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**DIPLOMA THESIS:**

**RECORDING AND MANAGEMENT OF BYZANTINE AND POST BYZANTINE  
MONUMENTS IN CENTRAL MESSE니아**

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## **Abstract**

The first Christian community was spotted in Messenia in Koroni, with the foundation of a large early Christian basilica dated back at the 5<sup>th</sup> century. From this time began the period of christianization of the population.

In this thesis the Byzantine churches of the area north of the village of Androusa till the village of Polixni will be presented and examined. Twenty-nine (29) Byzantine and Post Byzantine monuments will be presented. An analytical review of the architecture, history and chronology is given, based on references information, while the problems and solutions for their management will be presented. The reason for the selection of this study area is, because it was spotted a lack of references information and archaeological research in this specific region.

The scope of this thesis is to record, detect, analyze and recognize the problems, and give solutions concerning the Byzantine monuments.

At the beginning of the thesis the historical frame will be given focused mainly in the Byzantine periods. Then, the Byzantine churches will be analyzed. Most of the monuments were visited and an approach of the problems of the monuments will be given, in order to extract possible solutions for the management and preservation of the monuments based on new technologies.

The study area has a high number of important Byzantine churches, both known and unknown to the scientific community. Further investigation for the preservation and protection of the sites is necessary for the Byzantine Heritage of Messenia.

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## Chapter 1

### 1.1. Introduction

Messenia during the Byzantine periods, as most of the places in Peloponnese has faced a multiple of transformations in political, economical and social level. The area changed from the one historical period to the other, and present several peculiarities. The several raids of different ethnic groups revealed an area that was rich in agricultural production, an important trade center for the trade routes, a secure place for inhabitations, and with mild climate. During these periods Messenia was under the power of different groups such as the Venetians, Franks, and Ottomans who left their signs in the area (castles, churches, mosques). During the Byzantine period, Messenia was a remote province of the Byzantine empire and was far away from the central government of the Byzantines, but an important area for the trade routes to the western Europe (Penna V., 2010).

In the second chapter of this thesis the historical frame of Messenia will be given, starting from Prehistory until the Post Byzantine period. The historical frame will be focused mainly in the Early, Transitional, Middle, Late and Post Byzantine periods and their historical aspects.

In the third chapter it will be discussed and analyzed the main architectural types that were constructed in Messenia in different periods. All the Byzantine monuments of the study area will be presented and analyzed divided by their chronology, starting from the Early Byzantine until the Post-Byzantine period.

At the fourth chapter the problems of the Byzantine churches, as well as the problems for the completion of this thesis will be mentioned. Also, in this chapter will be discussed the proposals for the preservation and management of the Byzantine monuments of the area, with multiple solutions, and the enhancement of the monuments with the help of new technologies.

The fifth chapter includes a detailed catalogue of the monuments with information given about their location, century, elevation, latitude, longitude. A catalogue was a necessary step for the creation of archaeological maps. Based on this catalogue, two digital maps were



created of the Byzantine churches, with the use of Geographic Information System (G.I.S). At the sixth chapter the conclusion of this thesis is discussed.

## Chapter 2

### 2.1. Historical Frame of Messenia

Messenia is a region in south-west Greece in Peloponnese and defined at the north from the Neda river and the Arcadian mountains, at the east from the mount Taygetos being the highest mountain in Peloponnese, south from the Messenian bay and at the west from the Kyparissian mountains and the Ionian sea. Northwest of Messenia is the prefecture of Ileia, at the north east is the prefecture of Arcadia, and at the east is the prefecture of Lakonia. Messenia has a population of about 160.000 with the biggest city and the capital being Kalamata an important commercial, economic and cultural center of the region.

According to the myth the first inhabitants of Messenia were Pelasgoi and Leleges and were inhabited the area from Prehistory. The mythical kings of Messenia were Polykaon and Messini. During the Mycenaean period the kingdom of Neleus ruled the region until the Dorian invasion to the Peloponnese, with the capital city of the area being Steniklaros in the northern plain. Sparta wanted to conquest Messenia, as the region had fertile soils and calm Mediterranean climate. Three Messenian wars broke out. The first Messenian war took place at 743 B.C and ending at 724 B.C with the subjection of Messenia to Sparta. The second Messenian war took place at 685 B.C and lasted until 668 B.C, again with the defeat of Messenians. The second Messenian war was under the leadership of Aristomenes, who kept the Spartans away for seventeen years (685-668 B.C). The third Messenian war took place in 464 B.C after a severe earthquake hit and destroyed Sparta. Messenians took the chance to revolt against the Spartans. The Messenians defended themselves for some years but in 454 B.C, again Messenians were defeated by the Spartans. The liberation of Messenians came after the Battle of Leuctra in 371 B.C., when Epaminondas of Thebes win Spartans, and founded in 369 B.C the city of Messene, today the archaeological site of ancient Messene, being the capital of the area. Messenia during the Hellenistic period was independent, but never became a political and financial power. Epameinondas liberated the Messenians, and in order to cease the attempts of the Spartans to enslave again Messenia, established two cities, Megalopolis in Arcadia and Messene in Messenia. In 365 B.C Koroni (today the village of

Petalidi), Thouria and Korifasion were detached from Sparta and a period of political stability followed. Messene became the financial center and other cities of the area were Thouria, Koroni, Methoni, Pylos, Asini and Kyparissia (Panagiotopoulos I., 2010). After the fall of the Theban power it became an ally of Phillip B' of Macedonia and joined the Achaean League. In 146 B.C Messenia with the other states of Greece were under the power of Roman Empire (Kapos M., 1997, Banou E., 2012).

After the redistribution of the Roman state after the death of the great Constantine Messenia and the whole Peloponnese came under the administration of Macedonia. After the death of Theodosius A', the successors Onorios and Arcadios distributed the Roman Empire in half. Arcadios ruled the east part and Onorios ruled the west part. At the end of 4<sup>th</sup> century Goths invaded the region and in 467 and 474 Vandals invaded Messenia. During the reign of Justinian and after the 565 Messenia was a part of the Byzantine Empire. At 750 – 760 Slavs from the north settled in Messenia (Kapos M., 1997).

## **2.2. Early Christianity in Messenia**

At the late Roman period Messenia was a part of the Roman province of Achaia with Corinth being the capital of the province, an administrative regulation that will be maintained later during the Byzantine periods with the creation of the Thema of Peloponnese (Anagnostakis I., 2007). The spread of Christianity in the Peloponnese is attributed to the work of the Apostles Peter, Paul and Andrew. In south Peloponnese a major role in the spread of Christianity played the Corinthian Church (Episkopi), and in the middle of the 2<sup>nd</sup> century Christian communities emerged in the area. There are several reasons for the spread of Christianity in Messenia. First of all, the quick spread of Christianity in the northern Peloponnese, and the trade of the coastal Christians areas like Crete and Ionian Islands such as Corfu and Kefalonia.

The first Christian community in Messenia was founded in Koroni by the Apostle Onesifor, who was one of the seventh Apostles. At the same period many Idolatry monuments were abandoned (3<sup>th</sup> and 4<sup>th</sup> century) as, for example, the big Doric temple of ancient Messene at the end of the 4<sup>th</sup> century. Another testimony of the appearance of early

Christianity in Koroni is the foundation of a large, early Christian basilica, located within the Castle of Koroni. It was built in the 5<sup>th</sup> century AD, with the remains of the church being preserved and exhibited in Koroni museum. Another town with evidence of early Christianity is Methoni, with the basilica of Saint Sophia, situated on the hill of Saint Nickolas above an ancient settlement. Two early Christian basilicas have been spotted in Filiatra which continued to function through the byzantine era, and also an early Christian basilica has been discovered underneath the byzantine church of Saint Andrew near the villages Nea Koroni and Logga. These first Christian monuments are located close to wealthy farmhouses or ancient temples that have been collapsed or looted and their materials have been used in the new constructions (Anagnostakis I., 2007). In Ancient Messene two early Christian basilicas were spotted. An important early Christian site is the catacomb cemetery, Catacomb of Methoni named also catacomb of Saint Onesifor dated in the 4<sup>th</sup> and 5<sup>th</sup> century when the underground burial was necessary in the early Christian period. During 12<sup>th</sup> -13<sup>th</sup> century, the catacomb became into a church dedicated to Saint Onoufrios (Mmess, 2018, Panagiotopoulos I., 2012).

Other testimonies about the spread of Christianity in Messenia and especially in the geographical section of Messenia, is the presence at the end of the 3<sup>rd</sup> and in the begging of the 4<sup>th</sup> century of the Bishop of Messene, subsumed at the Metropolis of Corinth.

In addition, other testimonies are the participation of the Bishop of Methoni at the Synod of Sardikis (Sofia) in 343, and the participation of the bishop of Koroni Agathoklis in the Third Ecumenical Synod in 431. Also, Bishop of Messene Ioannis participated in the 4th Ecumenical Synod in 451, and the Bishop of Koroni Afovios participate in both the Synod of Corinth in 458, and the Synod of Constantinople in 459 AD (Mmess, 2018).

In the study area, the archaeological site of ancient Messene has been the political and religious center of Messenia until the 4<sup>th</sup> century B.C. The decline of the economic and social structures of Messene occurred after the earthquake of 360/ 370 A.D, as several buildings were abandoned and with absence of urban planning. The first early Byzantine settlements are situated in the monument of Asclepius in 5<sup>th</sup> and 6<sup>th</sup> century. Stadium and Gymnasium were abandoned between 360/370 A.D. In the south of Arsinoi fountain (Krini), which was not destroyed by the earthquake of 360/370, and was reused in the early Byzantine period, was excavated an early byzantine basilica. The center of the city at the middle of the 6<sup>th</sup> century was transported north of the area of Asclepius and the theatre (Xantopoulou M., 2012).

### 2.3. Transitional Period

During the transitional years in Messenia, the consequences of the raids and settlements of north populations, especially those of the Slavs, are significant. Those inhabitations and Byzantine interventions and relocations weakened a declining population and economic province. For the Byzantines the area of Taygetos, until the 10<sup>th</sup> century, is an area that must be conquered as the Slavs have settled in the mountain, and the Byzantine generals wanted to conquer the region. The Messenian area has an extensive transformation during the transitional period of the 7<sup>th</sup>-10<sup>th</sup> centuries. The new settlements and relocations, the christianize, in the 9<sup>th</sup>-10<sup>th</sup> centuries, of population groups will offer a new dynamic in Messinia. A major change that can be spotted during the transitional period is the new organization and naming of the settlements. The settlements being in the plains and without fortification were abandoned and their populations were moved to towns that had fortifications, castles. The town of Kyparissia is restricted to its castle and is called Arcadia, and its ancient name is no longer used, the ancient Koroni (Petalidi) is abandoned and its name is transferred southern and renamed the town of Asini to Koroni. Also, Pylos, Sfaktiria and Korifasion were named Avarinos and Navarinon. In the study area, Messene-Ithomi was renamed into Vourkanon, the ancient Pharai and Kalamai were named Kalamata and Gianitsa. Slavs controlled the western Peloponnese and Messenia for 218 years from 587/8 to 805/6 during the reign of the emperor Nikiforos A'. In Messenia during the 7<sup>th</sup>-8<sup>th</sup> century it is observed a constant mobility of population from the plains to the mountains, as well as in some cases a coexistence of the locals with the Slavs (Anagnostakis I., 2007).

When the Byzantines began to expand their power to the Messenian inland, the castle of Pharai and Messene-Voulkanos were the main bases for the Byzantines, which repelled the Slavs to the mountains mainly in the Kontovounia mountains and the western slopes of mount Taygetos. When the Messenian peninsula came under the power of Byzantines during the middle Byzantine period, the Byzantines created the Metropoly of Xristianoupoleos, as they wanted to christiniaz the population of the Kontovounia mountains (Anagnostakis I., 2007).

During the 7<sup>th</sup>-8<sup>th</sup> century Messenia was a part of the government Thema of Greece with the seat of the general being in Corinth. The Thema covered an area from the Thessaly

and under and the population was called Elladikoi, Elladites by the Byzantines. At 733 the east Illiriko where the Peloponnese existed, were detached from the power of Pope and subsume to the Patriarchate of Constantinople. The Peloponnese was an indepedent military thema at the end of the 8<sup>th</sup> century, and in the beginning of the 9<sup>th</sup> century it will be organized ecclesiastically with the two Metropolis of Corinth and Patras. The creation of the Thema of Peloponnese is imperative due to the aggressive behavior of the Arabs, Slavs and Frankish in the Ionian and Peloponnese. The campaign of Logothetis Staurakios in 783 in Peloponnese during the reign of Eirinis Athinaias, as well as the constant concern of Nikiforos A' for the region made the Peloponnese a part of the Byzantine empire for the following four centuries. At the end of the 8<sup>th</sup> century the region of Peloponnese was reorganized polically, military and ecclesiastical and the bishop of Patras became Metropoly having under its power the bishops of Lakedemonos, Methonis and Koronis. Messenia was subsumed into the Metropoly of Patras with three bishops of Methonis, Koronis and Xristianoupolis (Anagnostakis I., 2007).

#### **2.4. Middle Byzantine Period in Messenia**

From the 9<sup>th</sup> century and onwards the Byzantine Messenia belongs both militarily and politically to the Thema of Peloponnese with the seat and the general of the Thema being in Corinth. The two Bishops of Koroni and Methoni was subsumed to the Metropoly of Patras and the Ecumenical Patriarchate of Constantinople. Together with Patra, Koroni and Methoni are the main Middle Byzantine maritime trade routes between the east and the west. In addition, they were important points of resistance, supply and shelter of refugees during the 9<sup>th</sup> -10<sup>th</sup> century Byzantine-Arab conflict in the central Mediterranean from Cretan until Sicily. At that period a large number of refugees from southern Italy reached the Peloponnese and especially Methoni. One characteristic example was the monk Athanasios from Catania who went to Patras and after became bishop of Methoni and lived until his death in 879 (Anagnostakis I., 2007).

During 872-881 Messenia and especially Methoni was attacked by the arabds of Crete and Sicily. The Byzantine fleet, which was based in Methoni and Corinth, faced the aggressiveness of the African Saracens who were defeated by the Byzantine admirals Nikitas Orifas and Nasar, who gave as a gift all the ships that had taken over from the Saracens which have large quantities of olive oil (Anagnostakis I., 2007).

The 10<sup>th</sup> century is for Messenia a period of consolidation of the Byzantine mainly with the integration of the population into the Byzantine state and its culture. In Messenia, for the Christianization of the population new local Saints were needed. The two Bishops of Methoni and Koroni will provide the first Saints the Christianity needed, such as the worship of the Bishop of Methoni Athanasios, whose head was in the cathedral of St. John in Methony, evolving in the 10<sup>th</sup> century into a pilgrimage site. Also, Osios Theodoros from Kythera came from a wealthy family of Koroni. The worship of these new Saints remained limited.

On the other hand, the action of Osios Nikonas from Pontos around 970 created the conditions for the development of a Byzantine Saint from the east, who was worshiped in the entire southern Peloponnese and covered an important gap. Osios Nikonas with his missionary work in Messenia and Laconia, has led the southern Peloponnese to acquire its own Saint. As for Messenia, based on his life (Vios) and his actions, Byzantine Kalamata first referred in his Vios in the 10<sup>th</sup> century, as well as the communication routes and geographical continents of the area which has visited (Anagnostakis I., 2007).

In the first part of his Vios dating back to the 11<sup>th</sup> century, Kalamata is referred as an important station on his way, coming from Sparta and Mani, and then he was headed to Koroni and Methoni. Osios Nikonas after the castle of Mainis crossed the Outer (Exo) Mani, reached to Kalamata and then he visited Pylia, the Messenian plain and the area of Arcadia – Kyparissia. This route of Osios Nikonas in Messenia around 970 covers all the well-known geographical districts of the Messenian area such as Mani, the Messenian plain, Pylia and Trifylia. The choice of Nikonas to visit all these areas and the choice of his biographer to refer on his Vios showed their significance in the 10<sup>th</sup> and 11<sup>th</sup> century. Kalamata (Ancient Farai) was an important castle-town as well as Messene-Vourkano, Arcadia-Kyparissia, Methoni, Koroni, all of them referred as main stops in his missionary route (Anagnostakis I., 2007).

In the 10<sup>th</sup> and the first half of the 11<sup>th</sup> century with the consolidation of the Byzantine empire in Messenia, a number of monuments appeared in the inland, the Messenian plain and the surrounding mountainous settlements. It is a period of construction development in the Messenian inland and is connected with the reorganization of older settlements or the establishment of new agricultural villages in several sites mainly in the Messenian plain. Also, churches were constructed in the plain as for example in Messene-Vourkano, Kontovounia

and Pylia. In addition, during this period there is an increase in the olive and viticulture cultivation (Anagnostakis I., 2007).

During the 11<sup>th</sup> century agriculture, industry and trade economy are developed. The increase in agricultural production has led to the development of coastal towns such as Kalamata, Koroni, Methoni, Arcadia-Kyparissia, as they were export centers for the Messenian products. Messenian castles were used as storage facilities of the export products and the Venetians in the upcoming years will dominate the region's trade.

