

**(Review Article\*)**

## **Armenian and Iranian Town-Planning Interactions between 8th BC-7th AD Centuries in the Context of Architecture**

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### **Abstract**

It is known that among the important nodes in the history of world urban development is the formation of the settlements of ancient Iran and Armenia. The study of their heritage is of high importance and interest. Apart from studying them separately, their comparative study is very remarkable. In fact, their comparative study is of great importance for the identification of the stages of urban development and architecture in the given countries, which have a special interest. Our study is based on the study of the formation and building of historical old cities in Iran and Armenia, including the parallels between them, in the context of the architecture of the historical period under investigation. In other words, our aim is the presentation of a comparative and analytical study of the respective settlements of Armenia and Iran by introducing their data within the ruling principles of the discussed historical period, that is, in the context of architectural developments.

**Keywords:** Armenia, Iran, town-planning, compositional layout, urban features, architecture, influences, interactions, ancient urban settlements.

### **Introduction**

As history shows, cities and urban settlements, with their developments, are significant social trends that have largely brought changes in the context of human existence in relation to and interaction with the environment and within people. In fact, the changes in people's reactions to each other and to the environment caused a series of social movements and spatial transformations, which led to the emergence of a new, unique phenomenon called the city, the concept of which shows a number of similarities and differences in each period of history and in each country.

A city in Iran and Armenia, both in ancient times and in the early Middle Ages, was the base of an authority and seat of government or kingdom.

### **Review**

The city in ancient Iran was called '*Khashat*' in ancient Persian, which means a 'kingdom'. In fact, early Iranian urban settlements have emerged in some places with fertile soil and a good climate. Also, sometimes holy places or the influence of people's beliefs played an important role in the formation of cities, even on the architecture style and urban planning (Kheirabadi, M. 2000). Generally, various factors played an important role in the formation of early cities, such as suitable geographical conditions and climate, rituals and beliefs, military and commercial factors, as well as political, administrative, and governmental ones. "The cities that were founded before Islam were organized in such structures as rectangles with streets (facing the four corners of the world) as if

they were belts. These streets intersected diagonally with the main axis, sometimes enveloping the rectangular city." (Abu-Lughod, J.L., Yek Shahre Eslami, Chegoune Shahrist, 2004)

Historical-archeological studies show that all ancient Iranian cities were well developed as urban planning, urbanizational, and settlement centers, and, currently, different historical sites clearly testify about the unique features of their formation.

Thus, the ancient period of Iran (600 BC–652 AD) covered the formation of the Medes state (678–549 BC) to the end of the Sasanian ruling period (224–651 AD). So, by studying the mentioned period, we can disclose that in the context of the formation of ancient and early medieval urban planning, the principles of physical creation of cities, their geographical positions, features of the building of urban environments, interactions with the cities of regional countries, mutual influences, religious factors, and other factors were taken into account. In these conditions, it becomes clear that the ancient cities of Iran include manifestations and imitations of Mesopotamian, ancient Armenian, as well as Greek, Hellenic, and Roman international examples.

As history attests, Iran is considered one of the oldest civilizations in the world and the home of a number of ancient urban settlements, such as Shosh from the Elamite period (2700 BC), Ecbatan from the Median Empire (670 BC), Pasargate, Persepolis, and others from the Achaemenid period (550 BC), Nisa, Ctesiphon, and others from the Parthian period (248 BC–224 AD), Ardashir Khoreh, Neishabur, Bishapour, and others from the Sassanid era (224–650), and others. All these ancient Iranian cities were well developed in terms of town planning as urban settlements, being the origins of city building since ancient times. The study of those ancient cities testifies and proves that the urban development in Iran had its own stable and solid bases and principles.

The history of the emergence of ancient Iranian cities documents that they had several categories of cities, including: a category of the capital was a provincial city, where the founder of this or that dynasty started his rule, such as Pasargadae (the first Achaemenid city), Nisa (the first Parthian capital), and Estakhr (the hometown of the Sasanians), which have served as symbolic centers for dynastic ceremonies. Another category was administrative centers, where state archives, treasuries, courts, legal bodies, and other administrative bodies were located. Of course, these categories were not mutually exclusive, but on the contrary, they complemented each other.

