Mareitime villas visibly stood out in the landscape and were important, marked orientation points. They had watchtowers (mentioned by Pliny the Younger) with panoramic views, from which important maritime routes and the channels between the islands and mainland could be controlled. In addition to their economic and residential purpose, they also played an important role in navigation in general along the eastern Adriatic coast. Villas also had safe and protected ports, supplies of food and water for ships and facilities for repairing vessels and ship equipment. Ports for ships in transit were located at a certain distance from the villas. Such examples included Soline and Palmizana on the island of St. Clement near Hvar, the bays of Verige and Madona on the Brijuni islands, Veli and Mali Lago and Ubli Bay on the island of Lastovo, etc. In the first centuries of Roman rule, luxury villas were built by senatorial families and high-ranking commanders of the Roman military, especially the navy. They were linked with urban centres, with which they formed a network of navigation and stopping points. They were located in strategically important places on maritime routes and played an important role in signaling as we can see from the Roman wall paintings (maritime villas with light houses) from Pompeii and Stabiae. There was an important difference in the use of maritime villas in the Early Empire with their strong economic role, as opposed to Late Antiquity, when their defense role was essential. In that time they played an important role in securing the vitaly important navigation routes in the Adriatic and in supplying and accommodating military units villas were still central elements in the landscape of the eastern Adriatic coast, as described by Cassiodorus (Variae, XII, 22).

Key words: maritime villas, 1st – 6th century, Roman Empire, strategic role, maritime routes, Eastern Adriatic coast

The configuration of the Eastern Adriatic coast provides many opportunities of safe shelter for ships. Numerous bays and channels between the islands and the mainland offer protection from strong southwest and northeast winds, which make navigation dangerous. Pliny the Elder wrote that the eastern Adriatic coast was portunata - rich with ports. Protected, natural harbors as well as sources of drinking water were needed for ships in transit. Those were the natural resources on which the economic and political power was based. Since prehistoric times, settlements were located near best natural harbors with sources of drinking water. By taking over the eastern Adriatic coast in the 2nd to 1st century BC the Romans took possession of the most suitable locations for ports. Best agricultural land with such natural harbors was given to high military commanders and to Roman aristocracy. The land near urban centres was given by the designation to Roman colonists. The improvement and defense of the newly conquered territories, especially the most interesting properties along the coast was given to the narrow circle of military commanders and senators who re-
ceived estates (with the obligation of development and defense). They were expected to develop those estates and to provide them with ports and stone-built piers and quays. Maritime transport was a major source of revenue, which was later standardized in Diocletian’s edict on prices of maritime transport (Arnaud 2007). The period between Caesar and the Flavian emperors (1st century BC to 1st century AD) witnessed a rapid ascent in economic and political power of the colonial elite in Roman Istria and Dalmatia. Originally Italic colonists, those loyal supporters and associates of the Julii, the Antonii, and the Claudii developed economies of scale and through their building programs transformed the city and country landscape. In the wake of recent scholarship and excavations and our own work on the Roman villas, we have undertaken a comparative study of urban and rural architecture to reconstruct the patterns of transformation.

Building activity started with the foundation of the colonies of Tergeste, Pola (both in 46 B.C.) and Parentium (Tiberian period) Tarsatica, Senia, Iader, Scardona, Salona, Narona and Epidaur and the development of villae rusticae in the countryside. The Roman expansion into Noricum and Pannonia coupled with favorable imperial policies stimulated the economy and propelled some families into the senatorial rank. Luxury building began after Augustus annexed Istria to Regio X, 18-12 B.C and after the Baton War 6-9 AD The elite were at first shaping the cityscapes in metropolitan style and ideology and then embellishing their country residences. City buildings related to the imperial cult and Roman lifestyle, while some coastal villae rusticae were expanded into villae urbanae and maritimae, in the Campanian fashion. In the next stage, politically mature proprietors, some of them holding highest offices, lavished their attention on their villas. New, post-Augustan architectural designs found their application in maritime villas. City structures were improved and decorated, perhaps due to increasing involvement of freedmen, but innovative architecture did not feature in the cities. The same situation had been on the central and south part of the eastern Adriatic coast in Roman Dalmatia.

Maritime villas were the residences of Roman aristocracy and the centers of their estates on the coast. The political, economic, and ideological conditions were ripe for the birth of this architectural phenomenon on the eastern Adriatic coast during the first century of the Roman Empire. Maritime villas were prestige projects, removed from production sites. The sea became an internal, desired space, embraced by floating porticoes (Lafon 2001, 3-4). The architecture opened to the landscape. The topography of the Adriatic coast with rocky promontories and protected bays was conducive to imaginative and exclusive architectural designs, which took off in the Augustan period and lasted during the whole first century.

