

## A fidelity made of stone. The Armenian Architecture seen from the Vayots-Dzor' fringe

This research focuses on medieval architectures in the Armenian region of Vayots Dzor. The research mission is carried out since 2014 by the University of Florence, School of Architecture. In this paper, we show the results of a part of this research focusing on ancient buildings in the cities of Areni, Noravank and Yegheghis. We propose a series of unpublished cartographic elaborations showing the main flows of spreading of architectural typologies in Armenia, and then we focus on the analysis of the main religious structures of the village of Yegheghis.

These analyses are based on architectural graphic elaborations to investigate the architectural Design, Space and Composition of medieval Armenian structures. The aim is to highlight the elements that define their architectural shape: the compositional rules, the structural design and the relationships between plan and elevation. Starting from the architectural analysis on

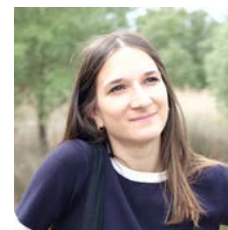
religious buildings, we investigate the Armenian architectural language. Within the analysis of territorial and historical context, the paper crosses the Cuneo' studies with the analysis of the architectural elements, focusing on their both functional and mystagogical aspects. Although the Armenian cultural heritage is strongly characterized by religious buildings as churches and monasteries, the last-two-centuries-studies about Armenian architecture, including the great cataloguing work by Paolo Cuneo, have never considered this point of view. This Armenian feature explains why Armenian architecture seems to use till today an ancient language even on contemporary non-religious architectures.



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Keywords:  
Paolo Cuneo; Armenian architecture; Vayots Dzor; Վայոց Ձորի մարզ; architectural survey

## 1. INTRODUCTION

We propose a research to discover the heart of the meaning of "Armenian architecture" starting from the examples studied in Yegheghis: an Armenian historical village located in the upper valley of the homonymous river, in the region of Vayots Dzor.

This proposal is born from a holistic methodological vision and approach, that led us to hypothesize a different point of view concerning the meaning and language of Armenian architecture.

We know that Armenian Cultural Heritage is mostly constituted by churches and monasteries. For this reason, our research includes also the reading of some passages of Gregory the Illuminator's vision, to better trace the architectural expressiveness of the Armenian religious dimension. Furthermore, Gregory (Thomson, 1970) was the backbone of the Armenian church and the first cultural catalyst whose effects have come down to us carved into basalt. These architectures, characteristic and familiar to the Latin West, have been the subject of extensive discussion among scholars.

## 2. STATE OF ART

The scientific landscape could be summarized in two main factions, to which is added a third one that changes the way to approach the knowledge of Armenian architecture aiming to preserve it. In all these cases, the studies are lacking in an aspect that we believe it's fundamental: the reason that has produced such constructive fidelity over the centuries, until today.

We can well understand that every people forming within a sovereign state feels the need to promote a national identity that passes by language, traditions, and inevitably also by architecture.

This expressive loyalty refers to a unifying language that wants to solder an identity that maybe was not originally there. Historical studies don't escape this logic: they can be divided into either promoter of an autonomous identity or researchers for external influences.

Since the early 1900s, Armenian architecture has been the focus of an active discussion between two

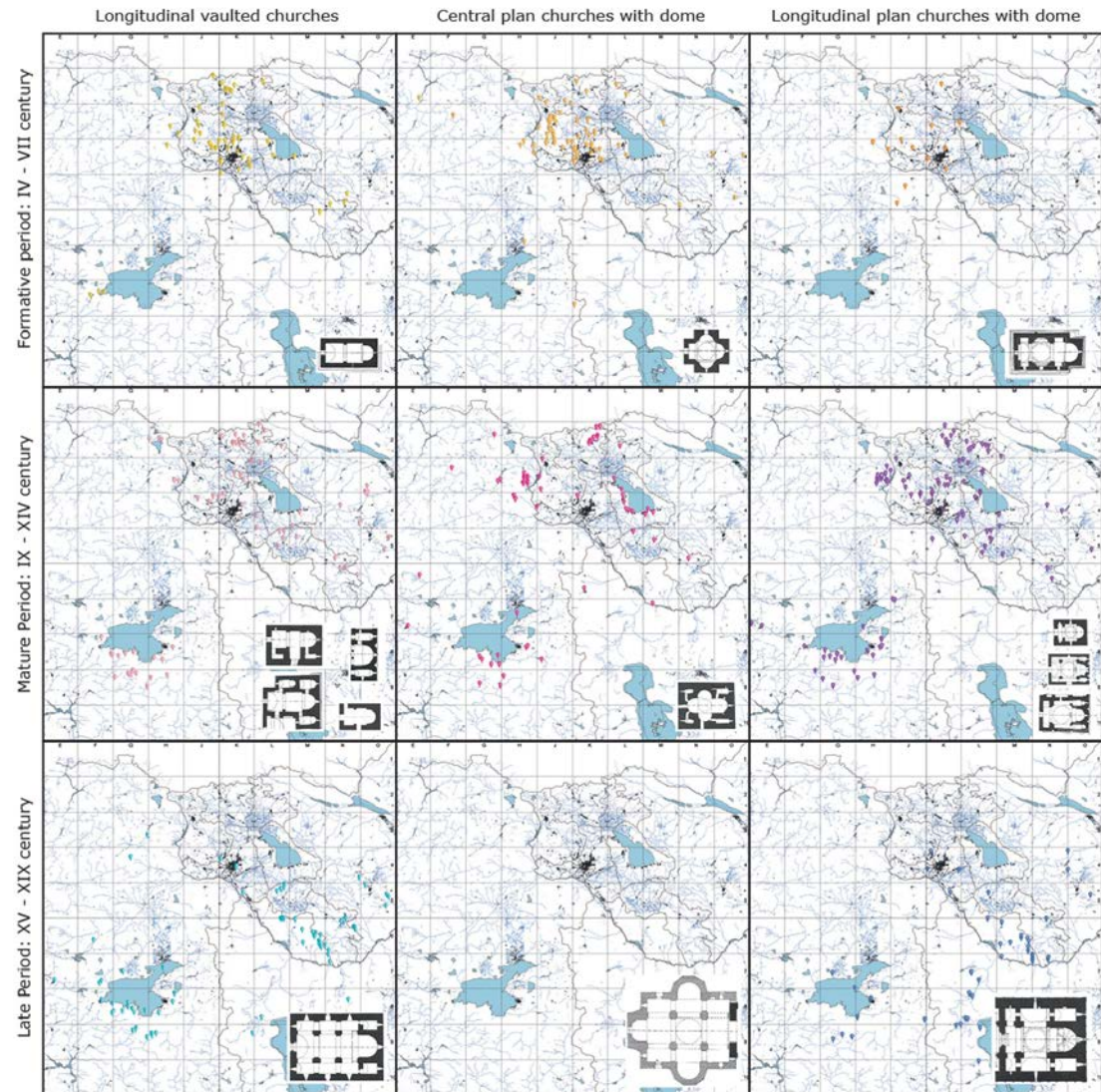


Fig. 1 - Visualization of the geo-localisation of the churches on the Armenian territory classified by period and by architectural typology.

