin our work, we pour the water off the top, add a few drops of egg yolk, mix it around by the finger, and proceed to paint. The consistency of paint should be such that you can easily load a brush with it; if it runs off the brush, it is too thin.

Natural egg tempera stays fresh for only 3 or 4 days. After that, it begins to spoil. As this happens, it ceases to bind with gesso well, and the pigments begin to lose their vivid colors. One may keep the prepared paints in a cool place but not let them freeze; freezing ruins them completely.

PIGMENTS

The assortment of pigments should be kept to a minimum:

1. White
2. Ochres (yellow ocher and red ocher)
3. Siennas (raw sienna and burnt sienna)
4. Burnt umber
5. Cobalt blue
6. Green⁴⁵
7. Cadmiums –yellow light, orange, red light, red dark, violet.
8. Black - bone black or ivory black

The rich chromatic palette of the old Russian icons, especially at the peak of its development in the 15th century, was the result of complex combinations of very basic pigments. This rich variety of colors stemmed from the great skill of the iconographers, their sensitivity to color, and their deep understanding of each pigment. Ancient masters made their own dry pigments out of local ores, which contained ochers, umbers, and other minerals.

⁴⁵ Mother Luliania indicates **emerald green**. However, this designation is ambiguous as there have been many pigments of various composition and chemical formulae that bore this name, from the extremely toxic Veronese Green to its non-toxic replacement Viridian. In any case, Emerald Green, whichever Mother Luliania meant, is most likely to be a synthetic pigment. In historic practice, various **green earths** (terre verte) were used as greens.

Besides mineral pigments, synthetic pigments and dyes were made according to recipes that were passed down from one generation to another; these recipes included lead white (basic lead carbonate), saffron and buckthorn (organic vegetable dyes) and pike bile (organic animal dye).

The best pigments were imported from Western Europe. Such were venetian red, lapis lazuli, azurite, orpiment, verdigris, and cinnabar. Russian iconographers also used lead white, ocher, green earth, minium, Berlin blue, red oxide, crimson lake, and many others pigments brought from German-speaking lands.

Common Russian pigments were: ocher, red bole, Kaluga ocher, Greek ocher, Pskov *tchervlen*,⁴⁶ Moskow white, Kashin white, madder lake, and others.

Besides the names of primary pigments, the history of iconography has kept the names of the following **color mixtures**:

SANKIR (санкирь) is a pigment combination which was used as the base tone for flesh. It consisted of yellow ocher, red ocher (or burnt sienna), and green earth. Sankir should be mixed in such a way that no single color of the above three mentioned is dominant. It may, however, lean towards a reddish hue, or towards a greenish hue. If the icon's overall color palette is cool, then the color of sankir must be warm; if the icon is dominated by warm colors, then the sankir must be cool, leaning towards green.

REFT (рефть)⁴⁷ is a mixture of three pigments: yellow ocher, black, and white. This makes a gray color of varying value, from dark to light.

DIETCH (дичь) is a lilac⁴⁸ mixture of various hues. We can replicate this color by mixing modern pigments cadmium red, burnt sienna, cobalt blue, and white.

BAGOR (багор) is a pigment combination of various reddish tones, from dark to light. *Bagor* can be replicated by mixing cadmium red, burnt sienna, and white.

Natural egg tempera is one of the strongest and most resilient paints known to man. Egg-based paint, especially when earth pigments are used, are colorfast. With the passage of time it does not fade but only gets stronger.

Along with natural egg tempera, there is factory-made synthetic tempera. Such is **polyvinyl acetate tempera**.⁴⁹ The pigments used in making this tempera are very finely ground. It is sold

⁴⁶Червлень (tchervlen) was an organic reddish-brown dye.

⁴⁷ In the West, *verdaccio* ("dirty green") is an Italian name for the mixture of black, white, and yellow ocher pigments resulting in a greenish gray tone, depending on the proportion. Verdaccio was used for underpainting.

⁴⁸ Some sources indicate that "dietch" was a bluish gray tone.

in art stores in tubes as a thick paste. The binder used for this tempera is synthetic water-soluble polyvinyl acetate emulsion, or PVA.

Polyvinyl acetate tempera is used predominantly in academic painting, in decorative works; it can also be used in painting icons. It can be diluted with egg emulsion.

The advantage of polyvinyl acetate tempera over casein-oil tempera is that the paint layer is very elastic, is far stronger, and does not yellow with time. White colors do not fade under the coat of varnish. This tempera is lightfast.

Polyvinyl acetate tempera is incompatible with casein-oil tempera; the former is acidic in nature, and the latter is alkali-based. If we were to mix them, these two paints would chemically react with each other and curdle.

Polyvinyl acetate tempera dries faster than casein-oil tempera, and the dry paint becomes water-insoluble. Therefore, when working, do not squeeze too much paint out of the tubes, and keep the paint moist on the palette by adding drops of water. While painting with PVA tempera, it is advisable to keep the brushes wet in a shallow saucer filled with water; however, after work they still need to be washed thoroughly with soap. If it happens that paint dries on the brushes, alcohol can be used to loosen and soften it, or even hot water. The palettes can also be washed with hot water.

Some of the colors of this synthetic tempera change their hue as they dry. For instance, bone black becomes lighter, and so do cobalt blue and red ocher. On the other hand, cadmium yellow and cadmium red become darker, and so do yellow ocher and burnt sienna. The latter two pigments, in fact, darken as they dry, but with time they become lighter again. One may observe a marked darkening of caput mortuum,⁵⁰ burnt umber, madder lake,⁵¹ raw sienna, Veronese green, and ultramarine blue.

☺☺☺

When everything is ready, we may proceed to the drawing stage. However, we must call to mind, accept, and be mindful of the following guidelines:

1. A student of iconography must be above all imbued with reverence towards this art and recognize it as sacred.

⁴⁹ Precursor of acrylic paint.

⁵⁰ Dark violet hematite, one of several iron oxides

⁵¹ Alizarin crimson

2. One must be highly respectful of the people of the past eras who worked out the iconographic language and created styles of the icon which are lofty and true to the Church. Among those people we count many saints.
3. An icon is a prayer that takes the shape of a sacred image; consequently, an icon's whole point of existence is to engender a prayer. Therefore, while working on an icon, the painter must never forget about prayer. Prayer will guide, teach, and explain without words; it will make things clear; it will make the icon approachable, and it will show what is spiritually true.

In regard to the technical aspect of painting an icon, it is important to remember that making the drawing is a crucial stage of painting a sacred image. In fact, in old iconographic ateliers or workshops, only the most accomplished masters⁵² of the group were privileged to make drawings.⁵³

The following technical guidelines should be applied to the drawing:

1. The graphic quality of the drawing must be very clear. The lines must be confident and sure, yet without heaviness. These lines must show forth all of the details of the icon such as architecture, landscape, facial features, the hair structure with hair locks, and so on. The folds of the garments must be correctly and competently indicated, for it is the folds that indicate the body underneath the fabric.
2. One must at all cost avoid dry, monotonous, thin wire-like lines which are the same everywhere. The line must be free, vivid, and artistically expressive; yet it should not be chaotic or careless. Each line must be thought out and justified by clear understanding of its purpose and the need to be there.
3. In terms of composition, the drawing must be correctly positioned on the board, not skewed, angled, or shifted. The old icons of the best masters are the best examples of a correctly positioned composition.

Good drawing does not come easily. One must practice and study diligently, and the skill will blossom slowly, almost imperceptibly at first, all according to one's perseverance, patience and

⁵²In archaic Russian, the title of the headmaster was **знаменщик** ("znamenschchik"). This word cognates with the words "sign" and "scribe." The headmaster was the one to begin the icon with the drawing and also the one to finish it with calligraphy, inscribing the names of the saints and the texts on the scrolls and palimpsest.

⁵³ Less accomplished members of the group were delegated simpler tasks such as painting base tones, developing garments, modeling faces etc. Apprentices were delegated to make boards and to grind pigments. Teaching was done through observation.

diligence. Constant practice will make one's hands steady and the eyes perceptive and discerning. If the beginner completes the task set before him—be it a very simple task or a complex one—with all the diligence and skill which he possesses today, tomorrow he will do so even better.

There are many ways of making a drawing on gesso. In olden times, the master-scribe did a light sketch in charcoal first, and then made a detailed drawing with a brush in black ink. The most talented, skilled, and experienced iconographers could make the drawing directly on the board without the help of a preliminary sketch. They reverently held the prototypes in their memory; and, being steeped in the mind of the Church, they made free decisions as to follow their own prayerful cognition. Sometimes they re-created the drawing anew. However, inexperienced icon painters and students of iconography must use transfer images, tracings, and copies of the drawings, which we now call *proris*.⁵⁴

Students of iconography, even if they have previously taken drawing classes, should not become overconfident and rely on their hitherto honed strengths and prior knowledge because iconographic drawing is a unique and unparalleled art form.

The student must learn how to make a tracing of the icon, at least initially. The method of tracing the prototypes is rooted in many centuries of teaching experience. It was part of an educational system used in countless iconographic schools with great success. Eventually, when a student is ready to draw an iconographic image freehand, he or she should not hesitate to attempt it; however, an experienced master still needs to check the work for mistakes.

⁵⁴**Proris** (пропись) is a line drawing copied or traced from an existing prototype, re-copied multiple times, passed around among iconographers, and disseminated via anthology books.

5. Transferring the drawing onto the icon board

Making a tracing is done the following way. Choose an old icon whose design is not too complex. The selected icon must not be large; however, it must be clear and easy to "read" in both the drawing and painting.

It only makes sense to choose the prototype first and then make an icon board of the same size to match the prototype.

TACK TRANSFER METHOD

Take some dry black pigment (bone black or lamp black) and mix with a little garlic juice or honey in a wooden spoon, using your index finger.⁵⁵ Having done that, take some egg emulsion (egg yolk with kvass or beer), and apply a thin layer of it to the entire front side of the prototype icon. When the yolk dries, using the prepared black mixture, trace with the brush over the lines and contours on top of the prototype icon. The coat of egg yolk is necessary for the black paint to adhere to the surface. The brush must be of a medium or small size; when working with it, make sure that the lines you are painting are of the same thickness as on the original. When this drawing is dry, take a white sheet of paper. Breathe on the prototype to make the black drawing on the icon tacky.



Figure 1. A Tracing, a mirror image imprint on paper

Immediately, apply the piece of white paper to it, breathing onto it in places to insure that the paint does not go completely dry losing its tack. Press it firmly into the surface with your hand, rubbing it over with the fingers lightly. As the result, the drawing will imprint on the paper as a mirror image (**Fig. 1**). This constitutes **a tracing**. You will get a better quality tracing if there is more binder in your black paint than of pigment; that is to say, there should be more flow to the paint.⁵⁶ Also, the paint should be mulled well so that there are no clumps or large particles present.

⁵⁵ This procedure is described in detail in Chapter 4.

⁵⁶ If there is too much pigment in the paint, its tack is greatly reduced.

After you make a good quality tracing, clean the prototype icon with a moist piece of cotton or a soft sponge, two or three times, to remove egg yolk and the black lines.

The tracing is, as we have already indicated, a mirror image of the original. For the next step, take a piece of translucent paper (tracing paper, also known as *papier calque*), and place it on top of the mirrored tracing. With the same black paint, trace the lines again. This will be your **transfer sheet**. Apply this sheet to the gessoed board, making sure the position is correct, and press it into the surface, refreshing the paint's tack by breathing under the paper from time to time. When the drawing imprints on the board correctly, remove the transfer sheet (**Fig. 2**). The method of making a tracing described above is called "tack transfer."



Figure 2.
Imprint of the drawing on the icon board
made with a transfer sheet

DUSTING TRANSFER METHOD

In the past, there was also another commonly used method of transferring the line drawing to the board. Here is how it is done.

Take a piece of translucent paper and make a pencil tracing of the existing icon. Then place this pencil sketch onto a small stack of paper (2 or 3 sheets) on a soft but even surface such as corrugated cardboard or corkwood. Using a needle, make a series of holes along the lines of the drawing, placing the holes very close to each other. After this, attach the tracing to an icon board. Make a small pouch out of cheesecloth (folded twice), fill it with black pigment, and fold the loose ends. With this pouch, tap over the surface of the tracing. The fine black pigment will go through the cheesecloth and through the holes of the tracing onto the board. The resulting image is a series of fine dots of dry black pigment on the gesso (**Fig. 3**). Connect these dotted lines with India ink or black egg tempera paint using a brush. This second method is known as "dusting transfer."



Figure 3 Dusting transfer method

It is also possible to make a tracing simply by placing a piece of translucent paper over the prototype or the existing drawing and copying the lines on it. To increase the paper's translucency, oil it with *olifa*⁵⁷ (or any vegetable oil), on both sides, and then let it dry. Tracing can be done in pencil; pencil draws well on oiled paper. However, the lines can also be painted over with paint and brush, but paint does not stick well to an oiled paper. To counteract this, slice a fresh clove of garlic and rub it on the oiled paper's surface. A thin coat of garlic juice will

⁵⁷ Boiled linseed oil

make the paint stick to the oiled surface. Or you can rub the surface with a rubber eraser, but lightly. It must be said that overall this is not the best method of making a tracing as no tracing paper is fully translucent, obscuring details. Once the tracing is complete, copy the lines either by using the method of tack transfer or by using carbon paper. If the latter is used, attach the transfer sheet firmly to the board so it does not shift, and use a hard pencil to imprint the image onto the gesso.



One can make "carbon paper" by rubbing a sheet of transfer paper with a graphite pencil or charcoal pencil. It is possible to use carbon paper sold at art stores as long as its dye is not water-soluble. After the drawing is transferred, check it against the original and correct the lines with a pencil; the wrong lines must be removed along with accidental smudges. Do not use a rubber eraser for line correction. An eraser only smudges the pencil and makes the gesso dirty. One way of removing the incorrect lines or smudges is to rub them with fine pumice powder. This can be done with the finger, or with a hard eraser.

Once the preliminary design is complete, the entire line drawing must be reinstated in India ink.

All tracings and transfer sheets must not be discarded but kept for future projects. With time, an iconographer accumulates a whole library of invaluable and useful material.

Some iconographers reinstate the lines of the drawing with black paint mixed with egg yolk. We advise the use of India ink instead. If we need to scrape off an entire section of paint later, the drawing in India ink will remain intact whereas egg tempera black paint will be scraped off along with the rest of the paint.

In all three methods of transferring the image onto the board, some lines could be incised into the gesso with a sharp needle. This is only done in the places intended to be covered with opaque dark paint. Dark and opaque base coats obscure the line drawing completely, but the incisions will help to find the correct lines. It is important, however, not to incise too deeply into the gesso (a typical beginner's mistake). If you happen to make this mistake, cover the area with a mixture of egg yolk and some pigment; this mixture should fill the incised lines and flatten the surface.

