

country. While in the Georgia, the historical approach to decoration persists and light is controlled from inside and outside of church. Although this region attracts many tourists due to its historical dimensions, they won't decorate new churches or lighting old churches for this purpose (Table 1).

Table1. The quality condition of light presence in the internal and external spaces of the Caucasus region churches in the both historical and traditional period. Source: Author.

Lighting of Caucasian contemporary churches				
Position	Period	Country	The dominant approach	Quality of lighting
Inside the church	Tradition	Georgia	Introspective	Pale & symbolic
		Armenia	Introspective	Pale & minimum
	Contemporary	Georgia	Extrovert & decorative	Pale & decorative
		Armenia	Introspective	Pale & minimum
Outside the church	Tradition	Georgia	-	-
		Armenia	-	-
	Contemporary	Georgia	Expressive & decorative	Bold, index & propagan- da
		Armenia	Traditional & Introspective	Normal & such other buildings

Endnote

1. It is different a bit in Georgia, so that, there are east-facing windows in some churches which are proved the symbolic application of the light. But the general trend is not still for the presence of light in the Interior, and we can observe the symbolic presence of the light.

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Fig6. The strong presence of the Sameba Church in the Tbilisi night landscapewith the help of lighting was a symbol of the Georgia's contemporary approach to decoration and lighting of churches in this country. Tbilisi, Georgia. Photo: Mohammad Jamshidian. Archive of NAZAR research center, 2013.

Conclusion

Based on these observations and above analysis, we can deduce two approaches to aesthetics or management of light and decorative role of light in the Caucasus region churches:

First, the introspective and original approach that derived from divine intellects, tendency toward solitude and austerity and secret worship and also the traditional costume of the earlier era of Christianity emergence; and second one is extrovert and expressive approach resulted from modern managing styles of officials and municipal and religious politicians and administrators of cities in this region. The presence of light inside church was weak in the first approach. Sometimes, symbolic approaches have been seen inside the church, but there are not any decorative representations of light in this approach. This type of light usage is seen outside the church, and night lighting is also weak. In the second approach, which is seen more in the outside of the church, there are propagandistic and expressive light usage. These tend to put importance on the church lighting during the night, and viewed it as significant aspect of night landscape of the city. These two approaches follow different and distinct procedure

in both countries of Armenia and Georgia churches. In general, the dominant approach of ornamental application of light in Caucasus region churches have different path in both countries of Armenia and Georgia. The historical pathway and traditional process governing Armenian churches has been continued, and have not experiences any changes throughout construction of new churches or repair and preservation of old ones. The prevailed aesthetic of lighting in these churches are a traditional and original aesthetics in which, viewed decoration and lighting of interior and exterior spaces of the church as accessory and extra elements that must not disturbed the attention of prayers during worship. Aesthetics ordecoration management of Georgia experienced a fundamental transformation. This transformation changes introspective tendency to an extrovert and propaganda approach. This tendency has been manifested as beautiful and colorful night lighting in theGeorgiacontemporary churches. The tendency toward apparent effects on church exterior and endeavor to attracting more tourists and even non-Christian audiences has been considered as the dominant approach to decorating the churches of this

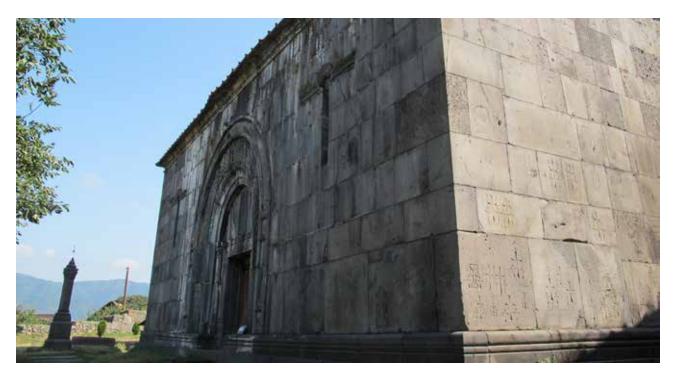


Fig4. Exterior decoration of Haghpat churches complex which limited to slight stone carving on outside view stones is an instance of exterior decorations that onlylimited to burnish of door frames façades and margin of the towers. Haghpat monastery, Allaverdi, Armenia. Photo: Mohammad Jamshidian. Archive of NAZAR research center, 2013.

churches are still places for prayer, they were left in the dark of the night (Fig.5). In the Armeniancities such as Yerevan and in the night landscape, there are not any distinctive locations for lighting for churches and they use a regular lighting like other building and structures in the city. Lighting if night pursuit another goal in the Georgia. The night lighting of the churches in Georgia is very luxury and decorative. Georgia cities churches like Tbilisi are shining in the night and urban management has put great importance on their night view in the city. Lighting of this country's churches are distanced from introspective and traditional approach, and view the aesthetic aspect of church as a way to presenting it to bystanders (Fig. 6). This approach is even continued in line with the specific scenario of attracting tourists. "Urban lighting is a category that can create value and added effect in attracting tourist. Urban lighting can preserve the city context in the night and appropriate mental image for the tourists, have positive impact on the city safety and security and increases the tourism time and could be used as desired tourist attraction policy" (Taghvaii, et al., 2011).