main theories: the Strzygowski's orientalist one (1918) and the Rivoira's Western Roman one (1918). Without going into the heart of the question, we report that what was disputed about Armenian architecture at the time didn't lead to definitive conclusions, that's why even today we try to understand its results. After the studies carried out by Germans and French, who produced, with a romantic research attitude, iconographic documentation of great monuments most of which monumental architectures, we arrive at the Italian studies of the 1950s. They, in turn, can be divided into two large groups: one from Milan led by Adriano Alpago Novello and one from Rome in which Paolo Cuneo actively works. Their common characteristic was to not to seek derivations of Armenian architecture under any influences; rather their activities focused on cataloguing as punctual as possible the architectural testimonies on the Armenian territory (and former) to facilitate its preservation. The two Italian groups were only interested in a large-scale action, as happened in Italy about the minor Architecture of the territory and which has then been preserved with laws of protection and reconversion [1]. Each Armenian monument was therefore accurately documented, while the evidence of style and construction technique was left to the reader's judgment, as declared by Alpago Novello (et al., 1986) and written by Cuneo (1988) in the preface of his two volumes. The University of Bologna, the Politecnico of Milano and the Politecnico of Torino have recently returned to study the Armenian territories to collaborate in the recovery of monuments [2]. Since 2014, the University of Florence with two departments -SAGAS and DIDA- is engaged in a mission in Armenia entitled "Making silk road, the Vayots Dzor" [3]. Here we would like to lead you following Cuneo's work that helped us to extricate ourselves between histories of domination, complex nomenclature, and disorientating typologies. The territorial contextualization of the different sites seems to be the first necessary step to continue the research prepared by Cuneo and to enrich it with the historical, social, and religious sense that's placed at the base of this entire research.

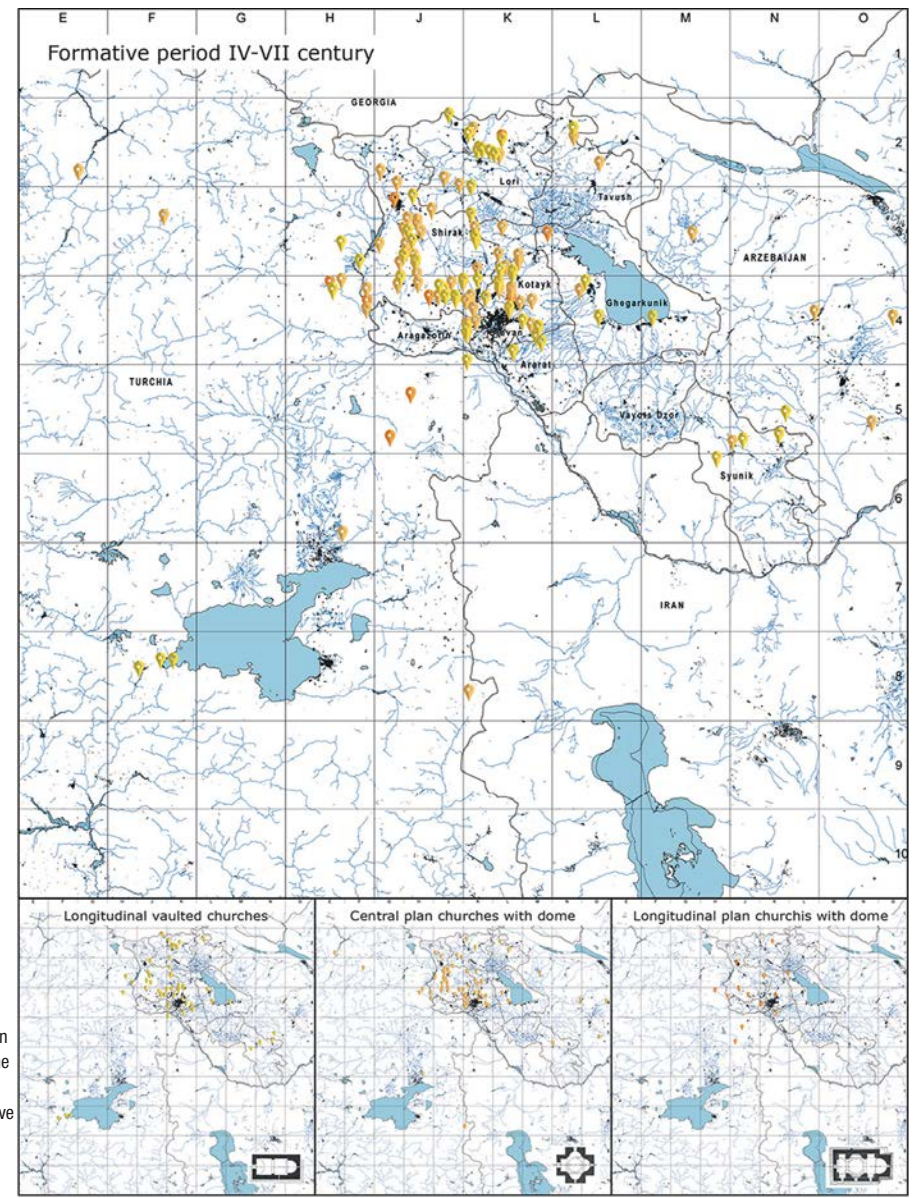


Fig. 2 - Graphic visualization of the geo-localisation of the churches on the Armenian territory during the Formative Period. The churches are divided into the main three architectural typologies.

### 3. TYPOLOGIES AND DIFFUSION OF ARMENIAN CHURCHES

In the great work carried out by Cuneo, the author classifies the religious architectures into three large families: longitudinal vaulted churches, domed churches with a central plan, and domed churches with a longitudinal plan. These typologies return continuously in the three periods that Cuneo identifies as formative period, mature period, and late period, with feedback of numerous examples. Within these groupings, he makes further subsets dictated by architectural characteristics. In the case of the longitudinal church he distinguishes the typology with a single nave from that with three naves (basilica), and in the first case a simple he divides the apse area between protruding apse or incorporated by a complex apse area with more than one apse.

In the case of the central domed churches, he differentiates the simple cruciform churches from those with a complex central plan.

In the first case, he classifies the possible typologies: monoabsidata, triconca, and tetraconca with inscribed or free cross. In the second case, he identifies the following typologies: hexaconche, ottoconche, with dihedral niches, with compact perimeter, with the presence of central pillars and potential ambulatory. In the case of the longitudinal domed churches, as for the first type, he distinguishes the single nave from the basilical one with three naves, classifying other groups depending on the conformation and the number of angular chapels and apses. In conclusion, Cuneo makes a sort of crossing reference, readable by period, or by architectural characteristics (fig. 1). According Cuneo's classification, we observe at first the number of examples still present on the territory. In the case of longitudinal vaulted churches: the typology with rectangular apse is the least common with only one example in the formative period and few others in the mature period. The same happens for the circular-apse-extruded typology: there are simply 14 examples and only in the formative period. Very different appears the spread of the models with semi-circular apse in-

