



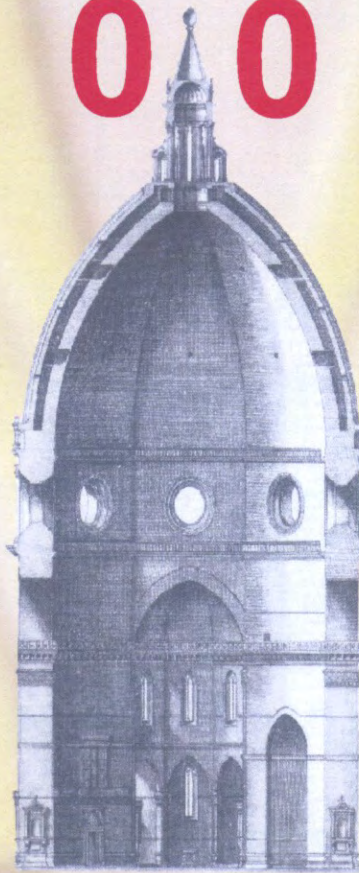
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# **RESTORATION WORK ON BYZANTINE AND POST-BYZANTINE MONUMENTS IN THE PRESPA AREA - GREECE**

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## **SUMMARY**

**The district of Prespa preserves a great number of Byzantine and Post-Byzantine monuments that date from 10<sup>th</sup> c. onward. A conservation project, financed by European Union and the Greek State, run by the 11<sup>th</sup> Ephorate of Byzantine Antiquities, started in 1995 for the repair, consolidation and promotion of some of those monuments, including the improvement of their direct environmental space. This paper presents the whole project and its methodological approach, together with the most characteristic case studies.**

## **1. INTRODUCTION**

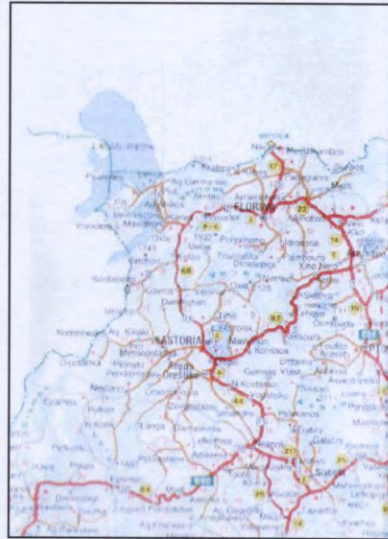
The district of Prespa lies in a large upland basin, at an altitude of 850m above sea level. The two lakes of Small and Large Prespa lie in the middle of this basin. Greece, Albania and F.Y.R.O.M share Large Prespa, while Small Prespa belongs to Greece and Albania (Fig. 1). It is an area of special natural beauty, well known for its own particular flora and fauna. In 1994, the Prefectural Administration of Florina submitted, in collaboration with the 11th Ephorate of Byzantine Antiquities, which is responsible for the safeguarding of Byzantine and post – Byzantine monuments in the area, eleven (11) projects for restoration work on ecclesiastical monuments in the Prespa area to be included in CSF II. All projects, of a total budget of 312.000.000 drachmas (approximately 920.000 Euro), have been accepted under "Measure 7: Tourist Development". Work began in 1995 and is expected for completion by the end of 2001.

## **2. HISTORICAL NOTE**

The region of Prespa has been inhabited since antiquity. The earliest settlement appears to be the ancient city of Lyca, centred on the islet of St Achillius in Small Prespa Lake, while satellite communities were spread on the shores of Small Prespa. The city of Lyca most probably survived until the Early Christian period, when it was finally abandoned. There is not any information, hitherto, on the centuries that followed, due to the absence of historical evidence and to the sparse archaeological research into the area. At the end of the 8<sup>th</sup> c. the Byzantine city of Prespa was developed on the islet of St Achillius and later, in the 9<sup>th</sup> and



10<sup>th</sup> c, it became a theatre of conflict between Byzantium and Bulgaria. By the end of 10<sup>th</sup> c. Tsar Samuel proclaimed it the capital of his short-lived Kingdom of Bulgaria. In 1018 Prespa rejoined the Byzantine Empire, under the Emperor Basil II. A period of prosperity followed, until 14<sup>th</sup> c., when it became part of the Serbian Kingdom of Stephen Dusan. After his death, it came under the control of petty rulers, under whom its importance diminished. In 1386 the region was surrendered to the Ottoman Turks.



