Constitutive Role of Light in Christian Sacred Architecture
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Abstract—Light is the central theme of sacred architecture of all religions and so of Christianity. The aim of this paper is to emphasize the inner sense of light and its constitutive role in Christian sacred architecture. The theme of light in Christian sacred architecture is fundamentally connected to its meaning and symbolism of light in Christian theology and liturgy. This fundamental connection is opening the space to the symbolic and theological comprehending of light which was present throughout the history of Christianity and which is lacking in contemporary sacred architecture.

Keywords—Light, sacred architecture, liturgy, theology, church.

I. INTRODUCTION
Light as one of the central themes of all religions pervades the entire history of sacred architecture. All religions have developed a special relationship to the theme of light and so has Christianity. Throughout its history, the phenomenon of light has been connected to the kerygmatic and symbolic framework and placed in the center of Christian symbolic language. The theme of light has been reflected in the history of Christian architecture primarily from the symbolic and theological points of view. The relationship between architecture and the phenomenon of light in the last century demonstrates the absence of symbolic and theological reflections upon the role of light in the sacred space. Light in contemporary Christian sacred spaces is often considered only from the functional or aesthetic points of view, and the fundamental reflection upon the symbolic and theological roles of light is usually absent. But over the past years, this problem has begun to be observed as witnessed by the symposiums and publications issued in the last 20 years [1]. The aim of this paper is to point out the importance of reflection and realization of light in Christian sacred spaces from symbolic and theological points of view in continuity with its original meaning as evident in the history of Christian architecture.

II. LIGHT AND CHRISTIAN THEOLOGY
Light is a theme that pervades biblical history since its beginnings. The Old Testament Bible texts consider God as revealing Himself as light, whereas in the texts of the New Testament there is an identification of the idea of God with the idea of Light.

In the New Testament, the Evangelist John contrasts comprehending of light before Christ and after Christ. For St. John light before Christ meant divine presence, divine action in the world: "In the beginning was the Word, and the Word was with God, and the Word was God. He was in the beginning with God. All things came into being through him, and without him not one thing came into being. What has come into being in him was life, and the life was the light of all people. The light shines in the darkness, and the darkness did not overcome it." (John 1: 1-5). However, with Christ "The true light, which enlightens everyone, was coming into the world" (John 1:9). The only aspiration of Christian life is to partake of light, to become the child of God, to identify oneself with the Light that has come into the world, which revealed to the world the way to eternity. The Christian life path is the path of transition from darkness to light so that Christians themselves become the light of the world. "You are the light of the world" (Matthew 5:14). This light illuminates life when there is no trace of another light in it giving meaning to human existence. Light is a symbol of the Trinitarian God and Christians are the ones transformed by Jesus’ revelation. From the preserved Old Testament and New Testament biblical texts, it is evident that light is the most important Christian symbol.

III. LIGHT AND LITURGY
In Christian life, the liturgy is the ceremony of making present the basic theological truths of Christianity. Light as an important Christian symbol is integrated in the Christian liturgy in a special way, and the culmination of the symbolic power of light is reflected in the Paschal Vigil, whose liturgy itself is called the Liturgy of Light.

As the predecessor of the Liturgy of Light, in the early 3rd century, in the Church, the Luminary ceremony was shaped. Although modified through the centuries, this ceremony still lives today. Accompanied by prayers and songs, the trembling light slowly enters into the dark church. That little light makes the world emerge from darkness. With this little trembling light that makes the world exist, the Christians worship and
glorify Christ as "the true light that enlightens every man" (John 1:9). The dramatics of chiaroscuro become the symbol of Paschal Vigil, in which, in the darkness of human sin, the light rises and new life shines, reconciling the world with God and fulfilling the long-awaited promise. The symbolism of light that annuls the darkness extends throughout the entire celebration of the Resurrection. The service of light marks a motif that expresses a turning point and a new beginning. The presence of light thus becomes a source of experience of the transformation of Christian life.

The light of Paschal Vigil becomes a matrix of understanding light in the process of designing the Christian sacred space. Paschal light can be followed as it grows through other liturgical acts, through the liturgy of the word, baptism, and in the Eucharist as its peak. Thus, the light of Christ becomes the starting point of every liturgy, but also of the understanding of the liturgical space.

IV. LIGHT AND LITURGICAL SPACE

Christian architecture as a materialisation of Christian theological concepts and liturgy, in which theological concepts become the living reality of Christian communities throughout its history, has carefully guarded the symbol of light, giving it different accents and interpretations, witnessing the fundamental symbolic and theological understanding of light in the sacred space. Even Saint Ambrose, a renowned bishop and theologian of the 4th century, elevates the theme of light in his hymns. In the hymn *Splendor paternae gloriae* he says: *Splendor paterna gloriae, De luce lucem proferens, Lux lucis et fons luminis, Diem dies illuminans* ("Splendor of the Father's glory, that brings light from light, light of light and living spring, day of days illumining").