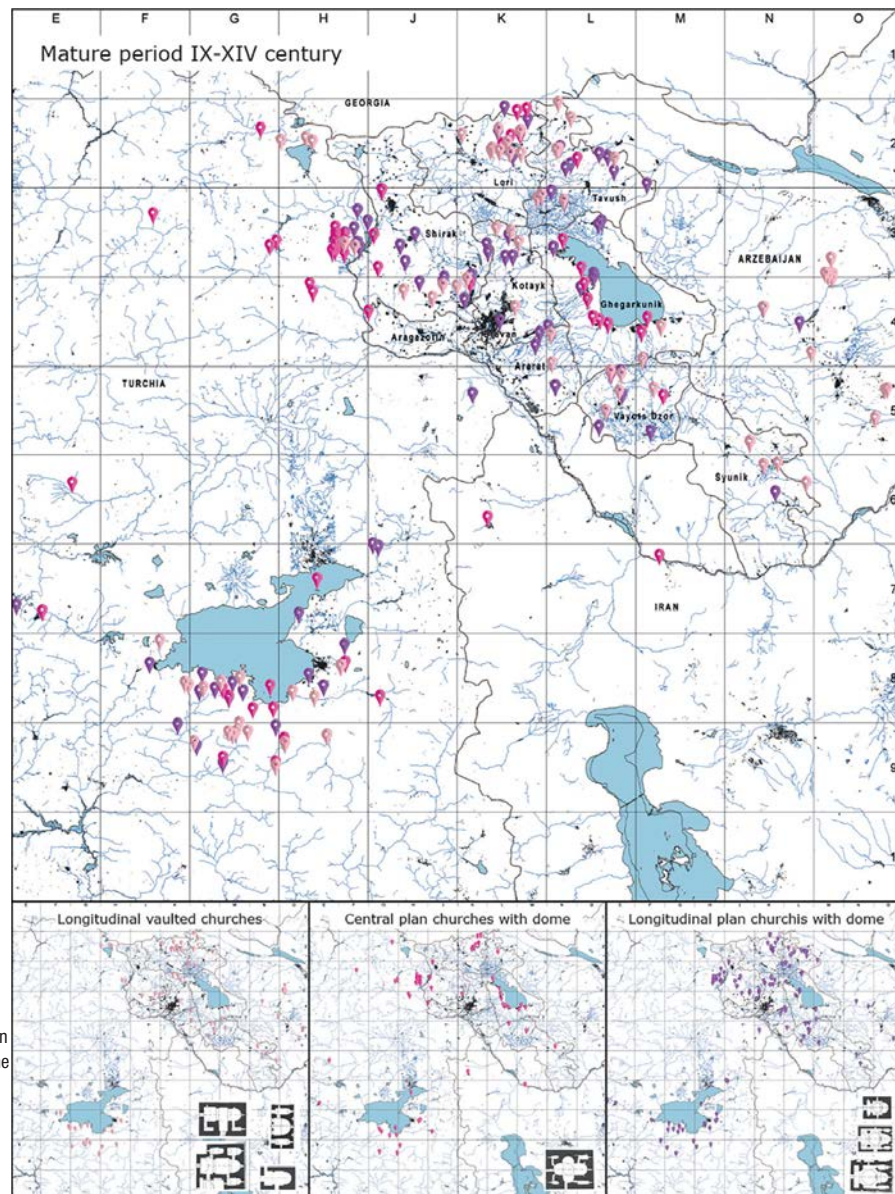


Fig. 3 - Graphic visualization of the geo-localisation of the churches on the Armenian territory during the Mature Period. The churches are divided into the main three architectural typologies.

corporated inside rectilinear perimeters that represent over 87% of the longitudinal churches with a single nave and that are therefore configured as a winning model compared to the other variants just mentioned.

The central plan churches seem to maintain a constant constructive both in the formative period and in the mature period, but the typology is almost completely abandoned in the late period. The longitudinal domed churches have a first moment of development in the formative period in which the construction technique of the dome had to be still in experimental phase. Then they became the privileged model of the Armenian architecture in the mature period. The examples of the late period occupy in a centrifugal way all the adjacent areas to the central territories of the Arpa river valley, as a sign of Christian evangelical action. We observe that the greatest concentration of buildings is attributable to the mature period. It's identified from the second half of the 9<sup>th</sup> century to the first half of the 14<sup>th</sup> century. We refer to a very large historical period known as an era of general renewal for Armenia in which the country affirms its identity also in the field of construction. It's the expression of the expectations and ambitions of a society in which the middle class was becoming the promoter of craft development, artistic and cultural production, and long-range trade (Cuneo, 1988, p31).

#### 4. HISTORICAL CONTEXT AND GEOGRAPHICAL LOCATION

##### 4.1. THE FORMATIVE PERIOD

Historically, this period (4<sup>th</sup>-7<sup>th</sup> century) represents a phase of controversies between Romans and Persians. The country has a strong Hellenic tradition derived from Alexander the Great' domination (356-323 BC). The government management, based on a subdivision of territorial units controlled by governors, is committed to the *nakharrar* (Նախարար: firstborn) (Alpago Novello et al., 1986, p.74). The central authorities that succeeded each other over the centuries left to the local representatives a sufficient autonomy, both

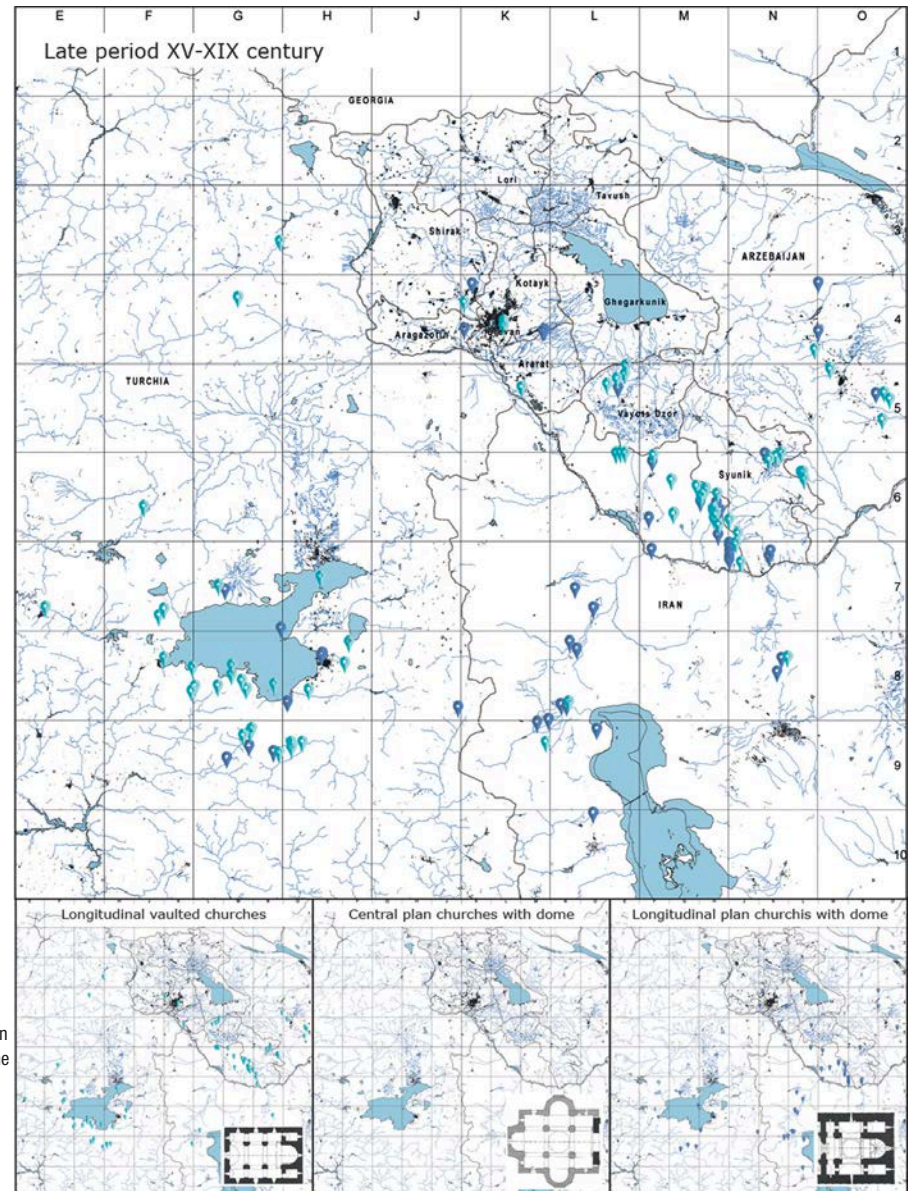


Fig. 4 - Graphic visualization of the geo-localisation of the churches on the Armenian territory during the Late Period. The churches are divided into the main three architectural typologies.