Agricultural intensification of cash crops, wine and olive oil, and exploitation of stone and salt caused the rapid transformation of the landscape and society, and lead to the great building activities, especially of large maritime villas. Imperial policies and elite economic interests went hand in hand in the development of maritime villas, and they also created economies of scale. Our studies of the topography, architecture and development of such villas in Roman Histria and Dalmatia showed significant differences in the two regions, although the Roman colonization played the initial role in both areas. In Histria the builders of maritime villas were the senatorial and colonial elite, who developed economies of scale in agriculture and natural resources and who attained high offices in Rome. Their names are documented on amphorae and tile stamps. In Dalmatia, where the colonies had a more important role as military and commercial ports, the owners of maritime villas were more likely high officials sent from Rome rather than the local, colonial elite. In Late Antiquity, the economic and strategic function, especially of the villas on the key shipping routes, was essential in the entire Adriatic region.

Soline bay on the island of Sv. Klement, near Hvar. The island Šćedro south of the island of Hvar, Sreser on the peninsula Pelješac, Lumbara on the island of Korčula, Ubli on the island of Lastovo, Polače on the island of Mljet, Tiha bay near Cavtat, Sustjepan near Cavtat. (Fig 1) Beginning from the north part of the eastern Adriatic, there are known maritime villas on the territory of the Roman colony of Tergeste 1/ Barcola (today in Italy) and 2/ Simonov zaljev (today in Slovenia). And Fornače near Piran (Stokin 1992, 79-84). These will be left out of our discussion.

Part of Roman Histria

3/ The maritime villa on Katoro promontory near Humagum was situated on the low promontory and its architecture reached into two bays on either side. The position is panoramic with vistas on all sides. The site is only partially excavated. Some architectural remains of a high level were found on the top of the promontory - peristyle, a row of rooms, massive terraces, and walls in opus isodorum technique. The building may be dated to the 1st century AD. The baths were located in the north St. Margarita bay, while a large, semicircular fish pond (piscina) with compartments takes up the south bay (Gluščević, Bolšec Ferri 2003, 116). A monumental tomb with fine glass jug and pottery dated to the end of the 3rd - 4th century were found near the baths on site of Tiola (Bolšec Ferri, 2003). At low tides, partial ground plans of new premises with mosaics that frame the southern side of the peninsula occasionally appear. (Fig 2) There is also same evidence of a big stone mole north of St Margarita bay and north of Sipar, which protected the whole bay from the north wind.

4/ The maritime villa at Loron, north of Parentium, was spread over two bays, Santa Marina and Cervar, and a promontory between them. In the bay of Červar-Porat, was located the second largest amphora wor-
A workshop in Istria, active from the 1st to the 4th century. It also produced terra sigillata and tiles early in the first century. The recent Franco-Italian-Croatian excavations on the north side of the bay, at Loron, have uncovered further production installations. A structure with a long row of rooms on the shore and more structures on the slope, one with a hypocaust, have been excavated so far (Tassaux, Matijašić, Kovačić 2001, 89, 312). A maritime villa connected with this production site has been located at Loron, but is awaiting excavation. Walking for over 500 meters along the curving shoreline and on the slopes of the promontory between the bays, one can see evidence of dispersed buildings constructed both at sea level and on terraces. A piscina vivaria is located at the end of the Santa Marina bay. Some walls are also visible on the promontory and in Santa Marina Bay. The villa had a panoramic position and would have had a visual control of the sailing to Parentium from the north.

5/ The maritime villa south of the city of Parentium was situated on a narrow promontory of Sorna. The villa straddles the promontory and its long porticoes open to the wide vistas on all three sides. The axial symmetry of the two peristyle complexes indicates a unified design, not a two-phased development (Matijašić 1998, 126). A large dining room (triclinium) is centrally located at the highest point of the promontory. The light comes from the peristyles on each side. In the east bay, close to the sea, there is the baths complex. The rooms decorated with polychrome mosaics and wall paintings, dated to between the 1st and 2nd century, have been excavated. Here we may truly have an imperial-period villa built for the purpose of otium, the enjoyment of country life. In late antiquity there were changes and additions to the villa. The structure in the lower left corner was added in the 4th century, according to the excavator. In the center of the villa, constructed over the triclinium, a small rectangular building with lateral additions was very likely a church. On the southeast side of the promontory is visible the remains of the port in front of the villa. The villa had a panoramic position and would have had a visual control of the sailing to Parentium from the south (Vrsalović 1979, 139).