It is known that ancient Iranian cities were built at the foot of the holy mountains and near the sources of water, and thus, their establishment was due to various factors, including the above-mentioned ones, as well as the local customs, cultural and socio-economic conditions, etc. All these have had their influence on the layout of the cities, formation, and built-up environment, along with the expansion of settlements (Varjavand, P., 1987).

Pre-Islamic Iranian culture occupies its unique place in the history of world culture and art in the face of the Achaemenid, Parthian, and Sassanid dynasties, which still maintain their deserved weight and actuality in the face of urban development, town planning, and the architectural artistic heritage that has reached us.

Observing the types and sizes of ancient Iranian settlements in the discussed period, namely, the urban planning developments, i.e., the location and contents of the castle, the structure and developments of the city fortress, the developments and structures of suburbs, and the location and developments of urban centers, we can state that the physical structure of ancient Iranian cities is related to the natural and geographical, cultural and social characteristics of society, as well as spiritual beliefs, traditions, etc.

Moreover, all ancient Iranian cities under the Achaemenid, Parthian, and Sassanid empires have been well developed as centers of urbanism. In terms of spatial structure, the settlements were *homogeneous* in form and were organized like rectangles with intersecting streets, which intersected diagonally with the main axis and sometimes encircled the rectangular city.

The observation of Elamite and Median cities, such as Shosh (also: Shush, Susa) and Ecbatana, has gone through successive periods of historical-political, social, urban planning, and built-up environmental and architectural transformation since the conquest of the Achaemenids to the period of the Sasanids.

The urban development and architectural arts of the Achaemenid cities, such as Pasargadae, Shosh, Ecbatana, Persepolis, and Estakhr, are magnificent. They combined Median, Assyrian, Urartian, Mesopotamian, and Greek elements, of course, by preserving Persian characteristics, which can be seen in the compositional layout of preserved architectural structures and cities, samples of art findings, etc. (Pope, A. U., 1938, p. 116). The influence of the above-mentioned cultural ties can be seen both in the built-up environment and architecture of cities, as well as in the constructive arts. Generally, historical events and interactions with neighboring countries had an impact on the urban planning and development, architecture, and arts of Achaemenid Iran, including a number of glorious cities, memorably massive buildings, the magnificent palace complexes, temples, underground and rock-cut tombs, etc.

The Parthian Empire was one of the most powerful and influential civilizations in the ancient world. Nisa, the capital of the Parthian Empire, is the outstanding symbol of the significance of this imperial power. Generally, the Parthian cities (Ctesifon, etc.) were influenced by the urban planning, architecture, and culture of the Greco-Hellenistic and Roman eras, as well as their interactions with the Armenian ones. It should be noted that the circular compositional layout was born in Iran during the Parthian period.

The Sasanids were another important period from the perspective of the discussed topic. In fact, during that period, some cities were directed for economic, cultural, and religious purposes, as well as administrative and military purposes. A large number of buildings, palace complexes, rock paintings, rock-cut reliefs, written inscriptions, and collections of excavated materials testify to the rapid urban development that took place in the south-western part of Iran. From this viewpoint, the intensive urban projects and the urbanization associated with them provide sufficient evidence for Richard Fry to present Sasanian Iran as a completely "urban-centric culture" (Frye, R. N., 2000, p. 22)

Sasanid rulers viewed the establishment of cities as the basis of autonomous rule, thus renaming the cities with their own names. In fact, in almost all archaeological studies of Sasanid cities, the hierarchical structure of society has been considered the dominant factor in shaping the spatial layout, such as in Ardashir Khoreh, Bishapour, and others, where economic, cultural, religious, administrative, and military purposes have been taken out. They were carried out with circular (Parthian inheritance tradition, such as Ardashir Khoreh and Darabgerd) and rectangular (with the invention of Hippodamus, taken from the Romans, such as Gundishapour and Bishapour) compositional plans.

It should also be noted that Bishapour, from a compositional layout viewpoint, is considered one of the urban samples with a geometric perimeter of settlements (Kertmenjian, D. G., 2011 p. 225-226), which was penetrated into Armenia in the example of Yervandakert city.

Referring to the Armenian urban development culture and architecture, we should state that they express the historical and cultural aesthetic evolution of the ancient Armenian people. Armenian town planning and architecture have evolved throughout the centuries. Armenia is known for its exceptional architectural monuments and ancient settlements, which form a unique cultural atmosphere. Most magnificent Armenian ancient towns and monuments were created in the regions of historical Armenia, i.e., in the Armenian Highlands.

