SPATIAL REPRESENTATION METHODS
IN BYZANTINE ART

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Abstract: This article proposes an analysis of the issue of spatial representation in Byzantine art. In the first part, we identify the reasons leading to the elimination of three-dimensionality effects in Byzantine imagery. The idea that Byzantine artists intentionally gave up three-dimensional representation is supported with arguments. Even though Byzantine art systematically rejected representing the third dimension, we can definitely discover certain ways of rendering spatiality. These methods are briefly analysed in the second part of this work.

Keywords: Byzantine art, perspective, space, overlapping, hierarchical perspective, inverted perspective

Ancient Greek and Roman art represents a moment of relative development of the spatial representation principles. There is a time interval of almost a millennium and a half between this period and the Renaissance, when perspective is developed. Surprisingly enough, during all this time, the representation of space seems to be abandoned or neglected.

Both Byzantine and Romanesque art promote an artistic style where the third dimension is not desired, the rules of perspective representation being ignored. The artists are no longer interested in the laws of geometry or in the proportions between objects and their placement in space.

The first elements of the Byzantine style emerge during a difficult period of time, characterised by serious social, political and economic crises, when rationalism and sciences are no longer trusted. This unstable climate generates the alienation from the material world, people tending to embrace the spiritual side of life. Divinity is placed far away from the sensible world, which becomes less important than the suprasensible one. Almost all interests of the society gravitate around religious research, which is the central issue.

Art gradually transforms itself into a powerful instrument of religious influence, aiming at taking the faithful people away from the material world and making them get closer to the transcendental existence. The main goal of Byzantine art is to render the essence of a supernatural world. For the Christians of those times, the invisible reality becomes more important than the visible one.

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Byzantine art has a programmatic, instructional and perceptual approach, with the Court and the Church totally controlling it and conditioning all its themes, down to the last detail. As art historian Charles Delvoye states, Byzantine art does not belong to reason or reality, but rather to transcendence and ostentation, its main purpose being that of astounding and infusing respect into the submissive people and the neighbouring nations[1].

The Byzantine artist does not intend to accurately depict reality or to awaken admiration through a naturalistic approach; his goal is to make the Christian soul turn to God. The Byzantine painting is meant to present religious themes in a precise and accessible manner, stimulate memory and orient imagination towards a pre-established direction. Art historian Viktor Lazarev believes that the artistic image had to make the Christians think about God and urge them to contemplate purity. And the icons represent the only way for the believers to detach themselves from the earthly possessions[2].

Byzantine art has a slow evolutional process, artistic revolution being practically impossible due to the same strict control exerted by the Court and the Church, the slightest deviation from the religious theme being immediately eliminated, as Viktor Lazarev asserts[3]. The freedom of Byzantine artist is limited, as his themes are established in detail and he also has to follow a series of rigid canons. Because of this authoritarian character of power, art turns into an instrument of propaganda.

After having briefly clarified the context in which Byzantine art emerges and develops, its role within the society of those times and its characteristics, the decision of the Byzantine artists to opt for the elimination of the spatial representation effects seems totally justified. The fact that this exclusion of three-dimensionality from the Byzantine iconography happens during all stages of its existence helps us conclude that the artist's intentions can be considered as being premeditated. As art historian Nadeije Laneyrie-Dagen[4] states, from Paleochristian times to the Romanesque period, artists have avoid any form of *trompe l'oeil* and any illusion of depth, placing characters and motifs at levels that have no significance to their relative position, filling the background with horizontal stripes and creating ambiguity, and there is no way of telling if the figures are located inside or outside.

Therefore, the entire Byzantine iconography – with rare exceptions – is marked by a pronounced two-dimensional character. Since Paleochristian times, the artistic creation has presented a tendency of geometrically stylising the forms that populate the plastic space, depicting them unrealistically and

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[1] Charles Delvoye, *Arta bizantină (Byzantine Art),* Meridiane Publishing House, Bucharest, 1976, p. 30.

[2] Viktor Lazarev, *Istoria picturii bizantine (The History of Byzantine Painting)*, vol. I, Meridiane Publishing House, Bucharest, 1980, p. 71.

[3] *Ibidem,* p. 52.

