THE CAUCASUS ARCHITECTURE

OVERVIEW

Buildings are durable physical structures that contain information about civilizations, and the rise and fall of different cultures and societies. They were built to withstand the climate, to protect people from harsh weather, and are among the best physical traces left by human beings to understand the evolution of their lifestyle, their economy, their technology, their level of literacy, and their living standards.

With the advancement of society, architecture has developed different shapes and designs. In the ancient Caucasus the structures were constructed of mud, bricks or large stone blocks with distinctive geometrical shapes showing the high level of sophistication that these people had even in ancient times.

With the acceptance of Christianity, churches, monasteries and basilicas replaced the pagan structures. The architecture developed a new style which combined with the elements of their own tradition and the elements of European architecture resulting in a distinctive Caucasian style of architecture.

In addition to religious structures, the architecture in the Caucasus reached a new level with the construction of palaces, tower buildings and fortresses.

After the Russian advance, the architectural style in the Caucasus was replaced by the Russian classical style in all public buildings. The new types of buildings such as theaters, schools, hospitals, and houses were constructed based on the European traditions.

Radical change in architecture began during the Soviet period. Large towns had the Soviet-engineered style of architecture. After World War II, a monotonous standard and utilitarian architecture began to appear in the Caucasus. In the second half of the century, skyscrapers and prefabricated buildings dominated the cities.

ANCIENT PERIOD

Georgia: In the 4th millennium BCE, the structures were round and built of mud bricks formed like termite mounds. There were also kurgan burials which had survived from the early Bronze age period.

Cyclopean Buildings: The Cyclopean buildings and fortresses like Shaori were built with large stone blocks during the Bronze Age in Georgia.

Armenia: During the third millennium BCE, prehistoric Armenian architecture was already distinctive. The most common feature was its groundwork, which incorporated many geometrical shapes, ultimately forming a cell shape. An example of such architecture can be found in Kültəpə, near Nakhchivan. These buildings were approximately 6–7 metres wide and about 5 metres high.
Urartian architecture has foundations on cut rocks for mud brick buildings as in the Erebuni fortress.

**Temple of Garni:** Temple of Garni has a Hellenistic style architecture built on a high cliff extending over the Azat River Gorge in the 3rd century BCE. The temple collapsed in an earthquake in 1679, and was reconstructed in 1975. Construction materials included stone, clay, and brick.

**Azerbaijan:** Natural caves like the Azykh cave were used as homes by the ancient people found in the Khojavend District. They drilled flues in the ceiling to guide fire smoke out of the cave.

An ancient temple was found in Karabakh, Ilanly-Tepe settlement from the 5th Millennium BCE.

Strong fortress walls were built in Caucasian Albania in the 4th century BCE in Gabala town.

**Gabala fortress ruins**

**NORTH CAUCASUS**

**CHECHNYA:**

**Dolmens:** Examples of Bronze Age architecture are megalithic structures called dolmens (burial chambers) found in the northwestern Caucasus. These monuments are dated to between the end of the 4th millennium and the beginning of the 2nd millennium BCE.

The dolmens were built with huge stone blocks and look like tables. Archeologists have found dolmens near the Zhane river and in Gelendzhik in the Krasnodar area and in Abkhazia.

Wattle Houses: The Vainakhs had small wattle houses made of clay.

Questions:
1- How did ancient peoples develop their architecture and construction methods without any type of formal training?

Readings:
4- Ibragimov, T., Sculptural Arts in Caucasian Albania, Baku, 2019.

**POST – CLASSICAL PERIOD**

**SOUTH CAUCASUS:**

**GEORGIA:**

**Cruciform style:** With the acceptance of Christianity, the construction of churches gained rapid improvement, and gradually a unique cruciform style of church architecture developed, as is evident in the basilica-type churches of Bolnisi and Urbnisi (5th century) and the cruciform domed Jvari Church (6th century).

**Cross-dome style:** The Georgian cross-dome style of architecture became a characteristic feature of most medieval Georgian churches. One example is the Gelati Monastery. The Bagrati Cathedral in Kutaisi, the Ikalto Monastery complex and Academy, and the Svetitskhoveli Cathedral in Mtskheta also belong to this style of architecture.