During the 12<sup>th</sup> century in Messenia is observed a commercial expansionist views of new powers of the Mediterranean such as the Normads, Genoans and the Venetians. Methoni and Koroni are towns where Venice has received special privileges from the Komniane government for free trade. In these ports is observed a mobility of traders, crusaders, sailors and within one century these towns suffered from crusaders that caused a lot of destructions in their history. The monuments of this period shows a wealthy and economical flourishing. The fourth Crusade would end the power of the Byzantines in a rich but neglected region of the empire (Anagnostakis I., 2007).

## **2.5. Late Byzantine Period in Messenia**

Messenia after the victory of the Franks in 1205 against the Byzantines of Michael Doukas passed into the power of the western powers, after a battle that took place into an olive grove in the Messenian plain where the Byzantines defeated. This defeat of the Byzantines resulted in the Frankish occupation of the Messenian Plain and its settlements, then they conquered Corinth, having all the Peloponnese in their possession (Anagnostakis I., 2007).

The history of Messinia, based on its written sources, began in 1205 after the conquered of the Messenian castles by the Franks, which have been seriously damaged by the serious destruction caused by the Venetians. In this period, Messenia was passed into western powers for the following centuries (Anagnostakis I., 2007).

After the fall of the Byzantine Empire by the Crusaders in 1204, Messinia, as well as most of the part of the Peloponnese, was under the power of Venice. In the following years the conquest of the Peloponnesian castles was taken over by two Frankish Knights the Geoffroi (Godefridos) A de Villehardouin and Guillaume Ier de Champlitte (Goulielmos

Samplitis). The operations started from Messenia with the easy occupation of the harbors and the castles, with the exception of the castle of Arkadia-Kyparissia which was surrendered in 1205. In 1206, the first skirmishes between the Venetians and the Frankish were taken place. After the signing of the Treaty of Sapienza between the Venetians and the Franks in June of 1209, Venice kept under its rule the castles of Methoni and Koroni with the surrounding areas, and giving the rest of the Peloponnese as a feud to Geoffroi (Godefridos) A de Villehardouin, who was the master of the whole Peloponnese after the death of Guillaume Ier de Champlitte (Goulielmos Samplitis). The state that was created was named Princedom, Principality of Achaea with the capital being Andravida, and Messenia was an integral part (Kappas M., 2007).

Geoffrey divided the princedom into twelve baronys(baronies), and he kept under his administration the fertile Messenian plain, Kalamata, and the castle of of Arcadia-Kyparissia. In the years of his successors and especially of his son, Guillaume (William) B' de Villehardouin, the principality-princedom had a remarkable development. His son was borned in Kalamata and was called also Kalomatis, in order to preserve and strenght his possessions, preserved and extended the existiong castles of Kalamata, Arcadia-Kyparissia etc. Also, he constructed new forts in important points of the princedom, such as the fort of Mainis, Mystras and Leuktro (Kappas M., 2007).

In the ecclesiastical, religion administration, the Villehardouins followed the Roman Catholic Church, but the Greek population did not receive the pressure they had other Latin controlled areas. The bishops of Methoni and Koroni, were under the administration of the Latin Archbishop of Patras, while there are no records for the Orthodox Messenian bishops (Messene, Xristianoupolis etc.). A turning point of the Princedom was the involvement of William in the conflict between the two important Byzantine Kingdoms of the period those of Nicaea and Epirus. In 1259, at the battle of Pelagonia, William was captivated and after two years in order to be liberated, he gave the Byzantines Laconian castles of Mystra, Monemvasia and Mani. This action was of particular importance, as in the next decades it allowed the consolidation and expansion of the Byzantines in the Peloponnese where, with the capital being Mystras, they created the Despotate of Morea. After the death of William B' in 1278, his spouse Agni married the powerful leader of Thebes Nikolaos B' de saint Omer, and the castles of Kalamata and Arcadia-Kyparrisia were under his administration. In order to control better the southern border of his barony, he builded the castle of old Navarino in the ruins of the ancient Pylos. A troubled period was followed for the Princedom with the Anjou



princes of Neapoli being actively involved in the issues of the dynastic succession of the region. This turmoil attempts to exploit various other foreigners that were active in Peloponnese as well as the Greek population of the area (Kappas M., 2007).

In the following years of the reign of the daughter of William named Isabella, the Greek population of the mountainous settlements of Taygetos north of the Messenian plain, escape of the control of Isabella and constructed a castle at Gardiki, where they raid into the Messenian plain. Isabella in order to control them, construct a castle north of the Messenian plain at the location Mila, as well as she construct a smaller fortification up to the hill of Polixni on the remnants of the old Byzantine monastery (Kappas M., 2007). The Slavs of Taygetos in 1292-3 occupied the castle of Kalamata for a while, and in 1320 the Greeks occupied the castles of Akovas and Karytaina. At the same period Messenian Mani passed into the sphere of influence of Mystras. The Anjou house in an attempt to stop the Byzantines, was undertaking an unsuccessful campaign, resulting in another contender in the area of the Florence house of Acciaiuoli, who acquired great property in Messenia. In 1376, the queen of Neapoli Ioanna, in order to deal with the Princedom situation, gave the Princedom to the Ioannites Knights to control the state. The Knights gave the military control of the region to the brotherhood of Navaraion from the Iberian peninsula. When the Knights left in 1381 the Nacarreans settled into the castles of Androusa and presented as the dominant power of the area (Kappas M., 2007).

The situation will worsen over the next years, while in the beginning of the 15<sup>th</sup> century two powerful Italian families competed for the power in the area, those of Zaccaria and Tocco. Konstantinos Palaiologos would took the advantage of the decline of the Princedom in 1420-1430, taking all the areas of the Princedom, including of Messenia, except of Methoni and Koroni (Kappas M., 2007). Venice between the 13<sup>th</sup> – 15<sup>th</sup> century recognized Messenia as a strategic position for merchant shipping and protected the castles of Methoni and Koroni. The Byzantine administration in the region was less than 30 years as Messenia subjugated to the Ottoman Empire. The only resistance was the Venetian administration in the castles of Pylia which were occupied by the Ottomans in 1500 (Kappas M., 2007 p. 143). The first Venetian-Ottoman war (1463-1479) started by the Venetians in order to conquer the whole Peloponnese ended with the conciliation of the Venice keeping only the castles of Methoni and Koroni. The second Venetian-Ottoman war (1499-1503) lasted with the defeat of the Venetians and the whole Messenia region passed into the administration of the Ottomans (Nanetti A., 2007).

## 2.6. Post Byzantine Period in Messenia

Sultan Mehmet B', using as a pretext the weakness of the Peloponnesian authorities to pay the subjection tax, invaded the spring of 1458 in the Peloponnese, reaching Messinia, and two years later a second campaign would take place against Peloponnese. After the victory against the population of Gardiki he continued into the Messenian plain. The towns of Kalamata, Arcadia-Kyparissia, Androusa submitted with many devastations, deaths and captives. Few people found shelter in the towns of Methoni and Koroni which were under Venetian administration. In 1460, started for Messenia and the Peloponnese the long difficult period of the Ottoman occupation, which would be distracted by the short Second Venetian rule. Although in the beginning Mehmet B' implemented a prudent policy for the farmers, recognizing the privileges of the local feudal lords, the living conditions of the Christian population worsened afterwards (Nikolaou G., 2007). Apart from the various taxes (xaratsi, dekaki, spetza etc.), which were paid only by the Christian populations, they also suffered from daily humiliation and discrimination. In addition, they encountered many obstacles in the repairing of the churches, some of which were converted into mosques, and the impact of the conquest was immediate in the ownership of the fields. The Ottomans took into their possession the most fertile lands of Messenia. Many fields were taken by the muslim horseriders named Spaxides, while some christians kept their lands, but in order not to lose their fields and privileges change their religion and became muslims. The only force of spiritual resistance during the Ottoman occupation was the Churches and the monasteries of the region, which kept the people in their faith and traditions (Nikolaou G., 2007).

The situation in Messenia will be completed by the occupation of the castles of Koroni, Methoni and Navarino in 1500 by the sultan Bayezid B'. In June 1500, the Ottomans were moved towards Methoni and on the 9<sup>th</sup> of August the town was submitted, with the slaughter of the men, and the capture of the women and children. Few of them were escaped and moved to Zante and other Venetian areas. On August, the castle of Koroni and the castle of Navarino submitted into the Ottomans. After the conquest of these major commercial cities the situation changed. Christians were expelled from the castles, and only Ottomans inhabited inside the castles (Nikolaou G., 2007). In the spring of 1659 Frangiskos Morosini arrived at the small port of Kitries in Mani, and together with other manioti headed

and captured Kalamata, as well as and other villages of the southwest of Peloponnese. Morosini departed from the area and left many Maniots under the pressure of the Ottomas, and some of them emigrate to Italy. (Nikolaou G., 2007).

### **Second Venetian Occupation**

On the 24<sup>th</sup> of June 1685, arrived in the Messenian gulf the navy of the Sacred Coalition and started to conquered Koroni. On 11<sup>th</sup> of August the Venetians occupy Koroni, on 10<sup>th</sup> of September the fortress of Zarnata, and on 14<sup>th</sup> of September forces of Venetians, Maniats, and Saxon occupied Kalamata. Then they occupied the castle of Old Navarino, the castle of Niokastro, the castle of Methoni and the castle of Arcadia-Kyparissia. Many Ottomans were captured where others left with the Ottoman troops from the Messenian region. This was the second Venetian rule that stared in Messenia for thirty years (1685-1715). The Venetians focused in the distribution of the land and the improvement of the agriculture, as all the olive oil of Messenia was exported to Venice. Also, they tried to increase the population of the region, that had declined during the first Ottoman occupation, due to war conflicts, migration and plague. The population of the plains were increased.

Despite the measures taken by the Venetians, the situation has not changed much in relation to the previous period of Ottoman occupation, as the farmers were obliged to do chores. The situtation was better for the residences of the towns that belonged to higher society as they had some privileges. Moreover, the christian population were dissatisfied by the ecclesiastical policy pursued by the Venetians, which aimed to cutt off the spiritual and economic ties of the local Church from the ecumenical patriarchate of Constantinople, and control the election of the Bishops, although they did not seek to turn the Orthodox population towards the Catholicism. An important personality was the Bishop of Xristianoupoli Athanasios, being an important figure of that period. In conclusion, with the exception of the inhabitants of the towns, most people disliked the Venetians and did not appear willing to fight at their side, when the Ottomans conquered again the Peloponnese and Messenia (Nikolaou G., 2007).

### **Second Ottoman Occupation**

After 30 years since the conquest of the Peloponnese by the Venetians, in the summer of 1715 the Ottoman troops led by the great vizier Ali Kioumourtzi occupied the entire

Peloponnese. The Venetian forces decided to defend in Methoni and in 17<sup>th</sup> of August 1715 the Ottomans occupied the castle causing damages. This is the beginning of the last Ottoman domination in Messenia. After the occupation, many Ottomans returned in their former fields and took back their properties. The fertile lands were gathered in the hands of the powerful Ottomans having big fertile fields named Tsiflikia, where Christian farmers worked. The Christian population were obliged to pay expensive taxes, as they had to do many chores. The community institution helped the Christians to deal with these situations (Nikolaou G., 2007). The Christians were bonded around communities and treated collectively and with solidarity during the Ottoman occupation. Ottomans constituted a minority of the population and lived mainly in the towns and villages. In the mountainous villages lived mainly Greek Christians, while in some villages of the plain lived mainly Ottomans. The population of Messenia during this period was negatively affected by the rebellion of the 1770 horlofika, the migrations and the plague. Messenia produced many products that were exported to the rest of Europe from its harbors, mainly from Kalamata and Koroni (Nikolaou G., 2007).

In 1770 a revolutionary attempt was made by the Greeks, which was instigated by Russia, and in particular by the commander of the Russian naval , Theodoros Orlof. In a secret meeting at the house of Panagiotis Benakis, the Greeks together with the Russians took the decision for rebellion. On the 1<sup>st</sup> of March 1770 the siege of Koroni began, as well as the looting of the Ottoman houses in the countryside by the Maniots. The Ottomans of the Arcadia were surrendered. The attack from the Ottomans and the departure of the Russians resulted in panic and flight of the Greeks. The consequences of the failed rebellion were many as many people have left, the Benaki property confiscated and the invasion of the Turkish Albanians and their devastating raids have worsened the position of the Christian population. The trade also suffered and until 1779 the Christian population of Messinia suffered from the brutality of the Turkish-Albanians. For many years the signs of destruction were visible (Nikolaou G., 2007).

## **Chapter 3**

### **3.0. Byzantine Monuments, Churches of Messenia**

#### **3.1. Early Byzantine Period in Messenia**

During the early Byzantine period, several settlements are found in Messenia, mainly in the coastal areas such as Methoni, Koroni, Petalidi-Asini, Kyparissia, Filiatra, and Avia, but due to limited archaeological research, few scattered finds in different areas of Messenia have been identified. The earliest monuments of that period are dated at the end of the 4<sup>th</sup> and the beginning of the 5<sup>th</sup> century. At that period can be dated the cemetery of Saint Onoufrios outside the village of Methoni. With the existence of Christian cemetery, the existence and spread of the new religion is revealed. The construction continued during the 6<sup>th</sup> century mainly in the coastal areas, and in the mainland of the region can be dated an early Byzantine Basilica in Ancient Messene, as the city continued to be an important center (financially and commercially), during the late Roman and early Byzantine period. All the basilicas constructed in that period were big with nice sculptural architectural decoration, and some of them had mosaics. All these evidences revealed that the region of Messenia had financial and commercial growth (Kakouros I., 2012).

#### **3.2. Transitional Period**

During the Transitional period the Byzantine monuments are fewer. One is located in Koroni, the church of Saint Sophia inside the castle dated in the 7<sup>th</sup> century, in Ancient Messene, the Basilica of the Theatre of the 8<sup>th</sup> century, and in the area of Filiatra, the church of Saint Christoforos of the 8<sup>th</sup> – 9<sup>th</sup> century. In that period many changes have taken place in the Byzantine empire at a political, administrative, military, and ecclesiastical level. In Messenia there are some changes in the organization and naming of the settlements, and the appearance of foreign invasions, first by the Slavs and then by the Arabs that affected the existing settlements and created new ones. The three monuments, Saint Sophia, Saint Christoforos and the Basilica of the Theatre of Ancient Messene are constructed at the end of

the 7<sup>th</sup> and the beginning of the 8<sup>th</sup> century, a period where the Byzantine authorities created the Thema of the Peloponnese (between 784-788), and from the 9<sup>th</sup> century a new era of the Byzantine Messenia began. (Kakouros I., 2012).

### **3.2.1 Early Christian Churches in Messenia of 5<sup>th</sup> -6<sup>th</sup> and Transitional period of 7<sup>th</sup> -8<sup>th</sup> centuries**

In the study area, monuments of early Christian and Transitional periods were discovered in ancient Messene, after extended archaeological research with the excavation of two Basilicas and a Christian settlement.

#### **3.2.1.1. Basilica of Ancient Messene**

A Basilica inside the archaeological site of Messene was discovered in the area of the Agora and north of Asklipeio monument. At that moment only the apse and the chancel barrier, as well as and a thorax fragment have been discovered dating the Basilica to the 5<sup>th</sup> – 6<sup>th</sup> centuries prior of the Basilica of the theatre (Themelis P., 2002).

#### **3.2.1.2 Basilica of the Theatre**

The three-aisled Basilica situated west of the Agora and forty (40) meters southeast of the Theatre, with a length of 38 meters and wide 16 meters was constructed at the end of the 7th century. It has a semicircular arch at the east and a narthex at the west. The three aisles were separated by columns. At the east side of the south aisle was a door leading to a chapel. The narthex and the central aisle had a paved, tile floor originated from the former buildings of late Hellenistic and Roman periods, while the side aisles have soil ground. The angles of the central arch have two pedestals, with the names of Great Alexander and Aristomenis. Their placement in the Basilica reveals the intention of the founders of the church, to associate the new religion with the legendary generals of the antiquity (Themelis P., 2010). The basilica has been continuously repaired with extensions and was functioning throughout the Byzantine era. During the Frankish period, it was used as a cemetery, and at the side aisles constructed arches used for burials. Most of the bases of its Ionic columns are preserved in situ. Around the building, several architectural members of the altar are scattered from the first phase of its construction (Chalkia E., 2010).

### **3.2.1.3 Settlements in Ancient Messene**

Small settlement complexes that can be dated from 400 – 600 A.D are located in various areas between the ruins of the Hellenistic and Roman city, in the area of the theatre, at Arsinoi fountain (Krini), in the Agora, east of the Asklepieion, at the gymnasium, and at the area outside the Arcadian Gate. The buildings were small with extensive use of materials from public and religion buildings of the antiquity (Penna V., 2012).

Graves and settlement buildings, apart from the Basilica itself, testify that inhabitation continued in ancient Messene even after the period of destruction, abandonment and collapse of most buildings of previous centuries, dating back to 360/370 A.D (Chalkia E., 2010).

