The article touches upon the origin of khachkar art, symbolism, stages of compositional development, as well as characteristics of artistic means. Since the 9th century, khachkar art has become a means of expressing the spiritual aspirations, religious perceptions and ideas of the Armenian nation. Thousands of khachkars, being one of a kind, are scattered not only throughout the Republic of Armenia and Arcakh, but also in the territory of Historical Armenia, including Turkey and Nakhichevan, as well as the Armenian colonies. Unfortunately, thousands of khachkars have been destroyed by vandals, who have tried and are trying to erase the Armenian trace outside the territory of present-day Armenia. The study aims at systematical presentation of the sequence of the phased development of khachkars, the compositional, ornamental and national features typical of each period. We think that any research devoted to those purely Armenian monuments is still up-to-date and can enrich the list of scientific works dedicated to Armenian culture.

Keywords: khachkars, monumental art, sculpture, floral and geometric ornamental motif.

Introduction

Khachkar art has always been in the spotlight of the Armenian and foreign scientists in various cultural directions. The monuments were studied by art critics, historians, archaeologists, lithographers and architects. Numerous studies are devoted to Armenian khachkar art: monographs, scientific dissertations, articles and film series. Noteworthy are the Babken Arakelyan's, A. Shahinyan's, A. Jacobson's, M. Hasratyan's, S. Mnatsakanyan's and others' published researches. Expert of sculptures Samvel Karapetyan, author of the book and the film "The Khachkars of Jugha" (1995), has a great contribution to the study of khachkars of Jugha. Khachkars are widely studied by historian Hamlet Petrosyan. In his book "Khachkar" (2008), issues, related to the origin, function, ritual, meaning behind composition and symbolism of khachkars are addressed. The studies and publications devoted to separate khachkars are numerous too. In his book "Problems of Armenian Medieval Folk Culture. Khachkar", Artsruni Sahakyan touches upon the topic of cross and cross worship after the adoption of Christianity in Armenia. Numerous illustrated books have been published, out of which the "Khachkars" by photographer Hrayr Baze Khacheryan, the "Armenian Decorative Art" by co-author Armen Kyurkchyan, etc. are noteworthy.

The researches are mainly conducted by historians and art critics. However, there are a number of issues related to the architectural composition of khachkars, the formation and development of ornamental sculptures, as well as to this unique type of monumental art in Armenia as a small architectural style, which should be elucidated and interpreted.

In this paper, an attempt has been made to systematically present the preconditions for the creation of khachkar art, types of khachkars, stages and peculiarities of the composition development as well as through comprehensive analysis to observe the link between supplications and borrowings with the previous stages. Studies devoted to khachkar art are of great importance, as thousands of these sculptural stone monuments of the Christian period are scattered throughout the territory where the Armenian people lived and created.

Materials and Methods

Armenian and foreign scientific literature, archival materials and photographs as well as measurements were studied. Comprehensive research, comparative and situational analyses have been carried out.
Results and Discussions

Khachkar art is one of the valuable achievements of the Armenian culture. Due to its compositional and ideological significance, khachkar has certain similarities with the vertical stone structures created in the Armenian plateau at different historical stages (dragon stones, phalluses, stone monuments of Urartian and ancient periods with inscriptions, obelisks of the Christian period, quadrangular monuments, winged stone crosses) many of which are created of single-piece stone and have a vertical position [1]. Many researchers consider dragon stones as a prototype of a khachkar. Not denying the distinct similarities between the mentioned monuments, it should be noted that khachkars generally belong to the series of monuments made of a single-piece stone as well, erected vertically, however, ideologically, semantically, symbolically and compositionally khachkars can be considered to be unique and exceptional monuments of the Christian period in Armenia, which are true national manifestations entrusted by the Armenian people to the treasury of the world culture. The compositional center of a khachkar is the cross, which became the main symbol of Christianity after the adoption of Christianity in Armenia. After the crucifixion of Christ, the Cross symbolizes eternal life, the victory of Jesus Christ over Satan and sin for the salvation of mankind. It is worth mentioning that one of the five Feasts of the Armenian Apostolic Church is the Feast of the True Cross, celebrated to commemorate the return of the Jesus Christ’s True Cross to Jerusalem from Persian captivity and its erection in Golgotha. According to Grigor Tatevatsi, the True Cross became the bridge connecting the abyss between Heaven and Earth, "the one who opens the gates of paradise and gives the kingdom of heaven as inheritance".