In the 13th century, Georgian architecture reached a new level and is well represented in the Gelati Cathedral, the domed church at Tighva, the churches of Ikolta and Betania, and the rock-carved monastic complexes of David Gareja and Vardzia.

**ARMENIA:**

**Basilicas:** After the adoption to Christianity, the first Armenian churches were built between the 4th and 7th century. The early churches were mostly basilicas, arched structures with supporting columns. The construction of one of the best examples of early Christian architecture, the *Echmiadzin Cathedral* (Cathedral of the Only Begotten) belongs to the 4th century. It was built on the spot of a pre-Christian temple in Vagharshapat (Echmiadzin).

**Cupola Cone:** By the 5th century the typical cupola cone in the center had become widely used.

**Hripsime style - dome structures:** By the 7th century, centrally-planned Hripsime style churches were being built with niched buttress. The church of St. Hripsime has remained active throughout the centuries, and up to the present.

One of the best example of central dome structures was the *Temple of Zvartsnots* built in the mid-7th century with a three-story pyramidal structure set on strong circular columns.
Between the 9th and the 14th centuries, Armenian architecture reached its zenith. The Monastery of Geghard, the Temple of Surb Khach on Akhtamar Island built by the architect Manuel and the Church of Noravank built by Momik are all examples of this revival period. Haghpat and Haritchavank were built in this period. The Monastery of Geghard was partially carved in adjacent solid rock and the rest of the structure blends in with the surrounding landscape. Momik’s church of Noravank was richly decorated with images of Our Lord and the angels, and this was a new style in Armenian architecture.

After the invasions of Armenia by the Timurids and the destruction of the Armenian kingdom of Cilicia by the Mamluks at the end of the 14th century, architectural activity halted for nearly 250 years, and there were no new structures built until the 17th century.

The 17th century was another revival period under the rule of the Safavids. The churches at Mughni and Shoghakat at Etchmiadzin are churches built in this period.

AZERBAIJAN: Defensive fortifications were built in the village of Yukhari Askipara of Gazakh region in the 5th century.

Yukhari Askipara Tower

The Kish church temple was the first Christian temple in Shaki district was built of limestone.

Kish church

In the 6th – 7th century, one of the distinguished examples of architecture built on the banks of the river Agoglan, in Azerbaijan was the monastery Amaras. It was one of the oldest Christian sites in the world.

Amaras Complex

Dome Building: After the adoption of Christianity by the Caucasus Albanians, till the 7th century, basilicas replaced the pagan structures. The best examples of this period are the basilica in the village of Qum, a complex of temples in Minghachavir, Kilisadagh in the Gabala district, Mamrukh in the Azqatala district, and Lekit in the Qakh district which reflect the high level of culture of that period. Minghachavir temples reconstructed on the ruins of pagan temple.

Atababa dome

With the arrival of Islam, the formation of architecture received a new style reflecting the new religion as in the Juma Mosque built in the village Sundu of Shamakhi in the 8th century.

Juma Mosque, Shamakhi
Nakhchivan School - Tower Building: The use of towers with several identical sides was an important characteristic of the Nakhchivan School’s architecture. The prominent figure of tower building in Azerbaijan was Ajami Abubakr oglu Nakhchivani. He was also the founder of the Nakhchivan School of Architecture in the 12th century. He built the Usif Kuseyir Oglu tomb (locals called it the Atababa dome) and the Momina Khatun tomb.

Momina Khatun tomb

Maiden Tower: In the 12th century, a cylindrical eight story, 28 meter structure Maiden Tower was built by architect Massoud the son of Davud alongside a natural oil well in Baku.

Maiden Tower

Shirvan School: The Palace of the Shirvanshahs built in the 15th century by the Shirvanshah dynasty is the best example of Shirvan architecture. The Shirvan School was famous for the type of stone used, asymmetry and the carving style of the architects in the main building.

Shirvan School

A four-column structure, the ateshgah (the fire altar) is a castle-like ancient Zoroastrian structure in Baku with pentagonal structure resembling a castle.

NORTH CAUCASUS:

CHECHNYA: From the 12th century, the temple Tkhaba-Yerdy was the most significant Christian monument in Chechnya and Ingushetia. Also, Alby-Yerdy and Targhim were churches constructed in Ingushetia and on the territory adjacent to Chechnya in the same period.