[4] Laneyrie – Dagen, Nadeije, *Pictura-secrete şi dezvăluiri (How to Read Paintings),* RAO Publishing House, Bucharest, 2004, p. 79.

making them seem extremely rigid. The human body, for instance, is drawn by ignoring all physical parameters; it is spiritualised and becomes an abstract symbol standing against a flat, two-dimensional background. While painting cloths, the painters render creases in a way that totally contradicts the logic the volumes of the human body, without emphasizing the anatomical shapes. All objects are represented in a space with no gravitational attraction. The depiction of figures follows the rules of a severe form of ascetism, as they have no volume, looking like shadows without a body that do not belong to the concrete reality. The landscape is as schematic as the rest of the elements: the hills are flat, the cliffs are stylised to such an extent that they become unrecognisable, the trees and the plants seem mere geometric motives.

In the case of icons, mosaics and mural paintings, the genuine three-dimensional space is replaced by an abstract golden background or a monochrome one – usually blue. Depth is neglected, and so is the placement of the elements in space. In the scenes with a pronounced narrative and illustrative character that present biblical events, the space is adapted to the story line necessities without any rules, thus resulting an ideal world, with no connections to the earth and its physical laws. All material elements are excluded in order to reach a maximum level of spiritualisation, the artistic image achieving a transcendental character.

Even if Byzantine art systematically rejects the rules of linear perspective, we can still identify certain "traces" of spatial representation, if we are to take into consideration Rudolf Arnheim's opinion that "there is no such thing as a strictly flat, two-dimensional image"[5].

Overlapping

One of the simplest methods of creating the illusion of depth is by overlapping two or more shapes. If their contours touch or intersect each other without interruption, the effect of spatiality is barely visible or even absent. But when one of the shapes eliminates a part of the other, the overlapping is strongly perceived, the eye and the brain recreating the incomplete shape.

Overlapping is a method of spatial representation that is typical to decorative arts schools. As Rudolf Arnheim states, "overlapping is particularly useful in creating a sequence of visual objects in the depth dimension when the spatial construction of the picture does not rely on other means of perspective"[6]. Overlapping is usually combined with the multi-storeyed perspective, the former being an improved version of the latter in what illusion is concerned[7]. Spatiality is achieved through a figure that is partially

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[5] Rudolf Arnheim, *Art and Visual Perception*, University of California Press, Berkeley, Los Angeles, London, 1974, p. 219.

[6] *Ibidem,* p. 250.

[7] Zamfir Dumitrescu, *Structuri geometrice, structuri plastice (Geometric Structures, Plastic Structures),* Edit. Meridiane, București, 1984, p. 163.

overlapping another one or through a group of elements that are slightly higher than the ones in the foreground. The elements are placed in successive registers, without reducing the proportions in accordance with the spatial depth. This method is highly used when there is an intention to represent a group of figures or elements, the ones in the second and third plane being somewhat elevated than the ones in front of them, thus leaving visible certain parts of their surfaces. The shapes with continuous contours are perceived as being placed in front, while those with interrupted margins appear to be situated somewhere in the back. The elements placed in overlapped frontal planes imply the existence of a minimal space. This way, although the space is perceivable, the distance between the elements is reduced to the maximum, the image keeping its two-dimensional character.

Overlapping is a very common element in Byzantine painting, being present in icons, as well as in mural paintings and mosaics. In the image bellow (Fig. 1), *The Forty Martyrs of Sebaste* form a compact group of characters. The martyrs in the foreground are presented entirely and partially cover those in the back. But the dimension of the characters is not reduced in proportion to their distance from the plane of the observer. The same effect occurs in the second image (Fig. 2), which presents a fragment from the scene of *The Last Judgement.* The characters are represented staying side by side, their heads having the same size (isocephaly), and are partially overlapped, the ones in the back being present only through their halos.
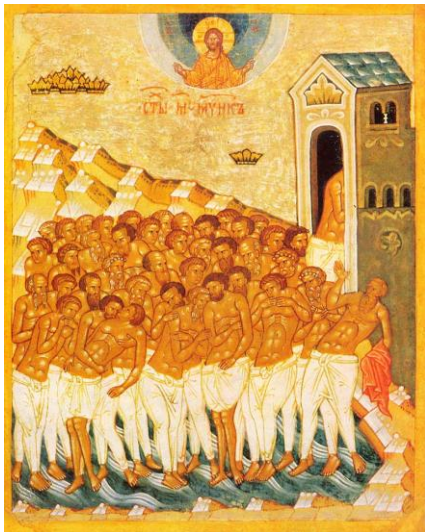

Fig. 1. *The Forty Martyrs of Sebaste* - Russian icon, 15th century

Fig. 2. *The Last Judgement* – fragment, Voroneţ Monastery, 16th century

Byzantine art uses overlapping because it fits the plane vision. By means of this simple, yet suggestive method, the Byzantine painters manage to

depict aspects of the three-dimensional space, at the same time keeping the two-dimensional character of the image, which is typical to the paintings of that period.