6/ Zambratija Sv. Ivan near Humagum—maritime villa with piscina vivaria. Two breakwaters formed port 27 m long to the north (Vrsalović 1979, 139).

7/ Further up the coast, at Barbariga, was located the largest known oil-producing estate in the early imperial Histria. In the bay Porto delle Colonne near Barbariga the latter site contained remains of a fullonica and on Punta Cissana (Punta Barbariga) ground murex shells dating from Late Antiquity were founded. A maritime villa, sprawling over the promontory, was the luxury residence of this estate (Schwalb 1902). The villa plan shows three interconnected buildings ending in a mole and the harbor area. The oldest part of the villa is the northern wing. The first building may well be the original platform villa.
with a frontal portico, comparable to Lafon’s Type B, to which prestige buildings with mosaics were added. The peristyle opened to a panoramic view on the seafront and both facades were embellished by monumental stairways. Among the remains were two fragments of frescoes of the 3rd Pompeian style (Meder 2003, 44). The baths also belong to the later construction phase.

8/ The maritime villa in Verige bay on Brijuni islands is the most elaborate maritime villa on the eastern Adriatic. The villa was built in the 1st century and consists of separate functional areas: the residential area built on four terraces; three temples (aediculae) dedicated to Neptune and Venus, third unknown) surrounded with semi-circular porticoes; structure with a nymphaeum; the library; palaestra with baths; and a production area. The whole complex is connected by a system of porticoes and cryptoporticoes along the coast. The complex was surrounded by terraced gardens and the bay had a stone built waterfront flanked by two large moles. It is significant that this villa is the only site where the late republican to early imperial building phases are clear. (Fig 3) The villa has a whole range of long colonnades open to the sea and a peristyle courtyard around which buildings are grouped. A semicircular colonnade follows the shoreline, which had a stone-built waterfront (Begović Dvoržak 1990, 98). Villa with the panoramic views and guardhouses control the sailing in Fažana channel and to Pula from the north. Two safe anchorages belongs to villa - one in Madona bay (safe under the north east wind - bora) and second in Verige bay (under the south and southwest wind). (Schrunk Begović, 2000, 257). The coins from the 3rd to the 5th century AD found in the underwater exploration of Verige bay, specially statistically greater quantity of coins from the usurper Magnentius and his Caesar Decentius (from the middle of 4th century) may signify that the bay was used as a military base (Belić 2009, 39).

9/ The villa in the deep bay of Valbandon was partially excavated early in the 20th century and only new excavation could clear its chronology and the relationship between the two parts on the opposite side of the bay (Matijašić 1998, 122). Imaginative architectural forms and the finds of high-quality decoration, including a floor in opus scutulatum indicate a luxury residence. In the southern complex, almost all the residential areas were decorated with mosaics. Two exedras in the northern part of the bay were decorated with black mosaic with crustae. Behind them lies the northern wing of the residential part. Alongside the mosaics are the remains of decorations of marble slabs in the opus sectile technique. There was evidence that the inner part of the bay was enclosed to form a piscina, which was fed by a creek that flowed into it. The complex is dated to the 1st century AD. There was also some renovation of mosaics in late antiquity (Verzar Bass 1986, 656).
10/ The area south of Pula is characterized by large promontories and deep inlets. Additional natural resources are the deposits of high-quality building stone, rich fields and sheltered bays. The deposits of high-quality limestone can be found from Banjole to Premantura. Traces of production of olive oil were registered on five sites, including the partially explored maritime villa situated deep in Banjole Bay. The phases of construction have not been established. The ground plan shows a villa with a central corridor which separates two rows of rooms (Matijašić 1998, 135). The portico along the entire length of the front with a panoramic sea view characterizes it as a maritime villa, similar to those represented on the Fourth Pompeian style wall paintings.