Old icons rarely have incised lines. Mostly, incisions are made in those places in which the lines are easy to lose under gold leaf; such as the halos and the contours of the figures.

Historically, the Byzantine Greeks did not incise the drawing into their icons. These incisions begin to appear on later Italian and Cretan icons. At the end of the 15th century, incised lines are found more and more often. In the 16th and 17th centuries, the incised lines become prevalent, sometimes duplicating the entire line drawing.

6. Iconographic Anthologies

For every iconographer, the important question eventually arises: "How do I paint an image of this or that saint"? The answer is found in **iconographic anthologies**. These are books with descriptions of saints accompanied by the rules of their portrayal. Such books may contain drawings of the most characteristic features of each saint and his or her appearance. The colors of their garments may also be briefly described.

Many of these collections are still extant, among them are the Stroganoff, the Bolshakoff, the Siyan, the Gourianoff, and other anthologies.

However, not all of the images should be copied literally. Some of these drawings are fairly schematic, and they require detailed elaboration, as in the Stroganoff and Bolshakoff anthologies.

The Stroganoff anthology was compiled in the late 16th – early 17th centuries while the Bolshakoff anthology is a later copy of the Stroganoff. Although the Bolshakoff images are even more schematic than the original ones found in the Stroganoff collection, they have one advantage: the first half of the book contains detailed descriptions of each saint whereas in the Stroganoff edition, there are only scant annotations written above the faces. Unfortunately the annotations are abbreviated in such a way that many archaic terms are nearly impossible to decipher. In both anthologies—the Stroganoff and the Bolshakoff—the images of saints are arranged according to their order in the church calendar. The Siyan and the Gourianoff anthologies give various and very precise drawings of icons from different eras, often showing the modeling and the characteristic 17th century *assist*.⁵⁸

When consulting various anthologies it is important to remember that many drawings may in fact be printed in reverse, as mirror images;⁵⁹ such a glaring discrepancy is immediately noticeable on those saints who seemingly inexplicably give the blessing with their left hand. One must be aware to this phenomenon.

The Eastern Orthodox ecclesiastical calendar or *menologion*⁶⁰ can also serve as an iconographic source material; some editions even have the lives of saints printed in them. One example is the Gourianoff Menologion from the St. Nicholas Yedinovercheskiy Monastery in Moscow.

⁵⁸ **Assist** (Chrysokontilia) is the method of modeling the garments of Christ or Theotokos with golden rays.

⁵⁹ See Chapter 5 for explanation.

⁶⁰ **Menologion** (from the Greek μηνολόγιον, from μήν "a month"), a church calendar of the months, a calendar of the Orthodox Church containing biographies of the saints in the order of the dates on which they are commemorated.

Original anthologies are highly respected as source material, and one should not doubt the accuracy of the saints' portrayals. These images stem from the Scriptures and the Tradition. Some faces were painted during the saints' earthly lives – secretly, unbeknownst to the saints. Because of their humility, these strict, ascetic, and holy people shunned being painted for posterity; clearly, such subject matter was incongruous with their authentic and genuine piety. For instance, the image of St. Euphrosyne of Pskov was painted in secret by a person named Ignatios, when the saint was still alive. Other images were painted from memory, after the saint's falling asleep in the Lord.

Sometimes the faces of the saints were painted after a mystical vision. Such are the icons of St. Mitrophan of Voronezh (December 20: The Life of Bishop Anthony of Voronezh. In *Lives of Saints: 17th – 19th centuries*, p. 509), the icon of St. Pachomius of Nerekhta (St. Dimitry of Rostov. In *Lives of Saints*, vol. 2; addendum, p. 470), and many others.

Sometimes, when iconographers wanted to paint an image of a saint, they would turn to people who personally knew the saint. Such is the icon of St. Alexander Oshevensky, which was painted according to the verbal descriptions given by Nikifor Filippov of Onega (Pokrovsky, N.B., *Essays of Monuments*. St. Petersburg: 1870, pp. 305-306).

These extant sources and prototypes made up for the lack of available information and were sought out by iconographers.

Naturalistic portraiture was never the goal; only a "likeness" of a saint in his or her general appearance was presented in a condensed form, and only to indicate which of the saints was depicted on the icon. "True likeness" has always been present in iconographic images, and this representation is far more important than the pictorial naturalism or the portrait-like realism. In Greek, one word for iconographer is *isographos*, from ἴσος (equal, like) + γραφή (drawing, painting, writing). Therefore, a modern iconographer must adhere to the written instructions and the drawn schematic features preserved in the source material; one must not distort these features according to one's fancy. These drawings and descriptions were not arbitrarily conceived by their authors. The entire point of making an anthology of source material was for the sake of future iconographers so that they would not lapse into subjective willfulness. Moreover, these codified materials were intended to guard against non-Orthodox influences as well as the affects of the Zeitgeist or defining spirit of the time.

It would make many things clear if we familiarize ourselves with the history and the origins of the very earliest known iconographic anthology.

In Russia, the history of this book is connected to the history of the Orthodox Church, just as the Church herself is connected with the adoption of the Christian faith by the Slavs. The origins of this book dates back to Byzantium, from where the Greek artists came to Kiev to paint the

church at the Lavra in the 11th century.⁶¹ These Greek artists shared the original anthology with the Slavs. Over the centuries, this collection kept growing due to the addition of new saints of the Russian Orthodox Church.

The earliest known Greek Byzantine anthology goes back to the 10th century.⁶² It was distributed among the iconographers by the decree of Emperor Basil Bulgaroktonos.⁶³ The artists who lived around 980 AD and who authored this book remain unknown.

Recently, several copies of this original anthology were discovered in the library of one of the monasteries on Mt. Athos. Some for them have been re-printed in France; however, these Athonite copies were compiled no earlier than the 15th century.

The Russian anthology does not align with the later Athonite edition. The texts are given in translation, and the images are of later copies. The development and expansion of the primary anthology was under the supervision of the spiritual authority who guarded the Church's Tradition. Russian icon painters who had studied under Greek masters passed on their knowledge to their compatriot peers, associates, and successors in the form of written instructions and drawings. Their pupils, in turn, passed these records to their students, and so on.

In the early days of Russian iconography, the primary anthology was quite extensive in scope and covered all the aspects of its designation. The anthology was comprised of three books:

1. Images of the saints;
2. Rules of iconography as applied to panel painting;
3. The same rules as applied to wall murals.

To the extent that new Russian saints were being added to the Menologion, the contents of the anthology also grew and expanded. It was greatly expanded at the time of St. Macarius, Metropolitan of Moscow (Archbishop of Novgorod in 1526-1542; later Metropolitan of Moscow in 1542-1563). Metropolitan Macarius himself was a painter, according to historical records, "...he was skilled at painting icons." (*The Nikon Chronicle*, p. 254).

⁶¹According to the Primary Chronicle, in the early 11th century, St. Anthony, an Orthodox monk from Esphigmenon monastery on Mount Athos, was sent to Kiev as a missionary of the Athonite monastic tradition. He chose a cave at the Berestov Mount that overlooked the Dnieper River and a community of disciples soon grew. These Athonite monks founded a monastic community, and the architects from Constantinople built the monastery for them, now known as Kiev Lavra, or Monastery of the Caves.

⁶²**The Menologion of Basil II** is an illuminated manuscript intended to serve as a calendar of the Orthodox Church. It was compiled c. 1000 AD. It contains a synaxarion, a short collection of saints' lives, and over 400 miniature paintings by eight different artists. It currently resides in the Vatican Library.

⁶³Basil II (958–1025) was a Byzantine Emperor from the Macedonian dynasty. He was nicknamed Βουλγαροκτόνος ("the Bulgar-slayer") for the expansion of the eastern frontier of the Byzantine Empire and complete subjugation of Bulgaria, the Empire's foremost European foe.

Two local Church Councils were convened in 1547 and 1549 respectively, which canonized new Russian saints who had labored for and been known to the Church by the time of these Councils. Although the names of new saints were added to the lists, the older anthologies were also habitually copied and disseminated; this explains why various existing copies disagree with each other regarding the number of saints.

The Stoglavy Council (1551) made no mention of the primary anthology; instead it referred to the work of Andrei Rublev. This was due to the fact that at the time anthologies were owned by a very limited number of iconographers and connoisseurs. The decision of the Council reads as follows:

"Iconographers must paint icons using ancient prototypes, just as the Greek artists, Andrei Rublev, and other renowned painters did."

In most cases, master iconographers copied drawings from manuscripts and menologies. The images were copied by hand in India ink or in paint; brief annotations were written above the drawings. Menologies do not contain any texts.

According to one 17th century document,

"In the villages, many unskilled painters have appeared. Without proper schooling, these people create images of saints, but they do not follow ancient prototypes. Many have adopted their ways, and many have been taught by these unskilled painters. They are learning to do so without understanding of how to paint holy icons. Furthermore, these people are not willing to learn anything from skilled artists, who possess the correct drawings; instead, they keep walking in their own injurious ways, which is typical of slow-witted and unintelligent people."

The document further states that the villagers of Kholuy, being ignorant of the Holy Scriptures,

"...are so brazen as to write holy icons without any respect or understanding that veneration of an icon ascends to its very prototype, according to the Holy Tradition. And these villagers, because of their woeful ignorance, paint holy icons badly and haphazardly."

What follows is a decree on behalf of His Holiness Patriarch of Russia and the Czar:

"In Moscow and other cities, icons should be painted by skilled masters only, who have in their possession ancient drawings and tracings, and only after having been accredited by the best iconographers, so that no one who is unskilled would paint icons. To ascertain the proper level of their skills, a group of expert iconographers must be selected, those for whom this work is customary and who possess ancient drawings. Obversely, those

who lack skills should not paint icons. Also, in Moscow and in other cities, a provision must be implemented so that vendors who sell icons must accept the holy images from accredited painters only, and should never accept uncertified icons."

As for the villagers of Kholuy,

"...from now on, you should not paint holy icons!"⁶⁴

This 17th century document also attests that realistic tendencies which germinated in the 16th century were in full bloom, and that the minds of the Russian people were divided. Medieval Russian traditions were subjected to new intellectual currents flowing into Russia from the West via Ukraine, Poland, and Lithuania.⁶⁵ These intellectual influences were reinforced by mass production of printed icons and brochures, all coming from the printing presses in the South and the West. These publications contained Latin and Protestant concepts. In Russian society of that time, discussions were taking place about the use of unleavened bread in the Eucharist,⁶⁶ about transubstantiation, and many other concepts.

These influences affected church art as well, and the iconographers began borrowing the realistic style of their Western colleagues. Even some iconography, which had been hitherto off limits or rejected by the Church, were becoming commonplace.

The Russian Orthodox Church did not reject the realistic tendencies of the leading masters of the time, and made peace with this novelty. However, the Church tirelessly fought against unskilled iconographers who produced inept and clumsy images:

"We call for a skillful artist, who is also a kind man and a high-ranking member of the Church's hierarchy, to be a supervisor and administrator to iconographers, so that in their ignorance they do not profane the images of Christ, the Mother of God, and His saints by means of poor and inept painting. This is to be done so that no corrupt philosophizing would take root, for there is already a habit of painting willfully without supervision." (Acts of the Great Moscow Council, 1667)

By the 17th century, paper was becoming more affordable, contributing to the dissemination of tracings and anthologies, which the Church recommended iconographers to follow.

⁶⁴ Painters of Kholuy (Холуй) were mentioned in 17th c. scribe books mostly in a negative context. Indeed, these painters—unlike the masters of Palekh and Mstyora—easily departed from the established rules of traditional iconography. However, by the 19th century their professional standards had significantly improved. Artists from Kholuy painted churches in many cities, including Moscow and St. Petersburg. Among their work are The Church of Savior-on-Spilled Blood (St. Petersburg) and the Assumption Cathedral in the Moscow Kremlin.

⁶⁵ Rzeczpospolita, the Polish-Lithuanian Commonwealth (1569–1795). At its maximum extent in the 17th century, the commonwealth included territories of the modern Ukraine, Belorussia, Latvia, and parts of Estonia.

⁶⁶ The use of leavened versus unleavened bread in the Eucharist has been a point of difference between the Roman Catholic Church in the West and the Orthodox Church in the East. First a liturgical difference, this issue became one of the many theological arguments which eventually led to the Great Schism of 1054.

7. Gilding

When we intend to gild parts of an icon such as the background, the halos, the *pallium*, and the other details, it is best to do so before we begin painting the image. Since in this book we are describing the process of making an icon from start to finish, this is the time to discuss gilding methods.

For gilding, we need the following materials and tools:

1. Gold size

There are two ways to gild. Iconographers can use oil-based varnish or they can use an oil-based gold size called mordant or *mixture*. These are manufactured or are sometimes made by the gilders themselves. The mordant or oil-based gold size has an advantage over the quick-drying oil-based varnish because it produces a much higher gloss.

2. Shellac

Gesso is very porous. If we apply gold size directly to gesso, the gesso will absorb the size leaving almost nothing upon which the gold leaf can adhere. To stop this absorption, we cover those areas we intend to gild with thin coats of shellac. Shellac is an alcohol-based varnish; it dries very fast. Stir the contents before use; shellac tends to settle.

3. Gold leaf

For gilding backgrounds and halos, we use gold leaf of yellow⁶⁷ or reddish⁶⁸ tone. There also is greenish gold leaf,⁶⁹ but it is unsuitable for this task. Greenish gold was used in shell gold in the 17th century when garments were modeled with shell gold; greenish shell gold was used on top of cool colored garments; yellow gold was used on top of warm colors.

4. Gilder's pad

Backgrounds can be gilded directly with full sheets of loose gold without cutting the gold leaf.⁷⁰ However, for smaller details we need the gold leaf cut into smaller pieces. For that, we require a **gilder's pad**.

It is made of suede; one can easily make it out of a piece of thin rectangular wood plank (about 15 by 20 cm, or 6 by 8 inches; the size can vary). Cut a piece of sheepskin—or even better is to use suede—slightly bigger than the size of the plank, and attach it to the plank's sides using small nails or tacks. Do so only on three sides; leave one side open. Take some cotton and stuff the

⁶⁷ 20-23 karat gold

⁶⁸ Historically "reddish gold" (червонное золото) was the term for the 24 karat gold. However, gold with added copper, typically 18 karat, was also called "reddish" because of its red hue.

⁶⁹ Gold with added silver and other metals; typically 18 karats and lower.

⁷⁰ This is a technique of laying down gold leaf directly from the book; it is done by unrolling the book flat, leaf by leaf.

pad evenly using a knife until it is firm. Close the side with nails and trim the excess suede. We use a gilder's pad to place sheets of gold leaf on it and cut the gold into pieces of needed size. Once cut, these pieces are transferred from the pad to the gilded area using a **gilder's tip**.

4. Gilder's knife

To cut gold leaf, we need a special tool called a gilder's knife. Its cutting edge is sharpened on both sides. If a gilder's knife cannot be acquired, one can use a scalpel to cut gold. When cutting gold leaf, do not cut perpendicularly to the surface of the gilder's pad. Rather, hold it at an angle, diagonally; this will preclude accidental cuts to the gilder's pad.