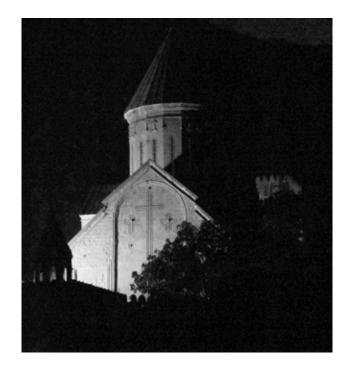


Fig5.Armenian churches lighting is a quantitative lighting which only met their functional needs. A church in Yerevan, Armenia. Photo: Mohammad Jamshidian. Archive of NAZAR research center, 2013.



Fig3. Although, they don't emphasize on the darkness of contemporary churches like old ones, but they are avoiding the construction of full space churches. Echmiadzin, Armenia. Photo: Mohammad Jamshidian. Archive of NAZAR research center, 2013.

for performing religious rituals, and only artistic and architectural relics of this era's Christianity (http:// www.tebyan.net/newindex.aspx?pid=198801).Therefore, we can follow the root of this fear and separation from the society in the spacing activities of the churches and other religious buildings like monasteries. Low light and small dark spaces of churchesreminiscent us of prime Christianitycaves and underground routes, which were safe place and shelter for apostles and followers of Jesus (PBUH). Thus it can be said that interiors of churches from population density or the amount of light penetration point of view were somehow inspired by the secret shrine and catacombs of early Christians, which have been consequences of holey Christian thoughts on one hand and the results of a historical period in other hand (Fig. 2).

We can observe the common thought of all churches of all eras from inspection of various churches of different period of time. The amount of light entered the early churches such as the Church of Saint Etchmiadzin or Geghard in Armenia and Ananuri and Haghpat churches in Georgia have beenset up according to this

ideology and approach: very low lighting and sometimes completely dark spaces. Although, we can see in the contemporary period that this school is not followed strictly as earlier churches and there are not any complete dark space, however, we cannot claim that lighting or dimming the interior space of churches has attract significant attention1.

Whilst, in the recent churches of Europesuch as Gothic and Renaissance cathedrals, they used light symbolically and as decorative elements for interior spacing of the churches, and painting and narrative art were reached their highest expression throughout the presence of light. In conclusion of this section, we should have said in general that the element of light have not any decorative dimension on the interior spaces of the Caucasus historical churches, and except in someminorcases, they have not attempt to use light as aesthetic element both visually or objectively, conceptually or symbolic (Fig. 3).

Light, outside the church

The introspective approach governing Christianity and Christians inside the church was concomitant with preventing the entrance of light in church's spaces and fewer decoration and ornamentation. In accordance with this intellectual view, there was not any decoration and adornment on exterior surfaces of the church. Because both theoretical and historical aspects of Christianity guide them for internalization and prevent outside expression."The outer faces of early Christian churches was an enclosed and continues cover (On the contrary of the Gothic period)"(Shultz, quoting Ghoddusifar, et al.,2012). Nevertheless, this legacy of early Christianity in the Caucasus lands would persist in contrary to Europe churches of Gothic period with immense ornamentation and decoration on the exterior of churches (Fig.4).

We are witnessing two different developmental directions in the lighting of churches in both Armenia and Georgia. Though there was not any issue as lighting in the past and it's a contemporary issue, however, what we could see in the church construction customs of this period was the lake of anything like exterior lighting of churches. This region churches are located in the natural context and sometimes in the suburb areas, which deprived them from even general lights of the night and they were lost in the darkness as the night ripen. This approach is continues in the Armeniachurches, and there are not any particular lighting work on the churches building. Whether old or new