11/ East of Banjole, by the present-day town of Medulin, the largest maritime villa in this area, and perhaps the largest in Istria, occupied most of the promontory of Vižula. Since 1995, the remains on the promontory and submerged structures have been surveyed. Several small areas have been excavated. Visible walls stretch for a kilometer along the shores and some are now submerged. Various buildings are arranged at different angles. The whole villa, built on three terraces, covered about 10 hectares (Džin 1995, 75, 77). The finds of mosaics, marbles and statuary indicate considerable luxury. Small finds date the complex from the 1st to the 6th century. Some investigated structures showed partitioning in late antiquity, perhaps to house an increased population, possibly military. Also it is visible that the shore had been built around the whole promontory in irregular rectangular shape. On the slope of the hills there is evidence of terraced architecture. The promontory is located in a deep bay, which offers safe anchorage and protection from all winds. Crossing the open sea between the tip of Istria and the island Unije is very dangerous under the north wind (bora). Ships sailing up or down the Adriatic need to wait in a protected area during such conditions. Fleets would winter in such safe bays. The villa had a panoramic position and would have had a visual control of the straits leading into the bay. (Fig 4)

There are some other coastal and maritime villas south of Tergeste today partly excavated:

1. Port Volma southeast of Pula – Roman villa, remains of the walls and port are visible under the sea level (Vrsalović 1979, 128)

2. Polari island southeast of Rovignum – Roman villa whose remains are visible under the sea level between the island and the cape St. Ivan (Vrsalović 1979, 140)

3. Veštar bay southeast of Rovinj – villa and breakwater and harbour remains, vicinity of a quarry (Vrsalović 1979, 140)

4. Cape Gustinja southeast of Rovign – Roman villa in the bay and the remains of the port, today under the sea level (Vrsalović 1979, 140).
5. Veruda port near Pola – Roman villa - the walls are visible under the sea level (Vrsalović 1979, 141).

**Roman Dalmatia**

Our study of the villas in Liburnia and Dalmatia produced an entirely different picture. Foremost, these areas’ political and economic position in the Roman Empire was different than that of Histria. They remained a part of Illyricum which, under Augustus, changed from the position of a senatorial province to that of an imperial one, governed by a legate. There is significantly less documentary or literary evidence for senatorial landowners, than is the case with Histria. There are no direct data on large senatorial estates, although the natural conditions are similar to those in Histria. The primary role of these cities was that of military and civilian ports and locations for the exchange of goods between the Mediterranean and the hinterland. The islands, due to their position and the establishing of protected maritime routes through channels, had primarily a navigational significance. The owners of the villas were probably engaged in maritime trade and military duties.

Archaeological explorations carried out to date focused on coastal towns at the expense of rural areas, so that villas are only partly or superficially explored. In the present state of research it is not possible to discuss the development, architecture or function of maritime villas in the Liburnian area, between the present-day cities of Rijeka (Roman Tarasatica) and Zadar (Roman Iader). There are two sites on the coast (Havišće near Jadranovo and Sece near Crikvenica) and three on the islands (Njivice, Šimuni, Supetarska draga) where architectural remains on the sea shore may belong to maritime villas.

The native Liburnian communities gained municipal autonomy in the 1st century. In this region the pattern of native settlements and land ownership (partly known), was conducive to the development of maritime villas.

On the entire Liburnian coast, between the present-day cities of Rijeka and Zadar (Roman Iader), five maritime villas were found. None of those was extensively explored. Three maritime villas were found on the islands belonging to this region, all of them were partly explored.

The site of Havišće near Jadranovo has been explored but is not published yet. Between the cape Ertak and the bay, and promontory Havišće near Jadranovo – Roman villa with the finds of a stone urn, the jewellery, lucernae, and tegulae with stamps Q. Clodii Ambrosii (R. Starac; Vrsalović 1979, 154).

12/ In Selce near Crikvenica a villa was found near the hotel “Slaven” on the sea shore. It may be connected with the owner of ceramics workshop in Crikvenica (Roman Ad Turres) Sextus Metilius Maximus whose stamps were found on several tegulae (Lipovac Vrkljan 2006). Ceramics workshops indicate the economy of scale.

13/ Recently, archaeological investigations started on a maritime villa in a bay at Njivice on the island of Krk, located nearby the Roman town of Fulfinum (Bolonić, Žic 1977). A round building 15 m in diameter has been explored. 14/ Another site of a maritime villa is investigated at the site of Šimuni on the island of Pag. It could be connected with one of the leading Roman senatorial families in the times of the Emperors Augustus and Tiberius – the family of Calpurnius Piso – who had property on the island of Pag. In Časka – Roman Cissa, the inscription reading “Calpurnia L. Pisonis Auguris Filia” was found (Zaninović 2001, 153). Archaeological investigations of a ceramics workshop (figlina) started last year near Novalja on the island of Pag (Gluščević 2006).