Thus, the study of ancient Armenian cities and settlements, such as Urartian, pre-Christian, and post-Christian, as well as in the early medieval historical periods, is noteworthy. It is known that the old cities of Armenia played an important role in the defense of the country due to their strategic position and large and powerful defensive structures. The dense network of cities and fortresses of the Armenian highlands was connected with the traditional and general system of defense of the country, which was due to its original geographical location, which was still formed back in the Urartian period (since 8–7 centuries BC) and was further improved in the ancient period.

Based on the study of preserved historical and archeological information, it can be noted that the urban development heritage of ancient Armenia follows the Urartian architecture of the early Armenian era and was reorganized during the period of the Yervandian dynasty (570–201 BC). It is then inherited through the Hellenistic as well as Roman-Parthian conflict periods. In fact, the heyday of Armenian cities covers the period of the 3rd–1st centuries BC, when military-administrative and commercial-industrial center cities were originating and rising.

According to historical sources, there were about 20 large and small cities in ancient Armenia, which arose in particular in the 3rd century BC (that is, from the post-Urartian period, then after the Yervandians; 6th century BC-200AD, during the Artaxiad period; 190BC-1 AD) (Arutyunyan V.K., 1955, p. 47-54). Five of those cities, such as Armavir, Yervandashat, Artashat, city-type fortress Garni, and Vagharshapat, were founded in the Ararat valley; the rest were located in the territory of Western Armenia, as well as in the areas of Artsakh, Goghtn, and Utik historical provinces (Harutyunyan, V.M., 1999, p. 200).

Adopting the traditions of city building, and architectural arts of the Van Kingdom period, however, the above-mentioned cities of ancient Armenia have shown new features conditioned by the historical circumstances and the beneficial effects of urban development and architecture of the Greco-Hellenistic world that penetrated here. Thus, the formation of ancient Armenian settlements, the construction of cities, and the development of their inner lives are inseparably connected with the architectural culture present in them. In fact, Armenian architecture with a history of about five thousand years is characterized by a high level of development, rich artistic traditions, and national originality, which, in addition to natural conditions, lifestyle, and folk origins, are conditioned by the artistic and physical characteristics of local building materials (Kertmenjian, D.G., 2020). It was not only influenced by neighboring civilizations but also made an outstanding contribution to the development of world architecture.

In fact, the leading and progressive Armenian masters worked in parallel with the world culture of architecture, coming up with unique works typical of stone; thus, they accepted the best, the progressives from the West and East, reinterpreted and adapted themselves, combining it with their new thinking, approaches, and their own ideas. Thus, Armenian architecture made a continuous advance within the centuries under investigation. Currently, Armenia has many old cities, churches, fortresses, and monasteries that vividly illustrate how the region's urban culture and

architectural style developed from the 8th century BC until the early Middle Ages, and in general, up to date.

Based on the types and sizes of the Armenian ancient and early medieval settlements, urban planning developments, the location and content of the castle, the structure and evolution of the fortified city, the structure of the suburbs, and the location and developments of the city center, we can easily notice and draw the development stages.

In ancient Armenia, local classical culture developed on the basis of Urartian urban planning and architectural traditions along with its urban planning innovations, in which the climatic features of the Armenian highlands, geographical conditions, the building materials available in the country, and the peculiarities derived from them played an important role. (Erebuni, Teyshebaini, and other urban settlements). Construction techniques of the Urartian period were conditioned by the combination of stone and wooden structures, traditionally used in the Armenian highlands. Mortar raw brick was the main building material of the structures. The pillars, the lintels, and the beam structures were made of wood. It should be noted that since the 6th century BC, urban development (city building) and architecture in the Armenian Plateau have entered a new stage of development, revealing new qualitative features. The Urartian architectural tradition is also preserved, which in the 6th–4th centuries BC came to complement the Achaemenid and, since the 4th century BC, the Greco-Hellenistic traditions (Kertmenjian, D.G.,2020) and from the 1st century BC, also under the influence of Roman culture, by formulating a component part of the culture called "Armenian Hellenism". It should be noted that the development of urban settlements, construction, and architectural complexes during ancient Armenian history should be considered along with the context of the Parthian-Roman conflicts of the time, because in this period, Armenia was constantly subjected to the incursions of its above-mentioned neighbors.