**Figure 1. Large and Small Prespa.**

### **3. BYZANTINE AND POST-BYZANTINE CHURCHES**

The district of Prespa preserves a great number of Byzantine and Post-Byzantine monuments that date from 10<sup>th</sup> c. onward. The three aisles basilica of St. Achillius, with domes surmounting the parabemata, is one of the oldest (10<sup>th</sup> c.) and is located on the island of St. Achillius in Small Prespa. On the same island the ruins of the Dodeka Apostle (11<sup>th</sup> c.) church, of St. Demetrius (14<sup>th</sup> c.) church and of the monastery of Panagia Porfira (1524) are located, while the church of St. Yeoryios (15<sup>th</sup> c.) is preserved in a better condition. On the other hand the church of St. Yermanos (11<sup>th</sup> c.), a cross – inscribed church with a dome preserves three different layers of fresco painting, while the ruins of St. Nicholas (14<sup>th</sup> c.), of the triconch type (three-apsed cruciform church) with a dome, have rich tile decoration and traces of frescos. Furthermore, there is a number of important small single-cell churches, with or without narthex, most of which have interesting mural paintings.

The growth of monasticism in Small and especially on the shores of Large Prespa, from the early 13<sup>th</sup> century, is another characteristic of the area. A number of hermitages, all barrel-vaulted, go back to that period, while remnants of hermits cells are preserved in their environment. These are the hermitage of Metamorphosis ((13<sup>th</sup> c.), the hermitage of Panayia Eleousa (1409/10) and the hermitage of Analipsis (15thc.).

All monuments are stone masonry structures. They are covered with domes or barrel vaults, as mentioned above, or with timber roofs. Lime mortars are mostly used until 15<sup>th</sup> c., while later the material, exclusively used, is mud mortar.

#### **4. DETERIORATION PROBLEMS**

Most of the monuments suffered considerable deterioration as a result of devastation, abandonment and exposure to weather conditions. Basilica of St. Achillius was abandoned in the 15<sup>th</sup> c. and gradually fell into ruins. In the same category belong Dodeka Apostole church and St. Demetrius, which both are ruins. Small size churches were gradually abandoned in the middle of the 19<sup>th</sup> c. and onwards, when a great number of three aisles basilicas of large dimensions were built to respond to contemporary needs. Deteriorated roof coverings would let rain waters enter the roof. Timber structure of the roof was damaged, causing additional structural problems to stone masonry.

Man action was in some cases particularly destructive, as in the case of St. Nicolas in Pili, where the dome was demolished in order for its materials to be reused, during the 2d world war. In the case of St. Yermanos, a three aisles basilica of large dimensions was built in the 19<sup>th</sup> c. in touch to its western façade. In 1930s its facades, with interesting tile decoration, were plastered and later its floor was covered with cement. The church of Panaghia Porphira monastery was bombarded during the second world war and its mural painted northern wall, dated from the beginning of the 16<sup>th</sup> c. was collapsed. The church was restored in 1954. Fragments of those frescoes were found in 1998, in touch to the rebuilt north wall, during excavation works.

Aging was another serious cause of decay in combination to all factors above and particularly in cases of poor building materials, such as mud mortars. Weathered mortars, followed by loss of adhesion to stones, local masonry destruction, rotten wood and loose timber joints, cracks and deformations on masonry were some of the most common problems that appeared on the superstructure.