16/ Maritime villa in bay Supetarska draga on the island of Rab was built few kilometers from the Roman city of Arba. Same walls and remains of mosaics were found there, today under the monastery of St. Petar. In late antiquity the church and monastery were built over the villa. (Vrsalović 1979, 161, 165)

North and south of Zadar (Roman Iader) two villas are known – first in Diklo and second in xx near Nin (Aenona). The villa in Diklo is partly excavated (Fadić 1986.), while the villa in xx is today completely covered with recent architecture.

15/ The villa in Muline on the southern side of the island of Ugljan exhibits the features of early Imperial and late antique constructions. It is situated on the edge of a fertile land abounding in water, in a favourable, protected bay. Villa was built with the peristyle and a big cisterna. Significant remains of mosaic floors were found there. In Late Antiquity a martyrrium was built over the villa, containing memorial cellae, a basilica with annexes and a vaulted mausoleum (Sušić 2003, 367).

17/ Bošana near Biograda – Roman villa with two breakwaters and waterfront built in stone 50 m long. Remains of coloms are visible in the west port. Archaeo-
18/ The maritime villa on the island of Murter is located on the west part of the island under the Gradiška hill. The island is close to the mouth of the river Krka (Titus), which flows into the sea not far from the ancient town of Scardona. The Latin name of Murter was Colentum (Pliny, NH III, 140). Villa was situated on a peninsula and it has been only partly excavated (Faber 1998). It had a long portico along the shore with a row of rooms (one apsidal) facing the sea, which offered panoramic views. The excavated baths and a large cistern (10 x 5,5 m, 1,8 m high) indicate a luxury villa of the 1st century. The medieval name for this site was Villa Magna. Now safety rather than control governed its location at the bottom of a deep bay Harmina, its entrance protected by a line of small islands. Harbor installations and some other parts of the villa were situated in the bay Harmina south of the promontory.

19/ The maritime villa in the bay called Stari Trogir was 22 nautical miles west of the colony of Salona and 12 nautical miles west of the town of Tragurion (Trogir). Pliny the Elder mentioned Tragurion as "marmore notum." The quarry was exploited from the time of the Greek colonization in the 3rd century BC into the Renaissance. The villa may be connected with that activity, but it was also situated in an agricultural area and in an important nautical location. The bay is well protected from all winds and a small island in front of it provides further protection. It is also at a point where ships sailing from Salona up the coast would leave the channel and go into open waters. (Fig 4)

The site has been surveyed but never excavated. The remains of a stone quay and a circular structure are visible in the sea (Kirigin, Marin 1989, 123-124). This circular structure of 8 m in diameter may be part of a piscina with a central circle framed by lateral rectangular compartments. Such fishponds are known from maritime villas north and south of Rome, illustrated by Lafon. Most date from the Augustan period. On the beach there are remains of the baths and a large cistern, divided into two compartments. More walls are visible on the slope, as the villa was raised on two terraces, nestled in the semicircular shape of the bay.

Some more coastal villas are situated south of Tarasatica -

1. Vrujle bay on the island of Unije – villa rustica along the shore at the site of ‘Mirisce’, remains of walls are visible on the beach at the edge of Malo polje field, Cape Arbit closes the bay (Vrsalović 1979, 154)

2. Caska bay, Zubovici on the island of Pag - ancient Cissa (Vrsalović 1979, 178)

3. Kožino near Petrčane and Zadar (Vrsalović 1979, 180)


5. Barbir near Suksan in Pašman channel (Vrsalović 1979, 181).

6. Kumenat near Biograd (Vrsalović 1979, 184)

7. Janice near Pakostane (Sucić 1963, Vrsalović 1979, 186)

8. Mišine near Nevidana on Pašman island (Vrsalović, 1979, 189)

9. Polačine near Kraj on Pašman island – villa with mosaic floors and remains of port and bath.

10. Mala Proversa on Dugi island (Vrsalović 1979, 502-504)

20/ Diocletian’s palace - Rectangular maritime villa 174,94 x 215, 54 x 180,90 x 215,54 m surrounded by a wall 2,1 m thick with square corner towers built about 295-305 AD. Along each external walls stood two square towers except on the south wall. South façade has the appearance of a Roman villa with the first floor opened to the sea by a cryptoporticus with a series of arcades with loggias. Three distinctive gates lead into the villa from the east, north and west. The gate on the south façade is a small exit to the port. Every gate is flanked by two octagonal towers except the gate on the south wall. Villa is conceived as a castrum with two main axes intersecting at right angles. At their intersection there is a peristyle with the mausoleum and three temples. The southern part of the villa has a residential function. According to Lafon, Diocletian’s palace in Split near ancient Salona is an example of maritime villa and has its place in the long tradition of the seaside villas that were built for the emperors. Diocletian’s villa is the last in this series, and may represent a missing link, because many maritime villas from Trajan period and later are still virtually unknown (Lafon 2009, 295-306). The villa is situated in a bay protected from the north wind by Marijan promontory and on the most significant (strategic) position in the central Adriatic. (Fig 5)