5. Gilder's tip

Pieces of cut gold leaf are transferred from the pad to the surface with the use of a gilder's tip. The hair pieces for the tip are long (4–5 cm, or 1.5–2 inches), with lots of spring, and are held together by a piece of cardstock. Sometimes, a small handle is attached to a gilder's tip, for convenience.

6. Butter

A very small amount of fat is needed to make gold stick to the gilder's tip; the dry hairs of the gilder's tip do not retain gold, gold needs oily surfaces to stick. Before starting to gild apply a tiny amount of butter to the back of the left hand. Holding the gilder's tip in the right hand we lightly brush against the oiled skin of the left hand. Microscopic amounts of butter will be transferred from the skin to the tip which will enable us to lift the gold leaf and transfer it to the surface of the icon. The fingers, however, must remain completely clean and oil-free. If one cannot acquire a gilder's tip, some gilders suggest using a piece of sturdy paper rubbed with paraffin.

If oil varnish is used as gold size, it is not recommended to tamp the gold down with cotton as oil varnish seeps through gold, and the tiny cotton fibers will get stuck to the gold; should this be the case, use your fingers to tamp down gold. However, if you use gold size or mordant you can tamp down gold leaf with a cotton ball.

7. Agate burnishers

Shell gold applied over paint looks best if it is burnished; without burnishing it does not have the characteristic golden luster. Burnishing is done with an agate burnisher which is a piece of highly polished stone called agate attached to a wooden handle. When burnishing shell gold, one must proceed carefully as paint can be easily scratched during this procedure. If the agate burnisher is not available, one may use an animal tooth (incisor), preferably from a wolf.

GILDING METHODS

There are several steps to the gilding process.

First, all parts of the icon which are to be gilded should be covered with a thin coat of glair,⁷¹ which works as a fixative. Glair is applied with a soft brush and is left to dry.

The next step is to apply a coat of shellac. It should not be applied thick as it forms puddles with raised edges.⁷² Any quick-drying varnish is difficult to apply evenly; therefore, upon drying, we may use a razor blade to smooth out the surface.

Once the shellac coat is dry, the **oil varnish** is applied. A flat brush with a good snap is best for this task. The coat must be thin; if there are uneven spots, they can be smoothed out with the finger. When finished, to clean the brush and hands, rub with vegetable or linseed oil and wash with soap.

Oil varnish becomes solid within minutes. At the last stages of its drying, we can gild. If the varnish is not dry enough and is very tacky, the gold can "drown" and lose luster; on the other hand, if the varnish is too dry, the gold will not stick to it. In this case, a new coat of varnish should be applied. When the area to be gilded is large, the tack window might have to be extended. This can be done by adding a few drops of *olifa*⁷³ to the oil varnish. Fingers should be used to tamp down the gold, not cotton balls; otherwise, the cotton fibers may adhere to the gold.

On the other hand, **mordant** or **oil-based gold size** is much easier to work with. To test the tack time of the gold size, lightly touch an inconspicuous spot with a cotton ball; if the cotton fibers do not stick to the surface, it is ready to be gilded. The gilding window of oil-based gold size or *mixture* is 10 to 12 hours, which is much more convenient for gilders than oil varnish. Unlike with oil varnish, when using oil-based gold size, gold leaf can be tamped down with a cotton ball.

Gold, applied with the oil-gilding method, cannot be burnished. We can only burnish gold applied with the method called **water gilding**. This method is labor-intensive and requires experience. The resulting burnished surface is highly reflective, and this is the main difference between water gilding and oil gilding; oil gilding is somewhat matte. Some water gilded icons lose some of their gold over time and the red bole underneath the gold becomes visible.

⁷¹ How to make glair: beat the egg white until it start to form white froth on the surface. When it becomes one stiff mass, cover the bowl and allow the egg white to settle overnight. In the morning, remove the white foam. The clear liquid is "glair" (from the Middle English *gleyre* - "egg white"). Store glair in an air-tight jar. Over time, it will develop a characteristic "spoiled egg" smell, but its adhesive properties will also amplify.

⁷² Shellac can be thinned with alcohol to any consistency.

⁷³ Boiled linseed oil

Through the years, water gilding evolved, and decorative techniques were added to the gold. Elaborate engraving was applied to backgrounds and margins, and later the engraved ornamentation was adorned with enamel.

The technique of **sgraffito** was also added to the decorative repertory. It was done in the following way. Before painting, either the entire board or just the areas designated for golden ornaments was gilded (oil gilding or water gilding). After the gold dried it was coated with a protective varnish. Once the varnish was fully dry, the gold surface was painted over. However, egg tempera does not stick to varnish; to counteract that, a cut clove of garlic was rubbed on it. After it was painted over, the painted layer was scratched off in ornamental patterns. This is why this technique was called *sgraffito* (in Italian, "to scratch").

Some artisans have been known to use aluminum leaf or foil instead of gold. The sheets of foil were attached to the gesso and glazed with a transparent yellow varnish; this gave the surface the appearance of gilding.

8. Painting the image

Translator's note:

Russian iconographic terms are often difficult to translate. A particular term may not only convey a concept but also contain clues to the technical execution of the process. Frequently, no adequate English equivalent can be found to make the meaning of the word clear.

There are two ways of dealing with this issue. One way is to retain the original Slavic term, transcribe it phonetically and introduce it into English. Another way is to assemble a new word out of spare linguistic parts found at the cultural intersections of Greek, Latin, French, German, and English. My personal choice is to give the reader maximum information, so that they can make a personal choice or even come up with a term of their own.

Since the techniques of modeling flesh are somewhat different from modeling garments, mountains, buildings, or inanimate objects, the areas of work are therefore categorized as what "flesh" is and what it is not, or as Russian iconographers term it, **lietchnoye** and **dolietchnoye**. This distinction is purely technical. It is important to remember that in the past icons were made in iconographic ateliers where several iconographers worked in sequence, painting only the parts assigned to them personally. That is to say, an apprentice made the gessoed boards; the headmaster did all the drawings and the calligraphy; one iconographer specialized in painting all the garments, mountains, objects; another iconographer only painted the faces, and so on. Hence the division of labor on **dolietchnoye** and **lietchnoye** — "non-flesh" and "flesh."

Dolietchnoye ("non-flesh")

Dolietchnoye⁷⁴ (доличное) means "everything else but flesh." A more literal translation is "before-face," which reveals the sequential order of painting icons. That is to say, first all the garments, buildings, mountains, and objects were painted, and the faces, hands, feet, and other flesh parts not covered with garments were painted last.

Roskrysh (роскрышь), is related to or cognates with **раскрашивать** (to paint in various colors). In iconography, the term refers to a uniform base tone painted within the outline of each object or shape. This term is only used with "dolietchnoye"; the same concept applied to the flesh is called "sankir." The Greek word for both "roskrysh" and "sankir" is *proplasmos*.

Probela (пробелá), means modeling the "dolietchnoye" with progressively lighter colors. A literal translation is "white areas," which reveals the technical side of modeling the form by adding more white pigment to each subsequent layer of paint. Modeling was not always done by adding white; moving from a darker, "dirty," base tone to a pure color was also one of several modeling techniques. The Greek term for the same is *photismata* (φωτίσματα, from φως, "light").

Lietchnoye ("flesh")

Lietchnoye⁷⁵ (личное), from the word "лик" (face). Flesh, flesh tones, and the techniques associated with painting flesh. In the West, the term carnation was used to refer to flesh tones (from the Latin word *caro*, "flesh"). The Greeks used the term *sarka* (σάρκα, "flesh"), also referring to the brighter flesh tone with which they would model on top of a greenish base color.⁷⁶

Sankir (санкирь), dark or light olive or brown base tone for the face, hands, etc. The etymology of this word is unclear; perhaps, a corruption of the Greek word "sarka." *Sankir* is also an olive green pigment combination consisting of yellow ochre, green earth, with some red pigment added (cinnabar, red ochre or burnt sienna).

Vokhreniye (вохрение), the process of modeling flesh. The literal translation of this word is "cohering," which reveals the technical detail: yellow ochre was used to bring out the lighter colors on top of the darker base tone, *sankir*.

Ozhivki (оживки), bright lines, spots, brush strokes placed on top of the lightest convex areas of the flesh. This technique creates the effect of radiance. Literal translations of *ozhivki* are "life-givers," "enliveners," "something that makes alive."

⁷⁴ Pronounced "da-LEETCH-na-yeh"

⁷⁵ Pronounced "LEETCH-na-yeh"

⁷⁶ See: Dionisios of Fourná, *The Painter's Manual*

Once the drawing is transferred onto the board, and the background or the halos are gilded, we move to the next step: painting the actual image. This step consists of several sequential stages:

1. Opening the icon (painting the base tones).
2. Reinstating the lines of the drawing with darker paint.
3. Modeling with lighter colors (garments, architecture, mountains etc.).
4. Modeling the flesh and the hair with lighter paint, toning with rouge, and placing shadows.
5. Painting golden rays and ornament with assist and gold leaf.

OPENING THE ICON

When the drawing is ready the next step is, in iconographic parlance, "opening the icon." To open the icon means to paint base tones. Working on this task, it is important to remember that each icon has its own holistic color scheme, which should be preserved. Therefore, we need to guard against a willful change of colors or copying the colors from reproductions; beginner students of iconography must especially avoid doing so. It is far better to have at one's disposal a real historic icon—even though it might not be of so great an artistic value—and learn to copy from it. Needless to say, it is better to learn this art using simpler images such as saints, and gradually transition to more complex compositions.

First, **the base tones** are painted; these are large color shapes which will serve as foundations for subsequent modeling with lighter tones and shadows.

On old icons, we often have base tones applied opaquely as well as transparently. Opaque and even base tones are applied in 2–3 coats. Another approach is to paint the base tones using the method of *petit lac*,⁷⁷ which can be done either opaquely or transparently. The latter does not always come out even. However, it is still preferable to do it in one step but with enough pigment so that white gesso lightly shines through paint. A slight unevenness creates a visual effect of vibration and imparts liveliness and lightness upon the painting. That is to say, when base tones are painted opaquely, the icon looks heavy; it is something to avoid. A word of caution: with *petit lac*, one needs to be careful as puddles of paint dry slowly and may cause the gesso layer to detach from the board, which is very difficult to repair.

PETIT LAC METHOD

The *petit lac* technique is done the following way. Load a soft brush with liquid paint and make a wet puddle in the middle of the area to be painted. With the tip of the brush, lightly spread the liquid paint in all directions; move the brush in such a way that its tip does not touch the gesso.

⁷⁷ **Petit lac** (French, "little lake") is the term for applying liquid paint by flooding it onto a horizontal surface with a well-loaded brush. The purpose of *petit lac* is to obtain an even layer of color. Larger areas are painted not by spreading the first puddle around but placing several of them on the surface and then merging them by adding more paint. As water evaporates, the paint dries uniformly with no brush strokes.

While the puddle is still wet, keep adding more liquid paint to it. It is important to do so expediently, without letting the initial puddle dry, for fresh paint added to dry paint forms undesirable ridges. Still, notwithstanding the quality and skill, this first application of *petit lac* may have some unevenness upon drying. These uneven spots must be corrected. Each base tone paint should be prepared in such a way so that, upon drying, we can go over the thinner spots with a semidry brush – once, twice, or even three times. These corrections are possible only after the *petit lac* areas are completely dry; the brush should be dry enough not to leave blotches.⁷⁸

To achieve an even coat of *petit lac*, some iconographers resort to complementary techniques of paint application. One of them is to paint all the base tones, then take all the paint off with a razor blade, and paint the base tones again using the same colors. After this procedure, paint looks much more even. Another complementary technique is to cover the gesso with egg emulsion, let dry, and then take it all off with a blade. As effective as these techniques are, skilled iconographers view these techniques as amateurish.

It is more practical to begin the opening of an icon by painting the larger areas of base tone first, starting with the *dolietchnoye* (that is, everything that is not the face or the hands, feet etc.). At this stage, do not paint the *lietchnoye* yet. Once all the base tones of the *dolietchnoye* are finished the overall tonal palette of the *dolietchnoye* will dictate the color and tone of the base tone for the face and flesh ("sankir"). If the tonal chroma of the *dolietchnoye* is cool, then the sankir for the flesh should be warm; if the chroma is warm, then the sankir should be cool. When painting the *roskrysh*, the black lines of the drawing should be painted over but not obscured.

If the icon's background or the halo is gilded, the gold leaf often covers those nearby areas to be painted with base tones. However, egg tempera does not adhere to gold leaf and sloughs off. In this case, take a sliced clove of garlic and lightly rub some juice over the joint of the contour and the gilded area. Doing this will prevent the paint from sloughing off the gold. We do the same when we need to paint the halo line or letters of inscription over gold.

Selecting the correct tone found on the original is not easy, especially for beginners. The difficulty is in the fact that on the prototype icon the sought after tone is surrounded by other colors, and they interfere with our ability to discern the correct tone. At the same time, the whiteness of the gesso on the icon makes us perceive the selected color as too dark. To avoid such mistakes, we use the following method. Take some black paper, cut two squares about 2-3 cm wide (1 to 1¼ inches). In the middle of each square, cut a "peephole," a small diamond-shaped cut about 2 to 3 millimeters. Combine the needed pigments, prepare the paint using your

⁷⁸ **Dry brush** is a painting technique in which a paint brush is relatively dry, but still holds paint and egg emulsion in very small quantities. The brush is first loaded with paint and then squeezed dry. Dry brush technique results in transparent and controlled application of **scumbles** (transparent *lighter* tone on top of the *darker* base tone) and **glazes** (transparent *darker* tone on top of the *lighter* base tone).

best judgment. Paint a small swatch on white paper, and let it dry. Take one black square and place it on the swatch, and the other on the same tone of the prototype. The black color of the paper blocks off interference from the other colors which distort our perception of the sought color, isolating it. With ease, one can determine if the paint matches the original color, and also what to change if the colors do not match. The calibrated paint can now be applied to the new board, even though in contrast with the white gesso it will look wrong.

LINES AND CONTOURS

After the icon is "opened," we need to reinstate the lines of the drawing as well as all the contours. These lines should still be somewhat visible through the base tones; that is to say, the paint for base tones should not be so opaque as to completely obscure the lines of the drawing.

If the painted icon is a "head icon"⁷⁹—that is, the image of the head and just the top of the shoulders—then the lines should be painted over the *sankir* first (i.e., on the face), and then everywhere else on the *roskysh* (on the garments, objects, etc.). On the other hand, if the icon is a "half-figure" (that is, the saint is portrayed down to the midsection) or any other type, we must reinstate the lines beginning with the *dolietchnoye*, and then finish the line-work with the face.