## **3.3. Middle Byzantine Period**

In the middle Byzantine period in the 10<sup>th</sup> and 11<sup>th</sup> centuries a shift is observed in the mainland from the coastal areas, with the number of monuments reaching the number of 26. Also, the countryside of Messenia had a construction development at that time, with reorganization of the old settlements and the establishment of new ones in the central Messenian peninsula. At the coastal areas there are Byzantine churches near Methoni, the church of Saint Basileios near Agaki and the church of Saint Andrew of Logga, where most of the byzantine churches of that period are situated near Ithomi (today municipalities of Messene and Oixalia). The churches have a single nave with wooden or vaulted roofs like Saint John Riganas in Ancient Messene. Three-aisled Basilicas and two-aisled churches like the Saint Nickolas of Zerbisia. Cross-in square churches having two categories, the simple one like Klisa Koukie and Klisa Porti churches in Mauromati, and the compressed ones like Saint Nickolas of the cemetery of Ancient Messene, as well as the transitional type like Saint Basilius in Methoni. During the middle Byzantine period the decorative sculpture of the churches was developed especially in Mani (Kakouros I., 2012).

### **3.3.1. Middle Byzantine Churches of 10<sup>th</sup>- 11<sup>th</sup> centuries**

The 10<sup>th</sup> -11<sup>th</sup> centuries constituted for Messenia a period of consolidation of the Byzantine power in the area, and a number of monuments can be dated in the study area at that period (Anagnostakis I., 2010).

### **3.3.2. Klisa Koukie Mauromatiou**

The Klisa Koukie church situated inside the archaeological site of Messene is dated between 10<sup>th</sup> and 11<sup>th</sup> centuries. It was a cross-in-square church with dome and without narthex. It was constructed with architectural elements of previous buildings (spolia) and with rubble masonry. Today only the ruins of the church remain and it was not possible to identify it due to dense flora (Kakouros I., 2012, Kappas M., 2010).

### **3.3.3. Klisa Porti Mauromatiou**

Klisa Porti church is located north of the Arcadian Gate of ancient Messene and it is dated at 11<sup>th</sup> century. It was a three-aisled, cross-in-square church with dome and narthex at the west side of the church. The church has rubble masonry. Today only ruins of the church remains and it is difficult to locate it due to dense flora. (Kakouros I., 2012, Kappas M., 2010).

### **3.3.4. Saint John Riganas of Ancient Messene**

Saint John Riganas is a byzantine church of Mauromati village up of the Klepsidra spring, dated at the 11<sup>th</sup> century. It is a single nave Basilica with semicircular arch at the east, and is constructed with big carved spolia of the nearby ancient Messene. The church has many alterations. The parts of the Byzantine period are the altar and the south side. The only decorative features situated at the altar, as the church is not painted. The wooden templon of the church has sculpture parts (Orlandos A.K, 1969, Kappas M., 2010).



### **3.4.5. Saint Nickolas of Ancient Messene**

The church of Saint Nickolas is the cemetery church of the Mauromati village inside the archaeological site of Ancient Messene. The type of the church is cross-in-square contracted, with the dome being collapsed altered the architecture of the church. At the north and south side the church has masonry with crosses. The only ceramoplastic decoration is the dentil course on the north and south side above the masonry with crosses. Inside the church does not have frescos, and there are spolia of ancient columns. The church is dated at the second half of the 11<sup>th</sup> century. The access to the church is easy as it is situated near the archaeological site of ancient Messene (Kakouros I., 2012).

### **3.3.6. Saint Nickolas of Arsinoi**

At the village of Arsinoi near Ancient Messene, is situated the one-aisle vaulted roof church of Saint Nickolas dated on the 10<sup>th</sup>-11<sup>th</sup> centuries. The characteristic of the church is the big semicircular arch of the east side. The access to the church is difficult (Kappas M., 2010).

### **3.3.7. Saint Nickolas Zerbisia**

Northeast of Ithomi at the village of Zerbisia are located the ruins of Saint Nickolas church, in a distance of 30km from Kalamata. It was a two-aisle church, with the two-aisles covered with semicircular domes. The outer and inner conchs are semicircular. The church was constructed with rubble masonry. On the east and south sides however, part of a cloisonné masonry is preserved. In addition, some ceramoplastic motifs are preserved. The church can be dated at the 11<sup>th</sup> century (Dimitrokallis G., 1990, Kakouros I., 2012)

### **3.3.8. Saint Constantine of Steniklaros (Alitourgi)**

Outside of the village of Steniklaros is the byzantine one-aisle church of Saint Constantine of the 10<sup>th</sup> -11<sup>th</sup> centuries with the characteristic big semicircular arch on the east

side. It is situated west of the village cemetery. Today the church is restored and has easy access (Kappas M., 2010).

### **3.3.9. Saint John of Steniklaros (Alitourgi)**

Saint John of Steniklaros is a one nave church with no additional spaces dated at the 10<sup>th</sup>-11<sup>th</sup> centuries (Kappas M., 2010).

### **3.3.10. Saint Athanasios of Steniklaros (Alitourgi)**

Saint Athanasios of Steniklaros was a cross-in square type church situated outside of the village of Steniklaros. Today only ruins can be found dated at the 10<sup>th</sup>- 11<sup>th</sup> centuries (Kappas M., 2010).

### **3.3.11. Panaitsa Steniklarou**

Outside of the Steniklaros (Alitourgi) village situated the church of Panaitsa dedicated to Virgin Mary dated on the 10<sup>th</sup> century. It is a three-aisled basilica and the access to the church is not easy due to dirt road (Lyras I., 2010).

### **3.3.12. Taxiарxes Polixnis**

At the village of Polixni, at a distance of about 30km north of Kalamata, up in a hill is situated the important byzantine church of Taxiарxes, which is a former monastery. The church is a cross-in square type with hemispherical dome closer to the west walls, a general characteristics of those churches. The dome is supported in two semicircular torches, which is unusual in the byzantine architecture. The narthex is difficult to be identified as of the length of the church. The conch is semicircular on the east side. Taxiарxes is a transaction of the cross-in square type, and it is observed in southern Helladic space of that period dated at the 10<sup>th</sup> century. The frescos of the temple are badly preserved due to soot (Dimitrokallis G., 1990, Kappas M., 2010).

### **3.3.13. Fonemeni (Faneromeni), Polixni**

Fonemeni or Faneromeni is a one-aisle church situated near the villages of Kalliroi Polixni and Konstantinoi up in a small hill dated on the 10<sup>th</sup>- 11<sup>th</sup> centuries. The access of the church is by dirt road (Lyras I., 2010).

Messenian byzantine churches dating back from the second half of the 10<sup>th</sup> to the first decades or mid-11<sup>th</sup> century are characterized for the simplicity in their shaping, and the single outer surfaces with small openings. The apses have a semi-cylindrical or curved shape, domes have cylindrical drums, and the roofs ends in triangular pediments. The masonry consists of large processed stones, most of times from spolia of ancient buildings. Also, is reinforced with concealed wooden zones at different levels. Domes and arches are constructed with bricks. Decorative brick ornaments are rare, and where they exist usually contains letters of the Greek alphabet or simply geometric motifs. The morphology and the construction of the above byzantine churches constitute a single whole (Kappas M., 2010).

### **3.4.1. Middle Byzantine Churches of the 12<sup>th</sup> century**

During the 12<sup>th</sup> century, the characteristics of the Hellenic school, which is the dominant architectural type of the byzantine churches in the south Helladic area, make their appearance in Messenia. The main features are the single outer surfaces, the flattened pediments, the eight-side domes, the three-side arches, the blocked brick system and the rich ceramic decoration. This is a period of demographic, agricultural and commercial development, and the churches show wealth and economic prosperity. There is a tendency at that period to construct churches nearby the coastal areas, as it is observed a movement of population towards the coastal urban areas, a result of the commercial development. In the study area only few but important Byzantine monuments can be dated at the 12<sup>th</sup> century. The architecture of the byzantine churches can be classified to the general category of the cross-in square type, big in shape, constructed with fine materials and decorated with decorative brick ornaments, marble sculptures and frescos (Kappas M., 2010, Kakouros I., 2012).

### **3.4.2. Panagitsa Valiras**

In the rural area of the Valyra village, about 25 km north of Kalamata, to the west and outside of the village, is the small church of Panagitsa (Virgin Mary). It is a one-aisle tiled roof basilica. Only the perimeter walls of an average height of 3.50 m are preserved from the original building, while the original semi-cylindrical dome, which has been dropped, was replaced with a wooden tiled roof. The church has undergone several repairs and frescos are not preserved. The masonry of the church in its initial phase was made by the block-brick system, with large-scale stones in the lower parts and there are decorative brick ornaments with letters. The church is dated most likely on the 12<sup>th</sup> century (Kakouros I., 2012, Dimitrokallis G., 1998).

### **3.4.3. Zoodoxos Pigi, Samarina**

One characteristic byzantine church of the 12<sup>th</sup> century in Messenia is the Zoodoxos Pigi, Samarina. It was a former byzantine monastery, as the ruins that were discovered nearby included monastic cells and a water tank. It is situated near the villages Kalogeroraxi and Ellinoeklisia and within 25km from Kalamata. The katholikon is a two-column cross in square dome with a narthex and a porch at the west. Above of the porch is the bell tower which is an extension from the Frankish period, dated back to the 13<sup>th</sup> century. At the side views in front of the entrances, there were two-column propyla, with the north one still preserved. The church was constructed with the use of archaeological materials spolia, with limestones from the nearby ancient monuments. The upper part of the church is constructed with the isodomic system, with rich decorative brick ornaments. One striking element is the small barrel-vaulted room of unknown use, which is found at the north side of the church and in connection with the north propylon. The barrel vault is constructed according to the cloisonné masonry. The ceramoplastic decoration is found mainly above the windows and is composed by dentil courses, brick apses, tables and two pilgrimages (Kappas M., 2010, Kakouros I., 2012).

In the interior of the church, frescos of the “academic trend” of the late-Komnianeian paintings show the relationship with Constantinople art of the late 12<sup>th</sup> century. At the apses there are monumental in size scenes of the Christological cycle, with a variety of colors. The

illustration program starts with scenes of the Old Testament at the angular parts, and finishes with the scenes of Dodekaorton. At the Sanctuary the scene of the Christ in the death shroud, indicates the Christological fights occurred inside the byzantine church during the reign of the Komninan dynasty. The floor is decorative partly with marble mainly in the Sanctuary, nave and the narthex. Works occurred at the frescos of the church, for the preservation of them with the use of photometrical technique, for the determination of the proper conservation materials for the frescos (Kappas M., 2010).

Another important architectural characteristic of the Zoodoxos Pigi, Samarina monastery is the marble altarpiece and two shrines from the Samarina workshop of the 12<sup>th</sup> century (Kappas M., 2010).

From the byzantine monuments of the 12<sup>th</sup> -13<sup>th</sup> centuries in Messenia (Samarina, Andromonastiro) can be claimed that, there was a group of people that financed the decoration of the churches with impressive frescos.

#### **3.4.4. Saint Athanasios of Kalirroï**

Saint Athanasios is a three-conch byzantine church with narthex in the west, being transformed in the recent years dated on 12<sup>th</sup> century. It is located in the village of Kalliroï in northern Messenia. The dome of the church has collapsed and a major part of the walls have been rebuilt. The architectural type of this church is limited in the Peloponnese. The access of the church is difficult as of the dense flora (Kappas M., 2010).

#### **3.4.5. Palaia Episkopi Androusas**

At the ground floor of the old Gymnasium high school of Androusa, are the ruins of the important Byzantine church, as the locals named it, Palaia Episkopi. By the morphological characteristics of the church it can be dated at 12<sup>th</sup> century (Kappas M., 2010).

During the 12<sup>th</sup> century important Byzantine churches of Messenia were constructed, as it is a period of economical, demographical and commercial growth. It is noted that the new monuments are being built closer to coastal areas, while in the mainland of Messenia the

churches were fewer due to the inhabitation of the population from the mainland to the coastal areas, as a result of the trade development of olive oil. This growth was motivated by the presence of Venetian traders in the coastal areas and the trade privileges that were given by the Byzantine authorities of the 12<sup>th</sup> century. Most of the churches belong to the type of cross-in square, are big in size and constructed with fine quality materials such as ceramics, marble sculptures and frescos, which reveal a wealthy period for Messenia (Kakouros I.,2012).

### **3.5. Late Byzantine Period**

During the late Byzantine period in Messenia, it is apparent an expansion of church architecture especially during the first period of Frankish occupation, and with most of the parts of Messenia being under the control of the Princedom of Achaia. There are monuments such as the church of Saint George at the cemetery of Androusa having both Byzantine and Latin characteristics. At the rest of Messenia, there are churches in the coastal areas whereas in the mainland churches are fewer. The churches of the 13<sup>th</sup> century were small in dimensions with multiple architectural types, constructed by the local population, with the appearance of the cross-shaped type and the one nave three-conch church like Saint Blasios in Balyra. A number of churches of the 13<sup>th</sup> century have frescos especially in the region of Mani. Byzantine churches of 13<sup>th</sup>-14<sup>th</sup> century can be found in the southeast areas like Kalamata, Avia, Thouria and Leuktro and few can be spotted in Ithomi like Saint Spyridon of Zerbisia. The number of churches having frescos is fewer than the previous period (Kakouros I.,2012).

Late Byzantine churches of the 14<sup>th</sup> century founded in the mainland Messenia (Saint Kyriaki Pidimatos, Saint Charalampos, Saint Spyridon and Ipapanti of Agrilos and Saint Marina of Lagkadas), and at the 14<sup>th</sup> – 15<sup>th</sup> century can be dated the churches of Saint Nikolaos Proastiou, Trikampanos Kastanias, and Saint Paraskeui Platsas belonging to the cross-shaped type. Churches are widespread all over Messenia, with the region of Mani having a rapid growth being close to Mystras. At the rest of Messenia which was under the Frankish occupation the churches are few, in small cross-shaped dimensions, with ceramoplastic decorations and with the combination of Byzantine and Latin characteristics. At the 14<sup>th</sup> -15<sup>th</sup> centuries a decline of the economy has led to the construction of smaller churches. From 1460 when the Ottomans occupied Messenia construction development declined (Kakouros I., 2012).

### 3.5.1. Late Byzantine Churches of the 13<sup>th</sup>-14<sup>th</sup> centuries

During the late-Byzantine period is observed a development of the ecclesiastical architecture and especially at the first period of Frankish rule at the 13<sup>th</sup> century when Messenia is a subject of the Princedom of Achaea. The Byzantine churches of that period are located in the coastal areas, as well as in the mainland of the Messenia. Some of them are situated in the already existed villages, as for example the Saint Vlasios in Valyra, and Saint George in Androusa. Architectural types of the byzantine churches of that period are the cross-shaped and one-nave churches. It is also obvious the mixture of Latin and Byzantine characteristics in the architecture, as can be found for instance at Saint George of Androusa.

### 3.5.2. Andromonastiro

One of the most important monasteries of the late Byzantine period in Messenia is the Andromonastiro, dedicated to Transfiguration. It is situated southeast of the village of Petralona, in an iconic landscape near Ancient Messene. It is a cross-in-square type church, with an octagonal dome of the group of the semi-composite quadrillion (four-column). The four columns of the dome are spolia. The two east columns have a capital of the Doric type, maybe from the nearby ancient Messene.

In its initial form it was by open porticos at the north, west and south sides, reminding the nearby church of Zoodoxos Pigi, Samarina. The main church stands on a complex of vaulted structures that cover the most important source of the wider area, while a well-organized pipe system served for the water management. After the erection of the Katholikon a small vaulted room, probably a chapel dedicated to Prophet Elias, was added to the south of the relevant cross-arm.

The main church (Katholikon) has an exonarthex and narthex and side porticoes. The north arch (gallery) at the east is a chapel of Saint Aikaterini. The floor of the church (Katholikon) was decorated with an elaborate opus sectile mosaic, part of which was revealed and conserved in the narthex. The original marble templon is considered to be a creation of

the famous masons' workshop that created the templon of the church of Zoodoxos Pigi (Samarina). The carved architrave of the original templon nowadays tops the Katholikon's later built altar screen, and can be dated to the 18<sup>th</sup> century, according to the style of the wall-paintings that decorates the frontal side representing the Christ, Virgin Mary and Saint John the Theologian. The nave is decorated with wall paintings and now are partially preserved, having been covered almost entirely with several coats of lime. Three main painted layers, dating to the thirteenth 13<sup>th</sup>, seventeenth 17<sup>th</sup> and eighteenth 18<sup>th</sup> centuries, were uncovered during conservation. A natural spring still runs underground of the main church, which was the main stream of the near village of Androusa. From all the monastery complex only the holy Trapeza north of the Katholikon is dated at the late byzantine period as the tower, the cells of the monks, the "hagiati" were built in 1753, according to an inscription. One of the last renovations of the monastery complex of Andromonastiro is the dedication of the Saint Aikaterini north chapel. This dedication took place in 1786, as it is informed by a letter of the Patriarch Prokopius Pelekasis. The Andromonastiro was serving as a metoxi for the monastery of Saint Aikaterini of Sinai hence the dedication of the chapel (Kappas M., 2010).

The architectural remains are an unequivocal fact of the long prosperity of the monastery. Abandoned for many years, the complex was spared of modern alterations and thus retained many of its original features, which are valuable for the study of the development of monastic architecture.

Built on a partially artificial west to east sloping terrace, the fortress like complex comprises buildings of various periods and functions with an irregular ground plan. To the north, a row of buildings comprises the refectory and adjacent tower, the bakery, and a two-storey multipurpose building, through which one enters the monastery by a vaulted passage. To the west is another two-storey wing with storerooms, stables, and a wine cellar on the ground floor, as well as monks cells and the synodikon (reception hall) on the first floor. A three-storey tower, which once housed the monastery's hegoumeneion (abbot's quarters), rises at the west wing's south end. A stone-built enclosure wall surrounds the complex.