#### **5. METHODOLOGICAL APPROACH**

Most of the Byzantine and post-Byzantine monuments of Prespa district have undergone many alterations and renovations throughout the centuries, so that they are adapted to the needs of the period. Most of those alterations are of historic value as well, because they add important information to our knowledge about the history of the region. Therefore, before and during restoration works, full documentation was carried out. This included architectural drawings of the present condition, relevant historic and archival evidence, history of the phases of construction, detailed site investigation, archaeological excavations and detailed photographs. The purpose was to distinguish, investigate, date, if possible, and evaluate the different structural phases and their characteristics for each building. Comparative and parallel work to different monuments at the same time was decisive. This would not only help to broaden knowledge about the past, but also affect the decision making for the new interventions and preserve, if possible, old technologies.

Furthermore, visual inspection of each monument in parts and as a whole was made and every defect was recorded, so that their structural behavior and the causes of their decay could be, if possible, fully understood. This would lead to the possible minimization of interventions, so that a great deal of the authenticity and consequently of the historic value of each monument would be preserved.



## 6. CONSERVATION WORKS.

Two different types of monuments were restored: monuments in ruins and whole buildings. The program contained conservation, consolidation and promotion including the arrangement of the surrounding area, archaeological excavation and research and conservation of frescoes. Minimization of interventions, which was one of the main targets throughout the conservation works, was not always possible, because of the extended deterioration observed, especially in the ruins. In case of whole buildings, restoration had the character of consolidation or conservation of the existing structure, in respect to history and all structural phases of the building. In the case of ruins, effort was made to keep the present image. Reconstruction was quite limited and was made only for stability reasons.

Pointing and very limited grouting were used for the consolidation of masonry, while, in some cases, deeply rotten wooden ties were replaced. Roof conservation included mainly the replacement of broken tiles and in some cases the replacement of their rotten timber parts. Floors were repaired or completed, when there was full archeological evidence for it. In case of not enough evidence, or for aesthetic and documentation reasons, graduated sand-gravel was used as a final layer. In case of reconstruction, a scotia (concave moulding) was set into the masonry to distinguish the original construction from the recent one. At the same time a program for the conservation of frescos was started and is still in progress. Additional works at the direct environment, such as widening, paving, external lighting were also carried out. The most representative examples are presented below.

### **Basilica of St. Achillius (10<sup>th</sup> century).**

The church, preserved in ruins, is exceptionally large. (Fig. 2) It was fully excavated in 1960s by prof. N. Moutsopoulos. All ground plan has been saved and permits understanding the whole arrangement and typology of the building, its function and its construction. The coins found during the excavation in Basilica prove that the church functioned until the middle of the 15<sup>th</sup> c.



**Figure 2. St. Achillius.**

All masonry and especially mortars suffered considerable deterioration as the result of century's exposure to the weather conditions. Slight inclination from vertical was noted to the piers of the north – east part. The preserved parts of the floor were badly deformed. Furthermore, occasional interventions with excessive use of cement caused either further deterioration of structural materials or aesthetic problems.

Excavations, carried out at the south of the church, brought to light a cemetery with 160 graves, which date from the mid- and later Byzantine periods, as well as the outline of a three-

room annex to the basilica, used for everyday rather than liturgical purposes, as Dr M. Paisidou, archaeologist, claims.

The conservation of the existing structure contained extended pointing of joints at a depth of approximately 5cm to prevent further deterioration and to protect the original mortar behind it. All concrete or mortar caps on top of the walls, built to protect them from rainwater, were removed, as they were not effective and, they caused deterioration on the masonry below. A sacrifice layer of stone masonry was built instead, where waterproof material was added to its mortar, to increase its resistance to water penetration.

Limited rebuilding for structural reasons was carried out in the northern row of pillars, while in 1989 the two doorway arches between the diaconicon and the nave had also been rebuilt for static reasons. At the east part of the northern row of pillars two pillars have been preserved almost in full height and between them one more at a lower height. The north part of the sanctuary has also been preserved at a large height, while all connecting arches had been destroyed. In 1899 this part of the monument was still standing complete, with all arches in place, as two photographs taken by Miljukov at that time show. In the mid - sixties, photographs taken during the excavation works show that on one pier the genesis of the upper arches was still in place. During the recent restoration, traces of lower row of arches were only saved to the two taller piers. Those traces, together with the old photographs, gave enough information for a safe reconstruction of the lower row of arches. A concrete slab, constructed in the sixties for stability reasons, was removed and three arches were rebuilt.