The color of the lines may be of the same color as the base tone, only a bit darker, but it can also be of a different color. For instance, if the color of the base tone for the face ("sankir") leans towards green, the lines' color for the face should be warm such as burnt sienna with added raw umber, or with burnt umber, and the like.⁸⁰

When painting the lines of the contours and of the fabric folds, it is important to pay attention to their artistic quality and not to lapse into dry and monotonous line work. The brush must be held perpendicularly to the surface.

The lines of the eyebrows, the hair, and the eyes are first drawn very thinly, barely visible at their inception. The line is then made a bit thicker as more downward pressure is applied to the brush in the middle of the line. Past the middle section, the pressure is gradually released, and the line is finished off with a barely visible taper, thin as a needle.

The line of the nose undulates two times and is made thick and thin in the corresponding places. The eyebrows are painted with two or three parallel lines (mostly black paint) which thin out towards the temples. These lines almost always begin at the bridge of the nose, at the corners of the so called "nasal triangle." The beauty of the lines is engendered by its "vibration," or in other words, by its changing saturation and rhythmic plasticity. Rhythm in iconography is the art of

⁷⁹ Icons are categorized as "head icons" (face, neck, and upper shoulders only), "half-figure" (face and torso down to the midriff), "full-figure," "scene" and so on.

⁸⁰ If a different tone is used, the color of the lines should be warm if the *sankir* is cool.

making the line of a specific length and vibrancy, of its placement and direction. This sense of rhythm is developed through observation.

MODELING GARMENTS

After the lines are reinstated, the next step is to model the convex shapes with lighter colors. Modeling is done two or three times, and every time the illuminated area is reduced in size. The first application of color is only slightly lighter than the base tone. The second application is much lighter and smaller in coverage. Finally, the third application of the lightest paint consists of bright lines with which the most prominent forward curves of the fabric are accentuated.





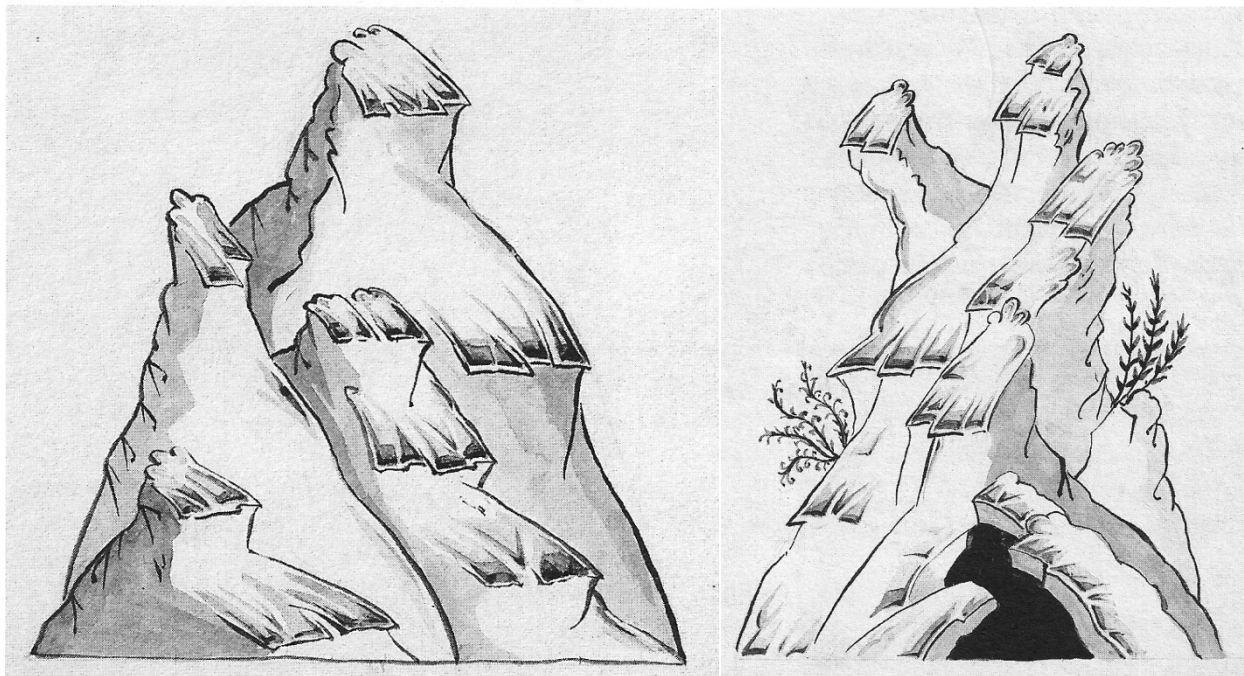
Most frequently, the modeling of the garments is done with the same color as the base tone by adding more white to it. However, sometimes other colors are used. For instance, if the base tone is bright vermillion or dark raspberry, the modeling may be done with greenish or slightly bluish colors. If the base tone is yellow, bluish tones may be used to model it. It is important to remember that white pigments always look slightly bluish when painted on top of any color. Therefore, if there is a need to reduce this bluish tint, some yellow pigment should be added to the paint in order to bring it closer to the basic warm color of the garment. However, if there is a

need to emphasize the bluish tone of the modeling, then there is no need to add blue pigment to it as white pigments tend to get even cooler after drying. It is better to add a small quantity of black to it, or yellow ocher, to soften the effect.

When modeling with lighter paint, it is important to follow the prototype. The more we do it, the better we understand the ancient artists' deep knowledge of the icon. Copying old icons opens to us the mindfulness of old masters evident in every brushstroke and every line of the painted garment.

Excessive dryness and schematic formality in garment modeling is not an achievement at all. On the contrary, we should strive to achieve rich and full modeling, and the illuminated areas should be in the right place. Incorrect garment modeling distorts the figure; therefore, observe the original modeling keenly and try to understand the logic and reason behind its placement.

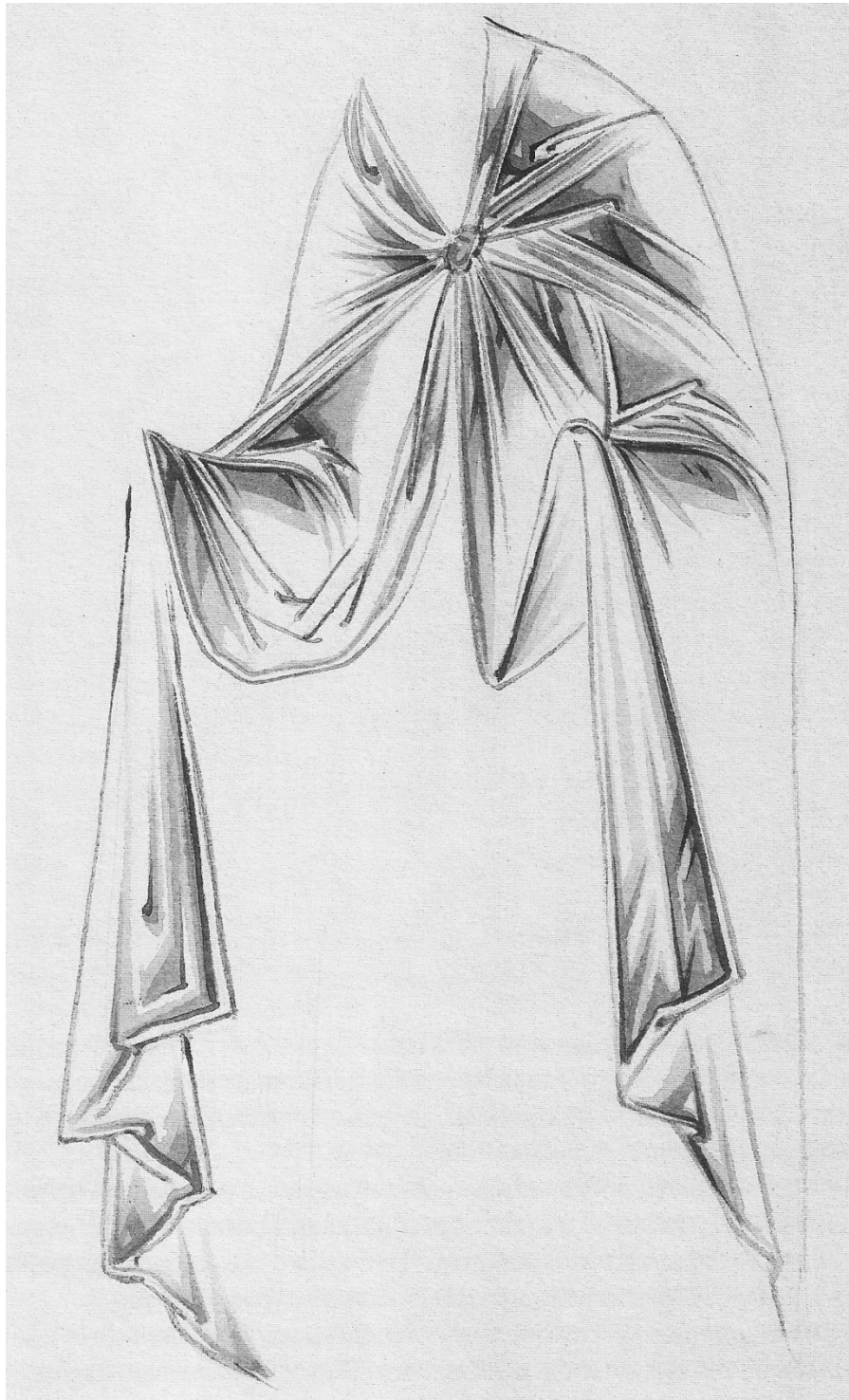
The technique of modeling the form with lighter paint is used not just on the garments, but also on mountains, trees, and architecture. In Russian iconographic parlance, all buildings are known as *palátkee*.⁸¹



Examples showing modeling of mountains. The highlights are shown in reverse.

⁸¹The modern Russian word "palatkee" (палатки) means "tents." However, iconographic vocabulary predates this modern meaning. It is a loanword from Greek, παλάτιον (palation = palace, dwelling, tabernacle). The Russian word **палаты** (chambers) and the English word **palaces** are derivatives of the Greek word.

Some iconographic anthologies show modeling in reverse i.e., the darkest area on the print corresponds to the lightest on the icon. Assist (modeling with golden rays) is likewise printed in reverse in such anthologies.



The cloak of Archangel Gabriel
Modeling of the garment is shown in reverse.

Modeling the garments with light tones makes the shape of the figure underneath clear; to further emphasize the form, the recessed areas are shaded by glazing with a transparent paint of the base tone. The contours are also reinforced with shadows of varying strength; the Russian iconographic term for shading the recessed areas is *prieplek*.⁸²

MODELING FACES

The base color for the flesh is called **sankir**. It is painted as the last step of "opening" of the icon with other colors. The process of modeling the flesh is called "plav" or "ochering." According to historic terminology, it was also called "vochreniye," from the archaic Russian pronunciation of the word "ocher" as "vokhra." This old term is still used to this day. The paint for modeling the flesh consists of mostly ochers (yellow and red), and only at the very end of the process a little bit of white pigment is added; hence the name of the process, "ochering."



Modeling of the angel's face is shown in reverse

⁸²Prieplek (Приплек, from Slavic: при- (fore-) + плеск (splash). This shading color is made by adding some dark pigment to the paint of the base tone.

The technique of overlaying the ochers consists of several successive steps.

1. First *petit lac*

Prepare a mixture of yellow and red ochers and dilute it with egg emulsion to the consistency of table cream. If the sankir has a greenish hue, the proportion of yellow and red ochers is 1:1, so that this paint has a pronounced reddish tint. However, if the sankir has a reddish hue, add only a little of red ocher, otherwise the modeling with the first *petit lac* will not stand out.

Before applying this paint, mentally mark the most convex parts of the face, the hands, and the feet. Generously load the brush and deposit this paint in those places; however, apply this paint not to the entire area of illumination but only to about a half or two thirds of it. Use the prototype image as your guide; notice the brightest accents called "ozhyvki" as the most prominent convex parts of the form. We must keep those accents in memory throughout the entire process of modeling the flesh. With the brush, lightly push and guide the liquid paint towards those central points ("floating"); make sure the tip of the brush does not touch the dried paint under the puddle, or else it might dissolve it, making a hole. While moving the liquid paint within the puddle, make sure we do not push the edge of the puddle beyond its appointed boundary.

While the *petit lac* is still wet, this action of moving the pigment towards the center of the puddle seems to achieve nothing. However, a different picture emerges when the paint dries. No matter how finely the pigment is ground, it settles at the bottom of the puddle, with larger quantities of it deposited in those places where we gathered it with the brush; these will be the brightest areas; where there is less pigment, these places will look more transparent. This first "float" must be thoroughly dry before moving to the next step.

2. Second *petit lac*

When the first *petit lac* is fully dry, a detectable boundary may form all around the edge. This edge must be smoothed out, blended into the base tone. In order to do that, we place a second *petit lac* on top of the first one, of a different quality; it will create a connection between the two colors. To do this, we add a little water to the modeling paint; only a little water is needed, easily added with the brush. Adding water will make our paint thinner and more transparent. Load the brush with this diluted paint, and make a new *petit lac* on top of the previous one, this time going over the boundaries and covering an area somewhat larger than the first *petit lac*. In this step, we do not move the pigment towards the center as we did in the first *petit lac*; in fact, more pigment should be deposited over the boundary of the first *petit lac* to smooth it out. Again, the results will become visible only after this second transparent float is completely dry.

3. Third *petit lac*

In the third step, add even more water to the paint (with the brush); this will make the paint even more diluted. At the same time, add a little white pigment and mix thoroughly. With this paint, make the third *petit lac*; however, this time the area should be smaller than the first *petit lac*.