The villa in Piškera Bay near Nečujam on the island of Šolta (the bay’s name derives from piscina) had in front of it a large fish pond (piscina vivaria) whose remains can still be seen under the sea surface. The entire Piškera Bay was closed by a large wall with an opening in the middle to enable the circulation of sea water. The villa has not been explored (Oreb 1990, 51). It is located in the deepest inlet of the well-indented Nečujam Bay, whose name indicates that it is protected from all win-
ds. Nečujam ("without a sound" in Croatian) was the last mooring site and control point before setting sail into the port of Aspalathos and Salona. The villa must have had a strategic importance, but it is also connected to the fertile fields on which grapes and olives were cultivated. The inlet is also popularly called "Diocletian's fish pond."

21/In the villa built on the northern side of Zlatni rat beach near the town of Bol on the island of Brač, a stele has been found representing the sea-god Neptune in relief (Cambi, 2002). The villa is situated on one of the most beautiful sandy beaches of the central Adriatic, on the controlling position of the major maritime route along the channel between the islands of Brač and Hvar, ending in the harbour of Split. Remains of a stone quay are visible in front of the villa, in the sea. The villa remains unexplored.

22/Another maritime villa was found in Lovrečina bay on the south side of the island of Brač. The famous early Christian complex was built near the villa.

23/ The villa in the harbour of Ubli on the island of Lastovo had a pronounced strategic importance. A protected bay with deep lateral inlets called Mali lago and Veliki lago (which offered protection from winds of different directions) was suitable for the mooring of ships and even for longer stays, before the last leg of the journey over open seas to the Italic coast. This villa, like the one in Lumbarda on the island of Korčula and the villa in Polače on the island of Mljet had to be very important points on the maritime route along the eastern Adriatic coast (longitudinal route) as well as the trans-Adriatic route. It was probably the seat of a highly positioned Roman official. The villa in Ubli is positioned on the edge of fertile fields, at the entrance to a narrow valley. It is only partially explored. A sizeable late antique settlement was built on the villa site, featuring an early Christian church (Zaninović 1995, 92; Jasna Jelić Radonić 2001, 199). (Fig 8)

24/ The maritime villa on the island of Sv. Clement, part of Pakleni archipelago, near the island of Hvar is located in the bay of Soline on the south side of the island. The remains are located along the shore, on the edge of a fertile field, still under cultivation. Space and well protected bay, with the island Dobri in front, has two entrances (as well the exits) from the bay. The name of the bay – Soline – indicates the existence of Roman salt works, which have been confirmed in medieval documents. The investigations since 2007 have been directed toward the questions related to the extent, layout, chronology and historical significance of the villa site. More structures underground were indicated by the geophysical/magnetometric survey. Two distinctive periods have been observed so far: probably an Early Imperial phase (1/2 nd century AD) and a Late Antique phase (4th-6th c.). Find of the tegulae with Pansiana stamps on the site. The archaeological
Fig. 6 Maritime villa in Lumbarda on Korčula island

Fig. 7 Maritime villa in Soline bay on St. Klement island - photo
finds date from the 2nd/1st BC to 6th c. AD. (Fig 7) Villa controled the navigation from Vis to Hvar, channel between Brač and Hvar and the navigation to Salona between Brač and Šolta islands.

24/ Rake bay and the bay Veli Porat on the island of Šćedro – Roman villa with mosaics floors, and the remains of port. The medieval monastery was built on the site (Vrsalović 1979, 222)

25/ On the promontory in front of Sreser on Pelješac Peninsula, there is a spacious villa on the most picturesque part of the sea coast. The rooms facing the sea were explored, some of which had mosaics. The area belonged to the Narona ager. In the vicinity, at the foot of the Janjina hill-fort, there is another villa in which an inscription was found mentioning Publius Anius Aper and Publius Anius Tiro from the Tribus Tromentina of Narona. Both were decuriones and quattuorvir in the colony of Narona (Fisković 1953, 234; Zaninović 2001, 157). The villa at Sreser is located in the so-called “Small Sea” (Malo more) between Pelješac and the mainland. Well protected in a quiet bay, it had strategic importance for the mooring of boats and control of navigation toward Narona. In the vicinity of the villa there are fertile lands and vineyards providing much-appreciated sorts of grape even today.