Finally the floor has been repaired in parts by removing the stone slabs, stiffening the soil underneath at a horizontal level and repositioning the slabs at the same place. The destroyed parts were completed with sand - gravel.

### **St. Demetrios.**

St. Demetrios is positioned on the island of St. Achillius and is also preserved in ruins. This small church has been the object of extensive intervention. The extent of the damage it has suffered has created considerable uncertainty about its original form and the history of its construction. While the excavation work carried out in 1995 by Professor N. Moutsopoulos unearthed the perimeter of the building, previously buried under an accumulation of foliage and rubble, it did not, however, provide much additional information. The iconography of the monument dates from the 14th century, and has been used as a reference point for the dating of the building itself. Current indications, however, suggest that an older church once occupied this site, parts of which were preserved when the present building was erected in the 14th century.

The century's exposure of the ruins to weather conditions caused bad damage and the superstructure left was ready to collapse. Parts of the sanctuary and the south wall were preserved at a larger height. A photograph taken by S. Pelekanidis, archaeologist, in 1950s showed a larger part of the sanctuary and the small window on it. Detailed measurements on site together with the photograph permitted a pretty safe reconstruction of the window of the sanctuary. Parts of the sanctuary apse, including its window, the southern wall and the partition wall between the narthex and the nave were rebuilt, in order to be connected together and be stabilized. A concave moulding set into the masonry distinguishes the original construction from the addition. Furthermore, the existing masonry was carefully repointed, and, where necessary, mortar was injected to fill gaps and tie the whole together. The rest masonry of the building was at foundation height. It was also repointed and a sacrifice stone layer was built above, to protect it from rainwater, in the same way to the basilica of St. Achillius. The rehabilitation of the interior, which was excavated right down to the rock, required the addition of earth material, stiffened and covered with graduated sand-gravel.



### St. Germanos (11<sup>th</sup> century)

Built at the beginning of the 11<sup>th</sup> c. St. Germanos is a cross – inscribed church with a dome rested on four massive pillars. There are three layers of frescoes. The oldest was painted at the beginning of the 11<sup>th</sup> c. and it probably coincides with the building of the church, the second is from the 12<sup>th</sup> or the beginning of the 13<sup>th</sup> c., while the last layer was painted in 1743, according to an inscription. Today the church is covered with frescoes of 1743, while traces of the others can be seen at certain parts of the walls. Architectural, iconographic and excavating observations indicate that the monument has undergone different alteration and renovation during the course of its existence. Most obvious were the changing of its entrance, the building of a three aisled basilica in touch to its western façade in 1882, the plastering of the other three facades in 1950s, and the covering of the floor with cement. Furthermore, bibliographic research and old photographs indicated that underneath the plaster interesting masonry was preserved with tile decoration and, yet, the height of the external walls and the roofs was increased.



Figure 3. St. Germanos.

The church was preserved in pretty good condition. Rising damp was one of the problems to be solved as well as occasional cracks on masonry. The aim of the project was to face the problems above and to improve the image of the monument by intervening to it and to its direct environment.

Before the beginning of the works trial sections were made on different positions of the external walls to reveal the masonry underneath and its condition. It was proved that most of it was in relatively good condition, preserving most of its tile decoration. Excavation works were carried out to the floor of the church to investigate the existence of older floor underneath the cement. Throughout most of the main body of the church and the narthex, a disturbed non - pointed floor of large irregular flagstones was revealed, while in the central part of the sanctuary and the prothesis an undisturbed floor of pointed brick was uncovered. Certain sections to the ground in touch to the three facades uncovered a very shallow foundation, positioned directly to the rock, while further sections to the ground on the east and south part of the courtyard showed that there were not any archaeological findings at that area.