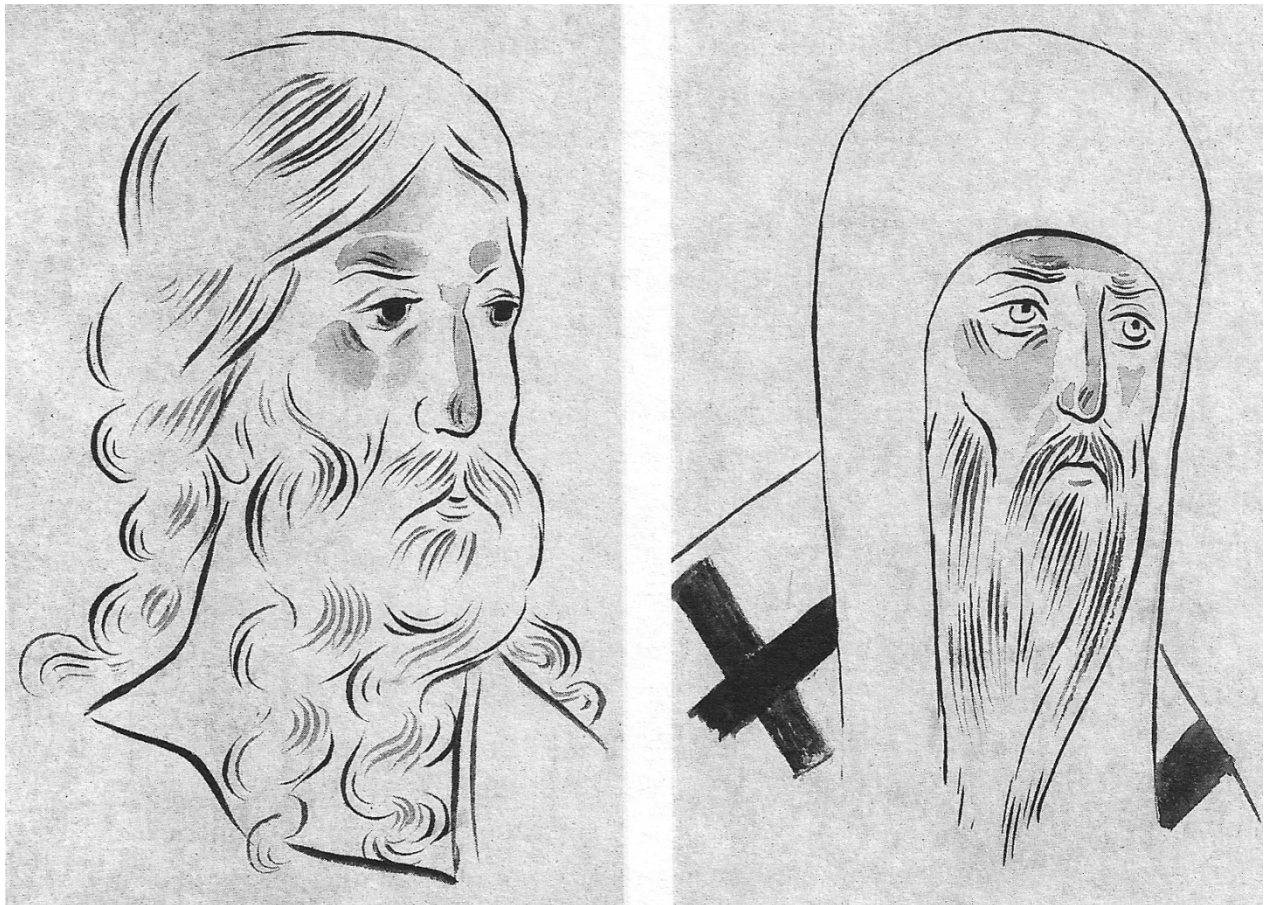
Just like in the first step, gently push the dispersed pigment towards the brightest spots, and let this third float dry.

After the third step, we can work over the cheeks with a little rouge, especially on the faces of young persons. Rouge is a very transparent, thin paint of red ocher, cinnabar, or cadmium red.

4. Fourth *petit lac*

In the last step, add more water into the remaining paint, and like in the second step, without pushing the pigment around, float this paint on top of the entire bright area, leaving the base tone untouched only in the recessed areas.

After the surface is completely dry, examine the results. Are the connections between the tones smooth? Did you add enough of white pigment in the third step? Can you still see the sharp edges of transitions from one color to the other? Is the area modeled brightly and vividly enough? If not enough, repeat the last step once or twice, but make sure you add more water to the paint for each consequent *petit lac*.



Faces of the saints. Modeling is shown in reverse.

All this demanding work must meet the following conditions:

1. We need to make enough paint so we do not run out of it in the middle of the process.
2. The icon board must be precisely horizontal; even a slight angle will cause the liquid paint to run to the side. Moreover, the greater concentration of pigment in a float should not drift from its determined position because of this tilt.
3. The paint must be made more transparent not by adding egg emulsion but by adding water. Egg yolk, just like water, does make the paint more transparent; however, such paint becomes quite fat. When fat paint dries, it forms a wavy layer of uneven thickness. A thick painting layer is prone to cracking, which is impossible to fix. Any *petit lac* layer must not be heavy or thick.
4. If there is too much of white pigment in the last *petit lac*, we will not be able to create a smooth transition from ochering to sankir.
5. If there is not enough of white pigment in the last *petit lac*, the modeling of the face will be unremarkable due to the lack of luminosity.

To summarize, the technique of modeling with *petit lac* consists of the following steps:

1. Make a *petit lac* and float the pigment towards the brightest spot.
2. Make a second *petit lac* with diluted paint, apply this paint but do not float the pigment towards the center; the result is that this transparent *petit lac* connects the first *petit lac* with the sankir.
3. Add more water to the paint, and also add white pigment; apply the third *petit lac* and float the pigment towards the center.
4. Add even more water to the paint, and apply the fourth *petit lac* to the entire surface of the modeling area, everywhere except the recessed areas. Do not float the pigment.

Make a note that we float the pigment only two times. When floating pigment particles is not required, the paint connects the previous step with the *sankir* through an even, non-floating application of the same but a bit more liquid paint.

Occasionally it does happen that a float is unsuccessful and uneven. In this case, a remedy exists: **hatch-lines**. Hatch-lines is a technique in which many thin lines are applied with a brush using a diluted, nearly transparent paint. If some spots of the ochering layer are too transparent so that the *sankir* shows through, we may remedy the situation by working over those spots with hatch lines. Another method is to carefully dissolve the dry ochering when the edge comes out too sharp, or is painted in the wrong place. However, such correction is better done by applying *sankir* over it. Remember, it is dangerous to fix paint when it is not fully dry. The brush may

dislodge the layer underneath and make an indentation, which will be very difficult to fix. Such a difficult procedure requires patience, attention, and care.

Having explained the process of modeling flesh on icons, it is hopefully becoming clear why we use such terms as "cohering," "petit lac," or "float." When we say "ochering," we refer to the color of the modeling. When we say "petit lac" or "float," we refer to the technique of its application. The words "float" and "petit lac" also refer to the use of paint that is quite liquid in its consistency; otherwise such paint will neither "float" nor form a "lac." The number of layers of paint needed depends on the size of the face or of the icon. Medium-size faces usually require four steps (as described above); larger faces require more; and small faces may only require two—or even one *petit lac*.

FINAL HIGHLIGHTS ("OZHYVKI")

Once the modeling is finished and has fully dried, it is time to paint the final highlights, called "ozhyvki." These are light, yellowish white lines placed on top of the most convex and bright areas. These lines should begin very thinly, needle-like; towards their middle, as we apply slight pressure to the brush, gradually thickening the line. Then, gradually easing off the brush, we finish the line just as thinly as we began.

Regarding the placement of these lines. Sometimes they are placed at the very edge of the ochering, by the sankir – for instance, around the eyes. Mostly, however, there should be some slight distance from the edge. If the highlights seem too harsh, we can glaze on top of them with a transparent mixture of yellow ocher with white; we need to make sure the lines are fully dry before we glaze.

MODELING HAIR

Once modeling of the face is finished, we proceed to paint the hair. Traditional iconography has developed its own terminology for hair: it can be light brown or gray in color; its shape can be curly, long, or with hair locks behind the ears. Similarly, the types of beard are systematized after the classical prototypes such as the beard of the Savior, of St. John Chrysostom, St. John the Forerunner,⁸³ St. Nicholas the Miracle Worker, St. Sergius of Radonezh, and so on. A beard can be small, forked, wide, round, furry etc. The beards of the Savior and of St. John the Forerunner are painted with black paint and are not modeled with light; instead, after the lines are done, the beard is glazed over with a transparent brown paint. Before painting **light brown hair**, the area is lightly glazed with a transparent brown paint; a good combination of pigments for this glaze is burnt sienna with green earth or burnt umber. Once the paint is dry, lines of hair are painted with burnt sienna, or burnt sienna with some black, or even with just black. The modeling on the hair (for instance, angels' hair) is done with two lighter parallel lines which are painted in between the dark lines. These light lines are also drawn very thinly at the beginning; towards the middle, the line is made thicker by pressing down on the brush, and then finished

⁸³The traditional Eastern Orthodox name for St. John the Baptist.

thinly. After this, take some light tone (such as yellow ocher with some red ocher added) and apply a scumble⁸⁴ to the space between the bright parallel lines as if connecting them. This band of lighter tone should be brighter in the middle of the hair lock but dissipate towards the both ends of the strands.

Gray hair can be painted in two ways. One way is to make a roskrysh the color of *reft*⁸⁵ and then model the hair accordingly. Alternatively, the area can be modeled first and then glazed transparently with gray color. This way of modeling gray hair consists of painting thin lines of hair – two, three, or even four lines in a strand; each strand is then glazed over with gray paint, combining these separate light lines into hair locks. In order to do this correctly, one must constantly look at the prototype and copy from it. After modeling is done, the contour of the head is lightly shaded with a darker tone to give it a shadow.



Top row: St. Jonah, Metropolitan of Moscow; St. Philip, Metropolitan of Moscow; St. Simeon the God-receiver.

Middle row: St. Alexi, Metropolitan of Moscow; St. Gregory the Theologian; Holy Apostle Peter.

Bottom row: King David; St. John the Forerunner.

⁸⁴Scumble is a tempera technique when a lighter paint is applied transparently over a dark base tone creating an opalescent effect. In this particular case, a thin coat of semi-opaque paint fills the space between two lines.

⁸⁵**Reft (рефтъ)** is a mixture of three pigments: black, white, and some yellow ocher. This makes a gray color of varying value, from dark to light.

St. Alexander Nevsky



St. Basil the Great
St. Paisios the Great

St. Peter, Metropolitan of Moscow

Modeling of the beards is shown in reverse.

WORKING WITH SHADOWS

Everywhere on the garments, shadows are placed all around the contour of the figure as well as in the recessed areas. The iconographic term for this shadow is "prieplesk."⁸⁶ Also, shadows are placed on the mountains, the buildings, and the trees as well.⁸⁷

Shadows are also added to the faces. For the shadow color, we use burnt sienna. With this color, we glaze the shaded side of the nose, the shaded side of the forehead, near the hair, and on female faces, on the neck around and under the chin.

⁸⁶ See p. 57 (footnote)

⁸⁷ Shadows can be placed at any stage of work.

With black paint, we paint the pupil of the eye and, around it, we draw the line of the iris. The pupil should not be round; a round pupil makes the face appear agitated. Instead, make the pupil either oval or nearly triangular, touching the line of the upper eyelid with its upper edge.

The iris is glazed with burnt sienna, and also a shadow is placed on the eyes under the upper eyelid. The eyebrows are glazed, and also the recessed area above the upper eyelid. For all these shadow glazes, we recommend using burnt sienna because it is a transparent and delicate pigment.

The sclera of the eyes is accented with white plus some yellow ocher.

The lips are glazed with very transparent solution of cadmium red, cinnabar, or red ocher. The shaded areas of the hands are also given a shadow. If the hand is over the background of cool-colored garment (such as green or blue), the shadow should be warm; use burnt sienna or red ocher to shade it. If, on the other hand, the color of the garment is warm, place a cool shadow there (such as green), or just leave it without a shadow.

To summarize, it is important to copy good icons; they are our best teachers in the area of color, drawing, modeling, and much more. Accordingly, it is not a good idea to use color reproductions as your source of information. We account for the fact that typographic reproductions distort the colors to such a degree that the reproduced iconographic images become nearly unrecognizable. The overall color scheme thus becomes misleading. Uninformed copying of these distortions will do nothing toward acquiring the art of color balance. Moreover, doing so will teach bad taste and lead the student away from truth.

ASSIST

Actually, "assist" is not the name of the technique but the term for the glue with which the gold lines and details are painted. These lines are first painted with this glue, and once it comes to tack, gold leaf is applied to it, and excess gold⁸⁸ is brushed off. Garlic juice or evaporated beer can be used as an assist; these should be prepared beforehand.⁸⁹ In iconographic parlance, the technique of applying the gold lines is called "assist."⁹⁰

Here is how it is done. The solidified evaporated beer or garlic juice is rubbed with a wet finger until its surface liquefies; this also can be done with a wet brush. Take some of this reconstituted glue and place onto the side of a small saucer.

⁸⁸ Excess gold in gilding parlance is called "skewings."

⁸⁹ The method of preparation is discussed in Chapter 4, "Drawing."

⁹⁰ The traditional Greek name for this technique was **chrysokontilia** (χρυσοκοντυλιά). Another obscure term for the same was **linokopia** (λινοκοπεία). This word points at the substance used as an assist, linseed oil (λίνον = linseed).

Before we work with an assist, the paint must be thoroughly dry. We lightly dust the painted surface with powdered chalk using a cotton ball, then blow on it to remove excess chalk dust.

With a thin wet brush, take some of the glue from the saucer (add a drop of water if it is too thick), and paint lines with it, either the unidirectional rays, or some ornament. The glue is transparent, but it is easily seen on top of the dusted surface; this contrast helps to keep the lines correct. Before applying gold leaf, we let these lines dry thoroughly.

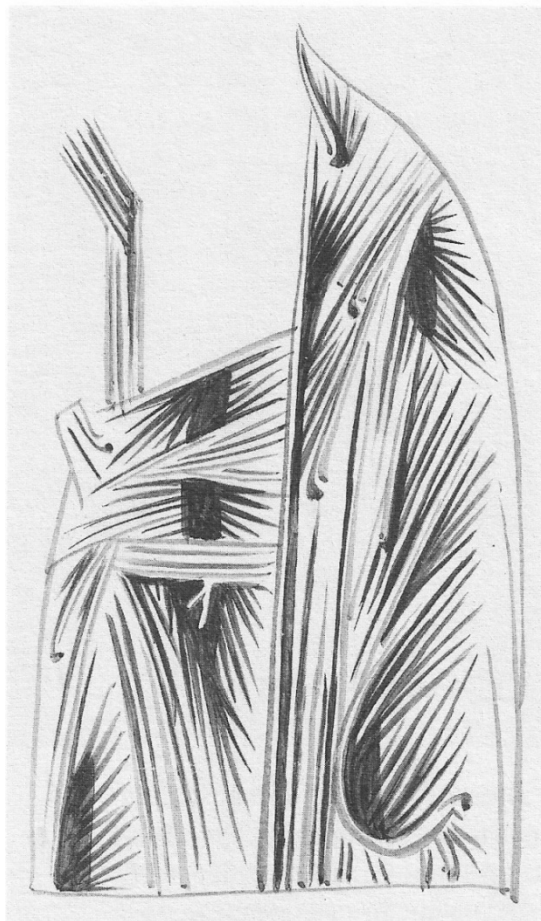
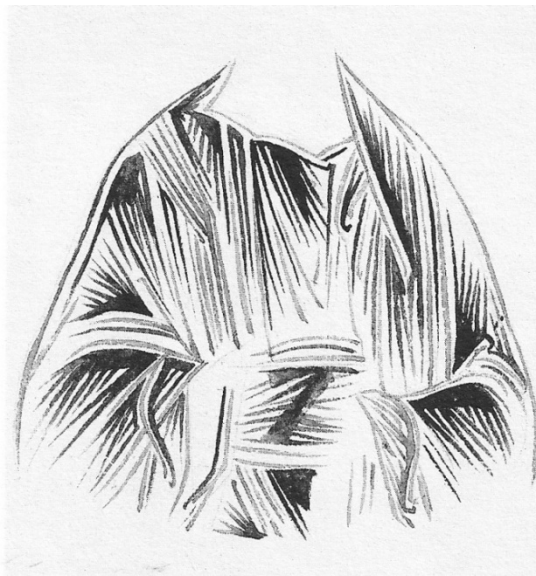
To apply gold leaf, we need fresh, soft rye bread. Take the soft part and kneed it into a sticky putty-like lump. With this lump, take some of gold leaf, and breathe onto the glue lines. As moisture from your breath reactivates the tack, we apply gold to it by lightly tapping with the bread lump on the tacky lines. Gold sticks to the glue, and the bread lump gathers and removes gold skewings.