A number of churches have been given the name of Surb Khach (Holy Cross) (Kasagh Basilica, 4th-5th centuries, Akhtamar church of 9th century, Armenian churches in Akhalkalaki, Damala village of 19th century in Georgia, etc.). It can be said that in medieval Armenian culture, the cross became a symbol of Christianity as an object of worship, in contrast to neighboring Christian countries (Byzantium, Syria, Georgia), where icons were widely worshiped. Cross worship is one of the special manifestations of Christianity among the Armenian people.

In the period of early Christianity, the symbolism of the cross became one of the main themes of Church doctrine. Many odes were dedicated to the Cross, for example, the marvelous odes of the Armenian philosopher of the 6th-7th centuries David Anhaght’s hymn to the Holy Cross, where the cross is represented in a form of a wonderful tree that grows from the earth, reaches the sky and fills the whole Universe with its fruits.

The cross, as an ornament, became the main pattern of khachkars since the 9th century. It symbolizes the Tree of Life. Until the 9th century, the cross was mainly presented in the form of winged crosses standing on a pedestal or obelisk. The origins of khachkar art can be traced back to the compositions carved on the pedestals of the early medieval quadrangular monuments and winged crosses crowning them, as well as to the ornaments of the church portal lintels and windows [2].

As monuments khachkars were erected in important historical places, sanctuaries, on graves, near churches and sometimes inside the church walls. Over the time, khachkars were attributed a number of meanings, according to which they are divided into three groups.

- Memorial khachkars, placed in cemeteries near a tombstone facing west (khachkars of Noratus, Saghmosavank, Old Julfa, cemeteries of monastic complexes).
- Worship khachkars placed in sanctuaries, in the areas of monasteries and churches (the Amenaprkich (All-savior) of Haghpat, the two khachkars of Dadivank, the embroidered khachkars in Goshavank, etc.).
- Monumental khachkars, erected to glorify an important historical event (the khachkar erected on the occasion of the liberation of Amberd Fortress from Seljuks, khachkar of Arajadzor in Artsakh, etc.) [3].

The following periods of khachkar art development can be distinguished: 9-10th, 11th, 12-13th and 14-17th centuries [4].

The earliest khachkars (9-10th centuries). In the 9-10th centuries, after liberation from the Arab conquest, the cultural life, such as architecture, miniature painting, fresco painting, sculpture as well as khachkar
art began to prosper in Armenia. Among the first khachkars are the khachkar of 866 located in the graveyard of the “Eghtsu Ktor” chapel of Vaghuhas village in Artsakh, the khachkar of 876 of Hortun village in Ararat region and the khachkar of 879 erected by Ashot Yerkat’s wife Queen Katranide in Garni village (according to the monument expert Samvel Karapetyan). Among the first khachkars are "Murad Khach" khachkar erected in Mets Masrik in 881 by prince Grigor Atnerseh of Syunik, the khachkar of Makenyats monastery (9th century), numerous khachkars in the territory of Talin (882), Kechut (886), Tatev (895-906), Artsakh, etc. (Fig. 1).

Fig. 1. The earliest khachkars. 9-10th centuries

The above-mentioned khachkars are mainly monolithic stone slabs (basalt or tuff), which are attached to the stone pedestals with protruding edges at the bottom. They are also often erected into the ground without a pedestal. Rectangular slabs are common too, but mainly extending upwards, with a circular composition at the top, encircled in an edging pattern along the entire perimeter. Like the altars in the church, khachkars are facing west too. The main decoration is the cross, carved on the central vertical axis of the western surface, on the basis of which the word "khachkar" is originated. Cross carvings have two wings with round balls – buds. Grape, pomegranate and other ornaments are depicted on the upper wing of the cross, and palm leaf ornaments rise from both sides of the lower wing, barely connecting at the horizontal wings of the cross. As symbols of Christianity, pomegranate and grapes become one of the important motifs of khachkar ornaments [5]. Stair-like bases or rosettes were carved on the lower section of the cross. Sometimes these stair-like bases were sculpted with lily or palm leaf ornaments. Later khachkars, of course, underwent some changes, preserving the main characteristics of the composition with the central cross sculpture.

From the earliest times, inscriptions were engraved on khachkars to document important historical events. Later on, the sculptor’s name was engraved on khachkars too, next to the name of the person who ordered them. Mkhitar Kazmogh (12th century), Momik, Poghos (13th century), Kiram Kazmogh (16-17th centuries) and others.