### **Restoration works**

The monastery was completely abandoned and left to decay during the last four decades which deteriorated its state of preservation. The refectory and the adjacent tower presented severe static problems and were about to collapse. Inside the main church



(Katholikon), the wall paintings were almost entirely covered with plaster, as were also the interior of the chapels, narthex, exonarthex, and parts of the exterior's original cloisonné masonry. In 2010 the Messenia Prefecture took the initiative to fund the study for the restoration of the monastery by the Greek government and the European Union (ESPA), carried out by the office of the architect- conservator Sotiris Vogiatzis.

Implemented by the Ephorate of Antiquities of Messenia, the monastery's restoration programme included two projects. The first one entitled "Restoration of the building complex of the Transfiguration Monastery (Andromonastiro)", with 800,000 euros budget, started in May 2011, while the second project entitled "Restoration of the west wing and covered passage building of Transfiguration Monastery (Andromonastiro)", with 1,150,000 euros budget, started in August 2013, The projects were part of the priority axes - Sustainable Development and Quality of Life in the Peloponnese of the Operational Program Western Greece- Peloponnese- Ionian Islands 2007- 2013. In addition to the Ephorate's permanent staff, the projects employed forty five short-term employees (three archaeologists, two civil engineers, one architect, three conservators, thirty four skilled artisans and two accountants, (Ephorates of Antiquities of Messenia).

The restoration works included: the repair of the roofs, the consolidation and filling of the joints and the restoration of the decorative brickwork. Conservation occurred at the wall-paintings and the opus sectile pavement of the narthex, while the rest of the floors were repaired. Also, new doors were installed at the two outer gates of the exonarthex and the wooden door of the main entrance was restored. Furthermore, window barriers were placed at the windows of the nave and the chapel of Prophet Elias, and metal frames with glass panes were used in those of the Post-Byzantine additions. The restoration works finished at the December of 2015 (Ephorate of Antiquities of Messenia).

Despite the local legend that the establishment of the monastery was dated back to the reign of Andronicus B' Paleologos, and the older researches dated the main church (Katholikon), at the 12<sup>th</sup> century, newest evidence and elements revealed, during the restoration of the main church, and dating its first structural phase at the first quarter of the 13<sup>th</sup> century. Andromonastiro Katholikon represents one of the most significant monuments building in the Peloponnese, right after the installation of the Franks in the region and the foundation of the Principality of Achaea (Kappas M., 2010, Ephorate of Antiquities of Messenia).

### **3.5.3. Saint Lazarus near Andromonastiro Monastery**

In a short distance northeast of the monastery is the abandoned cemetery church of Andromonastiro dedicated to Saint Lazarus. It is a late Byzantine church as deduced from its architectural details. There was a marble sarcophagus with carved crosses which is now at the bishop's megaron of the Holy Metropoly of Messenia (Kappas M., 2010).

### **3.5.4. Saint Vlasios of Valyra**

The ruined church of Saint Vlasios is a small Byzantine church located east and in short distance from the village of Valyra, north of Kalamata. It is a one-aisle three-conch church with a dome that has fallen, and the walls are maintained at a normal height. The walls consisted of decorative brick ornaments, with the use of bricks giving the impression of a block brick system and having a variety of clay decoration. The church was probably a chapel of a wealthy family and dated at the late byzantine period of the 13<sup>th</sup> century. The 26<sup>th</sup> Ephorate of Antiquities restored and secured the building, but today dense flora made the monument not accessible (Dimitrokallis G., 1998, Chalkia E., 2010).

### **3.5.5. Saint George of Androusa**

At the village of Androusa, in the cemetery, is situated the byzantine church of Saint George near the castle of the village. It is a cross-shaped church, where the transverse apse has collapsed and replaced with roof, changing the shape of the church into a basilica. It has a triangular arch at the altar, and two door openings of gothic architecture at the north and west side. It is constructed with the block brick system. Better is preserved the northern opening with the characteristic peaks and the construction of carved stones with hidden joints. The gothic Frankish architecture assimilated together with the byzantine during the 13<sup>th</sup> century. Another characteristic of the temple is the rich decorative brick ornaments with crosses from bricks at the conch of the altar. Saint George is dated at the middle of the 13<sup>th</sup> century. The 26<sup>th</sup> Ephorate of Antiquities restored the church and revealed the older stone-paved ground as

well as splinters of the initial frescos and the original Holy Trapeza (Kakouros I., 2012, Kappas M., 2010, Odysseus, 2012, Chalkia E., 2010).

### **3.5.6. Saint Spyridon of Zerbisia**

At the cemetery of the village Zerbisia, 30km north of Kalamata, is situated the byzantine church of Saint Spyridon. The church has two elongated tile roofs spaces ending in the south to a three side room angle space, and in the north to the semi-circle conch. It is a two-aisle church with the north nave acting as the main church with a narthex, and the south aisle function today as the cemetery church. At the building two phases are distinguished: One of the late-Byzantine, with the small chapel at the northeast corner. A second face of the post-byzantine period is the expansion of the western part, and the addition of the south aisle. Inside the church there are frescos dated to the post-byzantine period of the 15<sup>th</sup> -16<sup>th</sup> century. The church is dated on the 13<sup>th</sup> -14<sup>th</sup> centuries, based on the decorative brick ornaments. The church had stability problems and restoration works took place by the Ephorate of Antiquities. The works included stability works to the walls, the vaulting, and to the arch of the chapel of the south side. Also, the tiled roof of the south chapel was restored and the floor was covered by local plates, after the completion of the archaeological research. The installation of a metallic roof at the ruined part of the church is pending, for the limitation of the damage by the rain water (Dimitrokallis G., 1998, Kakouros I., 2012, Kappas M., 2010).

### **3.5.7. Saint Aikaterini of Lampaina**

Saint Aikaterini is a ruined byzantine church located outside the village of Lampaina. It was a cross-shaped church of small dimensions of 10 square meters and has collapsed after several earthquakes that occurred in the region of Messenia. The church is dated at the 13<sup>th</sup> - 14<sup>th</sup> centuries (Kappas M., 2010).

### **3.5.8. Vraxopanaitsa**

Vraxopanaitsa is a cave byzantine church near the castle of Mila. Fragments of frescos are preserved of Virgin Mary as well as frescos of full scaled prophets dated the frescos at the second half of the 14<sup>th</sup> century (Kappas M., 2010).

A number of churches dated in the middle of the 13<sup>th</sup> and the beginning of the 14<sup>th</sup> century. After 1320 and during the 14<sup>th</sup> and the 15<sup>th</sup> century, there was a decline in the building activity due to economic impacts, and war conflicts between the Frankish and the Venetians. The churches were built to service the local populations, and situated at the mainland. The architectural types are those of cross-shaped, cross-in-square, three-conch and free crosses. Most of the frescos were dated at the 13<sup>th</sup> century. Monuments of the 14<sup>th</sup> -15<sup>th</sup> centuries are few due to the several conflicts between the Frankish and the Venetians. Buildings had small dimensions, revealed the bad economic situation of the population. From 1460 and onwards when Ottomans occupied Messenia construction of new churches stopped (Kappas M., 2010, Kakouros I., 2012).

## **3.6. Post Byzantine Monasteries in Messenia**

In Messenia from the 16<sup>th</sup> to the 18<sup>th</sup> centuries fifteen (15) monasteries were established, of which, in only two cases church of the Byzantine period was used as Katholikon. Those are the monastery of Saint Constantine and Helen (Kalograion) in Kalamata, and the monastery of Grivitsiani Falanthi which was painted in the 16<sup>th</sup> century. In the study area, two important monasteries of the Post-Byzantine period will be presented and one Post Byzantine church located at the town of Meligala.

### **3.6.1. Old Voulkano Monastery**

An important Christian monument of the post Byzantine period is the old monastery of Voulkano. It is situated at the summit of the mount Ithomi above ancient Messene. At the east of the old Katholikon the ruins of the ancient temple of Zeus Ithomatas are preserved. There are different interpretations about the etymology of the name of Voulkano coming from the Sigilia or Xrisovoula of 1769 and 1798, which name the monastery Voulkano. A tablet of 1608 names the monastery as Vourkano (Kalokyris K., 1973, Themelis X., 2003). The monastery pronounced also as Epanokastritisa or Panagia Korifis. A tradition referred that at the old monastery found the Holy Icon of Virgin Mary.

The old Katholikon dedicated to Virgin Mary is a two-aisle church (flat interior ceiling basilica with semicircular arch and many subsequent interventions), with a length of 10, 15X3.50m with semicircular apse at the altar. The church has been built with the use of spolia of the nearby ancient monuments. Also, a rectangular narthex with a bilateral tiled roof chapel is dedicated to Timios Prodromos. At the east is situated the Katholikon, at the south and north the cells of the monks, and at the west the kitchen and the dining room. The entrance of the church is in the middle aisle of the narthex to the south side, and at the northwest is the entrance of the chapel. It is possible also to enter the chapel from the main church from the west. The two sides aisles of the church and the central aisle of the narthex, ending at an apse. Restoration works occurred to the monastery by the Ephorate of Antiquities of Messenia (Themelis X., 2003, Kalokyris K., 1973).

### **3.6.2. Frescos of the Katholikon, Iconographic Themes**

The church and the chapel have been painted by the brothers Dimitrios and Georgios Mosxos from Nafplion in 1608. Frescos dated at the beginning of the 17<sup>th</sup> century. From an inscription it is known that the Mosxos brother painted the church. As for the chapel the name

of the painter is not known, but due to the same technotropy and the same dating it is probable that Mosxos brothers painted the chapel. The style of the Cretan School is dominant in most of the frescos of the Katholikon and of the chapel (Kalokyris K., 1973).

The iconographic themes followed the typical themes of the byzantine art, such as the altar and the main church. In altar in the quarter-sphere of the main apse is the iconography of Platytera, the Ierarxes and Dodekaorton. Underneath the figure of Platytera are developed two iconographic zones. The first is the Communion of the Apostles and the second is the motif of Sillitourgountes Ierarxes. At the arch of the altar are the Prophets Zaxarias, Malaxias, Joel and Moses. At the upper level of the altar the Theomitorical iconographic cycle is dominant, and at the two higher parts of the arch the Dodekaorton cycle. The Annunciation is at the metope of the conch. The Crucifixion scene is situated at the west metope up of the entrance of the narthex, and at the south, west and north walls of the central aisle are frescos of Saints surrounded by blooming flowers. As there is no dome at the Katholikon the Pantocrator (One of the appellations of God. In Orthodox art, Pantocrator is the name of the fresco decorating the center of the dome, depicting Christ as the almighty God and Lord of the Universe) is painted in a medallion at the center of the central aisle. The cycle registered in square and at the side are the four symbols of the Evangelists. Prophets are painted over the Pantocrator facing from east to west of the arch. Full-body Saints constituted the lower part of the central aisle (Kalokyris K., 1973).

### **The south aisle**

At the south aisle of the Katholikon there are iconographic frescos of Ierarxes (Priests), scenes of Saints, female Saints, Military Saints, hymnographers and all the sides of the aisle are divided into three iconographical zones. On the upper zone are scenes and tortures of Saints, at the middle the braces (stitharia) and at the lower are frescos of full-body Saints. At the small conch of the east part is the fresco of Christ as High Priest and at the west wall of the aisle are frescos of Hymnographers Kosmas and Ioannis Damaskinos and underneath them are the Saints Marina, Paraskevi, Barbara and Kyriaki (Kalokyris K., 1973).

### **The Iconographic Themes of the Narthex**

In better condition are preserved the frescos of the narthex with themes from the Second Coming, Akathistos Hymn, scenes of the life and miracles of Jesus, tortures, full-body Saints, and Holy Mary. The Second Coming scene situated up of the metope of the main

entrance of the narthex to Katholikon, and the Akathistos Hymn scenes are at the torches. At the south part of the narthex is the scene of Vrefoktonia and Jesus Dodekaeti and at the southwest part of the narthex is the scene of the Anapesontos symbolized the Passions of Christ and the Resurrection. The south wall has the scene of the Epi Soi Xaire Kexaritomeni and underneath frescos of Saints (Albani B., 2010, Kalokyris K., 1973).

### **The Iconographic Themes of the Chapel**

The iconographic themes of the Chapel of the old Voulkano Monastery were difficult to identify, as for many years the northwest entrance of the chapel was closed and the light was limited due to the lack of windows, and the only entrance was from the narthex. After renovation the entrance of the chapel from the main church opened and scientists were able to identify the iconographic scenes of the Chapel. There are frescos of the Sacrifice of Abraham, at the conch is the scene of the Theotokos Vrefokratousa or Platytera and at the right side is the scene of Christ Zoodotis and Prodromos. Left on the wall is the scene of Theotokos Enthronos and the entrance from the narthex is the scene of the Ten Virgins (Kalokyris K., 1973).

The Mosxos brothers (Dimitrios and Georgios) were important painters of that period and selected to paint many byzantine churches. They probably had a group of people to help them for the iconography of the churches. They followed the Cretan School with Palaiologian standards with the exact design, vivid, bright and clear colors. They used blue versus red and also brown colors (Kalokyris K., 1973).

### **Other Buildings**

The cells of the monks are eight and all of them are stone-built and vaulted creating a courtyard with the church, the kitchen and the dining room of the monks (Vorvilas I., 1989).

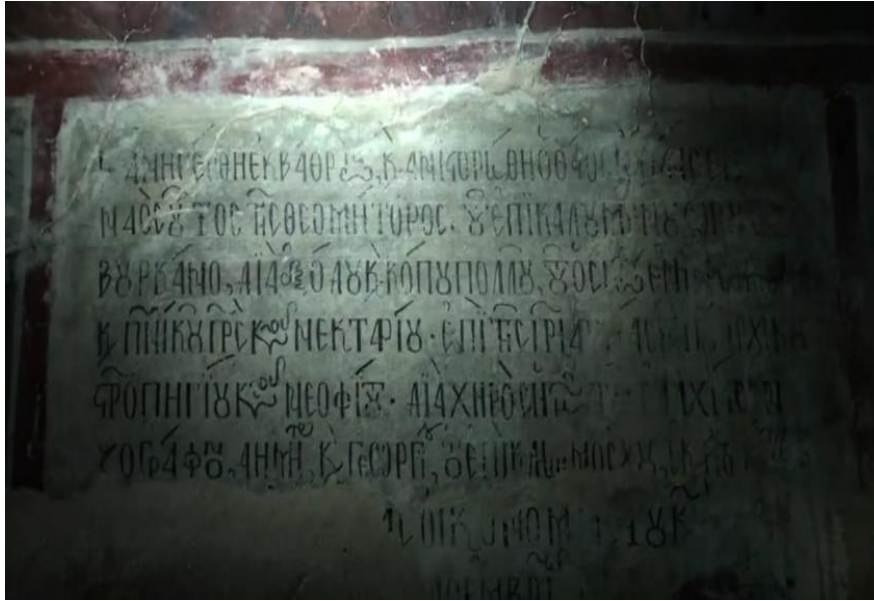


Figure 1. Ctitorical Inscription (<https://www.youtube.com/watch?v=fLOkcAUECRM>)

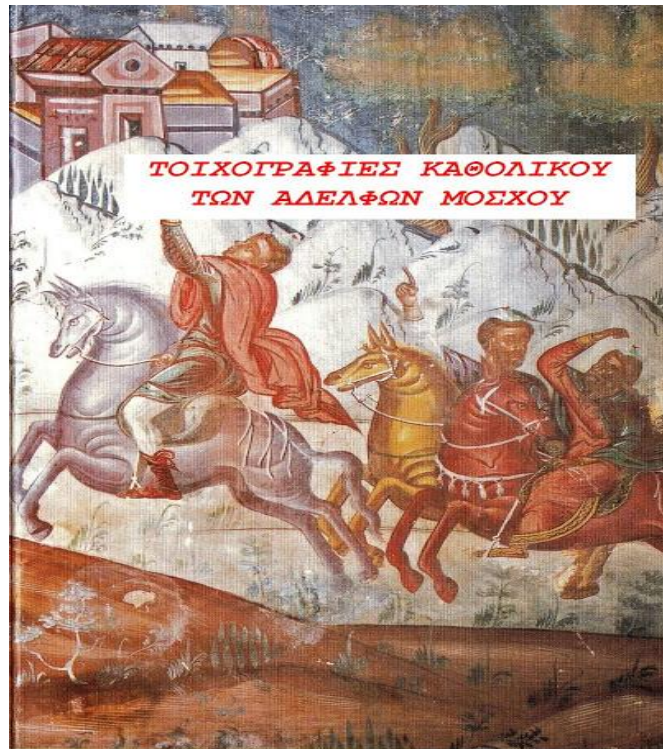


Figure 2. Frescos of Mosxos Brothers (<http://lyrasi.blogspot.com/>)





Figure 3. Frescos of the Katholikon (<http://lyrasi.blogspot.com/>)



Figure 4. Frescos of the Katholikon (<http://lyrasi.blogspot.com/>)

### 3.6.3. New Voulkano Monastery

The new monastery of Voulkano situated in a lower hill of mount Ithomi at 600 meters, using an abandoned Frankish castle having also a natural spring. The reason of relocation of the monastery was due to the bad weather conditions, as it is referred at the monastery file, dated back at the 5<sup>th</sup> of March 1625. The old monastery was built at the summit of the mount Ithomi at 800 meters height, and it was exposed at the bad weather conditions during cold winters. The area of the new monastery, which was purchased at 1625 for 10.500 grosia, from the father of Memetaga of the Androusa village, was a spacious and flat place for relocation. The monastery has an east and south view of the Messenia peninsula surrounded of small hills being visible from various places of the peninsula. The buildings of the monastery were not built at the same time, with the first rooms being at the southeast side of the Katholikon, at the ruins of the Frankish tower, with a tile roof dome being today the Arxontariki of the monastery. The construction of rooms for the new monastery was necessary for the safety of the monks, the accommodation of the visitors and patients, as well as of the severe damage of the primary buildings, after the raid of the Egypt Ottoman army of Ibraim in Messenia at 1825. Major construction works occurred at 1838, 1842, 1858, 1861, as it is recorded at the monastery files and the inscriptions being at the walls of the monastery. At 1838 the southeast accommodation complex for the visitors was built, at 1842 the west complex room, at 1858 the east side complex and at 1861 occurred the construction of the north complex of the monastery. There are also a stable, a yard, and storerooms (Vorvlila I., 1989, Almpani B., 2010).