When this work is finished, mistakes can be corrected with paint.

These gold lines must be secured with a thin coat of shellac. If we fail to do so, the final varnishing with *olifa* will dissolve the glue and remove the gold.

Traditionally, assist is done on the garments of Christ the Savior in Glory; such are icons of His Resurrection, Ascension, Transfiguration; and also on the icons of the Dormition of the Theotokos, where He is painted in Glory. Likewise, He is painted in Glory within the Deisis as King of Glory.

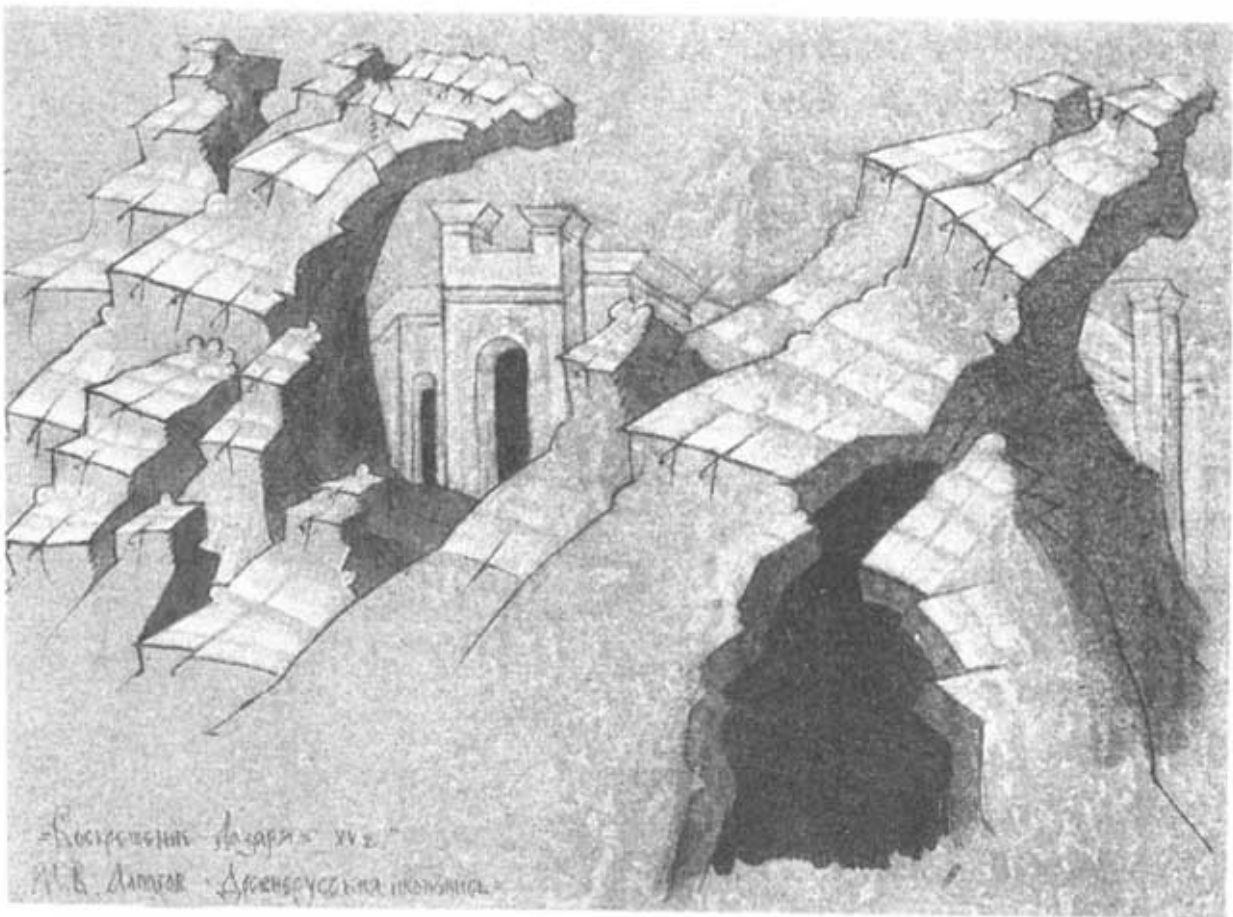
Assist is also traditionally used on the garments of Christ God-Child on the icons of the Mother of God, which indicates His pre-eternal divine nature. Often, assist is painted on the wings of angels, on thrones, chairs, royal and princely vestments (over brocade), and on other details. Occasionally, a vestment is contoured with a thin golden line. In the 17th century, painted backgrounds became popular whereas calligraphy was done in gold. For student



work, gold is substituted with a paint made of yellow cadmium plus white, with a little red cadmium added. After the lines are dry, glaze them with raw sienna, which softens them by imparting a "golden" quality to them.

Occasionally, a reader may encounter the term "inokop," or the expression "to decorate with inokop." Inokop⁹¹ is just another word for the technique of assist.

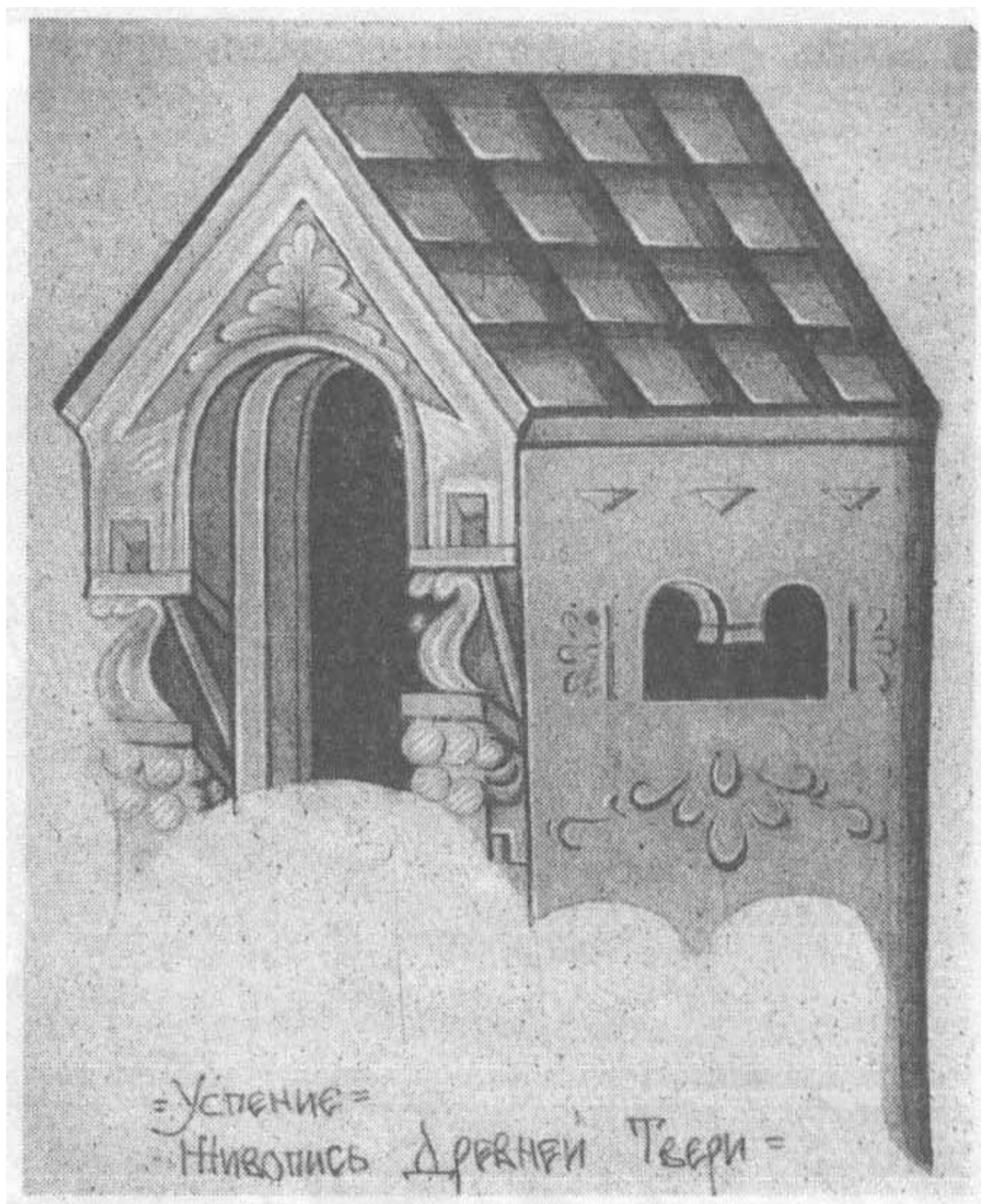
The technique of assist was first introduced in Greek and Italian icons of the 11th-12th centuries. Beginning with the second half of the 16th century, Russian iconographers introduced **shell gold**⁹² for modeling the garments instead of color. Shell gold can be burnished with an agate burnisher. By the 17th century, modeling the garments with shell gold had completely replaced modeling with color. In the 19th century, the garments of warm colors were modeled with yellow shell gold whereas the garments of cool colors (blue, green) were modeled with greenish gold, which has a cooler hue.⁹³

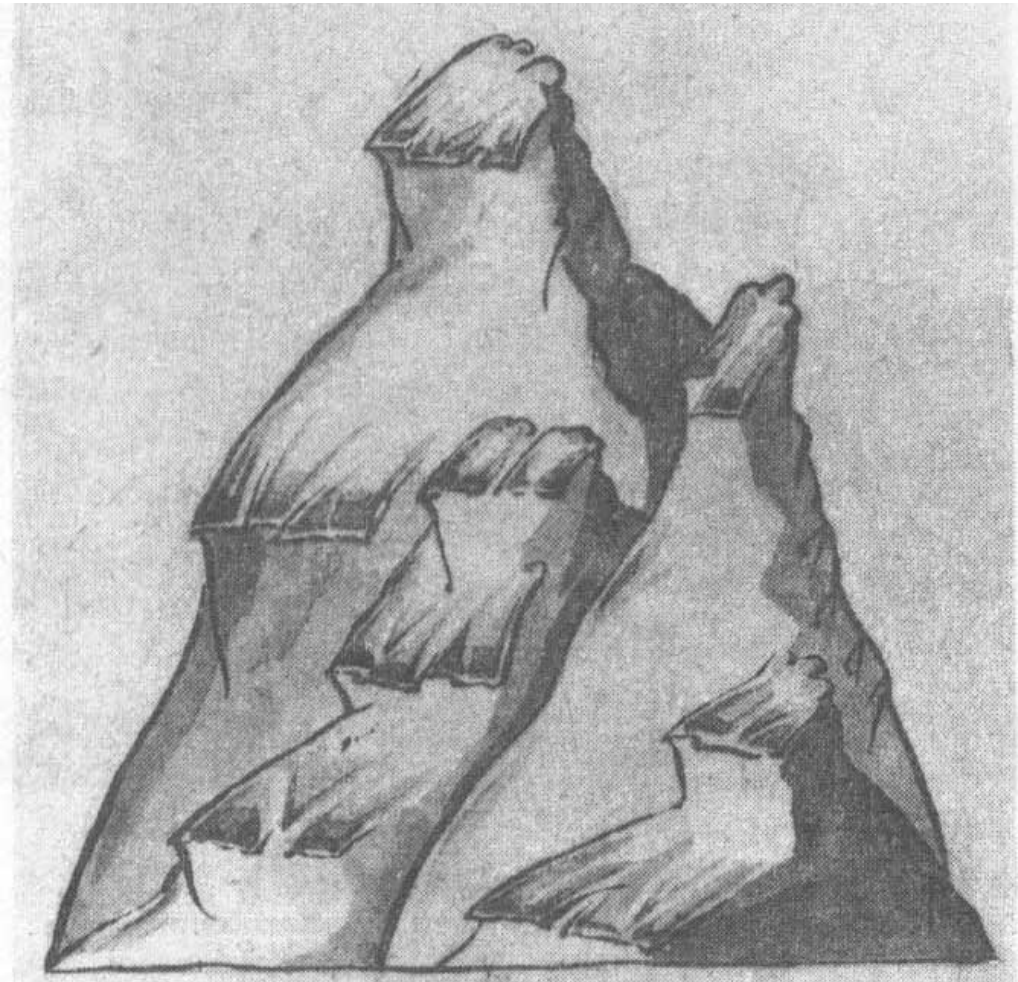
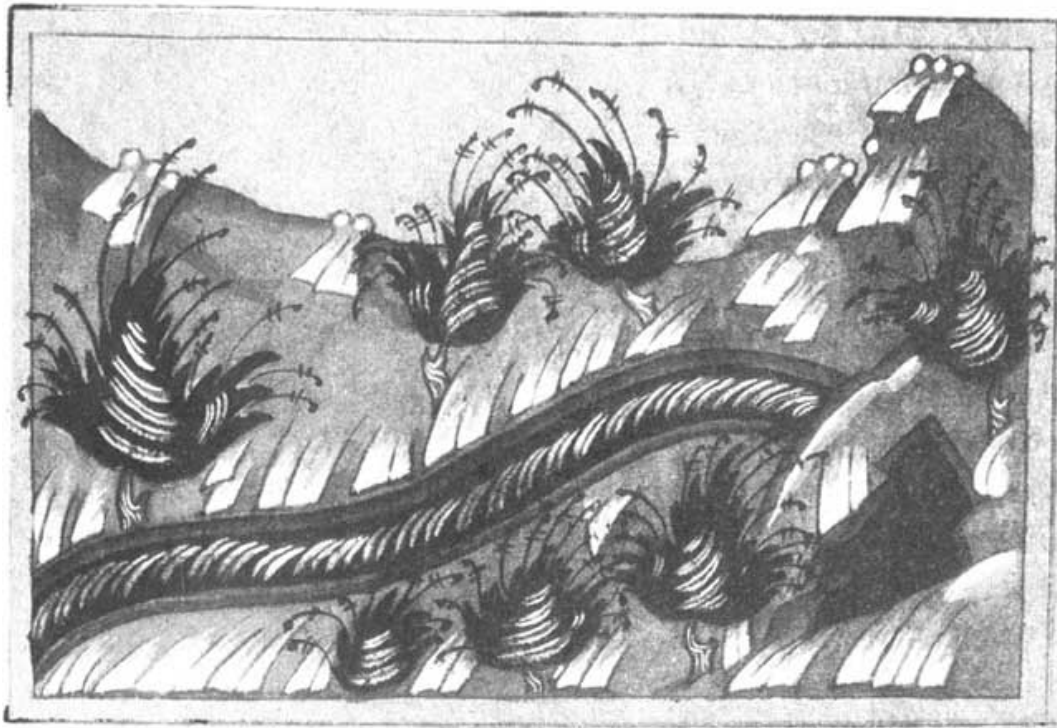


⁹¹ This is a corruption of the Greek word "linokopia."