The hierarchical (affective) perspective

Another method of representing three-dimensional space on a flat surface in Byzantine iconography is the hierarchical (affective) perspective. This method also characterises the art of Ancient Egypt, as well as the Pre-Romanesque and Romanesque art.

According to this type of perspective, the characters and elements are visually represented by following a subjective hierarchical criterion, as they do not depend on perception, but rather on their relevance within the image. The Byzantine painter does not imitate mechanically the elements he observes and neither does he give much importance to the proportions between the elements he visually perceives. The dimension of the elements is represented according to the place they occupied in a certain official, religious, or personal hierarchy, and also to the visual logic.

In Byzantine imagery, the elements and characters populating the artistic space are represented on different scales, in accordance with the role they occupy in the story the painting depicts and not as a result of a decrease in perspective. The most important character occupies a privileged position and is depicted on a bigger scale than the characters that are given less consideration, even if the latter ones are located closer to the observing eye. Although this technique does not follow an aesthetic principle, but rather meets hierarchical demands, it proves to be very efficient especially in the cases of the large mural scenes painted inside the churches, where the central figure is immediately perceived. In many works, the figures of Christ, Virgin Mary or the emperor (the symbolic expression of the entire Byzantine state) appear much larger than the ones of the other characters.

Those who are very familiar with the rules of linear perspective may associate the representation of characters at different scales with perspectival diminution. But such an interpretation is far from the stylistic conception of the Byzantine iconography. Perspective representation implies depicting the world the way an observer sees it, thus expressing his or her subjectivity. It does not mean representing the objects the way one knows they are, but the way an observer sees them from a certain place (a single "point of view"). This approach, which favours the perception on the objective reality, was inacceptable for the theology of the Byzantine Middle Ages. In accordance with its principles, the perspective representation created a hierarchy that the Church did not want to establish. During that period of time, it was inconceivable to represent Jesus Christ or the emperor on a smaller scale than a simple earthling just because they were located farther from the observing eye. Space as a three-dimensional concept was not of any concern to the

Byzantine visual art. However, the architect P. A. Michelis considers that space can still be perceived due to the different levels suggested by the comparison of dimensions and the movements of the characters within the two-dimensional surface of the work[8].
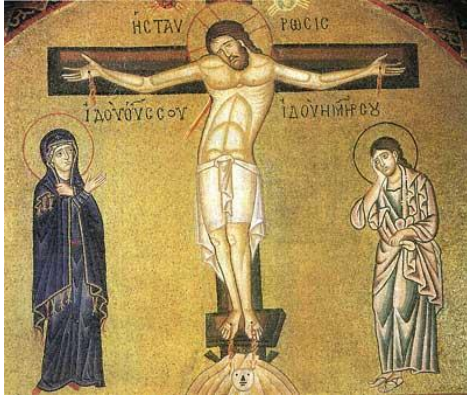

Fig. 3. *The Crucifixion,* Hosios Loukas Monastery, 11th century

Fig. 4. *Harrowing of Hell*, Cathedral of Santa Maria Assunta, Torcello, 12th century

The principle of the hierarchical perspective can be very well observed in the scene of *The Crucifixion* (Fig. 3), a simple composition, with three characters, that is representative for the 11th century iconography. The figure of Christ dominates the composition, due to its size. Virgin Mary and John the Apostle, much smaller than Christ, reticently share his sufferings. The symbolic importance of Christ crucified is emphasized by placing the action in an unreal, transfigured space. The figures seem to be floating in front of a golden background. There is no indication of the earth surface, the hill of Golgotha being reduced to a small spot, right beneath the cross. The same representation principle is applied in the scene of the *Harrowing of Hell*, presented above (Fig. 4). Christ dominates the composition through his stature, much bigger than that of the other characters, as well as through his central position.