The monastery host three libraries and a museum. At the museum of the monastery are four 4 Sigilia, (Xrysovoula) of 1853, 1630, 1769 and 1798. The monastery keeps also parts of Saints bones such as Saint John of Chrisostomos, Eudokias, Charalampous, and Dionisios Areopagitis. The monastery played an important role during the Greek Independence Revolution of 1821 and accommodated Greek worriors, giving them also financial support. The first King of the Greek State named Othonas visited the monastery at 1833 and 1840 (Lyras I., 2010, Vorvila I., 1989).

## **The Katholikon of the new Voulkano Monastery**

The Katholikon of the monastery is dedicated to the Dormition of the Theotokos. It is a two columned cross in-square dome church and was the first building of the new monastery, which constructed at 1701 with dimensions of 7 m. X 10 m. It has three protruding apses to the east, all three sided on the outside. The dome is in the form of the so-called Athenian style. It has an octagonal drum made of carved porous stone and adjoining a curved cornice of the same material. On the edges of the sides small porous stone columns are lined, crowned with capitals above, which marble gutters are fixed. The apses consist of carved porous stone and are traversed by beveled cornice at window sill level. The Katholikon was painted with nice frescos with black backgrounds at 1732, as it is recorded at the 12 code file of the monastery by an unknown painter. The frescos suffered severe damage by the raid of Egypt Ottoman army of Ibrahim in 1825 and was corroded, and calcified after the renovation of the church at 1882. The church hosts the important miraculous sacred icon of the Holy Mary Voulkaniotissa. The new iconographic program of the church took place at 1973 by the painter Dimitrios Giannakopoulos (Vorvila I., 1989).

## **Restoration Works**

The project “Restoration of the church of the new monastery of Voulkano” part of the project “Restoration of the Voulkano Holy monastery, Municipality of Messene, Prefecture of Messenia, Region of Peloponnese” was included in the operational program “Competitiveness and Entrepreneurship” with a budget of 260.000 euros. The restoration works were funding by the Greek government and the European Union. It was implemented under the auspices of the Ephorate of Antiquities of Messenia. Restoration works were carried out in the frame of the project were: the removal of the contemporary bell tower and porch, and the removal of the modern cement mortar that covered the external surfaces of the church and dome. Another works were the restoration and completion of the porous stone cornices, and the examination and consolidation of the foundations of the church. Also, the restoration works included the sealing of joints on the sides of the church and dome using compatible mortar, the removal of old roof tiles, dome and roof consolidation, as well as the tiling of the dome and roofs with handmade Byzantine type tiles. Furthermore, the works including the construction of a new single-lobed bell tower at the west end of the church, and the construction of a new porous

stone porch with wooden roof. At the surrounding area occurred small- scale works of repair and paving of the floor (Ephorate of Antiquities of Messenia). The opening of the new monastery of Voulkano was at the 12<sup>th</sup> of August 2018.

#### **3.6.4. Metoxia – Dependencies – Land of the Monastery**

The new monastery of Voulkano has three 3 land ownerships the first one is the old Monastery of Voulkano with the Katholikon of the Holy Mary of Korifis (Top) or Epanokastritsa at the top of the mount Ithomi, the second one is the Andromonastiro Monastery with the church of Transfiguration and the third one is the Zoodochos Pigi (Life Giving Spring) church in Messene (Vorvila I., 1989).

#### **3.6.5. Taxiarches of Meligalas**

Saint Taxiarches of Meligala is of the type of cross-in-square, semi-complex church dated at the 18<sup>th</sup>-19<sup>th</sup> centuries (Kappas M., 2010). The monument suffered by water leak problems while parts of the barrel-vaults had collapsed. The restoration works began with the removal of the landfills from the roof and continued with the cleaning of the vaults. The proper inclined form was given to the roof and was covered with tiles, placed with the according traditional technique (tiles embedded in mortar). Also, craftsmen of the 26<sup>th</sup> Ephorate of Antiquities made the tile-roof of the dome and the apse, whereas the rest of the church roof was covered by a local workshop. The project was funding by the Meligala municipality (Ephorate of Antiquities of Messenia).

The two monasteries of Voulkano the Old and the New, are important Post-Byzantine monuments of the region of Messenia, as well as important pilgrimages of Messenia and Peloponnese, and played a significant role during the Greek Independence revolution.

## **Chapter 4**

### **4.1. Proposals for Preservation and Management of Byzantine Monuments**

#### **4.1.1. Introduction**

Messenia is a region with a great historical significance, which over the years has a rich heritage of ancient and Byzantine monuments and sites. The exploitation and designation of sites of historical importance and their integration into the modern period, are the basic prerequisites for building and highlighting of a particular cultural identity. Archaeological sites are considered to be places where evidences of earlier periods such as buildings, roads, sanctuaries, walls, etc. In the region of Messenia there are a significant number of cultural heritage sites from prehistory until the modern period. Heritage is a broad concept and includes the natural as well as the cultural environment. It encompasses landscapes, historic places, sites and built environments, as well as bio-diversity, collections, past and continuing cultural practices, knowledge and living experiences. It records and expresses the long processes of historic development, forming the essence of diverse national, regional, indigenous and local identities and is an integral part of modern life. It is a dynamic reference point and positive instrument for growth and change. The particular heritage and collective memory of each locality or community is irreplaceable and an important foundation for development, both now and into the future. (ICOMOS, 1999).

#### **4.2. Problems**

At the beginning of this thesis it have been encountered many difficulties. The scientific, archaeological and publication research of the monuments of the Byzantine periods in the study area are incomplete. The researches of the area and general in Messenia, except of few archaeological researches, are focused mainly in prehistoric and ancient sites making the byzantine archaeological research problematic (Penna V., 2010). The archaeological

layers of the medieval, middle Byzantine and late Byzantine period were excavated without being recorded (Xanthopoulou M., 2012). Archaeological research has taken place in the archaeological site of Messene, where two Basilicas and an early Byzantine settlement were excavated giving important information for the early Byzantine period of the study area. Recently, new restoration and preservation works were occurred in monuments of the study area such as Andromonastiro, Samarina, and the new monastery of Voulkano giving new information about the monuments.

First of all, most of the Byzantine churches were visited, which are presented and mention in this thesis. The churches that not visited were mainly in dense flora, making the identification of the churches difficult. Another problem is the existing conditions of some byzantine monuments which are difficult to identify without further research information. In dense flora and ruin conditions were the churches of Klisa Koukie and Klisa Porti near Ancient Messene, Saint Athanasios in Steniklaros, Saint Athanasios of Kalliroi, Saint Aikaterini in Lampaina, and Saint Vlasios in Valyra.

The difficult access was another problem during the completion of this thesis, as many Byzantine churches were in rural areas accessible only by dirt roads, making the approach a demanding process. Churches and monasteries with difficult dirt roads making the accessibility difficult are the Panagitsa of Valyra, Vraxopanaitsa, the old monastery of Voulkano at the summit of the mount Ithomi, Fonemeni, Panagitsa of Valyra, Saint Nickolas of Zerbisia and Saint Lazarus of Andromonastiro,

Furthermore, many byzantine churches are vulnerable in wildfires as of the dense flora around them which is not cleaned during summers. Most of them situated in rural areas, making them prone to forest fires, which are widespread in Greece damaging properties forests and cultivation. For example, Taxiarkes Polixnis is at the top of a forest hill, Klisa Porti, Zoodochos Pigi (Samarina), the old and new monastery of Voulkano are all in rural areas and exposed to wildfires.

Another problem of the study area is the frequent earthquakes that strike in Messenia and southwestern Greece in general causing damages. Most exposed are the churches which are in ruins and churches which are not preserved such as Klisa Koukie, Klisa Porti in Ancient Messene, Saint Vlasios in Valyra, Sain Aikaterini in Lampaina, Saint Athanasios in Stenyklaros and Saint Lazarus of Andromonastiro. The stability of the monuments is a major problem for the preservation of the monuments and for the safety of people.

In addition floods can threaten Byzantine monuments being at the lower levels of the ground or near rivers and streams, as well as at the top of hills by the corrosion of the soil and landslides. Floods can be dangerous for the stability of monuments, and the interior decoration of the churches such as frescos, wooden decoration such as wooden altar e.g. Byzantine churches such as Panagitsa, Saint Vlasios of Valyra being near the river of Mavrozoumena are vulnerable to floods, and so are Saint John and Saint George of Steniklaros being near river.

The byzantine churches of the study area are situated in open areas and are prone to human and animal activities. Agricultural cultivation may cause damage at the churches and especially the ruined ones being most of the time inside agricultural areas. Also wild or domestic animals can destroy the already ruined churches.

Last but not least, the Byzantine monuments of the study area are not gathered and not registered in a detailed map, that can be achieved with the use of new technologies. Register all the monuments in an application can offer a promotion to the monuments and provide with many information about their location, history, their significance, as well as to reconstruct ruined monuments with the use of new technologies.

### **4.3. Solutions and Management**

#### **4.3.1. Introduction**

The conservation of cultural sites can be done through comprehensive approach to management that takes into consideration all of the sites values. Conservation decisions are most effective when they are based on the information gathered during a formal planning process, designed to identify appropriate management actions and practices. Cultural heritage scientists have put a number of conservation principles to guide their work. These principles and practices have taken the form of international charters and recommendations. The most famous is the Venice charter adopted by the International Council of Monuments and Sites (ICOMOS) in 1965. Later, on 1988 the ICOMOS adapted the principles of the Venice charter to local conditions and put them forth as the Burra charter. The principles of the Burra charter have been used as a planning method that improved the management of sites and their conservation. Management approaches must be suited in local conditions and traditions, including economic, political and physical environments. A series of steps must be taken in

logical order for the management plan of a site. It provides a structure for approaching a situation and design solutions for the conservation of the sites. The principal order of a management plan is to conserve the cultural heritage sites. Cultural heritage sites significance can be determined by the values society perceives for it. The values can be aesthetic, historic scientific, social or a combination of all these. Identifying the values of a site and bringing together all those that can influence decisions, that affect the sites is a critical step for the planning process. This information is important for the understanding of the management plan (Torre Marta, 1995).

At the 12<sup>th</sup> general assembly of ICOMOS in Mexico in 1999 the International Council on Monuments and Sites stated the International Cultural Tourism Charter for the Managing of Tourism at Places of Heritage Significance. The charter Ethos stated that the natural and cultural heritage belongs to all people and all of them have the right and responsibility to understand, appreciate and conserve the universal values of the sites. (ICOMOS , 1999).

The ICOMOS also stated that: *Heritage is a broad concept and includes the natural as well as the cultural environment. It encompasses landscapes, historic places, sites and built environments, as well as bio-diversity, collections, past and continuing cultural practices, knowledge and living experiences. It records and expresses the long processes of historic development, forming the essence of diverse national, regional, indigenous and local identities and is an integral part of modern life. It is a dynamic reference point and positive instrument for growth and change. The particular heritage and collective memory of each locality or community is irreplaceable and an important foundation for development, both now and into the future. At a time of increasing globalization, the protection, conservation, interpretation and presentation of the heritage and cultural diversity of any particular place or region is an important challenge for people everywhere. However, management of that heritage, within a framework of internationally recognized and appropriately applied standards, is usually the responsibility of the particular community or custodian group. A primary objective for managing heritage is to communicate its significance and need for its conservation to its host community and to visitors. Reasonable and well managed physical, intellectual and/or emotive access to heritage and cultural development is both a right and a privilege. It brings with it a duty of respect for the heritage values, interests and equity of the present-day host community, indigenous custodians or owners of historic property and for the landscapes and cultures from which that heritage evolved. (ICOMOS, 1999)* Also, ICOMOS adopted some principles for the cultural tourism.



The goals of the International Tourism Charter are the facilitation of those involved with heritage management and tourism, to reveal the importance of heritage and enhance the cultures of the communities, the dialogue between conservation interests and the development of management projects. (ICOMOS, 1999).

## **4. 4. Management**

### **4.4.1. Catalogue**

In the study area of this thesis, an important solution would be the creation of a new catalogue with all the already known byzantine churches and monuments of the region, from the early Byzantine until the post Byzantine period. This would make the work of the scientific community easier for future archaeological researches, as well as it can be useful for the information of locals and visitors, about the byzantine churches of the area and their history, architecture and the significances of the monuments. Catalogues are a useful tool in the archaeological research for the determination of sites, and can be the start point for a complete list of the monuments.

### **4.4.2. Cleaning Dense Vegetation**

Another step for the preservation and management of the sites should be the cleaning from the dense vegetation, in order to be done a more detailed recording assessment and research of the available monuments. For example Saint Vlasios in Valyra it is a ruined church that have been cleaned by the Ephorate of Antiquities but needs again a cleaning from the dense vegetation, Klisa Koukie and Klisa Porti also are two ruined churches that need cleaning, as well as Saint Athanasios of Steniklaros which is also a ruined church needs a cleaning of the dense vegetation. Saint Nickolas of Zerbisia and the cemetery church of Saint Lazarus of Andromonastiro are also ruined byzantine churches, that have been under dense vegetation and cleaning works must be done. Most of the monuments in the study area that needed a cleaning from the dense vegetation were ruins of churches, situated inside fields making the accessibility difficult with dirt roads. Apart from that, Byzantine monuments which are not ruined are few under dense vegetation, and some other were cleared after works

of cleaning. For example Samarina church after the restoration of the Ephorate of Antiquities is in good situation and accessible by car (Demas M., 2003).

#### **4.4.3. Improve Accessibility of the Monuments**

After the cleaning of the monuments from the dense vegetation, it is important to improve the accessibility of the monuments both by car, and with pedestrian sidewalks for walkways. Most of the monuments are in rural areas inside the fields or in top of the hills or even mountains, with not good road connection and in most cases in dirt roads, making the approach to the churches a difficult situation for visitors. Accessibility is an important factor for further exploitation of the monuments, as researchers can approach the sites more easily to exact archaeological researches, for local people to come in contact with the cultural heritage of the area, and for the development of tourism. Apart from that, having at least dirt roads for all the Byzantine monuments should be necessary in order to prevent and take measures for the dangers of wildfires, and the fire trucks can approach the monuments and save the heritage of the area. This is important because most of the Byzantine monuments of the area situated in rural areas and are prone to natural disasters. In that way, the authorities should take all the necessary measures for the protection of the monuments. There are monuments in the study area that is difficult to approach them. For example, the access of the old monastery of Voulkano is by dirt dangerous road making the access to the site problematic. Other churches with dirt road are the Panagitsa of Valyra, Saint Nickolas of Zerbisia, Saint Nickolas of Arsinoi, Fonemeni, Panagitsa of Steniklaros and Vraxopaitsa. There are also churches with better accessibility in the study area making the approach easier for the scientists, locals and visitors. For example, Samarina, Andromonastiro, Taxiarxes Polixnis, new monastery of Voulkano and churches being inside or near villages have appropriate access. The improvement of the accessibility, both by means of transport such as cars or buses and also by path routes, sidewalks and roads being accessible for people with special needs, is an important factor for the improvement of the byzantine monuments of the area. European funding programs such as ESPA (Corporate Pact for Growth Framework) can fund the improvement of accessibility, such as the construction of new roads, sidewalks and path routes. Local authorities can apply for the funding of those programs. Apart from the approach of the monuments by means of transport, there is one other factor that of the inside

accessibility of the Byzantine churches, making them accessible for all people (Naniopoulos A. and Tsalis P., 2008).

#### **4.4.4. Signs**

Signs post is very important for the enhancement of the byzantine monuments making them visible and easy to approach the churches. The signs were spotted in the most remarkable monuments such as Samarina, Andromonastiro, new Voulkano monastery, the big Basilica inside the site of Ancient Messini, Saint John of Riganas in Mauromati, Saint George of Androusa, Taxiarches Polixnis, Taxiarches Meligala. For the other monuments the use of references, was imperative for the visiting of the monuments. Signs are a good tool for information about the exact location of the sites for both local people and tourists. Furthermore, descriptive signs in Greek and English languages can teach and provide useful information about the history and architecture of the monuments. Information of the monuments is important for the enhancement of the sites, and should be placed in every site with detailed information.