⁹² Powdered gold dispersed in *gum arabic* as a binder.

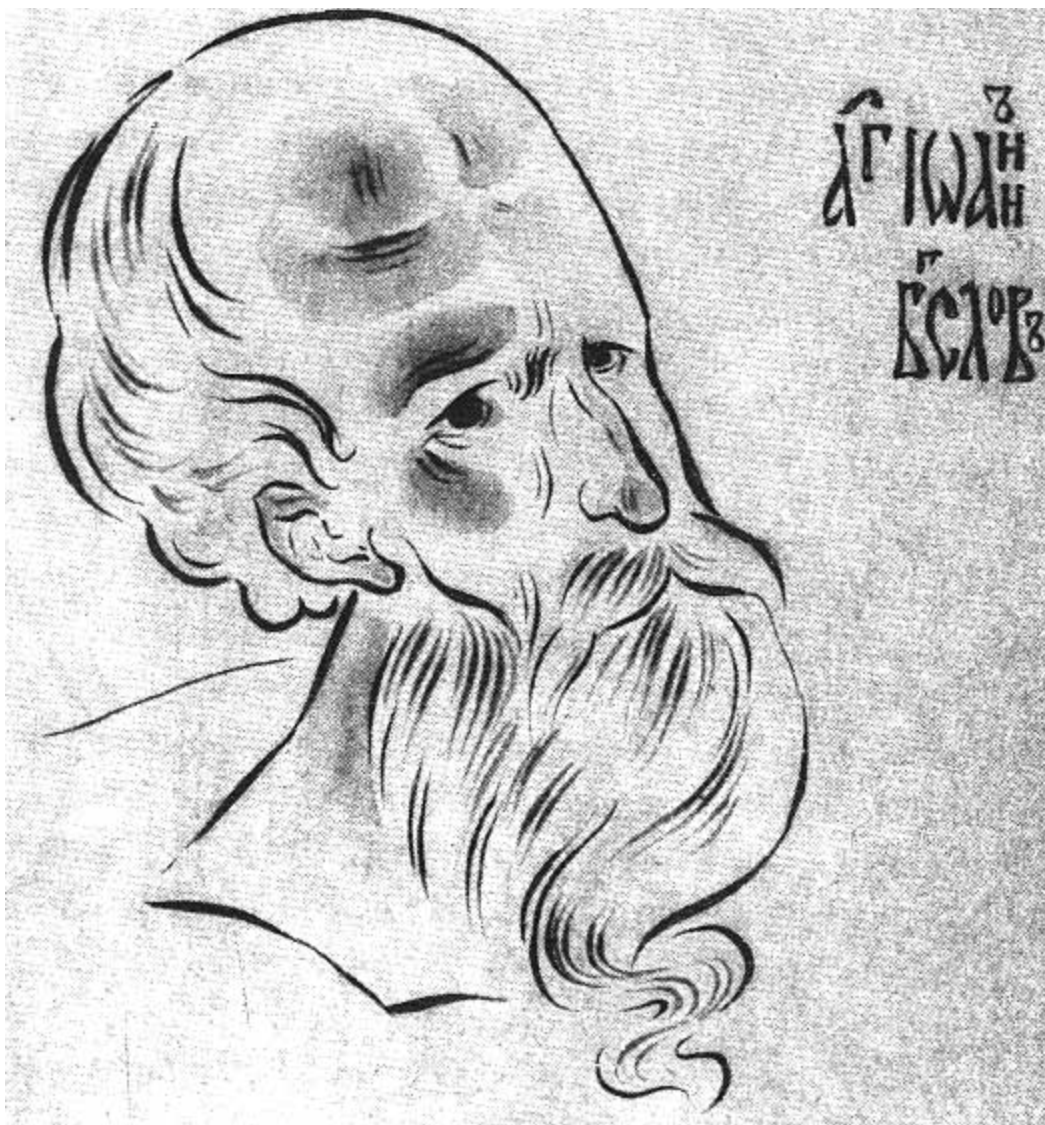
⁹³ See Chapter 7 "Gilding."







Melchizedek



St. John the Theologian



9. Varnishing with *olifa*

After finishing the painting, we coat the icon with a specially prepared oil called **olifa**.⁹⁴ This thin film of *olifa* insulates the painted layer from moisture and other harmful effects of the air. Varnishing icons with *olifa* is a crucial albeit rather cumbersome process. It is done as follows:

The finished icon is left to dry for about 5-6 hours, then laid down on a flat surface. Take a small quantity of *olifa* and heat it up; gesso absorbs *olifa* much better when it is heated; cold *olifa* tends to stay on the surface. Before pouring *olifa* onto the painted layer, remove any dust particles or debris from its surface. This is effectively done with a sweeping movement of the bare forearm, from wrist to elbow, over the entire surface of the icon.

Once the surface is free from dust, pour the heated *olifa* onto the center of the icon. Make sure the icon is positioned completely flat; even a slight tilt will cause the oil to run to the side. Keep adjusting the board until it is horizontally leveled. Add more *olifa* and spread it around with your hand so that it is no thicker than one millimeter. If the layer of *olifa* is thicker than that, the drying process will slow down significantly. Leave the board in this position for the rest of the process. The drying time of *olifa* varies depending on humidity and temperature in the room. The drying time also changes from season to season. If the room is adequately warm and dry, it takes only 4–5 hours for the *olifa* to saturate the paint layer.

The moment we pour *olifa* onto the painted layer, the gesso begins to siphon it in. This causes dry "shallows" to form on the surface; these are matte spots from which the oil appears to recede. At this stage, it is important to keep the surface uniformly covered by *olifa*; with your fingertips, keep pushing the oil onto these shallows every 15–20 minutes. After about two hours they stop forming, and the coat of liquid *olifa* will appear uniform and even. This is the phase when *olifa* begins to thicken gradually. It is an important moment because in some spots it may congeal faster and stick to the surface; to prevent this, keep spreading and moving *olifa* with your hand.

After about five hours, *olifa* thickens and begins to look like a concentrated glue. Take a sheet of tracing paper and blot out nearly all of it. It is very important to use tracing paper because it does not contain any lint. (One can also remove *olifa* by wiping it off with your hand.)

We remove nearly all of the *olifa*, leaving only a very thin film. This thin film of remaining *olifa* is necessary to prevent the development of matte spots upon drying. During the process of removal, your hands will get smeared with *olifa*, and it is necessary to wipe them clean from

⁹⁴Olifa is boiled linseed oil with either added driers or resins to accelerate polymerization.

time to time; however, do not use towels or blotting paper as lint from the fabric may get transferred to the icon. Again, tracing paper is the best for that purpose.

From this moment onward, we enter the most crucial phase of the entire process. While the remaining thin layer of olifa is still fairly liquid, it is just about to become solid. We need to keep spreading and smoothing it out constantly before it congeals.

Small particles of dust in the air become an issue when they settle on the surface of the icon and get trapped in olifa. Upon drying, these particles will look like tiny, shiny bumps, giving the surface an unpleasant, grainy look. To avoid this, it is necessary to smooth out the surface every 5–10 minutes, energetically wiping the surface with your hand, back and forth, from side to side, in different directions. As olifa solidifies, one might hear a swishy, squeaky sound while brushing the surface with the palm of the hand, "*fffeek... ffffeek...*" This sound is similar to the one made by a wet window glass when wiped dry with paper. Hence the Russian term for this process, **feeking**,⁹⁵ which means to make the congealing layer of olifa smooth and even by constantly rubbing it with your hand over the entire surface. If an iconographer performs the "feeking" at exactly the right time, the resulting film will be smooth and glossy.

Eventually, the moment comes when, as iconographers say, "olifa stands." Once this happens, we should refrain from touching the icon's surface because we may ruin the glossy surface and leave matte streaks which will not self-heal. To ascertain that olifa has reached this stage, select an inconspicuous spot and gently pass over it with the fingertip; if a matte spot forms there and does not become glossy again, this means olifa has reached the "standing" phase. Leave the icon to dry but make sure it is protected from dust. The initial drying of the outer layer takes about two to three days; however, it takes no less than a month for the olifa varnish to become fully solid.

There are countless recipes for making olifa, and there are just as many methods for its application. Old masters knew that linseed oil dried very slowly and that it would become matte upon drying. Therefore, they manufactured olifa from boiled linseed oil by adding various metallic salts and oxides.⁹⁶ Alternatively, they added various resins⁹⁷ to heated linseed oil, producing oil-based varnishes.

The question may arise: what to do if, for some reason, an iconographer misses the window of olifa's "standing"? When this happens, an iconographer has to deal with the following

⁹⁵ Фиканье (pronounced "FEE-kah-nye"). This is an onomatopoeic word that imitates a swishing sound.

⁹⁶ These served as driers. Modern boiled linseed oil is manufactured by heating raw linseed oil and adding oxides or salts of lead, manganese, or cobalt.

⁹⁷ Numerous recipes are known; they included adding sandarac, copal, dammar, amber, and other resins.

consequences: olifa has become solid in places where it had been thin but has remained liquid where it had been thick. What do we do? Clearly, we should not leave the icon in such a lamentable state. The dry areas will look bumpy comparing to the rest of the surface, and these elevated areas will also darken significantly. They must be removed. If this misfortune happens to you, take off the remaining liquid olifa completely so that the surface is dry. Pour some fresh unheated olifa over the problematic area. Vigorously rub the crust with your fingertips. Since the olifa has just recently congealed, there is a chance it might dissolve. However, in those places where olifa remains solid, the last resort is to use a razor. Should this be the case, damage to the painted layer is very likely.

When all the congealed spots are removed, blot out the fresh olifa completely so that not even a trace of it remains, and let it dry for a day. If there is damage to the paint layer, we first need to rub the problematic areas with a cut clove of garlic, and then paint over with egg tempera; without garlic juice, egg tempera will slough off the oily surface. Once the problem areas are fixed, we again let it dry and repeat the oiling process. It is best to do so this the following day.

In iconographic ateliers of Palekh,⁹⁸ the artists had a special room at their disposal. In that room, they only oiled icons, and did nothing else. Only the member of the team responsible for oiling icons was allowed to walk into that room. This arrangement minimized dust movement through the air. In winter, the iconographers left the icons out in an unheated room to accelerate the forming of the solid film. This always gave good results. The iconographers of today should make a note of this technique.

⁹⁸Palekh (Russian: Пале́х) is a Russian town, about 350 km east of Moscow. One of the leading centers of Russian icon-painting, Palekh has a very long history in Russian traditional iconography.

APPENDIX

A. The face of the Savior according to the ancient document

The oldest known document containing a description of the Savior's face is a letter written by Publius Lentulus, a governor of Judea during the reign of Augustus.⁹⁹

Here is the translation of this letter, which he sent to the Roman Senate at the time of the earthly life of Jesus Christ:

"Lentulus, to the Senate and the Roman People, greetings.

There has appeared in these times, and, indeed, is still living, a man of great power named Christ Jesus, who is said by the Gentiles to be the prophet of truth, but his disciples call him the Son of God. He raises the dead and heals all diseases.

He is a man of average height and pleasing appearance, having a countenance that commands respect, which those who behold may love or fear. He has hair the color of an unripe hazelnut, smooth almost to the ears, but below his ears curling and rather darker and more shining, hanging over his shoulders, and having a parting in the middle of his head according to the fashion of the Nazarites. His forehead is smooth and quite serene; his face is without wrinkle or blemish, and a slight ruddiness makes it handsome. No fault can be found with his nose and mouth; he has a full beard of the color of his hair, not long but divided in two at the chin. His facial expression is guileless and mature; his eyes are grayish and clear. In his rebukes he is terrible, but in his admonitions he is gentle and kind; he is cheerful, but always maintains his dignity. At times he has wept, but he has never laughed.

In stature he is tall and erect and his hands and arms are fine to behold. His speech is grave, reserved, and temperate, so that he is rightly called by the prophet, 'Fairer than the sons of men.' "

⁹⁹The *Letter of Lentulus* is now considered apocryphal. It most likely originated in the 15th century.

Almost the same description of the Savior is found in the work of the Greek historian Nikephoros Kallistos:¹⁰⁰

"His face was remarkable in its beauty and expression... [a description is then given similar to Lentulus' letter]. The color of his face was that of the ripe wheat. His face was neither round nor elongated. He looked very much like his Mother, especially in the lower part of His face. His face expressed restraint, prudence, humility, and unceasing compassion. That is to say, he looked very much like his ever-glorious undefiled Mother."

These descriptions are very similar to the descriptions of the famous image "Not made by hands." This image of our Lord Jesus Christ was an imprint of His face on a piece of cloth, which was sent by the Savior himself to Abgar, King of Edessa. John of Damascus was one of those who had seen this cloth.

Here is the description of the same image by the Italian eyewitness Picconi, from a much later date:

"This image is majestic and wonderful. It reflects the divine majesty and glory. One is enraptured and awed while standing before this image. The forehead is wide and tall; from its top, hair descends down on both sides, to the left and to the right. His hair is dark and covers his ears. It merges with the beard. The eyebrows are black, and the eyes are fiery, penetrating, as if radiating rays of light. One has a sense that his eyes follow the viewer, giving him a pleasant and gentle glance. The nose is straight and although somewhat long, it is proportional. Complexion of the face is dark. This image has something supernatural about it, and the art of man cannot imitate it. Many artists recognize this. One of them, by the name Lukas, had the opportunity to examine this image for quite a while. Lukas frequently said that there is no way that anyone can convey the holy nature of this image by using our paints. He was asked many times to make a faithful copy of the original, but he never agreed, even though people asked him repeatedly."

[*The Russian Pilgrim*, 1889, №1]

What is the fate of this sacred image? Prior to the 10th century, the image was in Edessa. Then, all of Syria, where Edessa was located, was invaded by the Sassanids.¹⁰¹ Emperor Romanos,¹⁰² using military pressure and monetary enticement convinced the Sassanid Emir to return this

¹⁰⁰**Nikephoros Kallistos Xanthopoulos** (Νικηφόρος Κάλλιστος Ξανθόπουλος), of Constantinople, the last of the Greek church historians, d. 1350. He was the author of "History of the Church," in eighteen books.