Furthermore, in Byzantine art the proportions between the characters and the furniture or buildings do not comply with the visual perception. There are many images where people can be as tall as a building or where they can hold an edifice in their hands, the latter being the case of the church founders in the votive portraits (see figs. 5 and 6). Rudolf Arnheim argues that this example shows „how size differences arise in response to considerations of meaning, e.g., when the relation between creator and creature or saint and emblem is to be expressed"[9].

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[8] Michelis, P. A., *Esthétique de l'art byzantin,* Flammarion, Paris, 1959, p. 185.

[9] Arnheim, Rudolf, *Art and Visual Perception*, University of California Press, Berkeley, Los Angeles, London 1974, p. 196.

Fig. 5. The votive portrait of Stephen the
Great, Voroneţ Monastery, Romania,
15th century

Fig. 6. The votive portrait of Neagoe
Basarab, Curtea de Argeş Monastery,
16th century

The seemingly incorrect proportions between the elements, often attributed to the lack of skills or attention, are explained by Arnheim as follows: „The basic irrelevance of visual size is shown most strikingly by our habitual obliviousness to the constant change in size of the objects in our environment brought about by changes in distance"[10].

The reverse (inverted) perspective

In Byzantine there are also some sporadic attempts to represent depth, especially in the case of the objects with flat margins and straight edges, spatial proportions that contradict the rules of linear perspective. Polyhedrons and even objects with curved margins are sometimes represented with some of their parts or surfaces being completely visible, although they are not directly seen by the eye of the observer. The Byzantine painter does not hesitate to bring in the foreground sides of objects that are normally "hidden". Furthermore, the viewer is surprised by certain unusual shapes of architectural elements or mountains, for instance. The walls of the buildings and the sharp cliffs look like they are coming forward, towards the observer, instead of moving backwards to create the illusion of depth. The objects seem to be looked at from different points of view and not have a stable position in a space characterised by a reduced profoundness. At a closer look, we can notice faces and parts of the human body depicted in an apparently awkward way, as if the painter did not have enough knowledge about it.

On the other hand, a quick examination emphasizes the incontestable artistic and technical qualities of the works created by the Byzantine artists, as well as the originality and symbolic value of the frescos, mosaics and miniatures. In fact, these unusual shapes and forms are the result of a conscious

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[10] Arnheim, Rudolf, *Art and Visual Perception,* University of California Press, Berkeley, Los Angeles, London 1974, p. 201.

and premeditated artistic endeavour. They are elements of a visual language through which the Byzantine artist expresses the reality he wants to transpose into images.

The theologian Pavel Florenski considers that these "breaches" of perspectival rules are not accidental and that we are dealing with a specific system of representation and perception of reality in Byzantine iconography. He thinks that the Byzantine artists knew about the use of perspective, but chose not to use it, or better said, they wanted to apply another principle of representation than the perspective, because the masterminds of those times perceived and sensed the world in a way which immanently imposed that particular means of spatial representation[11].

Nonetheless, it is obvious that the spatial representation system used by the Byzantine painters contradicts the rules of the geometric perspective developed during the Renaissance period. Some researchers, such as Oscar Wulff[12], are trying to justify this peculiar spatial representation method, while others are considering it to be imperfect or even inexistent. Wulff is the first researcher who uses the term "reverse perspective" in an article published in 1907, saying that in the artistic space of the icon, the laws of the linear perspective are reversed. Pavel Floresky would later use the expression in one of his essays from 1920.

Art historian André Grabar [13] tries to explain the way reverse perspective works by bringing into discussion the writings of the Greek philosopher Plotinus, in whose opinion the visual impression is created in the place where the object is, and not in the soul. Grabar considers that the Byzantine painter represents the image of an object as if he were in the place of that object, thus managing to depict it in all its greatness and from the right distance. In P. A. Michelis' opinion[14], Grabar's hypothesis is implausible. As a matter of fact, Michelis thinks that reverse perspective is not systematic, not being able to explain the entire composition of a Byzantine work of art. Even if there had been a system, it would have obviously been based on subjective criteria, and the proportion of the distances between objects, as well as between the objects and the viewer, would have remained undetermined. The same opinion is shared by art historian Clemena Antonova, who defines reverse perspective as a principle of the spatial organisation of the icon. According to Antonova, reverse perspective refers to a simultaneous representation of several aspects of the image, regardless of whether they are being viewed from a fixed point or not[15].