#### **4.4.5. Protection from External and Natural Factors**

Protection from external factors is based on the protection of vandalism of the monuments, mainly by humans, as well as from looting of important heirlooms from the churches. There are several physical factors, first of all from natural phenomena like climate change, causing weather extremes nowadays such as floods, instant severe rains causing erosion to the soil near the monuments, with dangers for the stability of them, especially those one being at the top of the hills, or in a short distance of rivers. Earthquakes is a major threat for the monuments, and in the region of Messenia are frequent, threatened especially those monuments without restoration and preservation works. Wildfires are also a major threat and responsible for the distraction of forests, houses and heritage sites.

For the external factors in order to reduce the vandalism and the looting of the monuments, protective fences that will not change the aesthetic of the monuments should be installed around the monuments in order to protect them from vandalism. Also the use of new technologies, such as security cameras and security alarms could be a measure for the elimination of the problem. Furthermore, police patrols could be another option for the protection of the monuments, guarantee the security of the cultural heritage sites. Also, local communities can play an important role for the protection of the churches, organized small groups of people patrolling around the areas of the monuments during the night hours.

For the natural phenomena, erosion control should be achieved for the stabilization of the sites. Techniques can be made from civil engineers and other fields, in order to control the soil, wind and water erosion. Methods can be ranged from high engineered solutions using geosynthetic materials or to simple techniques, such as the use of vegetation to control soil erosion, threatened the stability of the monuments. For the management of the rain waters and the prevention of floods around and inside the monuments, flood control systems can be applied, minimize the danger of flooding at the churches. (Demas M., 2003, MacDonald A., 1990).

The prevention of wildfires is a major issue that Greece deals with, as a number of fires damages hundreds of acres in the country. In order to protect the byzantine monuments of the study area, locals and visitors should be careful about fires when they are at rural forest areas, not placing fires or throw their cigarettes in the countryside, especially in summer. Also, they should inform immediately the Fire Department when a fire is occurred. Apart from that, Fire Department can do fire patrols in rural areas having cultural heritage monuments, especially in summer months (anti-fire period) for the prevention of wildfires. Local people can also play an important role for the prevention of fires by organizing local patrols for the prevention of the fires. Last but not least, the authorities can apply for European funding programs for the installation of fire protective systems such as fire extinguishers and fire alarms to the churches, as well as the installation of fire hydrants outside of the churches for the quicker refill of the fire trucks. All these can improve the fire protection of the monuments.

For the earthquakes conservation, restoration and preservation of the sites where it is needed are important factors for the protection of the monuments. Stabilization and consolidation of the churches is an important factor for the future continuity and enhancement of the monuments (Demas M., 2003).

#### **4.4.6. Preservation and Conservation**

In the study area, there are a number of monuments especially in rural areas most of them in ruined condition that needed preservation and conservation. The Ephorate of the Antiquities of Messenia has done an important work at the byzantine churches of the area, but a further preservation and conservation is needed. A number of churches have been preserved as for example the monastery complex of Andromonastiro, the Zoodoxos Pigi church in Samarina, the old monastery of Voulkano at the top of the mount Ithomi, the recently renovated new monastery of Voulkano, the cemetery church of Saint George of Androusa, and Saint Spyridon of Zerbisia. The basilica of the theatre has been excavated and preserved, as being inside the ancient site of Messene. Most of the churches needed preservation are those in ruined situation mainly with stability and cleaning works such as Klisa Koukie, Klisa Porti in Mauromati, Saint Aikaterini in Lampaina, Saint Athanasios in Steniklaros and byzantine churches such as Panagitsa in Valyra. There are a number of methods for the properly preservation of the monuments. The preservation and conservation can be achieved with European funding programs. For the ruined churches durable shelters can be constructed, in order to protect them from severe weather conditions such as rains, storms, winds and sun radiation (Taylor M., Cancino C., 2005).

#### **4.4.7. Environmental Pollution**

Environmental pollution is also another global factor which has a negative effect on the heritage monument and should be noticed. The environmental contamination can affect the Byzantine monuments, as for example by rain in the form of acid rain. In the study area, the positive factor is that most of the churches are located in rural areas such as forests and agriculture areas. However, there are some churches near the village of Steniklaros of Saint Konstantinos, Saint John, Saint George and Panagitsa, in Meligalas the church of Taxiarches, that are nearby the industrial area of the town of Meligalas. In the recent years, there is an increasing concern about the emissions of the factories that pollute the area. For that reason, authorities should take measures for the reducing of pollution, and the regular control of the appropriate limits of emission, in order to minimize the impacts to the cultural heritage sites of the area.

#### **4.4.8 Archaeological Park**

As the Byzantine churches of the study area are in close proximity to the important archaeological site of the ancient Messene, it would be possible to develop an integrated archaeological park in the area with the combination of both ancient Hellenistic sites and Byzantine monuments of the area. The archaeological site of Messene has two byzantine basilicas and byzantine settlements, highlighting the continuity of inhabitation of the area throughout the centuries. Ancient Messene is an important archaeological site of Messenia with thousands of visitors every year. A useful tool for the enhancement and visiting development of the nearby important byzantine churches would be, the combination of visiting both to the archaeological site and the byzantine monuments in group guided tours, in order the visitors have a complete visit of the area. In that way visitors would learn and inform about the history of the area, and come in contact with the monuments of different historical periods. Being in the countryside both the archaeological site and most of the byzantine monuments could also help the development of alternative tourism in the area with sign path routes, passing from hills, rivers and forests giving to the visitors an unique experience. The archaeological park of Dion in Pieria, Greece is a remarkable example of an archaeological park in Greece, being a large place with sanctuaries, baths, theatres, Macedonia tombs, mosaics, surrounding by lush vegetation, while the river Varifa flows through the archaeological park (Dion, Archaeological Park, 2008).

## 4.4.9 New technologies for the enhancement of the Byzantine monuments

### 4.4.9.1 Introduction

The scope of this chapter is to evaluate the possibilities of enhancement of the Byzantine monuments, with the application of new technologies. In order to understand the technical terms, such as 3D or photogrammy, it is important to define Cultural Computing (CC) in Cultural Heritage (CH).

Cultural Computing (CC) applies computer technology and scientific methods to social science, culture and arts with the purpose to enhance, extend and present monuments to the people (Wang., 2009). New methods in computer technology make possible the recording and manipulation of three-dimensional (3D) data, in several techniques such as computer graphics and reverse engineering. These techniques are used for the studying, analysing, preserving and visualizing Cultural Heritage (CH) assets (Barsanti et al. 2015). The use of immersive technologies in Cultural Heritage have been developed, which provide sensory experiences with combinations of real and digital content, such as augmented-reality, virtual-reality, and mixed-reality technologies. Cultural Heritage has been benefited from the use of new technologies and the people are able to experience cultural heritage in a new way (Kassahun M. et al., 2018).

- Augmented Reality: aims at enhancing the understanding and perception of the real world with superimposing virtual information with the view of the real world.
- Augmented Virtuality: aims at augmenting the virtual world with scenes from the real world.
- Virtual Reality: aims at enhancing the interaction and presence of a person with a computer environment without interaction of the real world.
- Mixed Reality: aims at combining virtual and real environments (Kassahun M. et al., 2018).

New technologies played an important role for the promotion and dissemination of recorded information regarding cultural heritage sites and monuments. Projects integrate a number of modules making the websites a useful tool not only for the tourists, but also for

scientists, using them for research purposes. Web applications are accompanied by archaeological data bases, GIS maps, ethnographic data, videos and photos, 3D reconstruction and visualization models, deviating for tourist and archaeological portals, as they can provide with several information. The sites are not limited to the most significant, but include sites and monuments that are not famous, restored or badly conserved and a number of information can be used for the further study of the monuments. The interest concerning the cultural web applications are: the presentation and dissemination of records of archaeological sites and monuments, the spread of the archaeological information in relation to the cultural or natural environment. Also, applications include the geographic distribution in space, the communication of the results of the surveys and excavations and the innovative techniques promotion such as GIS, and 3D modeling. In addition web applications are related to the development of new education and training models and the tourism promotion (Sarris A., 2011).

#### **4.4.9.2 Cultural Heritage Applications**

A classification of Cultural Heritage application fields is needed in order to understand where augmented- (AR), virtual- (VR), and mixed- reality (MR) can offer succesful solutions. Scientists classify immersive reality in CH as exhibition enhancement, education, reconstruction, exploration and virtual museums.

- Exhibition enhacement can improve visitors experiences at museums and heritage sites, through tour guidance.
- Education provide the users to learn about the historical aspects of intangible and tangivle CH.
- Reconstrucion aims at enabling people to interact and visualize with reconstructed historical aspects of tangible and intangivle Cultural Heritage sites. There are two characteristics differences in this form. It does not refer only in experts and the interaction and visualisation do not refer to the discovery of new sights.
- Exploration can help people to visualize and explore historical and current views of Cultural Heritage sites, in order to interpret, discover and acquire knowledge.



- Virtual museums present tangible and intangible Cultural Heritage sites in the form of digital museums to the people (Kassahun M. et al., 2018).

#### *Exhibition enhancement.*

A visitor's experience enhancement can take place outdoors or indoors, or sometimes both, based on the location of the Cultural Heritage assets. A virtual element such as a guide map, a description, or a virtual-human character can be imposed in the current view of the real world. Both augmented-reality (AR) and mixed-reality (MR) can be applied, as virtual-reality (VR) cannot be applied as it blocks the real-world views. In indoor environments a combination of sensor-based and markerless tracking methods can be applied, and in outdoor environments a combination of sensor-based, location-based and markerless methods can be employed. If users cannot approach the Cultural Heritage assets long-range optical sensors and GPS are more appropriate, otherwise if users can approach the Cultural Heritage assets a markerless method is more appropriate. Also, in the case of group visits interaction and collaboration can improve the visit of the groups (Kassahun M. et al., 2018).

#### *Education*

The scientific areas that deals with the diffusion and dissemination of Cultural Heritage should consider as education, using learning applications. Recently, museum designers applied immersive realities for temporal and spatial representation, interactivity and collaboration, in order to create learning experiences. Learning can be achieved, with the improvement of the way-finding in a virtual environment or enhancing the sense of place. The inexperience of users with those applications should not be a constraint, as well as the age, background and knowledge of the users, and the system should adapt accordingly. Intangible Cultural Heritage can use ready-made audio visual and interaction. Tangible Cultural Heritage can use high-resolution display and realistic rendering capability, as well as tracking for the immersion and interaction. For the education of Cultural Heritage assets both virtual-reality (VR) and mixed-reality (MR) can be applied in a fully immersive environment. Augmented-reality (AR) might not be an appropriate solution as it overlays real-world and virtual views, and the interesting of educational applications are more historical (Kassahun M. et al., 2018).

### *Reconstruction*

Reconstruction applications can provide reconstructed views of tangible and intangible Cultural Heritage assets, and allow the users to visualise CH assets that existed in the past or partially exist. Those assets can be applied in three forms: tangible, intangible and a combination of both of them. For tangible and the combination of tangible and intangible Cultural Heritage assets, augmented-reality (AR) and mixed-reality (MR) can be applied, as these technologies can reconstruct views in their historical location and can provide additional information. For intangible reconstruction and visualization of indoor tangible assets, virtual-reality (VR) can be applied, as does not need to display reconstructed views in their historical location. A combination of GPS, markerless tracking and orientation sensors can be used for the positional tracking in augmented-reality (AR) an mixed-reality (MR). Orientation sensors or stereo glasses can be used for the correct perspective of tracking in virtual-reality (VR). Reconstruction application users can be range from students, experts, the public, and the application should include all the background of these groups, and should focus to interaction and presentation aspects. For this reason, these applications should have immersive features and multimodal interfaces (Kassahun M. et al., 2018).

### *Exploration*

Applications of exploration based primarily on the current and historical aspects of the tangible Cultural Heritage, and provide users to explore, visualise, discover and manipulate the content, and provide new information. People that use these applications should be expertise. For indoor environments a combination of sensor-based methods can be applied for tracking, and for outdoor tracking location and sensor-based methods can also be applied. The best techniques for exploration are mixed-reality (MR) and augmented-reality (AR), as the users can see both the real world and virtual views (Kassahun M. et al., 2018).

### *Virtual Museums*

Virtual museums simulate physical museums and Cultural Heritage sites with their tangible and intangible assets. The simulation should be detailed and realistic to serve as a replica of the artefacts, in order the users not observe differences bewteen the originals and the replicas. The applications should be fully-immersive and also the users should be able to interact with movement, gesture, gaze and speech (Kassahun M. et al., 2018).

#### **4.4.9.3. How New Technologies can be applied in the society**

A collaboration between regional authorities, museums and academic society is needed, to increased the attractiveness of the Cultural Heritage sites and the experience of visitors. Young people often find heritage sites and museums unappealing, while at the same time they are the users of new technologies. New technologies can be helpful in raising their interest in cultural heritage sites and museums. Interregional cooperation can contribute to this process by providing a platform for mutual learning and exchange between regions and cities across Europe. Last but not least, cities and regions should cooperate with businesses from tourism sector and cultural institutions, in order to support and encourage digital technologies in cultural tourism.

[https://www.interregeurope.eu/fileadmin/user\\_upload/plp\\_uploads/policy\\_briefs/2018-08-06\\_Policy\\_brief\\_on\\_digital\\_technologies.pdf](https://www.interregeurope.eu/fileadmin/user_upload/plp_uploads/policy_briefs/2018-08-06_Policy_brief_on_digital_technologies.pdf)

#### **4.4.9.4 Discussions: Current Issues and Future Directions**

Despite the development of these applications there are many obstacles that prevent the acceptance and diffusion of immersive technologies in Cultural Heritage. These obstacles are mainly due to content complexity, technological limitations and human factors. There are many aspects of immersive technology, such as sensor-based tracking that can benefit from further attention, and the model resolution requirements of CH many times exceed the capacity of current technology. Also, immersive technologies might not have widespread adoption, without careful consideration of human factors as they affect the user experience speech (Kassahun M. et al., 2018). Cultural Heritage sites often face challenges to visitors and tourists. The partially destroyed sites and the lack of information of their architectural features make it difficult to interpret the sites and get a sense of their importance. AR and VR technologies can solve some of these problems with historical accurate reconstructions and enhance visitors experience (Younes G., et al., 2017).

#### 4.4.9.5. Proposals of Applications in the Study Area

##### **Digital Maps**

The archaeological, architectural and cultural heritage of the Byzantine world is an important aspect for countries of east Mediterranean. The project *Byzantine Heritage Network: Rehabilitation, Highlighting and Management in the Eastern Mediterranean Basin (BYHERINET)* was carried out for the homogenous registration and management of the Byzantine cultural heritage and the creation of an on-line and off-line platforms for the sites and monuments with difficult accessibility, through the help of systems of the Information Society. The project was a consortium of the Basilicata Region, the Lecce Province, IBA,- CNR, the Prefecture of Rethymno, the University of Cyprus and the University of Athens. In Rethymno the lab of IMS-FORTH with the collaboration of the Prefecture took the responsibility for the GPS mapping of the Byzantine and Venetian sites of the region, with more than 250 Byzantine sites and monuments been topographically recorded to a digital map. Then, an archaeological database was created of all the recording sites with information, and data concerning the preservation and restoration. Also, a G.I.S database offers information about the geographical distribution of the sites through a webpage, as well as a 3D model of one church were available for the interior and exterior of the church (Sarris A., 2011). A similar project can take place for the Byzantine monuments and churches of the study region, as well as for all the Prefecture of Messenia for the record, registration and management of the Byzantine cultural heritage of the area. After, with the help of GPS application, a digital map with geographical, historical and architectural information can be created about the monuments, and the phases of preservation and restoration. This application could be available in cellphones or tablets, in order the visitors can guide themselves through the Byzantine churches easily, and learn about the significance of the monuments. Also, a web application with the help of GPS can provide the selection of different cultural path routes for monuments being in a short distance to each other, in order the visitors enjoy the beauty of the landscape.

##### **Exploration**

Another option could be the development of a virtual tour website, for the better interpretation of the churches, in order people that cannot visit the churches, can have a virtual tour through the monuments, and admiring their significance. Applications of exploration

based primarily on the current and historical aspects of the tangible Cultural Heritage, and provide users to explore, visualise, discover and manipulate the content, and provide new information. The best techniques for exploration are mixed-reality (MR) and augmented-reality (AR), as the users can see both the real world and virtual views (Kassahun M. et al., 2018).

### **Reconstruction**

According to bibliographical research as the study area have a number of ruined churches that are not well preserved and difficult to be recognized, a good solution for the enhancement of the monuments can be the digital reconstruction of the ruined monuments. This can be achieved for the churches that scientists have the architectural plan (layout), in order to have accurate reconstruction of the ruined churches. Augmented-reality (AR) and mixed-reality (MR) can be applied, as these technologies can reconstruct views in their historical location and can provide with additional information, such as information about the chronology and the significance of the monuments (Kassahun M. et al., 2018).

A table is given with the ruined monuments of the study area.