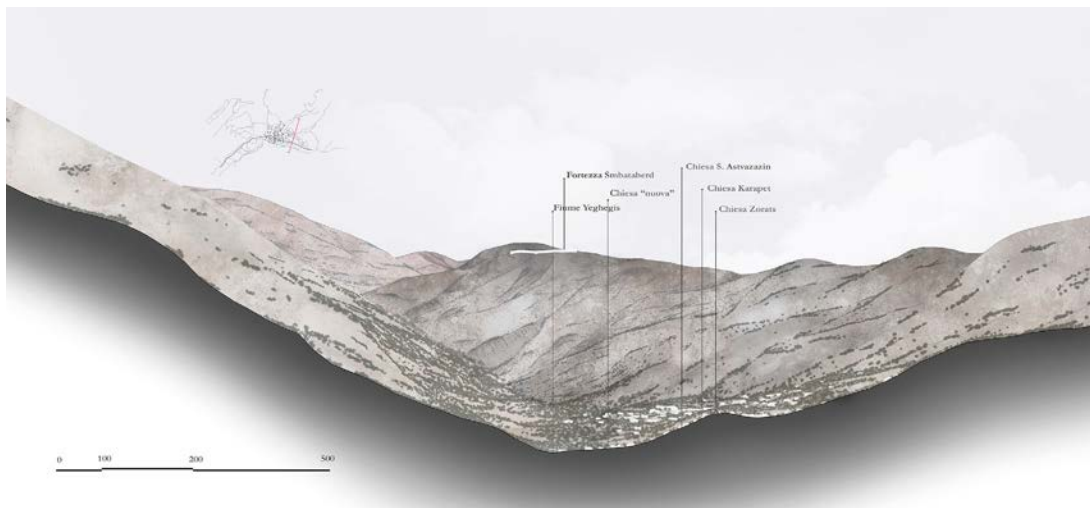


Fig. 5 - Territorial Section of Yegheghis village and geo-localisation of research's architectures.



Fig. 6 - Zoraz Church, also called "Church of the knights". Yegheghis.

economic and administrative, through relations of vassalage and servitude. All the feudatories, in turn, were represented by a prince to the emperor. The Seleucid-Hellenistic administration was followed by the Artasside, the local Armenian dynasty (190 BC-1 BC), and then by the Arsacid dynasty as Roman vassals until it returned in 428 under the local Armenian Sasanian dynasty.

The country, under Roman control, starts to build its own national identity: it sets the official religion and it realizes the national alphabet, which is still today one of the main characteristics of Armenian culture. With the conversion to Christianity of the 4<sup>th</sup> century A.D., the structure is integrated with the ecclesiastical system, which is configured as symmetrical to the feudal hierarchies.

In this experimental phase, the aim is to build structures to host the religious functions. This phase is linked to the figure of Gregory the Illuminator, the first catholicos of Armenia, thanks to which King Tiridates III converted himself to Christianity and he promoted it as state religion. The apocalyptic vision of the Saint is meaningful: he describes the foundation of Four Churches located in Echmiadzin, three of which were born as places of burial and veneration on the sites of the martyrdom of the holy Rispina, Gaiana and their companions and the fourth symbol of the priesthood (Agatangelo, 1843, p.132). These buildings were founded as places of veneration and burial of the martyrs: two characteristics that will remain constant in the development of Armenian religious architecture, connected from the beginnings to the cult of the dead and the transcendence of the sacred place. This imprint will lead to a typological development strongly linked to the central plan of the martyrrium and of the Roman mausoleum. The research for a charismatic place led the builders of Christian churches to reuse the foundations of the ancient pagan temples, using the old podiums and finding architectural solutions in which the model of the temple and the basilica merge themselves to compose the longitudinal typology.

The four buildings represented in the Saint's vision coincide today with the place of the catholicos

of Echmiadzin and with three other churches dedicated to their original martyrs. The area of Echmiadzin is a centre of irradiation of architectural experimentation of the 4<sup>th</sup> century. This position must have a significant political and economic value, near the crossroads of one of the great arteries of distance identified in the Peutingeriana map on the east-west axis between the Black Sea and the Caspian Sea and north-south axis to Georgia and the Persian Gulf (Levi et al, 1978). In the maps of the formative period, the churches are homogeneously placed in the north of the Arax river, in the basin of impact already mentioned. Compositionally, the presence of the basal podium and the east-west arrangement appear to be a constant. The entrance door can be positioned

either on the short side to the west, and not necessarily on the axis of symmetry, or on the long side to the south; even the possible presbytery chapel is preferably located to the south. In all cases, the altar in the apse is raised by one or more steps, while the chapels can have semicircular or rectangular apses.

The examples with lateral expansions covered by arches appear more frequently in the extruded apse typology, which will extinct itself. The arched covered lateral expansions, instead, will be recovered according to leaner proportions and will be adopted in the second part of the mature period and in the late period to widen the internal spaces and lighten the lateral discharge of the central barrel vault (Cuneo, 1988,) (fig. 2).



Fig. 7 - Surb Nshan Church, Yeghegis. Hand drawing.

Fig. 8 - Comparison between Surb Nshan church, Yeghegis, (left) and Surb Astvatsatsin, Areni, (right).