¹⁰¹The Sassanid Empire was the last Iranian empire before the rise of Islam. The Sassanid Empire was one of the leading world powers alongside the Byzantine Empire, for a period of more than 400 years. The conquest of Edessa took place in 609 AD.

¹⁰²**Romanos I Lekapenos** was an Armenian-born Byzantine naval commander, who reigned as Byzantine Emperor from 920 until 944 AD.

image to the Byzantines. Emperor Constantinos Porphyrogennetos¹⁰³ made a record about the transfer of this treasure to Constantinople in 944 AD. There, it was kept until 1204. According to one account, this image was stolen during the Siege of Constantinople by the Crusaders (1204-1261) and carried away by the Venetian Doge Dandolo. The ship on which the image was transported along with other sacred objects, sank in the Propontis.¹⁰⁴ [from *Lives of the Saints: St. Dmitry of Rostov, August 16th*]

B. The outward likeness and the inward virtue of the Theotokos

Nikephoros Kallistos also preserved for us this traditional description of the Theotokos' likeness:

"She was of average height or, as some say, a little taller than average. Her hair was of golden color, and her dark olive eyes were quick and vibrant. Her eyebrows were arched and moderately dark, and her nose was elongated. Her face was neither round nor narrow but somewhat elongated. Her arms and fingers were slender and long.

The most striking were not her pure physical beauty but her soul's special qualities.

Her garments were humble; luxury and pamperedness were alien to her. Her deportment was deliberate and confident; her gaze was stern yet pleasant. She was quiet and obedient to her parents. Her speech was meek and flowed gently from her kind heart.

Her mind was directed by God and toward God only, and her eyes were unceasingly on the Lord. Her heart was pure and undefiled, seeing and desiring God, who is pure. Her entire personhood was the abode of the Spirit. She was the City of the Living God. In the eyes of the Lord, she was all goodness.

In conversations with others, she was well-mannered, and she never laughed. She was never indignant, never angry. She was artless and simple, and cared little about herself. Humble and obedient, she had no need for comfort and amenities. To sum up, all her being manifested extraordinary grace."

¹⁰³ **Constantinos VII Porphyrogennetos** was the fourth Emperor of the Macedonian dynasty of the Byzantine Empire, reigning from 913 to 959. His nickname Porphyrogennetos ("Purple-born") alludes to the Purple Room of the Imperial palace, decorated with porphyry, where legitimate children of reigning emperors were normally born.

¹⁰⁴ The Sea of Marmara; now in Turkey

Saint Ignatius of Antioch¹⁰⁵ wrote:

"We all know that the all-pure Mother of God was full of grace and possessed countless virtues. It is said that during persecutions and tribulations she had always been cheerful, never dismayed by poverty and need. She was never angry at those who insulted her; on the contrary, she was a benefactor to them. In prosperity, she was meek and humble. She was gracious towards the poor and helped them as much as she could and with whatever she could. In piety, she was a teacher and a mentor for every good work. She was especially fond of the humble, because she was full of humility herself."

Three years after his conversion to Christianity, Saint Dionysius the Areopagite¹⁰⁶ was honored to meet the Mother of God in person, in Jerusalem. He described the meeting in the following words:

"When I was introduced to the God-bearing Virgin Mary, I was inundated with the great and immense divine light, from within and from without. All around me, a wonderful fragrance of different aromas was gushing. Neither my feeble body nor my spirit were able to bear such great and abundant signs and such foretaste of the eternal bliss and glory. My heart fainted, and my spirit languished before her glory and God's grace. The human mind cannot conceive of a higher glory and honor than the bliss which I experienced, not even those people who have been glorified by God. This was bestowed upon me, the unworthy yet blessed beyond understanding, by divine mercy."

Stories of The Earthly Life of The Holy Theotokos. St. Panteleimon Russian Monastery, Mount Athos—St. Petersburg, 1869; pp. 261-263

¹⁰⁵**Ignatius of Antioch** (35-98 AD; or 50–117 AD), also known as Ignatius Theophorus ("the God-bearing"), was an Apostolic Father and the third bishop of Antioch. He was a pupil of St. John the Apostle. He wrote a series of letters which have been preserved as an example of very early Christian theology. Important topics addressed in these letters include ecclesiology and the sacraments.

¹⁰⁶Dionysius the Areopagite was a judge of the Areopagus, who, as related in the Acts of the Apostles, was converted to Christianity by the preaching of the Apostle Paul. According to Dionysius of Corinth, quoted by Eusebius, Dionysius the Areopagite then became the first Bishop of Athens.

C. Descriptions of traditional garments in iconography

Garments of Christ the Savior

Chiton was a type of inner garment, a loose, long robe (down to the ankles) with wide sleeves and a belt tied around the waist.

Traditionally, Christ's chiton is painted in warm colors such as brown, cool red, bright red, or even pink (rarely). Over both shoulders of the Savior's tunic, front and rear, there are narrow stripes that look like embroidery running down to the hem; the strip itself is called *clavus*.

Clavus¹⁰⁷ was the symbol of God's messenger; hence the portrayal of Christ as the One who was sent into the world by God the Father with a mission to save the world (Gospel of John 6:38-40, 44 etc.) Hence the Apostles and the Prophets are also painted wearing *clavus* as God's messengers, who preached God's Word to the people and announced His will (Gospel of Matthew 28:19–20).

The color of the *clavus* is more or less different from the chiton's color. It is often yellow and is almost always decorated with gold assist.

Himation¹⁰⁸ is a long and wide piece of fabric which was worn on top of the chiton. Poor people also used a himation as a blanket when sleeping (Exodus 22:26-27). This piece of garment was quite large in size. We can infer this from the Gospel: when the soldiers who crucified Christ, divided His garments between themselves, the himation was divided in four parts, one part for each soldier (Gospel of John 19:23).

The color of this garment is always painted in cool colors – from light blue to dark blue, or from light green to dark green. However, on such icons as "Resurrection of Christ," "Ascension," or "Dormition of the Mother of God," Christ is painted in His Glory – that is, all of his garments are painted in golden yellow color and modeled with gold assist. However, on the icon of Transfiguration, Christ's garments are painted white.

On the icons of the Theotokos, the garments of Christ the Child-God are almost always golden yellow (of various hues), and modeled with gold assist. Thus the Church sets apart His

¹⁰⁷Clavus (Latin: "rivet"), an ancient Roman regalia consisting of a broad stripe or band of red or purple fabric worn on the shoulder over the tunic by senators as an emblem of office. This ornament, was often emblazoned with golden rivets; hence the name.

¹⁰⁸ A himation (Greek: ἱμάτιον) was a type of clothing, a mantle or wrap worn by Greek men and women from the Archaic through the Hellenistic periods (c. 750–30 BC). A very large rectangle of fabric, the himation was draped in different ways—e. g. , as a shawl, a cloak, or a head covering—during various periods. It was usually worn over a chiton and/or *peplos*, but was made of heavier drape and played the role of a cloak. The himation was markedly less voluminous than the Roman toga. When the himation was used alone (without a chiton), and served both as a chiton and as a cloak, it was called an achiton. The himation continued into the Byzantine era, especially as iconographic dress for Christ and other figures from Biblical times, although it appears still to have been worn by others, especially by older men of relatively low status.

childhood from that of ordinary humans and emphasizes His essence as co-eternal with God the Father, sharing His Father's throne.

The shoes on the Savior's feet—just like the shoes on the feet of the Apostles and the Prophets—are sandals. These consist of flat leather soles with attached straps.

There are icons on which Christ is portrayed as the King of Glory sitting on the throne. His garments are painted golden yellow and modeled with gold assist. As the King of Kings, the Lord is painted wearing royal garments (Byzantine style), sitting on the throne, and wearing a crown. When Christ is painted as the Great Priest, He wears a *sakkos* and an *omophorion*.

Garments of the Holy Theotokos

Tunic¹⁰⁹ is a type of inner garment, often with narrow sleeves. This garment is long, reaching to the floor. On the icons of the Theotokos, the color is traditionally blue, a symbol of purity. However, the color can vary in hue, from light blue to dark blue, or even from light green to dark green.

Maphorion¹¹⁰ was an outer garment. It was a round mantle (disc-shaped) with a round hole at the neck, big enough for the head to pass through. A strip (wide or narrow) was sewn onto the edge of that hole. A maphorion was worn over a tunic, reaching to a length a little below the knee.

Women of that time always had to cover their heads. On the icons of the Mother of God, we always see a light hair **bonnet** ("plat") covering her hair. On top of the bonnet, women wore **a cover**. The cover was circular in shape, similarly to a maphorion. From the center to the edge, a cut was made for the face. The length of the cover was down to one's elbow.

For the outer garments of the Theotokos, traditionally the following colors were used: brown or cool red of brownish hue. This color has its own symbolism: this color is made by mixing red and blue pigments. Here, the light blue pigment is the symbol of purity. Red, on the other hand, the color of blood, testifies that Son of God inherited His earthly royal mantle—His flesh and blood—from the Theotokos, the pure Virgin.

Traditionally, the head cover of the Theotokos is adorned with three stars – one above her forehead, and two on each shoulder. These indispensable stars are the symbols of her virginity. The Mother of God was a virgin before the birth of Christ (the star on her right shoulder); she was a virgin at the moment of Christ's inconceivable birth (the star on her head), and she remained a virgin after the birth of her divine Son (the star on her left shoulder).

¹⁰⁹The name derives from the Latin **tunica**, the basic garment worn by both men and women in Ancient Rome, which in turn was based on earlier sleeveless Greek garments.

¹¹⁰Μαφόριον (maphorion), from Hebrew מֵאֵפֶרֶת (ma'aforet, a type of an outer garment). A mantle or a cloak with a hood; it was identical to actual typical Byzantine dress for married women and widows when in public.

Symbolic imagery and the garments of Angels

Scripture tells us that there are always seven angels of the highest rank standing before the unapproachable glory of God: Michael, Gabriel, Raphael, Uriel, Selaphiel, Yegudiel, and Barachiel.¹¹¹ Of these, the most important is the Holy Archangel Michael. He was the first to rise against Lucifer who turned away from God, and called to arms the other angels. After vanquishing the fallen angels, Michael has not ceased to be our defender of the glory of the Lord and Creator, and for the sake of salvation of humankind. This is why he is often portrayed as a warrior, with a lance or a sword in his hand.

All angels have wings which signify their detachment from everything that is earthly and sensual, yet they retain their closeness to us. In addition, wings are the visual representation of the angels' speed and fiery zeal in doing the will of God. Lastly, angelic wings indicate the angels' willingness to serve the people and keep the people under their protection. The wings of the Seraphim that cover their faces and legs show us the angels' awe and humility, their fear and trembling with which they stand before the face of God.

Often in iconography, the angels are painted holding a rod and a round object called *the orb*. Within the orb, we often see the words such as "Lord" or the letters "IC XC."¹¹² These inscriptions symbolize the reality of the angels' lives, which is God.

In iconography, angels' garments vary. Sometimes angels are painted wearing chitons and himations, just like the Apostles or the Prophets. In this case, the angel's attire should include a *clavus*, which marks him as a heavenly messenger. Sometimes, their chitons are richly adorned with gold around the neck and at the hem. Sometimes, they wear the garments of royal servants, in the style of the Byzantine royal court. In this case, they also wear a wide and long orarion¹¹³ which crosses at the angel's chest; such an orarion is called a *loros*.¹¹⁴

¹¹¹ The earliest reference to a system of seven archangels as a group appears in the Book of Enoch, where they are named as Gabriel, Michael, Raphael, Uriel, Raguel, Remiel and Saraqael. Even though this book is not a part of the Eastern Orthodox Canon, it was explicitly quoted in the New Testament (Letter of Jude 1:14-15) and by the early Church Fathers. In the late 5th to early 6th century, Pseudo-Dionysius gave their names as Michael, Gabriel, Raphael, Uriel, Chamuel, Jophiel, and Zadkiel. About a century later, Pope Saint Gregory I listed them as Gabriel, Michael, Raphael, Uriel (or Anael), Simiel, Oriphiel and Raguel.

The Eastern Orthodox Church accepts only Archangels Michael, Gabriel, Raphael and Uriel. Michael is mentioned in the Book of Daniel and in the Book of Revelation; Gabriel is mentioned in the Book of Daniel and in the Gospel of Luke; Raphael is mentioned in the Book of Tobit, which is accepted as canonical by Orthodox; and Uriel is mentioned in 2 Esdras. Other names which were derived from pseudepigrapha but not recognized by Orthodox are Selaphiel, Yegudiel, and Barachiel. As her source, Mother Iuliania quotes the Menaion of St. Dmitry of Rostov (18th c.).

¹¹² **IC XC** is both a Greek and a Old Church Slavic abbreviation of "Jesus Christ" (Ιησοῦς Χριστός, Исусъ Христосъ)

¹¹³ **Orarion** is the distinguishing vestment of the deacon. In the Byzantine tradition, the orarion hung down from the front and back and wrapped diagonally under the right arm and over the left shoulder.

¹¹⁴ **Loros** (Greek: λωρος - cord, belt), a part of angelic vestments; a wide long strip of cloth, decorated with pearls and precious stones. This type of regalia is patterned after the Byzantine imperial fashion.

Garments of the Apostles and the Prophets

The garments of the Apostles and the Prophets are basically similar to those of Christ the Savior, with a *clavus* as a mark of God's messengers. The colors of their garments are specified in iconographic anthologies. It should be noted that the apostles from among the 70 are painted wearing the omophorion.¹¹⁵

Garments of bishop-saints

In the early times of the Church, all bishops wore the phelonion with the omophorion on top of it. (Besides the phelonion, they also wore the sticharion, the epitachelion, the belt, and the epimanikia). This is what we always see on the icons of St. Nicholas. The sakkos was originally worn by the patriarchs of Constantinople only, but over the time the sakkos became a part of bishops' vestments. The phelonion became a part of priestly vestments.

Garments of female saints

The garments of female saints—the martyrs and the righteous—are similar to the garments of the Theotokos. However, these may have some personal individualization as described in iconographic anthologies; the correct colors are also given. The footwear of female saints are closed shoes partially seen from under the hem of the long tunic.

All other saints such as kings, princes, bishops, priests, deacons, rassophores, schema-monastics, warrior-saints, and righteous people are painted wearing the garments of their titles as specified in the iconographic anthologies.



In conclusion, it must be said that an icon is considered Orthodox when a halo is painted around the head of the saint and his or her name is inscribed.

¹¹⁵In the Eastern Orthodox liturgical tradition, the **omophorion** (from Greek: ὠμοφόριον, "shoulder-worn") is the distinguishing vestment of a bishop and the symbol of his spiritual and ecclesiastical authority. It is a band of brocade decorated with four crosses and an eight-pointed star and is worn about the neck and shoulders.