The first early Christian basilicas inherited the architectural matrix of the Roman basilica in which the phenomenon of light in the architectural space was not reflected from the position of Christian symbolism and theology. In the inherited spatial concept, which is characterised by semi-diffuse illumination [2], early Christians, led by the inner sense of light in the liturgy, began to articulate liturgical elements in a clear connection with the symbol of light. The first liturgical elements that show an obvious connection with the symbolism of light in the context of Christian theology are the candles and the Paschal candle that appears on the richly articulated candelabrum near the ambo as witnessed today by the Church of St. Paul Outside the Walls of Rome.

Throughout the following centuries, the formation of Christian architectural concepts with a more reflection on the concept of light will come in consonance with the theological accents of the epochs that shape the Christian sacred architecture.

The time of early Romanesque Christian churches is characterized by the effort to reflect, in the new architectural forms, the motif of light. In modest and semi dark spaces, lightening accents are given to man almost denying themselves. It is in the nature of the mediaeval man who sees transcendence as the primal and the world as only a secondary and transient reality. Light accents are given through small windows and openings in the walls of sacred buildings, and they obtain the symbolic significance of the contact point with the transcendent which can only be sensed, but truly experienced in the afterlife. In the conditions of social and economic stagnation of Western Europe, Christianity becomes an important spiritual foundation for the new future society. At the same time, Byzantium inherits the social stability and organisation of the Roman Empire and integrates new Christian spirituality into it. The reflection upon light obtains a more significant and more monumental starting point in the Byzantine churches. The basic architectural element of the Byzantine churches is the dome that receives the theme of light in a symbolic connection with the golden colour. The golden colour represents light, the transcendental, but unlike the suppressed presence in the space of the Romanesque church, where the light is transcendence that is yet to come, here the light covers the entire space through the dome. This bears testimony to the new theological understanding of the transcendent that is opened and given to man, and whose presence already immerses man in the forthcoming perspective of the new life given in Jesus' word. This light, represented by the golden dome, is the light of the incarnate Christ. Indeed, in the dome there is a figure of Christ Pantocrator as the King of the universe [3]. With gold mosaics, light enters the sacred spaces, begins to obtain its defined place in architectural thought in relation with its inner meaning, the symbol of Christ - Light and his mystery of Redemption. The dome and the apsides with golden mosaics become not only architectural spaces, but also symbols of the celestial firmament flooded with the light of the incarnate God [4].

Entering into the Middle Ages of Europe, there is a deeper understanding of the relationship between light and architecture. The two most famous Mediaeval examples that help us to deeply understand the relationship between Romanesque and Gothic architecture in the context of the problem of symbolism and theology of light, are the theology of St. Bernard of Clairvaux from which we can read the Romanesque theological thought and the theology of the Abbot Suger from the Saint Dennis Abbey in Paris from which we can read the Gothic theological thought.

St. Bernard finds that "an incarnate architecture is modest architecture whose only decoration is made of rocks and light that varies according to the days of the seasons" [5]. So, St. Bernard suggests that the architecture of the church must be such that only natural light should be introduced into it, which has not been changed by passing through coloured glass, the light reflecting poverty and bareness, symbolizing the life of Christ. Light should be naturally expanded, not creating dramatics, avoiding the magnificence of colour. Such a light is suitable for architecture whose task is to symbolize Christ - the second Light that is hidden to man. That theological thought is reflected in the Romanesque architecture of small openings through which the light rays barely penetrate [6].

Contrary to St. Bernard, Abbot Suger formed a new starting point for the reflection on sacred architecture thereby influencing the theological foundation of Gothic art. Abbot
Suger perceived light as an element "filling the human spirit with the light of God" [7]. The explosion of light in the sacred space had the task, in contrast to the Romanesque perception, to awaken the senses and to set the altar as the centre of the church space, thus invoking the idea of "heavenly Jerusalem" [8]. By means of material, the human spirit, contrary to the teachings of St. Bernard of Clairvaux, ascends to "heavenly light". Such an understanding of light became the conceptual foundation from which Gothic architecture emerged in its lightness which, contrary to the Romanesque sense of space, played the role of creating the theophany of light, a kind of sensory experience of God, the manifestation of God through light. The Gothic architecture, in the conditions of the social and economic verve of Europe, testifies to the awakened man's enthusiasm and the elevated look upwards in the unmediated view of man and God. The light of cathedrals, in its fullness of the composition of light orchestration of colours, different intensities and free entrance of rays, comes from above, but in its full beauty comes down to man. In this way, the temporal existence, unlike the Romanesque concept, acquires the taste of afterlife.