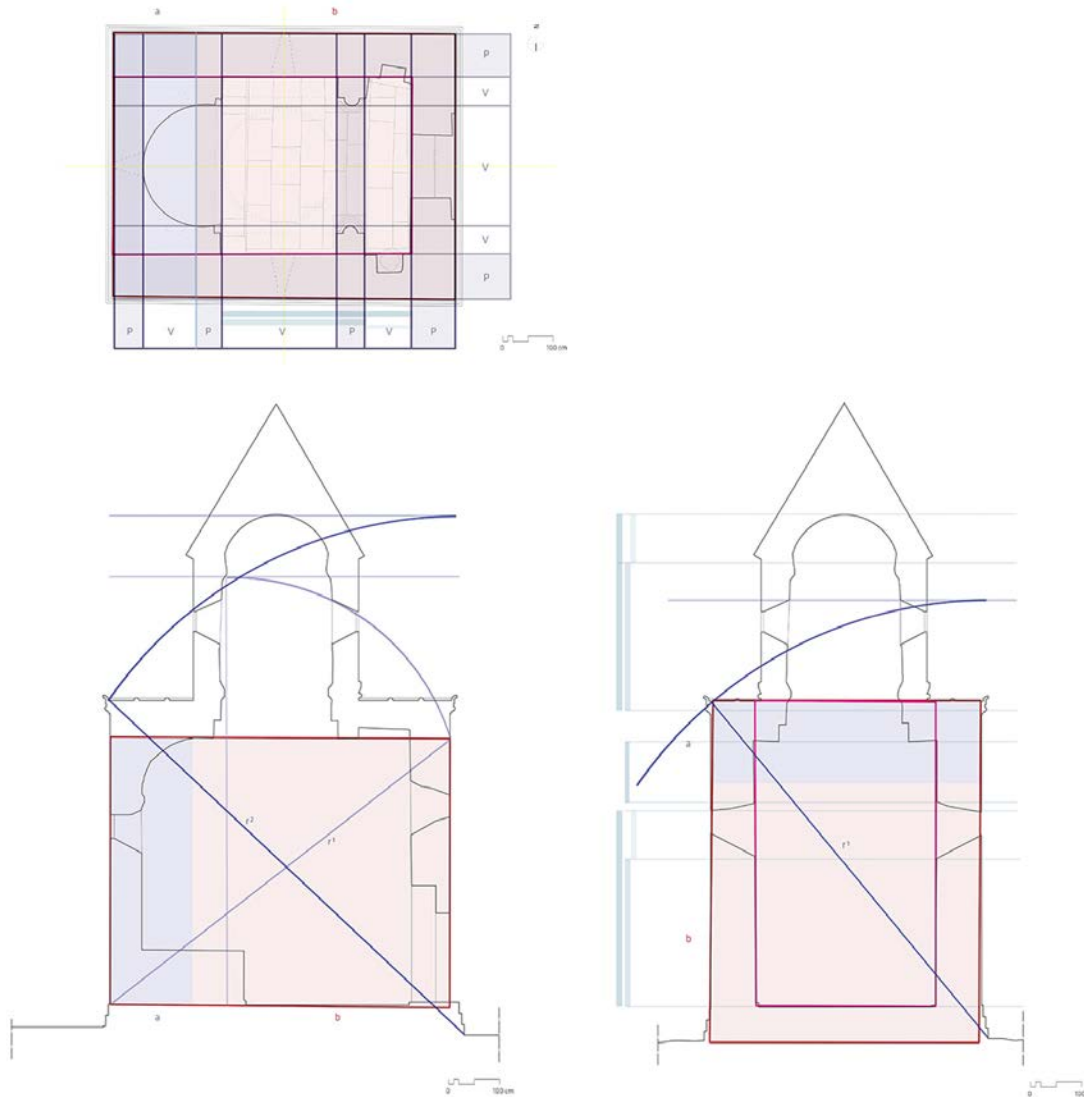


Fig. 9 - Geometrical studies on Surb Nshan church, Yeghegis. Plan and sections.

#### 4.2. MATURE PERIOD

The dispute between the Byzantine Empire and the Arab Caliphate characterized the end of the formative period (4<sup>th</sup> -7<sup>th</sup> century) and the beginning of the mature period (9<sup>th</sup>-15<sup>th</sup> c.). Between 884 and 1045 the Armenian princes Bagratidi regained their independence by establishing the new capital at Ani. These years represent an important moment in the history of national architecture. Historians agree that this phase is an era of revival of the arts (Cuneo, 1988, p. 31).

We observe systematic reuse of the architectural models of the formative period, creating uncertainties in the dating attributed by art historians. Parallel to the construction of the churches, many monastic centres vank' (convent), cenobitic centres Anapat (desert), and hermitages Menastan, are built. The cult of the image introduces the cult of the cross and the proliferation of the production of the characteristic tombstones called khachkar. The map of mature period shows a large architectural proliferation. We observe that in addition to the common architectural themes there are several specific schools of experimentation in the different regions. We recognize some areas more subordinated to cultural contaminations for their geographical position on the commercial routes (Sirak region identified with the provinces of Ani; the school of Tayk with Georgian Armenian influences; Tasir in the region of Loril) and other areas more isolated, including Syunik and Vaspurakan, respectively at Lake Sevan and Lake Van.

In this context, we focus on the Syunik area, where our case studies are located.

The architectural examples studied by Cuneo are evenly distributed throughout the territory. The area of influence identified in the formative period has slowly expanded in all the fertile regions located around Lake Sevan and satellite around Lake Van.

When in 1045 the Byzantine Empire annexed the Kingdom of Armenia of the Bagratids, the construction activity has suffered a significant impediment. In 1064, the Seljuk Turks reacted by destroying Ani and undertaking a campaign of raids that drove the native populations to migrate to the Byzantine



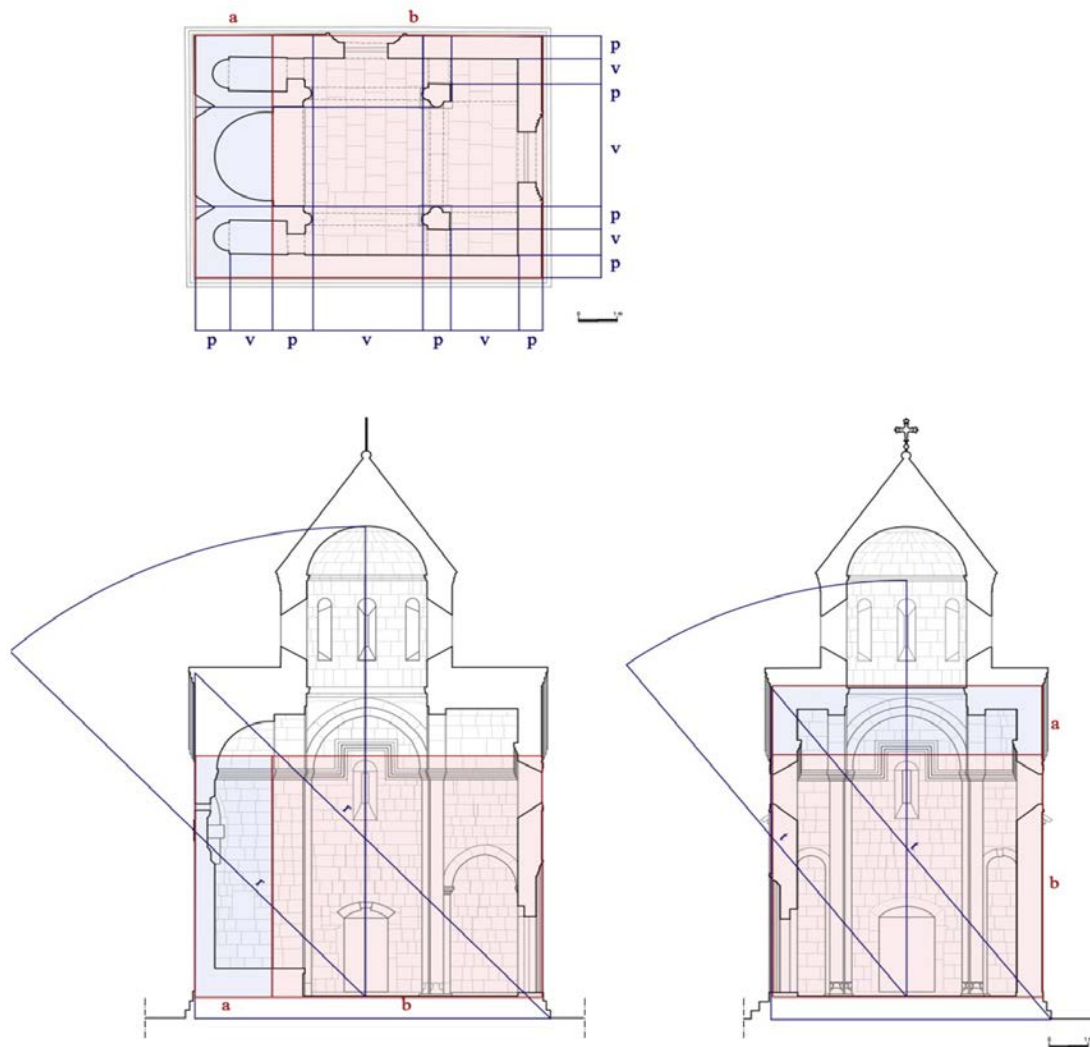


Fig. 10 - Geometrical studies on Surb Astvatsatsin church, Areni. Plan and sections.

territories seeking refuge until Cilicia, wherein 1080 the new Armenian kingdom of Cilicia will be founded (little Armenia).