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[11] Pavel Florenski, *Iconostasul (Iconostasis),* Edit. Anastasia, Bucureşti, 1994, p. 86.
[12] P. A. Michelis, *Esthétique de l'art byzantin,* Flammarion, Paris, 1959, pp. 179-180.
[13] *Ibidem,* pp. 183-184.
[14] *Ibidem.*
[15] Clemena Antonova, *Space, Time, and Presence in the Icon*, Ashgate Publishing Company, 2010, p. 169.

However, it is almost certain that the Byzantine artist does not conceive reverse perspective as a spatial representation system. Michelis[16] considers that the Byzantine perspective is of value only to us (from an aesthetic and cultural point of view), as we judge it by comparing it to the classical theory of Renaissance perspective. For the Byzantine artists, this type of perspective could not have been a system, as they were not interested in representing appearances. In addition, as Michelis rightfully asserts, reverse perspective contests the visual appearance, which implies a denial of the essences of reality, but instead it highlights the real values of the represented figure.

The principle of reverse perspective is simple. The parallel lines in space, which should converge toward the horizon, are rendered the other way around. Instead of meeting in a vanishing point situated in the back of the painting, the lines come together somewhere in front of the painting, in the plane of the viewer (see Fig. 7).
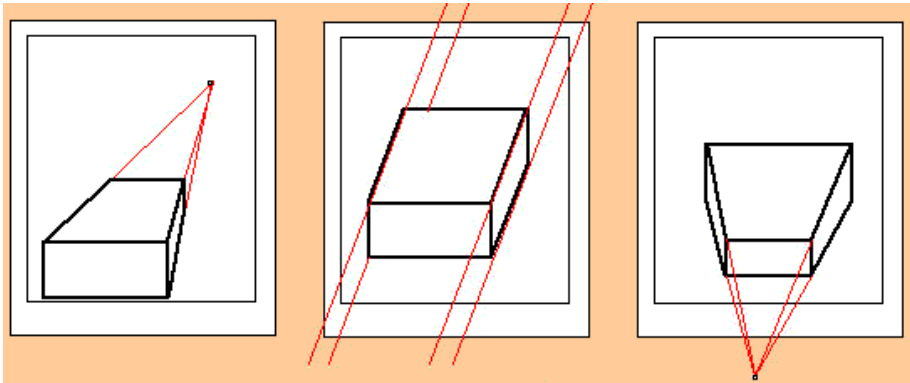

Fig. 7. Principles of construction: linear, axonometric and reverse perspectives.

We are not talking about a system with a single vanishing point. It is very uncommon to identify only one point of convergence in the Byzantine iconography. Most of the times, each represented object has its own perspective, being rendered in such a way as to be highlighted. Furthermore, one of the most common techniques of the reverse perspective is the polycentrism of plastic representations, determined by the mobility of view. The eye can look at different components of an object from various angles, each part having its own visual angle and its own centre of perspective. In this case, spatial representation in Byzantine painting is different from linear perspective, where there is only one point of view. By using more than one vanishing point in a composition, the artist is trying to establish a system of priorities and a connection with the viewer.

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[16] P. A. Michelis, op. cit., p. 184.

The buildings from the Byzantine images lose their three-dimensionality, reverse perspective conferring them a fragile, light and immaterial nature. These buildings have a purely decorative role, not being represented at a human scale. Besides, Byzantine art refuses the "box space", typical to linear perspective. In accordance with the same principle of reverse perspective, the events taking place inside the building are shown outside. A red veil is placed above the buildings, to suggest that the action is actually happening indoors.

Fig. 8. *The Annunciation*, 14th century,
Saint Clement, Ohrid, Macedonia

Fig. 9. *Jesus Christ* – detail.