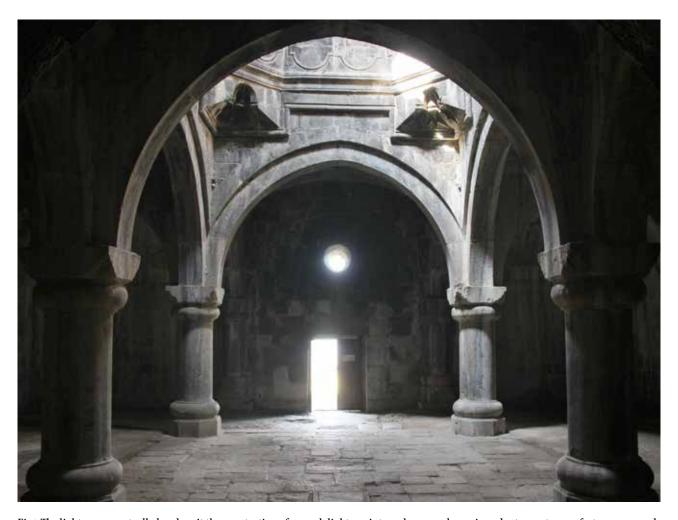


Fig2. The lights were controlled and omit the penetration of enough light per internal space volume, in order to create a perfect space according to Christian teachings; and its history could be seen well in the Haghpat Church and monastery. Haghpat, Allaverdi, Armenia. Photo: Mohammad Jamshidian. Archive of NAZAR research center, 2013.

original concepts of Christianity is also valued such spaces, "the whole architecture of a church reminds true believer that the presence of god which flow from communion in the altar is like a light shining in the darkness (Burckhardt, 1986: 97-98). In General, the limited and controlled presence of light has emerged in accordance with perception and induction of special theological doctrine.

The second influential issues related to the presence of light in the churches were historical background and antecedent of Christianity in the society. As history witnessed it, this religion has not open a place for itself after several decades of its emergence, not only as formal religion but also as religion in which, its followers could freely express their opinion in the community. In general, the historical course of this religion has

been divided into two periods, the first period begun with emergence of this theology until the acceptance by the Roman Empire which is called the "pursuit" period. This course is including that part of the history of early Christian art in which, Christians secretly perform their religious practice and propagation in fear of the government (http://vista.ir/article/230827). In this period elements called "catacomb" have been formed. "Catacombs were crypt that Christianshas been secretly performed their worship, prayer, and religious rituals in them before acceptance of Christianityby the Roman Emperor" (Yasini, 2009). These tombs that named "catacomb" were an extensive network of corridor, dent, and underground chambers under the city of Rome; they have been used as secret cemetery for burial of Christian dead and have been constructed



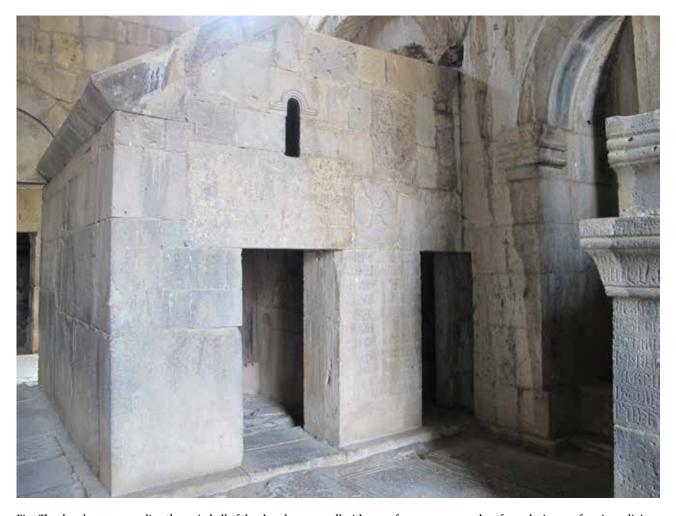


Fig1. The chambers surrounding the main hall of the church were small with space for one person, a place for seclusion, performing religious rituals and personal austerity. Haghpat monastery, Allaverdi, Armenia.

Photo: Mohammad Jamshidian. Archive of NAZAR research center, 2013.

exterior decoration. The selection of these two aspects dated back to attitude changes that happened regarding to churches decoration throughout the history, as discussed later. However, with studying the ruling approaches on churches of Georgia and Armenia, there are two different developmental paths regarding to adornment and ornamentation in these two neighbor country. The first part has affected the interior decoration of the church and the second part appeared as modern decoration and new technologies.

Light, inside the church

The quality state of light in the internal spaces has been one of the main factors in distribution of spaces of churches architecture of Caucasus region. Presence of this factor in churches has been continued with a little difference in the two countries of Armenia and Georgia. Quality and condition of lightening of churches of this region couldbe followed a theoretical basis and historical antecedent ruling Christian customs and thoughts.