There are two island villas on Korčula and Mljet. 26/ The first one is a maritime villa at Lumbarda and its location and masonry are notable. It was located on a promontory, on an elevated, panoramic position, at Lumbarda on the island of Korčula, between two bays named Bili Žal and Prolina. In the bay Bili Žal some architectural remains were found, which belonged to the harbour and the villa. The site controlled sailing in the Pelješac channel and the route to and from Narona. The villa also sits at the edge of a fertile valley, still today renowned for its vineyards. The site has been surveyed, but not excavated. The layout shows two rectangular buildings (29 x 25 m and 27 x 24 m) connected by a 93 m long, seafront portico 4,66 m wide (Zaninović 2001, 151). One preserved wall is built in opus reticulatum, a technique rare in the eastern Adriatic and outside of Italy in general. Lafon discussed the rare appearance of this building method in maritime villas in the provinces and saw it as an indication of property value and of high position of the original owner in relation to Rome. In Italy, this opus is always used in monumental villas, mostly in Augustan or early imperial age. Lafon further quoted Torelli’s argument that provincial use of this opus was for public architecture and that domestic usage was exceptional. We may have at Lumbarda a villa of an equal status to public architecture and built not only by a Roman architect, but also by Roman masons. We can compare it to the maritime villa in Fornače near Piran (Stokin 1992, 79). Was the “grand cru” of this island or its strategic position the reason for this high-power estate? There may be a connection with Appian’s quote that Octavian occupied Korčula and the neighboring island of Mljet (another villa’s location) during his campaign of 35-33 B.C. and killed and sold into slavery their inhabitants (Illyr. 16). Two protected bay Prolina and Bili Žal on the opposite side of the promontory. Villa controled the navigation from Lastovo and open sea to Narona. (Fig 6)

28/ The maritime villa on the island of Mljet is situated in Polače Bay facing the Pelješac channel. Now safety rather than control governed its location at the bottom of a deep bay, its entrance protected by a line of small islands. The village is now called Polače, from Latin palatium. There were two building phases. The early villa had dispersed buildings and only parts of the baths with mosaics have been investigated (Zaninović 1990, 730). There was a creek flowing into the bay, which would have supplied water to the villa, the baths and perhaps a piscina. The later villa, built in the 5th century, is a compact, two-story cross-shaped building with polygonal corner towers. Its walls are in parts preserved up to 20 meters in height (Fisković 1999, 63). Documentary evidence tells us that in 489 king Odoacer gave the entire island, then an imperial estate, to his high official
Pierius as a pay-back for his loan. Pierius was the likely builder of the villa, which has been suggested to function as his hunting lodge. Underwater finds in the harbor showed the luxury character of the site from the first to the sixth century (Brusić 1988, 139-142). (Fig 9) Its military function in the 6th century is attested by North African and Phocaean Red Slip Ware and by North African amphorae. Pottery and architectural evidence indicate that several maritime villas, possibly state owned, became in Late Antiquity fortified settlements and probably military and flotilla bases and commanders’ posts.

Two suburban, maritime villas have been located on each side of Epidaurum, one across the bay on the Sustjepan promontory, the other in Tiha bay, 300 meters from the Epidaurum harbor. Underwater finds in the harbor showed the luxury character of the site from the first to the sixth century (Brusić 1988, 139-142). (Fig 9) Its military function in the 6th century is attested by North African and Phocaean Red Slip Ware and by North African amphorae. Pottery and architectural evidence indicate that several maritime villas, possibly state owned, became in Late Antiquity fortified settlements and probably military and flotilla bases and commanders’ posts.

Two suburban, maritime villas have been located on each side of Epidaurum, one across the bay on the Sustjepan promontory, the other in Tiha bay, 300 meters from the Epidaurum harbor. The Croatian name Cavtat of this city derived from Latin Civitas. The bay of Epidaurum is protected from the sirocco and the bora and provides good anchorage. Epidaurum was an
important port on the shipping line between the Ionian and Adriatic seas and in the trans-Adriatic network.

29/ The villa on the Sustjepan promontory was partially excavated in the early 1970’s. It spread over three terraces with porticoes on the first and second. Along the shoreline were remains of a cistern, storage rooms and a mole (Zarinović 1988, 93). These would indicate that some agricultural production occurred on the site, although none has been confirmed. Thirteen skeletal burials of the mid-late 6th century were found within the walls of the lower portico.