However, complete factual materials about the cities of Hellenistic Armenia are also scarce. According to preserved historical sources, the cities of that period of ancient Armenia were located on the "Royal Road," which was the continuation of the transit trade routes of the Hellenistic world. It should be noted that Armavir, Yervandashat, Artashat, Tigranakert, and other ancient Armenian cities were built in the style of Hellenistic cities. An integral part of them is the square, the agora, and the theater, and a bath from the ancient period has also been preserved in the city-fortress Garni.

In fact, continuing the development, the Armenian antique cities gave birth to the government's military and economic interests. That's why many cities were built on important roads and some other cities on less important main roads. It should be stated that in the 3rd–4th centuries, urban planning and architecture entered a new stage of development due to the new political, socio-economic, ideological, and cultural situation. Most of the old cities experienced an economic decline; only Artashat and Tigranakert kept their importance for a short time. Later, they were replaced by other cities, e.g., the city of Dvin.

In the early medieval period, that is, during the reign of the Arsacid dynasty of Armenia (65–428), the capitals of the Armenian kingdom were Artashat, Vagharshapat, and Dvin.

Thus, in terms of landscape and urban development features, the ancient Armenian cities were founded in the order of inheritance on trade routes (Artashat-Tigranakert Royal Avenue) and in the craters of rivers. The terrain of the city is rarely flat (Vagharshapat city), mostly the urban areas have a structure with canonical relief requirements, i.e., a fortified city and a castle located on a hill, and there are also cities built in complex relief conditions (Artashat city).

The ancient cities of Armenia usually have a two-part layout. In terms of construction, they are mainly based on the principle of regular planning. The principle of regular planning was widely used in the Armenian cities, which corresponded to that historical period, as the cities grew both in area and population. This is evidenced by a number of historical sources, in which it is also mentioned that in the territories of the ancient Armenian cities of Van, Armavir, Vagharshapat, and others, the Hellenistic compositional layout of the city was combined with the local one, inheriting the traditions of the Urartian cities.

In the term of built-up environment, commercial and social centers are agoratype, located in the area adjacent to the built-up city (Artashat city), as well as in the fortified city, located in the square under the castle (Armavir and Tigranakert cities). Garni is one of the most typical examples of fortresses and wall construction. The main element of the castles is the palace, which has survived in a few examples (Yervandashat and Armavir cities). In terms of architectural typology, the preserved ancient Armenian buildings can be classified into religious and secular, residential and public (bathroom, theater, etc.), productive (mint, customs office) buildings, etc.

Thus, relying on available data (excavations and bibliographic and historiographical data), it becomes possible to shed light on the development of Armenian town planning features, including the observation of classical, regular schemes of Hellenistic urban planning, which provides an opportunity to clarify the compositional solutions of Armenian urban settlements through parallels. In fact, in the ancient Armenian urban examples, the zoned structure of the urban agglomeration with Egyptian parallels, as well as the symbolic subdivision with Mesopotamian and real parallels (two-part, three-part, four-part, etc.), as well as the rarely encountered geometric perimeter composition, are noteworthy. And finally, the schemes typical of the Hellenistic period of settlement planning, which average Eastern and Western principles.

### **Conclusion**

As a conclusion, it should be stated that Iranian and Armenian old towns and their urban planning data are of great importance in the crystallization of ancient and early medieval town planning principles. The development elements in them support the mutual complementation of the urban planning materials of the time, as it is characterized in our article from the perspectives of the interactions. As it is known, the Hellenistic culture carried the interweaving and influence of Greek, Eastern, and local elements. Among the construction, reconstruction, and urban elements of ancient Iranian cities, regional influences are visible, from Mesopotamian examples to Greco-Hellenistic and Roman developments. Although the Achaemenid, Parthian, and Sassanian periods had their own unique urban planning and architectural features and approaches, the commonalities with neighboring countries and especially with Armenian urban planning are also prominent. In urban settlements, circular and rectangular compositional plans have dominated.

Thus, in the field of town planning, by the two presented countries, preference was given to the Hippodamian, that is, the regular building-up principle, which was appropriate in the given historical period due to the imperative of rapid construction of cities.