The initial one is monasticism and thoughts that focused on religious customs, worship, seclusion, and isolation. We could see this matter in church sub-spaces. There are many secluded and small spaces around the main building of the church, which only accommodate a single person. It is clear that these chambers are used for personal self-devotion and so on (Fig. 1). The idea of seeking peace and solitude in the interior of the church has led to making tall buildings with dark, dull and low lights spaces. On the one hand, the

Introduction

Adornment means decorating and grooming an object with ornaments and decorative means. This adornment can be done from various aspects and with various methods. Decoration would be different depending on the desired theme and type of ornament and material used for decoration. Humansmade crafts are decorated in unique scale and functions, and also specific method of ornamentation. One of the human products which underwent different artistic decoration was architecture and buildings construction of human being. Architecture as comprehensive art have used other arts such as painting, sculpture, wood industry, stone, etc. for its decoration and ornamentation endeavors. Therefore, decoration has always been an integral component of architecture and man-made structures. It's well known that human made buildings have been decorated in various ways, except for special courses of history when any ornamentation in the man-made structures have been banned by dominant thought and policies. Since decoration is considered as independent art from architecture, and would be analyzed by artists and art critics; according to use of the aesthetics of different period of time, it's clear that parts of adornment and spacing of buildings are the responsibility of architecture. Religious monuments which were shaped and developed based on the specific outlook and school of thought has been influenced by the various aesthetics of different era for reception of decoration on their outer face. This aesthetics have been inconsistent depending on various environmental, social and cultural factors. A change in conventional perspective of any era, presence in diverse environments, and dealing with different cultures and societies hasprofound and fundamental impact on the aesthetics and decoration of the buildings. Various functions of architecture during the day and night, and the issue of space has been led to the emergence of an arguments called "lightening" and "light" and their definitions; which considered as one of the basic concepts of architecture. "Light" and "darkness" are both broached and discussed as influential elements in architectures. Darkness is the absence of light and often referred to nonexistence and negates the being than existence, and has had less impact in architecture than light. Darkness can create new spaces for architecture (Dibaj, 2005). Light has also been under influence of metaphysical and spiritual concepts in addition to functional themes of application of this natural element in the architecture. Whether from holiness of the light in the ancient rituals have affected architecture or symbolic application in the temples and synagogues of these religions (Ghoddousifar, et al, 2012). Light as an independent element which was associated with all other components of architecture such as structure, spatial arrangement, or paint and related materials, has specific impacts on the architecture of a building (Ahmadi, 2013).

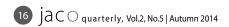
Thus, the presence of light along with other elements and features of an architectural body have gradually achieved an artistic aspect; and have been considered as some kind of decoration and adornment of buildings and spaces. Nowadays, lighting particularly in the night is considered as decorative and ornamental part of an architectural entity, and as artistic category has its own technical and practical experts. In Caucasus region's churches (Georgia and Armenia) as evident instances of religious buildings of this region, we could trace the development of managerial and aesthetic aspects ruling different era through technical and conceptual investigation of decoration and ornamentation. In this article, we examined lighting at night and also the entry and presence of day light in the Caucasus region churches as a form of decoration that prepared by natural and artificial light.

Hypothesis: Light had not any decorative role and position in Caucasus region churches in the past, and same approach have been followed for the inside and outside of the churches. Although this tradition and aesthetic procedures have been continued in the Armenian churches, there is decorative and visual (objective) perspective to light in the Georgia; therefore,

regional churches were viewed as parts of city night's landscape and tourism attraction attempts.

Lighting quality in Caucasus's churches

We can study "Light" as part of churches' decoration in Caucasus region from two aspects of interior and



Management and Aesthetics in

the Lighting of Caucasian **Contemporary Churches**

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Abstract

region churches indicates a change or developdo prevent the penetration of light generally two different directions.

Inspection and investigation of the structur- in to church. But this historical approach has al ornaments and decoration in the Caucasus taken two different paths in the contemporary era, the traditional and historical trends has ment of distinctive approach to some aspects been continued in the Armenia. Spaces of conof this issue. Application of natural and artifi- temporary Armenian churches are dark with cial light is one aspect of churches decoration, little light and outer face of the buildings are which managed and controlled in different low light without any lighting in the night. The ways. Field observations and historical study of dominant approach in Georgia Churches is atdifferent eras of churches construction in the tracting tourists. It is achieved through more region indicate that, there are different trend in lighting and propagandistic design of light and the aesthetics and management of the light and decoration inside and outside of church builddecoration in both Georgia and Armenia. Tra- ing along with night lighting which highlightditional and historical approach in this context ed it presence in the night view of the city. Thus includes an introspective approach in which, we can say that management of decoration and distinct decoration are not accepted for the lighting by municipal and religious leaders in inside and outside of the church. This thought the Armenia and Georgia were conducted in

Keywords