The period between 1045 and 1200 represents a phase of stagnation for the architecture that will recover only in the 13<sup>th</sup> c. when, with the fragmentation of the Seljuk empire in small independent emirates, Local families backed by Georgian kings regain power.

In this period, Orbelian family settled in the province of Vayots Dzor (ancient eastern Syunik) (fig. 3).

#### 4.3. LATE PERIOD

From the 15<sup>th</sup> century, Armenian territory became the scene of disputes of neighbouring states with an imperial vocation. These lands were first occupied by the Ottoman and Persian Empires and later by the Russian Empire, all eager to seize the region's trade hearts in addition to the pastoral agricultural resources of the hill. Even the cultural integrations declined in favour of local particularisms.

This period, (Cuneo, 1988, pp. 44-55) seems to recognize three fundamental phases:

- Mid 14<sup>th</sup>-16<sup>th</sup> century: cultural and economic stagnation;
- 17<sup>th</sup>-18<sup>th</sup> century: general recovery linked to the political expansion and growth of the cultural influence of the Iranian world;
- 19<sup>th</sup>- and early 20<sup>th</sup> century: New building activity with neoclassical and eclectic trends linked to the period of stability under the Russian Empire.

We notice how the entire building activity has suffered a setback and how the construction of the new buildings is linked to the birth of Christian communities in the south Syunik provinces and around Lake Van. Here, in the mature period, the usual typologies are proposed, ranging from the simple apse nave to the more complex spaces equipped with a dome with a preference for the first type.

The migration of the typologies, borrowed from the Hellenic tradition and developed starting from the most archaic prototypes of Sirak, is transited in centuries towards Syunik in the mature period and found a wide employment in the Vaspurakan in

the late period. It's also interesting to note that the typology with the central plan follows a zonal diffusion concentrating during the mature period in the capital Ani, a little further north in the Lori region, south of the Van, and linearly on the coast of Sevan. The longitudinal typologies instead follow a type of centrifugal expansion to Echmiadzin (fig. 4).

## 5. THE REGION OF VAYOTS DZOR

To better understand the evolution of the typologies catalogued by the Italian missions, the research focuses on a narrower territorial sector to read its internal structures. From the general panorama, we focused on the area south-east of Lake Sevan, in the territories of Yeghegis. Here, a network of rivers and tributaries descend from Caucasian mountains and characterize the region of Vayots Dzor, that literally means "valley of sorrows". The Arpa is the main river of the valley and it flows in the village of Areni. This village is an ancient settlement testified by Paleolithic finds on the surrounding mountains, and it records an important urban centre already in the Roman period (XV Legio Apollinaris). This urban importance is confirmed also nowadays as a primary agricultural centre. The main tributary of Arpa river is the river Yeghegis that bends the valley, giving the name to the town itself. The area, as the map of architectural buildings shows, is affected by strong building activity, especially during the mature period.

Among the oldest settlements are mainly mentioned the monastic structures whose origins are around the 9<sup>th</sup>-10<sup>th</sup> centuries and on whose foundations will be based the buildings of the 13<sup>th</sup> century. We remember the findings of the 9<sup>th</sup> century church in Noravank (Cuneo, 1988, pp.390-393), the church of San Sion of the 10<sup>th</sup> century in Arates (Cuneo, 1988, pp. 382-383), the monastery of Shatvank (Cuneo, 1988, pp.400-401) of 929 wanted by Prince Smbat; the two groups east and west of the monastery of Tsaghatskar in Yeghegis (10<sup>th</sup>-11<sup>th</sup> century) (Cuneo, 1988, pp.396-399) whose origins seem to date back to 451, the year of the battle of Avrayr against the Sassanids.

All the buildings scheduled are classified as

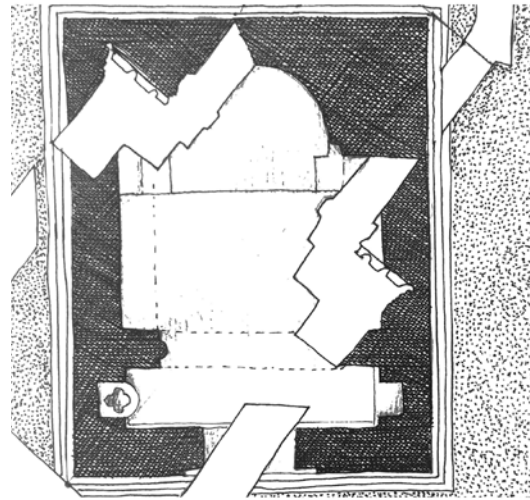


Fig. 11 - Proportional study on Surb Nshan Church, Yeghegis. Hand drawing.

longitudinal vaulted churches, a typology that characterized the first wave of construction in the area, except for the church of Surb Astvatsatsin of the western group of Tsaghatskar monastery, in which there is a central tetraconch plan type. It's possible that this typology relates to the building activity of Ani under the Bagratid reign in which the typology of the central plan was widely tested (Cuneo, 1970). As anticipated, in this period the territorial management develops a double structure: on one hand the Nakharar, a clan of trusting families to which the autonomy of territorial management is entrusted, and on the other one the ecclesiastical structure of the Catholicos. It is consequently not surprising to find a binary territorial system in which, having identified the monastery, it is easy to recognize in its immediate proximity a military support structure.

We can report in this case the castle of Smbataberd and the monastery of Tsaghatskar to the north of the village of Yeghegis, while to the south on the opposite slope are the monasteries of Spitakavor and Shatvank and the fortress of Proshaberd.

This does not seem to happen in Arates and in Noravank, foundations of the Catholicos, which, therefore, enjoy their autonomy. The area suffered a critical setback in 1064 when the capital Ani was destroyed by the Seljuk Turks sanctioning the end of the Bagratid reign and the beginning of an exodus of the Armenian people in search of refuge to escape the destructive policy of the occupying peoples. In 1080, the new Armenian kingdom of Cilicia was founded.

As in the European Middle Ages, building production has come to a standstill, monastic structures still support the framework of economic and cultural management while maintaining territorial control.

Between the 13<sup>th</sup> and 14<sup>th</sup> centuries with the division into independent emirates of the Seljuk Empire, the local autonomies restart to develop a growing economy open to trade to the Black Sea in which there is an active business with the Genoese and Venetians fleets. In this panorama, the building activity flourishes again and the Vayots Dzor starts an intense building activity, under the control of the Orbelian family since 1211.

In the territory of Yeghegis are recorded the structures of Noravank (Surb Karapet 1221-27; Surb Grigor 1275) (Cuneo, 1988, pp.390-391), of Arates (Surb Astvatsatsin XI; and the Gavit 1270) (Cuneo, 1988, pp.382-383) and the church of Areni (Surb Astsatsin 1321) (Cuneo, 1988, p.394); In the village itself, it's built the church of Surb Nshan (also called Surb Karapet) and the church of the knights of Zoraz, both dated 13<sup>th</sup> century (fig. 5). We record here in the 13<sup>th</sup> century a growing propensity for the longitudinal domed typology better known as "Armenian church".