Temple Tkhaba-Yerdy

Vainakh tower: The Vainakh tower that was used for dwelling or defense in the Middle Ages was a kind of multi-floor structure assembled from large stones. These architectural techniques reached their peak in the 15th – 17th centuries.

Vainakh tower

In this period, numerous defense towers were built to defend the population from the raids of hostile communities. These constructions were built in Doshkhakle, Orsoi, Kart and Tsecha-Akhk and mostly in the valley of the River
Argun (ancient tower complexes - Vaserkelovsky complex, Tazbichi, Ikolchi, Upper Cockatoo, Meshi, Motsar, Nicara, Ushkaloi).

Questions:
1- How much pre-Christian architecture survived in the Caucasus after the conversion to Christianity?

Readings:
3- Ibragimov, T., Sculptural Arts in Caucasian Albania, Baku, 2019.
7- Quliyev, B., The Christian Monuments of Albania/Azerbaijan

EARLY MODERN PERIOD

SOUTH CAUCASUS

GEORGIA: The 18th century Tbilisi royal palaces were built in the Persian style.

The Palace of Queen Darejan: The palace was built for the king Erekle II’s wife, Queen Darejan. It also functioned as a castle to protect its inhabitants from invasions of foreign occupiers.

Kulbiti Church: Kulbiti church’s façade was covered with reddish ashlar decorated with carved images.

The structure of the church reflected traditional Georgian architectural style with its arches on the dome, carved stonework and the ornaments on the cornices.

Church of Holy Virgin: The church of Holy Virgin built in the center of Tskhinvali. It had dome. The church walls were built with stone and brick.

Beloti Fortress: The fortress was built in the Patara Liakhvi River gorge belonged to the Eristavs of Ksani. It was built of stone and travertine. The fortress includes four towers. Three of them were circular in plan, whereas the fourth, used as a dwelling, was fiveangled.

Batonis Tsikhe (Castle): The complex was built in the 17th – 18th century which included two royal basilica chapels, bathhouses, defensive wall and large circular corner towers. The palace has a rectangular building with a central hall with columns, arches and four balconies (ayvān) and some sections of the palace reflected Persian influence.

Amilakhvari Castle: The complex built in the 17th–18th century. It had three castles belonged to a noble family of Amilakhvari. The main castle included a rectangular fortress, a church, and two towers.
ARMENIA:

In the 18\textsuperscript{th} century, there was a large scale migration of the Armenians to Russia and Europe due to continuous wars and political conditions. Although Armenian architecture was in decline in the 18\textsuperscript{th} century, there were still small architectural elements, such as chapels, bridges, castles and khachkars.

One of the castles built in the 18\textsuperscript{th} century was 	extit{Qyor Oghli Berd} castle in Aragatsotn Province.

\textit{Castle of Qyor Oghli Berd}

AZERBAIJAN: In the 17\textsuperscript{th}-18\textsuperscript{th} centuries caravanserais were built in Shaki, Shamakhi, Ganja and Baku in the form of a castle.

\textit{Shaki Caravanserai}

\textbf{Palace of Shaki Khans:} During the feudal period, many palaces and citadels were built. One of them was \textit{Palace of Shaki Khans} built in 1763 by Muhammed Hasan Khan. The two-story palace was built with raw bricks, river stones, plane trees and oaks. The palace consisted of 6 rooms, 4 corridors and 2 balconies.

\textbf{Govher Agha Mosque:} This mosque was built in Shusha, Nagorno-Karabakh. It was built of stone while the two minarets were made of bricks.

\textbf{Bayat Castle:} The castle consisted of defence walls, bath house, market place and a mosque. It was built with backed bricks.

\textbf{Shahbulag (Tarnakut) Castle:} Large castle complex had a rectangular architectural design consisted of one rectangular tower, mosques, houses, baths and a market place. The Castle’s external walls supported with semicylinder towers. It is constructed with limestone and dimension stone.

\textbf{Shahbulag Castle}

\textbf{Panahabad (Shusha) fortresses:} The defensive walls of Shusha fortress were made of stone and lime. The castle is constructed in Arran style of architecture and had a circular guard towers.

\textbf{Sardar Palace:} The palace was built in Erivan in 1798 during Huseyn-Ali khan’s son, Mahmud. Its architecture was similar with the the Shaki Khans Palace. It had a square wide building many rooms, halls and corridors.
NORTH CAUCASUS

CHECHNYA: After the conversion to Islam in the 18th century, the Chechen pyramidal-stepped roof style of towers was ceased.