Khachkars of the 11th century. Since the 11th century, the development of a rich variety of khachkar ornaments has been evolving quite rapidly. The sculpted central cross was encircled in the rectangular, arched edging at the top. The khachkar ornaments of this period continue to attach importance to the grapes and pomegranate coming down from the cross wings, and already a better styled palm ornament at the bottom, while the trim encircling the main cross throughout its entire perimeter is enriched with various geometric ornaments which are not repeated even in the same khachkar. Later, these ornaments, with their elegant, complex and diverse solutions, become the expression of not only khachkars, but also the artistic content of decoration of worship structures (Fig. 2).
Khachkars ending in cornice or frieze at the top appeared since the end of the 11th century. These were mainly of two types. The main feature of the first type was the upper part of the khachkar slab processing in a form of a plane pushed forward. In the second the khachkar slab was crowned with a frieze at the top, which was attached to the khachkar with iron nails or with special protrusions made on the top of the khachkar. The frieze was often decorated with various floral, geometrical or sculptural ornaments.

**Khachkars of the 12-13th centuries.** The 12-13th centuries were the heyday of khachkar art. Numerous masterpieces of khachkar art were created all over Armenia, decorated with high-art ornaments of various shapes and contents. At that period, anchor and pedestal were also of great importance. The pedestal could be multi-level, sometimes sufficiently high and richly decorated. This type placed a special emphasis on the monumentality of khachkar. It acquired a dominant, solemn appearance, and seemed higher than its actual height, increasing and emphasizing the significance and impact of the monument.

Geometric ornaments predominated, which were the basis for the trims encircling the cross. Ornaments of this period, with their variety, unique, diverse solutions of original ornamental motifs, give luxury and majestic elegance to khachkars with woven, embroidered ornaments, bringing khachkar art to perfection. The ornaments are repeated in unison in the exterior decoration of the church buildings of those eras, in portal lintels, decorative patterns of belts and arches [6].

From the end of the 12th century, icon sculptures became popular in the composition of khachkars, including images of Christ, Madonna, saints, angels and apostles. As compared with the neighboring countries, where the worship of illustration sculpture was manifested mainly in the form of mosaic and fresco icons, in Armenia it was expressed through the composition of khachkars. In neighboring Byzantine, illustration art was mostly expressed in the form of mosaics [7]. It dates back to the ancient times, reaching to perfection in St. Sophia Cathedral in Constantinople, in Church of San Vitale in Ravenna, in St. Mark Cathedral in Venice, and in many other places of worship (Fig. 3). In Georgia, icon art is mainly manifested in frescoes. The walls of medieval Georgian churches are decorated with colorful biblical-theme frescoes [8].

The icon sculptures of Holy Mother of God, saints, apostles, angels enrich and more intensely sanctify the worship of the cross in Armenia, appearing in the compositions of khachkars. One of the best examples are
khachkars of Noravank, some of which are created by a medieval genius master Momik (Fig. 4). There are also icon sculptures on secular themes.

![Khachkars of Noravank](image1)

**Fig. 4. Momik's Khachkars in Noravank**

Starting from the end of the 13th century khachkars, known as "Amenaprkich" (All Savior) were created, the main cross of which depicts the scene of Christ's crucifixion (khachkars of Haghpat, Dsegh, Etchmiadzin, Marts, Sevanavank, etc.) (Fig. 5).

!["Amenaprkich" khachkars, end of the 13th century](image2)

**Fig. 5. "Amenaprkich" khachkars, end of the 13th century**

Starting from the 12th century group khachkars were found, which were placed on general or separate pedestals (Kecharis, Havuts Tar, Geghard, Haghpat, etc.). Khachkars carved on natural rocks are of great interest as well (Fig. 6).

![Group khachkars](image3)

**Fig. 6. Group khachkars**
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Starting from the 12th up to the 14th centuries, khachkars, enclosed in walls, completely embedded in a polished stone niche, crowned with a double or single-slope roof, were found (Fig. 7). Khachkars enclosed in walls were attached to the church walls as well. The khachkars carved from rock fragments or on natural rocks (the rock-cut khachkars of Geghard Monastery, Garni, Vayots Dzor, Vardenis) are unique too.

Fig. 7. *khachkars enclosed in walls*

**Khachkars of the 14-17th centuries.** The cemeteries of Noratus and Old Jugha (Nakhichevan) of the 15th-17th centuries are among the pearls of khachkar art, which are sculptural "forests" of different khachkars (more than 100000) (Fig. 8) [9]. The khachkars and tombstones of New Jugha were completely destroyed as a result of the vandalism organized by Azerbaijani authorities at state level in 2005, leaving only photos, footages, and other undisputable information [10].