Another singularity concerns the example of the church of Zoraz (Cuneo, 1988, p.381; Luschi et al., 2020). The building is an open presbytery with an external area. It is known as the church of the knights precisely for the possibility of attending the liturgical celebrations remaining on horseback near the altar (fig. 6).

To confirm the economic ferment of this period, we add the discovery of the Jewish cemetery near the church of Zoraz. The oldest plaque dated 1266

and the last 1346 attest therefore the presence of a small Jewish community settled there for at least 80 years. Among the last architectural examples still present in the area we also record the basilica with three naves of Surb Astvatsatsin (Cuneo, 1988, p.381) dated 1703 by historians, but which reveals in its masonry walls a reuse of ancient material from the particularly exuberant size and that suggests a reuse of an older structure.

## 6. THE ARCHITECTURAL SHAPE

As we have seen in Yeghegis there are several religious architectures distant from each other a few hundred meters. They are connected by a narrow territorial system but they differ in terms of spatial composition and shape. The typological distinction made by Cuneo confirms these differences, letting assume about a different use of places.

The church of Surb Nshan, whose name means "Sacred Sign", also known as Saint Karapet or Saint Gregory (Cuneo, 1988, p.376), is built around the 13<sup>th</sup> century (fig. 7).

The typology to which it belongs, longitudinal domed Churches, seems to be easily comparable to that of Areni (Surb Astvatsatsin church), despite the first one is characterized by an important decorative apparatus with the recurrent use of the colours white and red. But beyond the architectural features, we want to understand the spatial concepts of these structures and what these two churches express with such similar composition (fig. 8). The comparison moves to Areni's church Surb Astvatsatsin. On its north side stood the Orbelian Palace, whose ruins are still visible today. In the same way, it seems that in Yeghegis was built an Orbelian Palace near Surb Nshan church, after that the Orbelian family transferred to this village. An erratic lintel next to the church seems to reveal its presence. This type of binomial, Palace and Church, with a church typology not suitable to involve a large crowd of faithful, suggest that it was a sort of palatine chapel, closely linked to the presence of the local dignitary. If so, we could justify the presence of this type of "chapel" right in Yeghegis.

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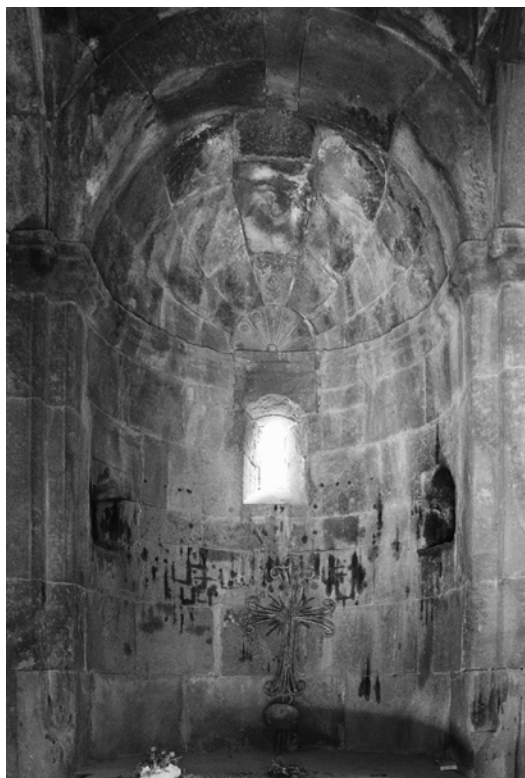
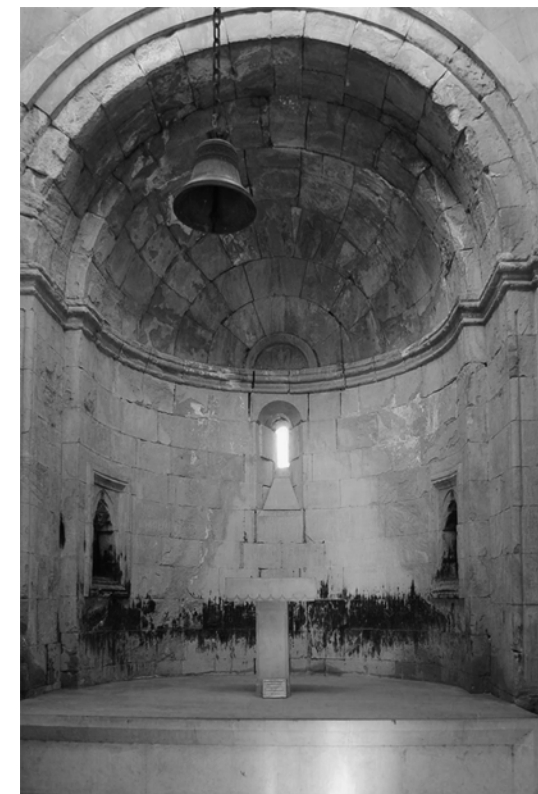


Fig. 12 - Apsidal cap of Surb Nshan, Yeghegis.

Fig. 13 - Apsidal cap of Surb Astvatsatsin upper church in Noravank.



Surb Astvatsatsin in Areni was built by Momik, the same monk architect of Noravank monastery, in which he built another church with the same dedication, Surb Astvatsatsin (1335). Some typological and structural analogies link the church of Surb Nshan with both Surb Astvatsatsin in Areni and Surb Astvatsatsin in Noravank, letting us suspect that even Surb Nshan church could bring its signature.

A compositional analysis shows that Surb Nshan and Surb Astvatsatsin in Areni have the same geometry which marks the buildings in a proportional order. The geometrical reading made on both churches reveals the application of a geometrical proportion that marks the structure, both in plan and in elevation, as if to guarantee a sort of

DOI: <https://doi.org/10.20365/disegnarecon.25.2020.8>

shipbuilding control of the project even during the construction phase (Luschi et al, 2019). The comparison between the graphic representation of Surb Nshan, Yegheghis (fig. 9) and Surb Astvatsatsin, Areni (fig. 10), tries to show this proportional relationship through colours and forms. The rectangular external perimeter of Surb Nshan church's plan matches with the constructive dimensions of the elevation, underlined by the red rectangle in the two sections. This means that the builders had the fundamental dimensions of construction already inside the plan dimensions. In fact, the rotation of the diagonal of this red rectangle gives information about the height of the construction plane of the dome (fig. 11). Another reading focuses on the plan relationship between "full" and "empty" portions (i.e. "built" and "not-built") of the building: it means to discover the proportional key used to build the artefact. This shows that the plan is based on a symmetrical and palindromic proportion, according to both the longitudinal and the transversal way. We observe that the building logic is simple but very clear, based on proportion and on a clever use of geometric control. We made the same analysis on the Surb Astvatsatsin church in Areni, and we found there the same constructive knowledge. Plan and sections respond to a geometrical logic that controls the relationships between walls even without knowing each metrical dimension itself. Behind this knowledge, this correspondence reveals a common thought, a same architectural conception and maybe the same constructor. To advance the hypothesis that the author of this project is the same Momik, a structural analysis shows another analogy between Surb Nshan and the superior church of Surb Astvazazin in Noravank: an atypical inverted closure of the apsidal cap (fig. 12,13). This evidence testifies contacts between the architect, the royal family, and the church of Surb Nshan. Another characteristic is represented by the sundial on the southern facade of Surb Nshan. It questions about the type of gnomonic knowledge present in Armenia in the 13<sup>th</sup> century (Maranci, 2014), finding an analogy in the church of Surb

Astvazazin in Areni (Aterini, 2018). This reinforces the idea that the two churches not only share the same architect and manpower but probably also the same function (fig. 14, 15). To conclude, we can say that the typology is chosen depending on its use. It is the architectural shape, with all the evidence emerged from the study, to reveal the role both from a symbolic point of view (temporal power), that from a theological point of view (spiritual power).