The buildings were made of clay-faced wattle, cane roofs and mud floor. 18th century monuments at Etkala and Khimozi reflected the Islamic style. But, the minarets were shaped like combat towers.

Questions:
1- The 18th century witnessed a search in castle building in the Caucasus. What does this tell us about the political conditions of the time?

Readings:
1- Development of Architecture in the Middle Ages  https://azerbaijan.az/en/related-information/46
3- Ibragimov, T., Sculptural Arts in Caucasian Albania, Baku, 2019.

19TH CENTURY

SOUTH CAUCASUS

GEORGIA: In 1801, the Georgian kingdom was abolished by the Russian Empire and it was incorporated into the Empire as a province. The architectural style of Georgia was replaced by the Russian classical style in all public buildings. The façades of the private houses in the cities were built in classical style, but their balconies and courtyards preserved their traditional Georgian style.

Until the beginning of the 20th century, the most common type of buildings in eastern and southern Georgia were structures partially cut into the ground and roofed by timber or stone called darbazi.

A darbazi style house in Tbilisi

With the arrival of the Russians, the structure of architecture for social buildings changed due to foreign architects - Russians, Germans and Italians. In the second half of the century, the first Georgian architect Svimon Kldiashvili laid the foundations of Georgian architecture with his first building of Tbilisi University and the Sukhumi Cathedral. A new style of buildings called odasakhli appeared in western Georgia, which combined elements of peasant structures and noble residences.

At the end of the 19th century, the Georgian architecture began to revive. The most prominent examples were the building of the Bank of the Nobility and the Kvashveti Cathedral of St. George in Tbilisi.
ARMENIA: With the arrival of the Russians in the 19th century, new styles of architecture, and structures made of black tuff appeared in Yerevan and Gyumri. A number of buildings were built in historical district the Kumayri of Alexandropol and Erivan.

A crypt in the old city cemetery made of black tuff in Gyumri

AZERBAIJAN: After the Russian advance in Azerbaijan, new types of buildings such as theaters, schools, hospitals, and houses were constructed based on the European traditions. Specifically Baku, with the development of the oil industry, became one of the largest cities in Russia.

Traditional architecture declined due to the unavailability of national architects. The European Architectural Schools (St. Petersburg Civil Engineering Institute and the Emperor’s Academy of Arts) also contributed to the construction of buildings in Baku.

The first theater building in Azerbaijan was built in the second half of the 19th century in Shamakhi by G. Hadjiibabayev in 1858, and the Tagiyev theater was built in 1883 in Baku.

Tagiyev theater

Traditional style architecture schools survived as in the Beyler mosque in Baku, built by Mohammed Haashim Al-Bakuvi and Mirali an-Nagi bin Seyyid Huseyn in 1895) and the Gasim bey mosque by Mashadi Mirza Gafar Ismayilov in 1896.

The architect Karbalai Safikhan Garabagi rebuilt the Imamzade complex in Barda in 1868, and built the Agdam mosque in 1868, the Ashagi mosque in 1874, the Juma mosque in Shusha in 1883, and the Hadji Alakbar mosque in 1890 in the traditional style.

Palace of Seyid Mirbabayev: The three-storey palace built in Baku looked like a French Renaissance-style building and was constructed on the basis of an earlier structure by the architect Pavel Stern.

Palace of De Boure: The palace was built on the basis of a project of the architect Nicholas von der Nonne in 1891–1895 on the order of Leo De Boure. The façade of the building was symmetrical on each side of its central axis.
NORTH CAUCASUS

CHECHNYA: The traditional Chechen houses were flat-roof, one-storey house, built of stone or of straw brick. Family settlements consisted of living quarters, a tower and the other structures.

In the 19th century, the Chechens began to use the Russian style of architecture with a tiled roof built of straw brick or logs of wood.

Watchtower

Numerous buildings in Chechnya were constructed for defensive purposes. The houses were built so that they could be easily dismantled and moved in case of invasion. In the early 19th century, there were many watchtowers built in the valley of the Argun Gorge and Cheberloi Canyon. Most of them were destroyed during the Caucasian War and the Chechen deportations in 1944.