Fig. 8. *Cemeteries of Noratus and Old Jugha of 15-17th centuries*

**Conclusion**

1. Taking into account the compositional features of khachkars, the types, formed and developed in the middle Ages, i.e. in the 9-17th centuries can be distinguished. They were:
   - The khachkars of the early period, which had a simple composition - a single-piece stone extending upwards, mostly rounded at the top. They did not have a pedestal, sculpted main cross was placed in the center, all the edges end in circular balls.
   - Khachkars made of single-piece stone and placed on a rectangular or ladder-shaped pedestal, the surface of which was sometimes sculpted.
   - Khachkars, enclosed in walls, embedded in niches, as well as inside the church walls or natural rocks.
   - Khachkars with cornice or frieze, the surface of which was also decorated with ornaments.
   - Group khachkars (sometimes placed on a common pedestal) and khachkar fields.
2. The main role in the khachkar ornament is attributed to the sculpted main cross. The pomegranate, symbolizing Christianity, grape clusters, palm leaf ornaments, various and multifaceted geometric
ornament motifs that are not repeated even in the same khachkar, icon sculptures and valuable inscriptions are of great importance too.

3. Over time, the khachkar acquired a three-part composition:
   - a pedestal that symbolizes a person’s heavenly, temporary life,
   - the main part (mainly included in the altar), which symbolizes the faith, the way to the eternal kingdom, decorated with the main cross and the ornaments symbolizing Christianity,
   - frieze, which symbolizes eternal life, paradise decorated with icons, floral and geometric ornaments.

4. Thus, it can be concluded that khachkars belong to the Armenian memorial art of the Christian period. And if the monuments of the historical periods, having lost their functional significance over time, became solely the bearers of the culture of given periods, khachkar art continues its development, being a product of the Armenian national thought. It has acquired national value, occupying its unique place in the treasury of the world culture.

Thousands of khachkars created over the centuries differ from one another. Each khachkar is the integrity of master mason’s imagination and emotions, manifested through the ornament motif having no analogues. Under the rubric “Armenian khachkar art. The symbolism and craftsmanship of the khachkar”, it has been included in the UNESCO list of the intangible cultural heritage of humankind. As a stone proof of the rich culture of the centuries-old history of the Armenian nation, khachkars continue their historical procession even nowadays preserving their practical and artistic significance.

References
[1]. G. Grigoryan, Hayastani vagh mijnadaryan k’arranist kot’voghnery. Yerevan, Hayastani patmutyan tanganar, 2012 (in Armenian).
[2]. Z. Hakobyan, Haykakan vaghmijnadaryan k’andaky (4-7th century). YSU Publishing House, Yerevan, 2016 (in Armenian).
[3]. H.L. Petrosyan, Khach’k’ar: Tsagumy, gortsarruyt’y, patmagrut’yuny, imastabanut’yuny. Printinfo, Yerevan, 2008 (in Armenian).
[4]. A.L. Yakobson, Armyanskiye khachkary. Ayastan, Yerevan, 1986 (in Russian).
[5]. N.E. Mkhitaryan, The Grape and Pomegranate Ornaments in Early Medieval Armenian Architecture. Scientific papers of National University of Architecture and Construction of Armenia, 2 (65), 2017, 75-84 (in Armenian).
[6]. A. Kyurkchyan, H.Khatcherian, Armenian Ornamental Art. «Kyurkchyan» publishing house, Yerevan, 2017.
[7]. Nicholas Patricios, The Sacred Architecture of Byzantium: Art, Liturgy and Symbolism in Early Christian Libraries (Churches of Classical Studies). I.B. Tauris, 2013.
[8]. A.L. Makarova, Freski tserkvi Rozhdestva Bogoroditsy v Betanii (Gruziya) i ikh mesto v iskusstve vizantiyskogo mira XII veka: PhD thesis (art history), Moscow, 2017 (in Russian).
[9]. M. Hasrat’yyan, Khach’k’arayin arvesti Jughayi steghtsagortsakan dprots’y - Hayastany yev K´ristonya Arevelk’y. Yerevan, 2000 (in Armenian).
[10]. A. Ayvazyan, The Symphony of the Destroyed Jugh Khatchkars. Yerevan, 2007.

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