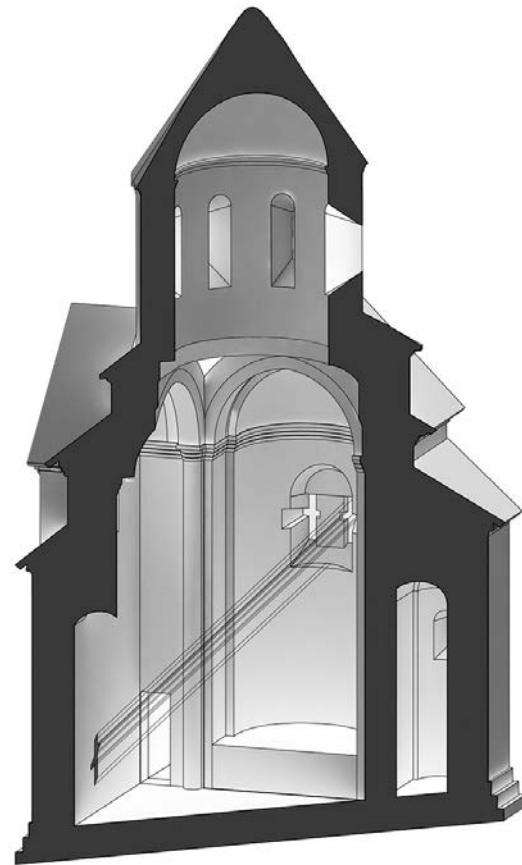


Fig. 15 - Photo of the sundial of Surb Nshan, south façade. Yegheghis.

Fig. 14 - Sundial study on Surb Astvatsatsin, Areni.

## 7. MYSTAGOGY

We propose a different approach of the research to read the architectural design according to some passages of Gregory the Illuminator's vision (Thomson, 2014; La Porta, 2014) (fig. 16). He was the backbone of the Armenian church and the first cultural catalyst. His effects have come down till to us carved in basalt. He operates a real trans-literation from the pagan temple to the Christian constitution of the altar, telling us the mystagogical sense of the churches' shape.

Here, we investigate the mystagogical value of each architectural element used to build churches such as that of Areni or Yegheghis. We propose the reading of the passage of Gregory the Illuminator's Vision, as described below by Agatangelo: "And as I looked, I saw the firmament of heaven open, and the waters above [...]"

And I looked, and I saw three other pedestals [...]  
And these pedestals were red in the blood; and the

pillars of clouds, and the capitals of fire; and above the three pillars, bright crosses, like the Cross of the Lord: and the crosses of these columns were equal to the capital of the column of light; that was of all the highest" (Agatangelo, 1843, pp. 127-128, translation by the authors).

If we compare it to the constructive elements of Surb Nshan or Surb Astvazazin we observe: a base on which a podium "pedestal" is erected, surmounted by a construction with a drum "columns of clouds", completed by a conical cover "capitals of fire" and surmounted by the cross "like the cross of the lord".

After the apocalyptic vision, there is a justification to understand how each element refers both to the symbolic construction of four churches and to a cosmic meaning representing a divine project: "the pillar of fire is the universal church that welcomes all peoples in the unity of faith under its wings" (Agatangelo, 1843, p. 130). In the vision, Gregory is commanded to build 4 sanctuaries as

shown by the angel exactly on the places of martyrdom and the rest of the Armenian martyrs. The description also continues: "And I connected admirable arches cast over the crosses of the four columns: and above them, I saw a domed edifice, like a pavilion, all the clouds, a prodigiously divine work. [...] And upon the top of the building I saw a seat of God which was wonderful, all of fire; and upon it, the Cross of the Lord: and the light spread abroad, and joined with the rays of the Cross; and he formed a pillar of radiant light, which stretched down to the bases of the pillars. [...] Gregory himself, taking hold of the 'arches hanging from the bricklayers', laid the foundations of the chapel" (Agatangelo, 1843, pp. 127-128, translation by the authors).

## 8. CONCLUSION

With this paper, we show how the holistic method embraces disciplinary dimensions apparently far one each other as architecture, geography, technology, and theology to permit a better understanding of the complexity of the relationships that have led Armenian architecture to crystallize into those identity forms that characterize it today. In this way, reading an architectural building becomes a philological action that takes the various disciplines to understand the evolutionary processes: from the geographic migration of the type to the territorial management, until the individual local declinations that reflect the theological inspiration dictated by the fathers of the church.

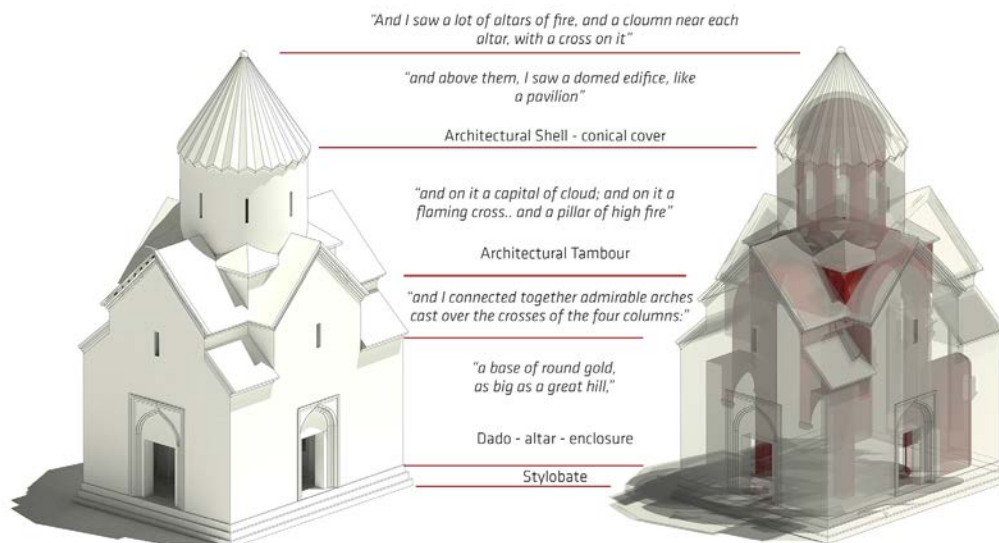


Fig. 16 - Reading of Surb Astvatsatsin's architecture, Areni, according to Gregory the Illuminator's Vision.

## NOTE

[1] D.lgs. 22 gennaio 2004, n°42 "Codice dei beni culturali e del paesaggio".

[2] We may note the project "Rochemp" developed by Bologna University and its Center based in Yerevan. The work carried out by Politecnico di Milano is documented in the book "The Politecnico di Milano in Armenia: an Italian ministry of foreign affairs project for restoration training and support to local institution for the preservation and conservation of Armenian heritage" ed. by Gaianè Casnati, Venezia, 2014.

[3] Research Mission "Making silk road, the Vayots Dzor", (2014-2020). Scientific Coordinator DIDA: Cecilia Luschi; Scientific Director SAGAS: Michele Nucciotti.

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