Questions:
1- What effect did the arrival of the Russians have on the architecture of the Caucasus?

Readings:
2- Ibragimov, T., Sculptural Arts in Caucasian Albania, Baku, 2019.
4- Ilyasov, L., The Diversity of the Chechen Culture, From Historical Roots to the Present, UNESCO, 2009.

20TH CENTURY

SOUTH CAUCASUS

GEORGIA: The 20th century Georgian architecture shows diversity from Modernism to Neo-Gothic and Neo-Romantic architecture. Radical changes in architecture began.

Circular architecture was a common design used in Georgian Soviet architecture as in Palace of Ceremonies built by the architects V. Jorbenadze and V. Orbeladze under the influences of German avant-garde expressionism. The similar structure also was used in the Archaeological Museum.

Palace of Ceremonies
**Chronicle of Georgia**: The monument was built by Zurab Tsereteli in 1985. It was a chronicle of the history of Georgia situated at the top of a large set of stairs. There are 16 pillars, at the top, there are figures of half kings, queens and heroes, at the bottom the life of Christ was depicted.

**ARmenia**: One of the architects of the 20th century was Baghdasar Arzoumanian. He built many civil and church buildings in Armenia. He is the architect of the City Hall of Vanadzor, Erebuni Museum, David of Sassoun metro station and the Degustation Hall at Yerevan Brandy Factory. The outdoor Erebuni Museum is located at the foot of the Arin Berd hill, and below the ancient Urartian Fortress Erebbunii. The building was designed so that it appears to be a continuation of the fortress on the top of the hill.

**Azerbaijan**: At the beginning of the 20th, during the oil boom period, the modern style architecture dominated the buildings in Azerbaijan carrying Mauritanian, Romanic and Gothic elements as in the Ismailiye Palace and the Theatre of Mailov Brothers.

Zirvarbay Ahmadbayov was one of the early architects of the 20th century who built the Baku-Blue Mosque, Taza Pir Mosque and Murtuza

**CHamber Music House**

Alexander Tamanian used a neoclassical design to preserve national traditions in Yerevan.

During the last decades of the Soviet Union, there were buildings constructed in Yerevan in traditional style like Chamber Music House that was designed by the architecture Stepan Kyurkchyan.
Azerbaijan National Academy of Sciences was constructed in 1945 is a typical Soviet style of architecture. The architects S.Dadashov and M.Useynov built the Oil Academy in 1932 and the Pedagogical Technical School in Gazakh in 1933 are all built in Soviet tradition.

Azerbaijan National Academy of Sciences

The Nizami Theatre and the former building of the Ministry of Food Industry of the Republic of Azerbaijan (1937-1939) built by S.Dadashov and M.Useynov combined the techniques of the antique Greek and Renaissance architecture with the national traditional architecture.

Nizami Theatre

The characteristics of the Soviet style architecture were to be found in the building of the Ministry of Internal Affairs of the Republic of Azerbaijan built in the 50s. Other constructions that were built around the same time were Lenin's Central Museum built by H. Majidov in 1955, M.F. Akhundov's Republican Library built by M.Useynov in 1960, and the Azerbaijan State Theater of Drama built by G. Alizade and M. Mammadov in 1960.

Ministry of Internal Affairs of the Republic of Azerbaijan

The Soviet-engineered Baku metro was opened in 1967. The second line, the Nizami Subway, was opened in 1976. These subways have the typical features of Soviet style of architecture and fine arts blended with national Azerbaijani motifs. The other lines were completed in 1985 and in 1989.

Nizami Subway

NORTH CAUCASUS

CHECHNYA: In Chechnya, big towns, especially Grozny had the Soviet style of architecture. After World War II, monotonous standard and utilitarian architecture began to appear in Chechnya. In the second half of the century, skyscrapers and prefabricated buildings were erected in Chechnya.

Questions:
1-What changes did the Soviets bring to the architecture of the Caucasus?

Readings:
2- Ibragimov, T., Sculptural Arts in Caucasian Albania, Baku, 2019.
4- Ilyasov, L., The Diversity of the Chechen Culture, From Historical Roots to the Present, UNESCO, 2009.
7- Soviet Architecture, http://architecture-history.org/schools/SOVIE%20ARCHITECTURE.html
8- On the map: 6 modernist architectural monuments of 20th century Tbilisi