The change of emphasis in theology, which reiterated the closeness of God and the world, and which appeared in the Gothic period attained its fullness in the period of the Renaissance. The Renaissance is a period in which man lives with a sense of domination over the world in full co-operation with God who gives man intellect and reason. The Renaissance is dominated by intellectualism and belief that by virtue of intellect, it is possible to master the natural lows. In that way, man understands light as well. Light is understood as a trace of God's presence, but also as a natural element to be dominated, whose laws need to be scientifically explored. In his treatise De architectura, Leon Battista Alberti says that the light in the churches should be balanced in the way to allow the continuity of the space [9]. The architectural space thus becomes clear and hidden, and it speaks of the ideal of the Renaissance man who has confidence in an intellectual component in analogy with God's mind. The light concept emphasises the uniform illumination of space and lighting in which man can orientate himself without raising the view higher, because the clarity and rational power of God's mind have completely occupied space and architecture. The Renaissance concept of light emphasises geometric mathematical rationality and harmony of space. After the Mediaeval symbolic and theological starting point of understanding the phenomena of light in the sacred space, the light, upon assuming general rationality of the space, gradually becomes a decoration and assumes characteristics that later in the Modern Age are connected with the concept of the aesthetic.

The Baroque appeared as a Counter-Reformation style and the last episode of the symbolic and theological reflection upon space. After the Council of Trent, there came an awareness that beauty and theology were unmistakably connected and had a common goal, the celebration of God. Contrary to the Reformation that places emphasis on original theology based solely on the Word in the context of social criticism, the Counter-Reformation emphasises the tradition and sensory experience of the incarnate God. Within the Baroque sense of beauty, the sense of bodily experience and the atmosphere of space play a decisive role. In this way, even the architecture is put in the service of empowering the experience of faith. St. Ignatius of Loyola says that the whole human life is an ad maiorem Dei gloriam (to the greater glory of God). God is the light that illuminates human existence in its rational and physical aspects. From this theological starting point we can understand the light in Baroque architecture.

Whereas light in Romanesque and Gothic architecture retains its own separation from the building itself, as the emphasis is placed on the symbol of light in the unmediated light flux, the Baroque light can be experienced only in the interaction with the material aspect of the sacred space, and thus, with the world. Light in Baroque architecture pervades the space and emphasises the volume of space and architectural plastics, and illusionism and playfulness provide an almost theatrical experience of space. One or several light sources enhance the impression of chiaroscuro and of the architectural plastics.

Under the influence of the Baroque world view which, apart from the spiritual emphasizes value of corporeity as the phenomena associated with the cognition of truth, in the 18th century a new philosophical concept of the aesthetic, comprehended as the perfection of the sensory consciousness, the cognition of the truth by senses appeared [10]. During the 19th century, however, the understanding of the concept of the aesthetic departs from the original foundation in the phenomenon of truth to the concepts of atmosphere and taste, thus determining future artistic practice.

V. LIGHT AND CONTEMPORARY LITURGICAL SPACE

The symbolic and theological comprehending of light marked the history of Christian architecture. In contemporaneity, there is a noticeable shift from the symbolic and theological comprehending of Christian sacred spaces to the functionalist or merely aesthetic comprehending. "It is important to light up the space well!" is a common imperative of investors. The light is thus understood in its functional, practical dimension with the aim of good illumination. However, the sacred Christian spaces, non-illuminated with the meaning of Paschal Vigil, are losing the important mystagogic component indispensable to sacred architecture. Such spaces do not offer a nearness to the transcendental phenomenon and do not create an atmosphere of participation in the mystery of Christian transformation, which is fundamental to the Christian sacred space. Indifference to the symbolic and theological character of light has coloured many contemporary examples of sacred architecture, thereby impoverishing the world of symbols in sacred architecture.

The design of the sacred space cannot be adequately achieved in the functionalist architectural starting points. The design of the sacred space is a complex process of creating a network of symbols orchestrated with the dramatics of the chiaroscuro of the Paschal night. Architecture condenses meaning using the full and empty and the light as the main
protagonist of the architectonics of the space. The altar, the ambo, the baptistery, and the tabernacle, as focal points of the liturgy and sources of symbolic language, are not merely elements placed in space, which is a common case in many contemporary architectural solutions. They, shaped by the Paschal meaning, become symbols and focuses forming the Christian space within a fine architectural orchestration intertwined with the symbol of light. Through the visible signs contained in the liturgy, in the architecture and in the artistic details another, transcendental reality is mediated, as a fundamental task of sacred architecture.

VI. CONCLUSION

Light is the phenomenon of the identity of the architectural space which, with its inherent structure and the way it is giving and denying itself, in the most obvious manner refers to the phenomenon of transcendence. The basic indeterminability of the light phenomenon, its immaterial presence, its changeability, its disappearance and appearance, as well as its absence, are the determinants constituting its fundamental connection with the theological foundation of Christianity, thereby affirming it as a fundamental Christian symbol.

REFERENCES


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