During the conservation works all plaster of the facades was removed. (Fig. 3) The original masonry brought to light has tile decoration and is reminiscent of the monuments of the same period in the area and especially in Kastoria. All initial decorative strips at the top of the walls, underneath the roof, were destroyed and replaced by later and simpler. Both conches of prothesis and diakonikon were mostly rebuilt, while the height of the external walls and the



drum of the dome was increased. Furthermore local interventions were made for repairing reasons.

The condition of masonry was fairly good. Mortar was deteriorated, mainly on the walls of the narthex. Pointing was confined only to the deteriorated areas, while later interventions were preserved and conserved. The flagstones of the floor were fixed with mortar. Cleaning and consolidation of frescoes has also started and is still in progress.

Extended works were also made in the courtyard, so that the church is improved and also the church, at a lower level from the street that passes in front of it, becomes visible. The courtyard was broadened and three levels, which guide gradually from the entrance of the courtyard to the entrance of the church were created. The whole was covered with granite, a local material widely used in the area.

### **St. Nikolas, Pili (14<sup>th</sup> century?)**

It is located very close to the western shore of Small Prespa. It belongs to the triconch type. Though at a first glance the building appears to be very symmetrical, symmetry does not exist. The church was covered with a dome with a drum, which was destroyed during the second world - war. Masonry has rich tile decoration, with horizontal brick courses and vertical bricks, which surround the stones, while further brick ornamentation makes the whole unique in the area. Lime mortar of very good quality was used, which still keeps its stiffness. Traces of frescoes indicate that it was painted all over.



**Fig. 4. St. Nikolas in Pili.**

The monument suffers from its exposure to the weather conditions. Additionally, it gets flooded during winter and spring, due to its neighboring to the lake. This causes salts from rising damp and decay to the foundation.

The conservation project, still in progress, retains the present image of the monument. A photograph of the south façade, dated from 1899, presents the dome and parts of this façade, destroyed today. This picture, together with traces on the wall (Fig. 4), permit a reconstruction of this part of the monument, some of which will be rebuilt, mainly for educational and documentation reasons.



## The Hermitages of Large Prespa Metamorfosis (13<sup>th</sup> c.) and Panayia Eleousa (15<sup>th</sup> c.)

These are the oldest surviving hermitages in Large Prespa, built in a cavity of the rock, both approached by boat. They preserve their small church, while ruins of cells are spread around. The churches are single-cell structures, barrel-vaulted. Panayia Eleousa keeps its initial form (fig. 5). Metamorfosis was enlarged by moving back the western and northern walls. A timber roof covered the addition. The southeastern section of the church is thus the only surviving part of the original building, with traces of wall painting still visible on the vault.

In Panayia Eleousa the interior walls are entirely covered with painted decoration, while on the outside, the plaster covering the stonework has on the southern and western part of the facades been over-painted to resemble ornamental brickwork.

Limited repair works were carried out to Panayia Eleousa, especially to consolidate the southwest part of foundation, while more extended were the works to Metamorfosi, including interventions to masonry and roof. Furthermore, the cells were repaired and the environmental space was improved. Frescoes were partly cleaned and consolidated and archaeological research was made to Metamorfosis to reveal the initial size and form of it.



Fig. 5. Hermitage of Panayia Eleousa.

## 7. CONCLUSION

An effort was made in this paper, the methodology of process of conservation works to be presented, through the most representative case studies. As shown in brief, all decisions made before and during the works were based on archives and site research. Reconstructions were limited and were made for stability or educational reasons. Detailed notes, photographs and samples of building materials were taken during the progress of works, which are further studied and analyzed to get the most information possible for the monuments and the area and which will be published in future.

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## **Thanks**

The author of this paper is responsible for the whole project. Drs M. Paisidou, archaeologist, is in charge of the archaeological part and Mr. P. Sgouros, conservator, is responsible for the conservation of frescoes. Mrs. M. Kouli and Mr. A. Stoios, architects, were the closest collaborators to the supervision of works. This project would have not been carried out without their participation. Furthermore, a great number of architects, archaeologists, civil engineers, conservators and technicians were partly involved in specific projects.