In the first image above (Fig. 8), the red veil placed over the baldachin, under which Virgin Mary is placed, implies that the action is taking place inside. The space is delimited by the oblique lines of the baldachin and of the two pedestals placed at the foot of the image. The pedestals give the impression that the soil is moving upwards, without generating spatial depth, because reverse perspective is used for their representation. The same effect occurs in the case of the pedestals beneath the column and the capital. At the top of the image there is a building seen from above which is also represented in reverse perspective. All these elements seem to be placed in the same plane. The sensation of two-dimensionality is accentuated by the abstract golden background, which resembles an absolute light that comes from beyond the earthly dimensions. For that matter, the lighting is contradictory in this image. As there is not a unique source of light to unite all the components in a coherent and inseparable system, the characters and objects detach themselves as

isolated and solitary elements that belong to another world. Some parts of the architectural elements, which should have normally been left in shadow, are emphasized through colour, thus claiming a spot in the foreground, compressing space even more. Due to these representation particularities, the action seems to be placed on a spiritual, imaginary realm outside the space.

In the other image (Fig. 9), reverse perspective is present in the representation of the Gospel. The cover is presented frontally, but the lateral sides, which normally should have converged towards the interior of the image, seem to advance in the direction of the viewer. At the same time, the edges of the Gospel have their vanishing point outside the image, in front of the observer. The red colour of the lateral sides additionally emphasizes the two-dimensionality of the image. Due to all these elements, the viewer is attracted in the plane of the painting, having the sensation of a continuous forward movement. Analyzing *The Trinity,* the icon created by the Russian painter Andrei Rubliov, the theologian Paul Evdochimov considers that reverse perspective eliminates the distance, the depth where everything disappears afar, and produces the opposite effect: it makes the characters come closer, showing that God is there and everywhere[17].

The principles of reverse perspective are applied in all stages of the history of Byzantine art, in icons, as well as in mural art or miniatures. But it is not used with the same rigour by all Byzantine art schools. Until the iconoclast period, reverse perspective appears only in its simple forms, although the permanent refusal of rendering spatial depth can be easily noticed. It is only during the Palaiologos dynasty that this spatial representation method manifests the richness of its artistic expression capacities.

The complexity of reverse perspective and its systematic application prove that Byzantine art cannot be described as being incapable of rendering space as we see it. This type of perspective is an artistic method thoroughly verified by practice and one of the main possible schemes in visual arts that corresponds to just one of the possible interpretations of the world around us. This original method of spatial suggestion is preferred by Byzantine painters, as it better expresses the world that the Middle Ages wanted to be transposed into images, fully satisfying people's aesthetic needs.

In recent times, researchers who look into Byzantine art have tried to explain the principles of reverse perspective by starting from certain scientific data. Egon Sendler identifies two tendencies in interpreting this particular method: an eastern one, which is supported by optical and geometric theories and a western one, which sees reverse perspective as the expression of cultural data. But Sendler concludes by saying that research is far from being over[18].

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[17] Paul Evdochimov , *Arta icoanei - o teologie a frumuseţii (The Art of the Icon - Theology of Beauty),* Edit. Meridiane, Bucureşti, 1992, p. 207.
[18] Egon Sendler, *Icoana, chipul nevăzutului (The Icon: Image of the Invisible),* Edit. Sofia, Bucureşti, 2005, pp. 141-155.

Byzantine inverse perspective and other forms of spatial suggestion that present reality in an unusual way have been spontaneously understood by the contemporary man. It would be unfair to judge these methods of space representation only by taking into account the principles of linear perspective. Architect P. A. Michelis[19] considers that this would make sense only if the Byzantine compositions had no artistic purpose and did not manage to express the desired subject. However, as Michelis states, what is odd is that they actually achieve their goal even better than they would have if they had used classic perspective or photography[20].

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[19] Egon Sendler, *Icoana, chipul nevăzutului (The Icon: Image of the Invisible),* Edit. Sofia, Bucureşti, 2005, pp. 141-155.
[20] *Ibidem*.

http://www.crestinortodox.ro/liturgica/locasurile-cult/noile-biserici-odihna-celor-vechi-118557.html

Fig. 7. Principles of construction: linear, axonometric and reverse perspectives.

http://www.atelier-st-andre.net/en/pages/aesthetics/byzantine_perspective.html

Fig. 8. *The Annunciation*, Byzantine icon, Palaiologos dynasty, 14th century, tempera on wood Church of Saint Clement, Ohrid, Macedonia.

http://en.wikipedia.org/wiki/File:Ohrid_annunciation_icon.jpg

Fig. 9. Inverted perspective in representing *The Gospel*.

Photo credit : the autor.