<b>Ruined Monuments</b>
1 <sup>st</sup> Basilica of Ancient Messene 7 <sup>th</sup> c.
Basilica of the Theatre 7 <sup>th</sup> c.
Klisa Koukie 10 <sup>th</sup> -11 <sup>th</sup> c.
Klisa Porti 11 <sup>th</sup> c.
Saint Nickolas Zerbisia 11 <sup>th</sup> c.
Saint Athanasios Steniklaros 10 <sup>th</sup> -11 <sup>th</sup> c.
Palaia Episkopi Androusas 12 <sup>th</sup> c,
Saint Lazarus Andromonastiro 13 <sup>th</sup> c.
Saint Vlasios Valyras 13 <sup>th</sup> c.
Saint Aikaterini Lampaina 13 <sup>th</sup> -14 <sup>th</sup> c.

#### **4.4.10. Religious and Cultural Heritage Tourism**

The Byzantine monuments of the study area have the benefit to be situated near the important archaeological site of Ancient Messene, which is one of the most important archaeological sites of the region of Messenia as well as one of the most important in southwestern Greece and Peloponnese. There are two types of religious tourism: the touristic religious tourism and the pilgrim religious tourism. (Chrysostomos T., 2011) Religious tourism is that form that is exclusively or strongly motivated for religious reasons. One of the oldest types of tourism and a worldwide phenomenon of religious history, it can be differentiated into various forms. The short-term religious tourism is distinguished by excursions to nearby pilgrimage centers or religious conferences. The long term describes visits of several days or weeks to national and international pilgrimage sites or conferences. (Rinschede G., 1992) Religious travel is one of the oldest forms of non-economic travel and every year millions of people travel to major pilgrimage destinations around the world. Approximate 240 million people travel to religious destinations and had become widespread and popularized in recent years. (Olsen D., Dallen J. T., 2006) The religious tourism can be a good factor for the enhancement of the monuments, in order the people come in contact with

the Byzantine cultural heritage of the past, and the development of local economy. In order to applied with the appropriate way, the religious tourism should be set some steps. For example it must be for everybody multicultural with respect to the monuments. All these features should be included in order to exact an appropriate development of religious tourism (Chrisostomos T., 2011).

#### **4.4.11 Education and Events**

The correct enhancement and management of the monuments contributes to its continuous development. It is important the local community to learn and know the history of the cultural heritage of the area. Education aspect is important for the management of the Byzantine churches. An educational step would be the cooperation of the Ephorate of Antiquities of Messenia with the locals for the development of cultural events to monuments of the region. For instance, during of 14<sup>th</sup> of August every year takes place the tradition of the transfer of the Holy Icon of Virgin Mary from the new monastery of Voulkano, to the old Monastery situated at the top of the mount Ithomi, by foot with the participation of many people. An overnight Service take place, and in the morning of the 15<sup>th</sup> of August the Holy Icon transferred again to the new monastery for the morning celebration Service of the Dormitory of Virgin Mary. This annually tradition could be an opportunity to educate and inform people about the religious, archaeological and historical aspects, as well as the characteristics of the monument. Such educational events can take place and in other monuments for the education of the locals and visitors (IEPA MONH BOYAKANOY 2.mpg, 2009).

For all the above to be achieved, it will be useful all the local authorities and departments to cooperate for the creation of a team, which the primary goal will be to record, preserve and manage the Byzantine monuments of the area, and in general all the Byzantine monuments of the Prefecture of Messenia.

## Chapter 5

### 5.1. Catalogue of the Byzantine Monuments of the Study Area

A table of the total number of 29 byzantine churches examine in this study created. Information given are: location, church, century, elevation, latitude, longitude via the Google Earth Pro application.

Location	Church	Century	Elevation	Latitude	Longitude
<b>Anient Messini</b>	1 <sup>ST</sup> Basilica	7 <sup>th</sup> century	<b>330m</b>	<b>37°10'36.11" N</b>	<b>21°55'13.36" E</b>
<b>Anient Messini</b>	Basilica of the theatre	7 <sup>th</sup> century	<b>330m</b>	<b>37°10'38.03" N</b>	<b>21°55'9.29" E</b>
<b>Anient Messini</b>	Klisa Porti	11 <sup>th</sup> century	<b>400m</b>	<b>37°11'43.95" N</b>	<b>21°54'55.65" E</b>
<b>Anient Messini</b>	Klisa Koukie	10 <sup>th</sup> -11 <sup>th</sup> century	<b>367m</b>	<b>37°10'44.19" N</b>	<b>21°55'10.77" E</b>
<b>Anient Messini</b>	Saint John Riganas	11 <sup>th</sup> century	<b>397m</b>	<b>37°10'47.15" N</b>	<b>21°55'19.77" E</b>
<b>Anient Messini</b>	Saint Nickolas	11 <sup>th</sup> century	<b>352m</b>	<b>37°10'41.28" N</b>	<b>21°55'4.54" E</b>
<b>Zerbisia</b>	Saint Nickolas	11 <sup>th</sup> century	<b>287m</b>	<b>37°12'13.50" N</b>	<b>21°54'17.75" E</b>
<b>Zerbisia</b>	Saint Spyridon	13 <sup>th</sup> century	<b>355m</b>	<b>37°12'7.91" N</b>	<b>21°53'30.50" E</b>
<b>Arsinoi</b>	Saint Nickolas	10 <sup>th</sup> -11 <sup>th</sup> century	<b>312m</b>	<b>37° 9'54.54" N</b>	<b>21°55'27.54" E</b>
<b>Androusa</b>	Saint George	13 <sup>th</sup> century	<b>120m</b>	<b>37° 6'40.75" N</b>	<b>21°56'49.36" E</b>
<b>Androusa</b>	Palaia Episkopi	12 <sup>th</sup> century	<b>128m</b>	<b>37° 6'32.45" N</b>	<b>21°56'35.34" E</b>
<b>Ellinoekklisia</b>	Zoodoxos Pigi, Samarina	12 <sup>th</sup> century	<b>200m</b>	<b>37° 8'13.89" N</b>	<b>21°55'36.03" E</b>
<b>Lampaina</b>	Saint Aikaterini	13 <sup>th</sup> -14 <sup>th</sup> century	<b>40m</b>	<b>37° 8'53.62" N</b>	<b>21°57'57.97" E</b>



<b>Valyra</b>	Saint Vlasios	13 <sup>th</sup> century	<b>26m</b>	<b>37° 9'26.76"N</b>	<b>21°58'50.66" E</b>
<b>Valyra</b>	Panagitsa	12 <sup>th</sup> century	<b>37m</b>	<b>37° 9'34.33"N</b>	<b>21°58'36.76" E</b>
<b>Petralona</b>	Andromonastir o	13 <sup>th</sup> century	<b>320m</b>	<b>37° 9'54.59"N</b>	<b>21°53'21.38" E</b>
<b>Petralona</b>	Saint Lazarus	13 <sup>th</sup> century	<b>350m</b>	<b>37° 9'54.99"N</b>	<b>21°53'15.00" E</b>
<b>Mount Ithomi</b>	Old Monastery of Voulkano	16 <sup>th</sup> century	<b>790m</b>	<b>37°11'9.02"N</b>	<b>21°55'27.53" E</b>
<b>Mount Ithomi</b>	New Monastery of Voulkano	17 <sup>th</sup> century	<b>360m</b>	<b>37°10'23.15" N</b>	<b>21°56'32.78" E</b>
<b>Meligalas</b>	Taxiarxes	18 <sup>th</sup> – 19 <sup>th</sup> century	<b>80m</b>	<b>37°13'39.71" N</b>	<b>21°58'9.06"E</b>
<b>Steniklaros</b>	Saint John	10-11 <sup>th</sup> century	<b>68m</b>	<b>37°14'31.61" N</b>	<b>21°56'50.85" E</b>
<b>Steniklaros</b>	Saint Athanasios	10-11 <sup>th</sup> century	<b>80m</b>	<b>37°14'37.03" N</b>	<b>21°56'33.90" E</b>
<b>Steniklaros</b>	Saint George	10-11 <sup>th</sup> century	<b>75m</b>	<b>37°14'28.71" N</b>	<b>21°56'48.53" E</b>
<b>Steniklaros</b>	Saint Constantine	10-11 <sup>th</sup> century	<b>85m</b>	<b>37°14'11.90" N</b>	<b>21°56'36.71" E</b>
<b>Steniklaros</b>	Panaitsa (Virgin Mary)	10 <sup>th</sup> century	<b>75m</b>	<b>37°13'57.06" N</b>	<b>21°56'55.97" E</b>
<b>Mila</b>	Vraxopaitsa	14 <sup>th</sup> century	<b>100m</b>	<b>37°14'50.83" N</b>	<b>21°54'32.44" E</b>
<b>Kalliroi</b>	Saint Athanasios	12 <sup>th</sup> century	<b>94m</b>	<b>37°15'26.75" N</b>	<b>21°55'56.71" E</b>
<b>Polixni</b>	Fonemeni (Faneromeni)	10 <sup>th</sup> century	<b>122m</b>	<b>37°16'10.37" N</b>	<b>21°56'18.54" E</b>
<b>Polixni</b>	Taxiarxes	10 <sup>th</sup> century	<b>155m</b>	<b>37°16'25.29" N</b>	<b>21°56'55.46" E</b>

## 5.2. Geographic Information System G.I.S Mapping

Geographical mapping is a useful tool to understand and interpret the data of an area, in order to reconstruct the evolution and the development of a site. Geographic Information System (GIS) is a system to store, capture, manipulate, analyze, manage, and present the geographic or spatial data. It is an important tool for archaeology as it is fast, interactive and easy to operate. Digitization is the most common method for the creation of data, where a topographic map is transferred into a digital through suitable software. Using images from satellites, aircrafts, etc. and digitizing the data, it can be extracted into geographical

(Worboys, 1997). For this thesis the software that was used to digitize the area of this study was the ArcGIS 10.0. The Greek Grid Reference System of 1987 (EGSA '87) coordinate system offers a reference scale of all Greece was used. Two maps differing at the scale used, were created included the byzantine churches of the study area based on the previous catalogue that was created during this thesis.

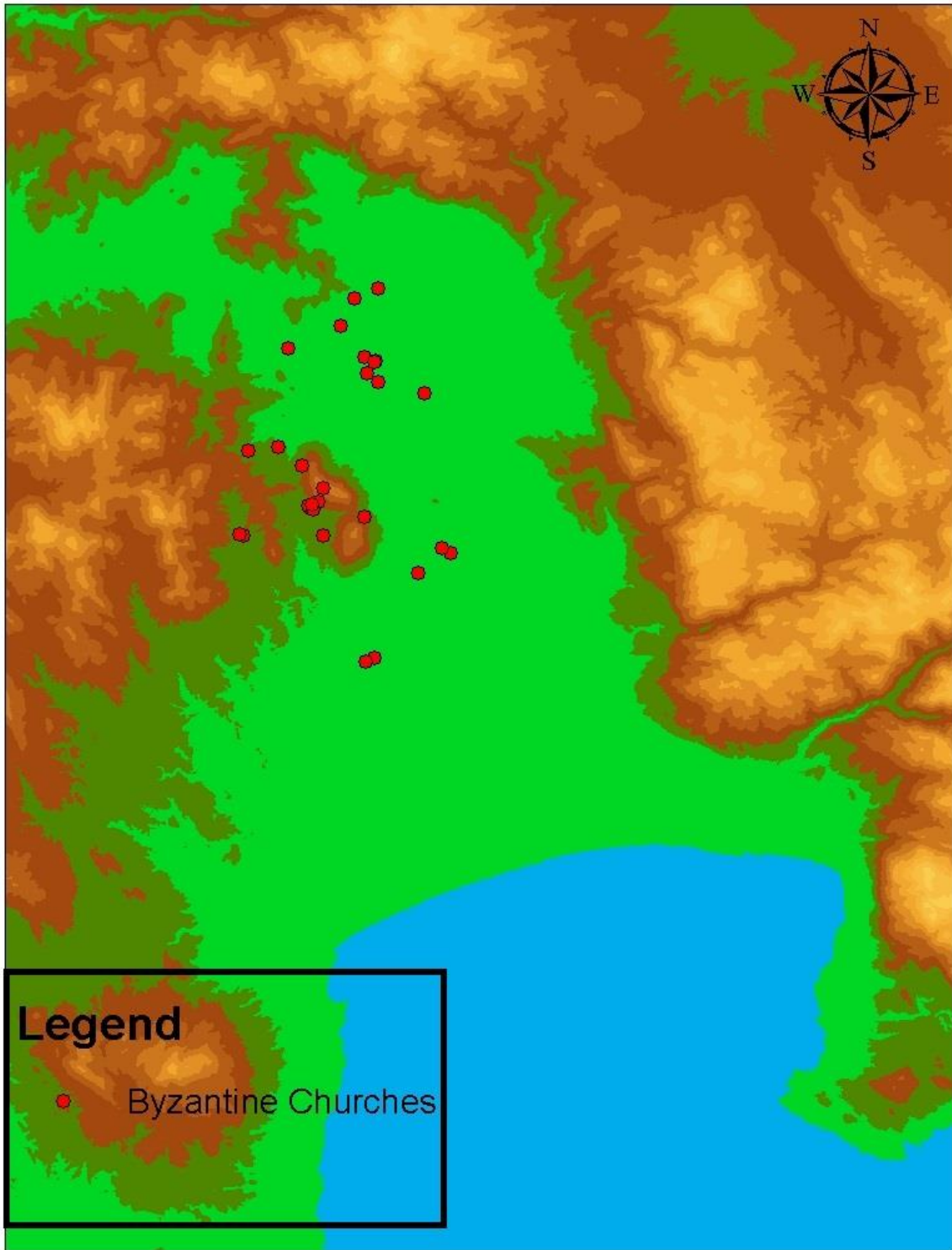


Figure 5. Map of Byzantine Churches 1

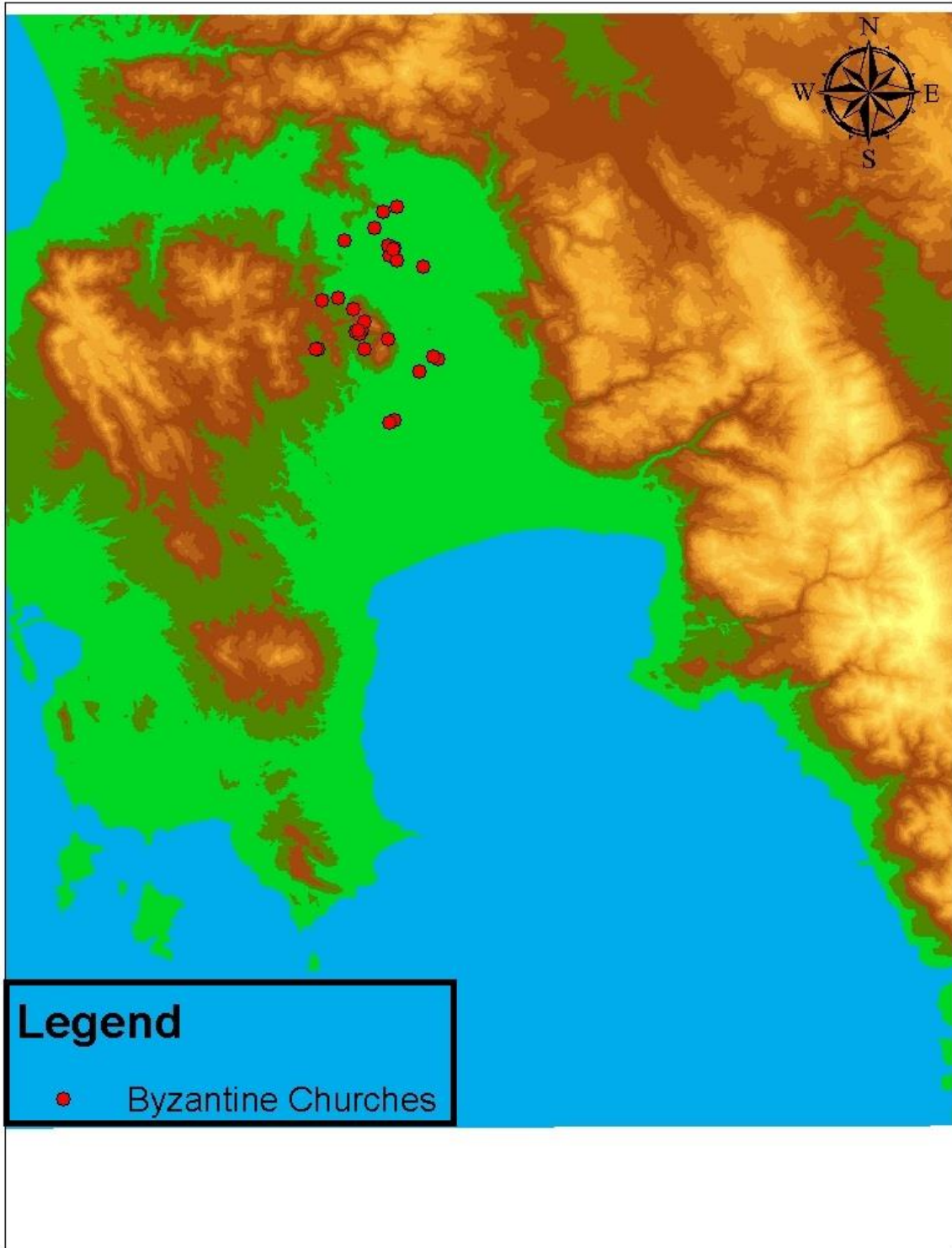


Figure 6. Map of Byzantine Churches 2

## Chapter 6

### 6. Conclusion

In this thesis, the significance of the byzantine monuments of the Messenia region is highlighted. The first clues of Christian communities dated in the 4<sup>th</sup> - 5<sup>th</sup> centuries A.D. in Koroni with the remnants of a basilica and burial catacombs. The archaeological evidences of the early and middle byzantine period in Messenia are limited. During the early Byzantine period, monuments are situated near to the ancient city of Messene, with two basilicas and early Byzantine period settlements. In the middle Byzantine period it is observed a shift from the coastal areas to the mainland with a constructional development and the establishment of new settlements. A great number of churches are dated at that period. During the 12<sup>th</sup> century important Byzantine churches were constructed as a result of wealth, commercial and demographical growth. Most of the churches of that period belong to the type of cross-in square and are constructed with fine quality materials. At the late Byzantine period in Messenia it is observed, both Latin and Byzantine architecture in the monuments. The churches are small in dimensions and a new cross-shaped type was introduced at that time.