In ancient Iran, as well as in examples of Armenian urban construction, the citadel and the ensemble of the main square always formed one entire ensemble. As for the solution of the street network of the considered cities, in them, as in the East in general, the ethnic and social class structures of the population (that is, hierarchical social stratification) were also important, which

created a certain system of district and street arrangement in the earliest periods (Dvin, Ardashir Khoreh, etc.).

Our studies confirm that the ancient cities of Armenia, due to their geographical location, strategic position, and powerful defense structures, played an important role in the defense of the country, whose traditional, general system was formed since the Urartian period. And in later centuries, they have improved and been expressed not only in the Armenian city examples but also in the examples of Persian classical architecture.

In general, there are many commonalities in the compositional creations of Armenian and Iranian historical cities, which are the result of the similarities in the urban life and climatic conditions of the two countries. The urban development of both countries went from ancient fortified cities to settlements with fortresses, fortress-fortified cities, and suburbs, where the quadrant development of cities is special, such as the Armenian cities of Tigranakert, Artashat and Dvin, Nprkert, Theodosoupolis, etc. Among the Achaemenid-Parthian and Sasanid examples are Pasargadae, Persepolis, Shosh, Artashir Khoreh, Bishapour, etc. Compared to Mesopotamian cities, these fixed the quadrant structure of the fortified city in town planning. This is what was expressed as Agora in Greek urban planning and as Forum in Rome, etc.

Some factors dictating the principles of early medieval urban development (e.g., economic and strategic, geographical and defensive location of the city, convenience of water supply, etc.), while not losing their importance, were subjected to some changes resulting from the nature of the feudal society being formed. This should explain the emergence of the already three-part plan structure of the cities, consisting of the citadel, the city itself, or *shashastan*, and suburbs; the appearance of the fenced citadel as a strategic unit; and the fenced *shashastan* as the public and business center of the city, which also begins to perform some of the functions of the citadel, forming a fortified part of the city (cities of the Sasanid period, Dvin, etc.). It was in the early medieval period that the development of trade and crafts in the urban settlements significantly affected the compositional layout of *Shahrestan*. In its central area, close to the citadel, there were religious and public, commercial and artisanal buildings, as well as the apartments of the council of aldermen of a city, and the entire business life of the bustling city took place here.

Indeed, ancient Armenian and Iranian town planning and architectural transformations are vivid, and their magnificent expressions comprise part of the ancient world civilization. Some of the Iranian examples (such as, Persepolis and others) are included in the UNESCO list.

In fact, as in the case of most cities in the ancient world, in the case of ancient Armenia and Iran as well, old historical and new archaeological data must be compared and paralleled in order to have a clear picture or an imagination of the urban development culture, which will bring new arguments to the discourse on the presented topic and add new knowledge on the comparison of the given topic between the two countries.

### References

- Abu-Lughod, J.L., *Yek Shahre Eslami, Chegoune Shahrist* (2004). *How Islamic city is a City*; translated by Mhedi Afshar), The book of articles - complex of urbanization in Islam (vol.1), Tehran (In Iranian)
- Arutyunyan, V.K. (1955). *K voprosu o gradostroitelnoy kulture Drevney Armenii*, *Izv. AN Arm SSR. Obshestv. Nauki*, 9. 47-54 (In Russian)
- Frye, R. N. (2000). *The Golden Age of Persia (The Arabs in the East)*, London, Phoenix Press.

- Harutyunyan, V.M. (1999). In the amazing four ways of beauty, Yerevan. (In Armenian)
- Kertmenjian, D.G. (2020). Armenian architecture in the ancient period (6th century BC - beginning of the 4th century AD), Yerevan, RA NAS "Science" publishing house. (In Armenian)
- Kertmenjian, D. G. (2011). On the question of compositional classification of the cities of ancient Armenia, "Tigran the Great", collection of materials of the international conference dedicated to the 2100th anniversary of the reign of Tigran the Great (2005), Yerevan, 2011, P.221-226. (In Armenian)
- Kheirabadi, M. (2000) Iranian Cities: Formation and Development, University of Texas Press, (Contemporary Issues in the Middle East), Syracuse University Press.
- Pope, A. U. (1938) A Survey of Persian Art from prehistoric times to the present Sassanid period, vol. I, London - New York, Oxford University Press.
- Varjavand, P. (1987). Urban and urbanization in Iran (in Kiani, M.Y. (ed.) Iranian cities, 1-43), Tehran, Ministry of Culture and Islamic Guidance Tehran.