There are several problems that need to be addressed. First of all, the lack of information can be a challenge for the researches and the archaeological community. Also, as mentioned above some of the churches need conservation and protection from natural and human factors. Cleaning the dense flora is necessary for the protection as well as the preservation of the monuments. Accessibility should be available for all the visitors, locals or tourists, in order to come in contact with the history and cultural aspect of the area. Another reason for accessibility is for the protection of the monuments in case of looting or wildfires. Digital development is necessary for the management and enhance of the monuments and for further exploitation. New technologies can offer important support for the enhancement, preservation, reconstruction of the past and it can be a useful tool for the education and exploration of Cultural Heritage monuments. In the study area, new technologies are necessary for the better interpretation of the monuments and can provide multiple of solutions, regarding the enhancement of both ruined and not ruined churches. Protection and enhancement of the monuments will emphasize the history of the area and help the economic development of the region. A number of funding programs of European Union such as (ESPA) are introduced every year, for the development of these types of projects. Last but not

least, this study is one of the first steps for the research, record, interpretation and enhancement of the byzantine monuments of this specific region, hoping for a further and complete scientific research. Byzantine monuments are widespread all over the region making the area a significance cultural heritage site.

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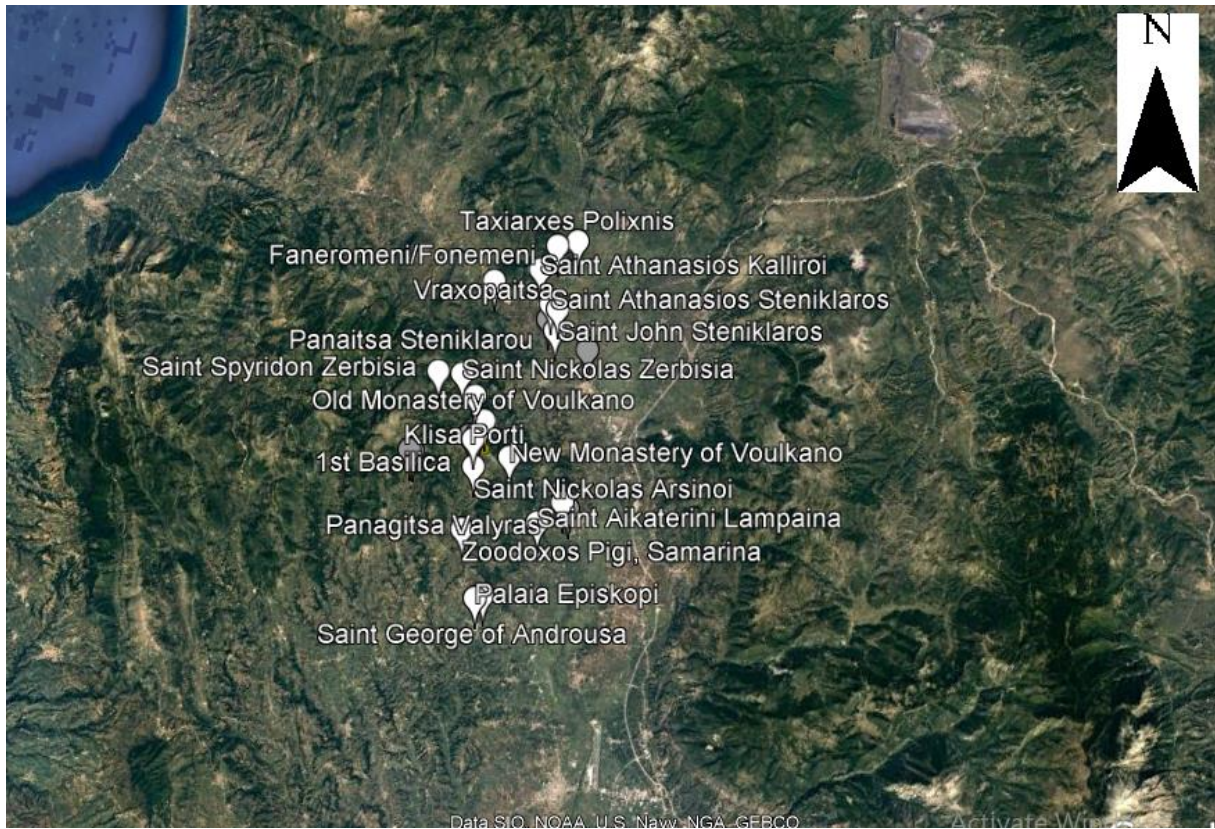
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## Apendices



**Figure 7** Map of Byzantine Churches under study

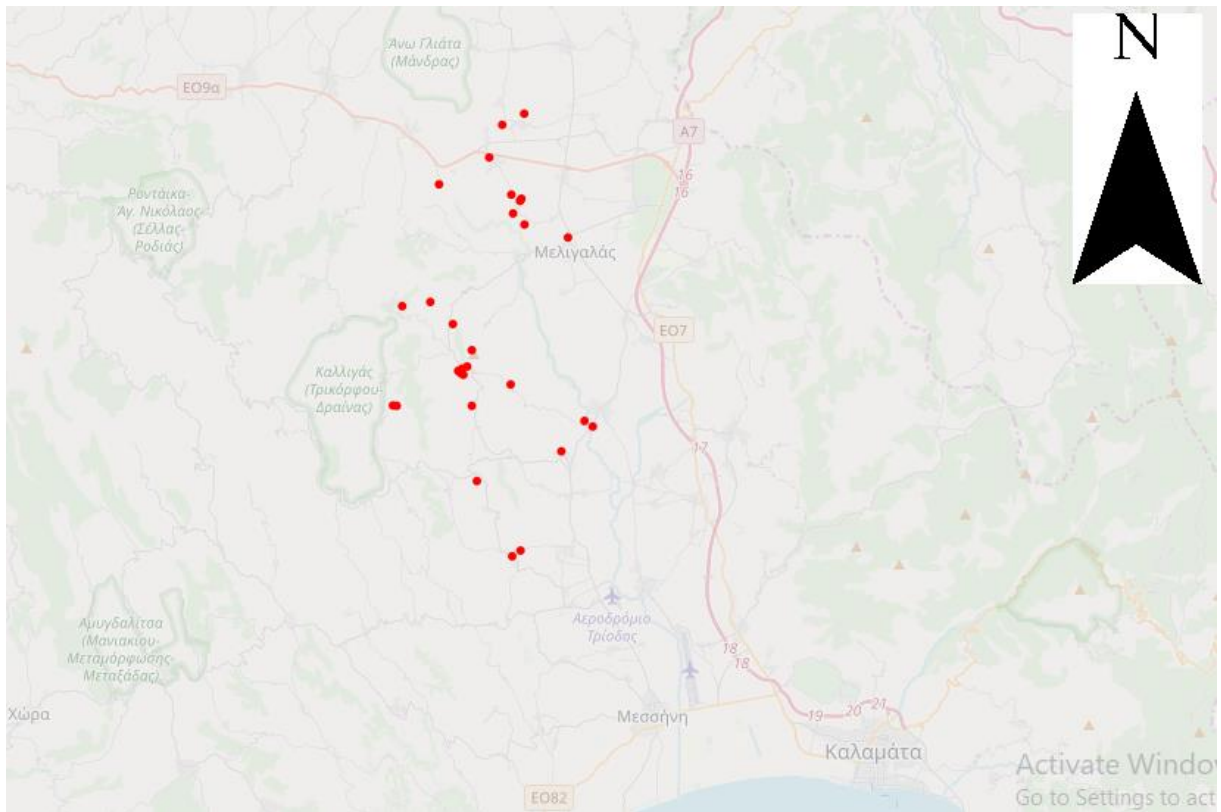


Figure 8. Map of Byzantine Churches under study



Figure 9. Basilica of the Theatre, Ancient Messene 1



Figure 10. Basilica of the Theatre, Ancient Messene 2



Figure 11. Basilica of the Theatre 3 (<http://lyrasi.blogspot.com/>)



Figure 12. Klisa Porti 1 (<http://lyrasi.blogspot.com/>)



Figure 13. Klisa Porti 2 (<http://lyrasi.blogspot.com/>)



Figure 14. Klisa Koukie 1 (<http://lyrasi.blogspot.com/>)





Figure 15. Klisa Koukie 2 (<http://lyrasi.blogspot.com/>)



Figure 16. Saint Nickolas of Ancient Messene 1 (<http://lyrasi.blogspot.com/>)



Figure 17. Saint Nickolas of Ancient Messene 2 (<http://lyrasi.blogspot.com/>)



Figure 18. Saint John Riganas Mauromati 1



Figure 19. Saint John Riganas Mauromati 2



Figure 20. Saint Nickolas of Zerbisia (Google Earth)



Figure 21. Saint Spyridon of Zerbisia 1



Figure 22. Saint Spyridon of Zerbisia 2



Figure 23. Saint Nickolas of Arsinoi 1 (<http://lyrasi.blogspot.com/>)



Figure 24. Saint Nickolas of Arsinoi 2 (Google Earth)



Figure 25. Saint George of Androusa 1 (<http://lyrasi.blogspot.com/>)



Figure 26. Saint George of Androusa 2 (<http://lyrasi.blogspot.com/>)



Figure 27. Palaia Episkopi Androusas (<http://lyrasi.blogspot.com/>)





Figure 28. Zoodoxos Pigi (Samarina) 1



Figure 29. Zoodoxos Pigi (Samarina) 2



Figure 30. Saint Vlasios of Valyra (<http://lyrasi.blogspot.com/>)



Figure 31. Panagitsa Valyras 1 (<http://lyrasi.blogspot.com/>)



Figure 32. Panagitsa Valyras 2 (<http://lyrasi.blogspot.com/>)



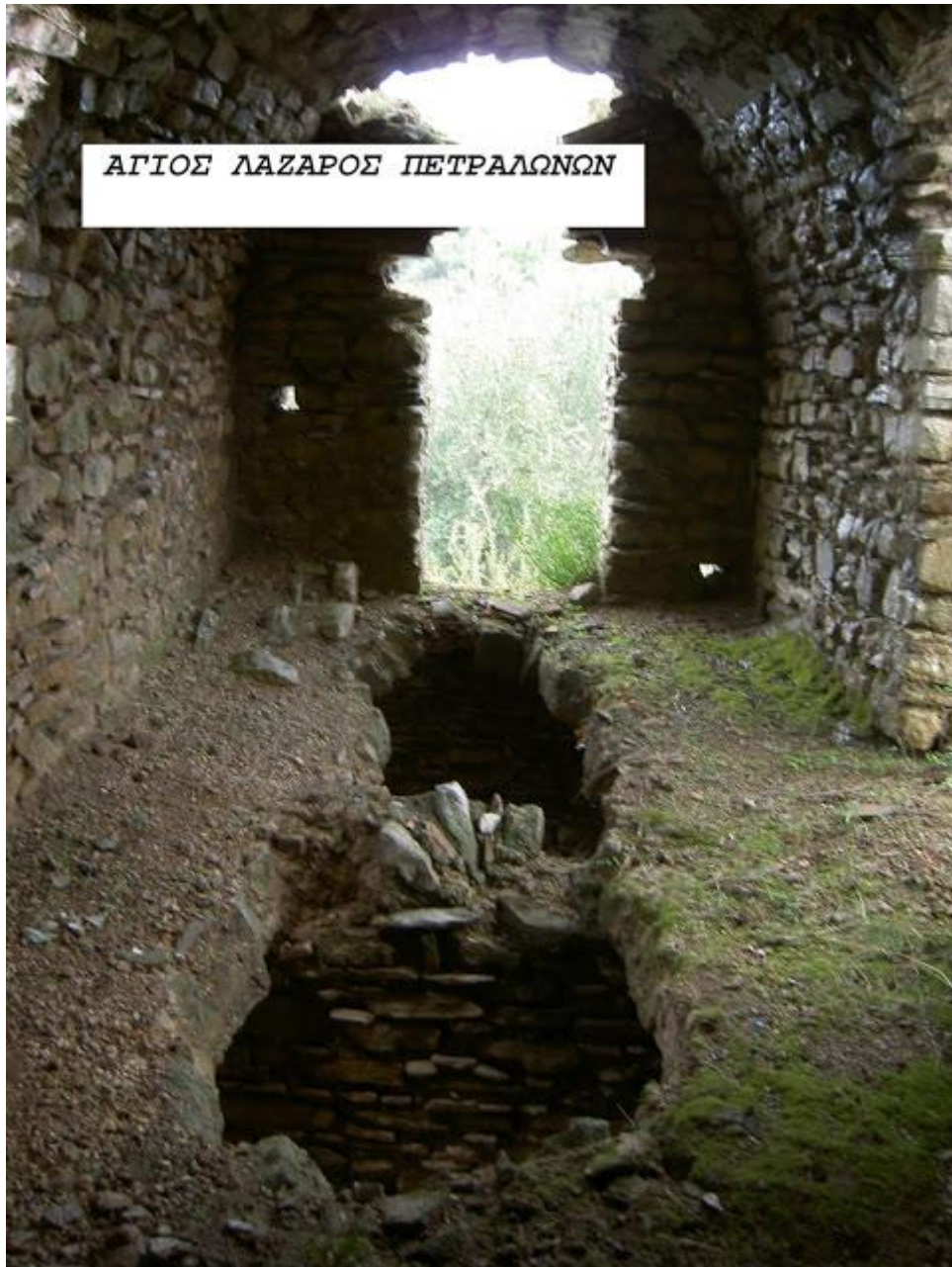
Figure 33. Andromonastiro 1



Figure 34. Andromonastiro 2



Figure 35. Andromonastiro 3



ΑΓΙΟΣ ΛΑΖΑΡΟΣ ΠΕΤΡΑΛΩΝΩΝ

Figure 36. Saint Lazarus of Andromonastiro (<http://lyrasi.blogspot.com/>)



Figure 37. Old monastery of Voulkano1 (<https://www.youtube.com/watch?v=aK3osGV6Owc>)



Figure 38. Old monastery of Voulkano 2  
([http://wantedpixel.com/spiros/arxaiamessini/index.php?option=com\\_content&view=article&id=71&Itemid=72](http://wantedpixel.com/spiros/arxaiamessini/index.php?option=com_content&view=article&id=71&Itemid=72))



Figure 39. New monastery of Voulkano 1 (<https://www.akroyali-hotel.gr/sights/iera-moni-voulkanou/>)



Figure 40. New monastery of Voulkano 2 (<https://www.gargalianoionline.gr/>)





Figure 41. Taxiarches of Meligalas 1



Figure 42. Taxiarches of Meligalas 2



Figure 43. Saint John of Steniklaros 1 (<http://lyrasi.blogspot.com/>)



Figure 44. Saint John of Steniklaros 2 (<http://lyrasi.blogspot.com/>)



Figure 45. Saint Constantine of Steniklaros 1 (<http://lyrasi.blogspot.com/>)



Figure 46. Saint Constantine of Steniklaros 2



**Figure 47. Saint Athanasios of Steniklaros**

**Ο ΑΓΙΟΣ ΓΕΩΡΓΙΟΣ ΣΤΕΝΥΚΛΑΡΟΥ**



Figure 48. Saint George of Steniklaros (<http://lyrasi.blogspot.com/>)



Figure 49. Panaitsa Steniklarou (<http://lyrasi.blogspot.com/>)



Figure 50. Vraxopaitsa Mila 1 (<http://lyrasi.blogspot.com/>)



Figure 51. Vraxopanaitsa 2 (<http://lyrasi.blogspot.com/>)



Figure 52. Saint Athanasios of Kalliroi (<http://lyrasi.blogspot.com/>)





Figure 53. Fonemeni of Polixni (<http://lyrasi.blogspot.com/>)



Figure 54. Taxiarches Polixnis 1 (<https://www.kastra.eu/castlegr.php?kastro=arxagmessin>)



Figure 55. Taxiarches Polixnis 2 (<https://www.kastra.eu/castlegr.php?kastro=arxagmessin>)



Figure 56. Taxiarches of Polixnis 3 (<https://www.kastra.eu/castlegr.php?kastro=arxagmessin>)