30/ The site in Tiha Bay has never been excavated and the modern construction has obliterated Roman structures, except some massive walls of a cistern on the site of Donji Obod (Sutivan). An inscription was found there in 1547, which honored Augustus’ legate to Illyricum, P. Cornelius Dolabella (Faber 1966, 26). A head and fragments of a statue were also found, perhaps of Dolabella himself. The postulated villa has been traditionally attributed to him as well (Zarinović 1988, 95). A villa and perhaps an estate of Dolabella would make sense here, but more as a strategic, than an economic asset.
Some walls and harbour remains are visible in the sea (Faber 1966, 25). (Fig 10)

Another villa in the territory of Epidaurum, at Mlini, is located near the fertile land of Konavli. Its remains show some elements of monumental architecture, (and also marbles, mosaics, and the coins of Galeria, Maksimian, Herculia, Constantin I and Constantin II), but further archaeological investigations are necessary (Zaninović 1988, 97).

There are some other coastal villas south of Salona today partly excavated -

1. Rogač, Banje bay on the island of Šolta
2. Kneža bay, Kneža site, island of Korčula
3. Bradat, Mirje near Vela luka, island of Korčula
4. Gudulija, near Vela luka, Sutulija, island of Korčula
5. Poplat bay, island of Korčula

Our study of the villas in Liburnia and Dalmatia produced an entirely different picture. Foremost, these areas' political and economic position in the Roman Empire was different than that of Histria. They remained a part of Illyricum which, under Augustus, changed from the position of a senatorial province to that of an imperial one, governed by a legate. There is significantly less documentary or literary evidence for senatorial landowners, than is the case with Histria. The islands, due to their position and the establishing of protected maritime routes through channels, had primarily a navigational significance. The owners of the villas were probably engaged in maritime trade and military duties.

Conclusion

The pacification of the eastern Adriatic coastline and numerous islands after the Roman conquest of the eastern Adriatic coast in the 2nd to the 1th century BC by the Romans was a difficult task that required an elaborated strategy and plans. One of the key moves in the pacification of the coast and the islands was the granting of large estates in strategically important places to military commanders and to some families of the senatorial class families. They defended the territory and improved the agriculture of the property they gained. The result was the construction of maritime villas as the centers of the property. Indigenous peoples were partially displaced as Appian wrote for Korčula and Mljet (Illyr. 16). The properties were built with villae and villulae. One of them was usually a large villa built for the owner and his family, and other, smaller villas had different uses - agriculture (processing and storage facilities), livestock, activities related to saltworks, fishing, salting fish or making garum etc. Villas also had safe and protected ports, supplies of food and water for ships and facilities for repairing vessels and ship equipment.
St. Paul the Apostle was saved after a shipwreck in the Adriatic in waters of Melita island (Mljet), and hosted by Roman a local notable (villa owner or *vilicus*) named Publius. St. Paul stayed during the winter on Melita and left the island in the spring on an Alexandrian vessel, and their crews with other ships who spent the winter on the island. (New Testament, Acts of the Apostles 27-28, 1990, 404-408). Port for ships in transit were located at a certain distance from the owner’s villa. The role of maritime villas in the economy and trade in the Adriatic was very important in the Early Empire, and especially was expressed in Late Antiquity. They had to regulate the harbors and the piers, breakwaters and shores built of stone, and bindings (cleats) for secure fastening of ships. Through Pliny the Younger’s observation (which he wrote in 1st century AD in his letters to Gallus) Roman villas were supplied by watchtowers with panoramic views (Bergman 1995, 410). Villas had according to Pliny the Younger’s writing high towers (on specific location of the villa or in its immediate vicinity). It is known from the literary sources of the tower of Mecenas’ suburban villa, where Nero stood and watched the fire of Rome. Maritime villas in the Adriatic region were primarily of strategic importance (especially in Dalmatia). They control the most important maritime directions - villa in Soline o St. Clement controled navigation from Vis to Hvar, the channel between Hvar and Brač and the way to Salona between Brač and Šolta. Villa in Verige controled Fažana Channel and the approach to Pola from the north; villa on Lumbarda, the island of Korčula controled voyage from Lastovo and the open sea towards Pelješac Narona and navigation channel between Pelješac and Korčula peninsula, the villa Polače controled sailing between the mainland and the island of Mljet, Medulin villa was situated in the last safe bay before the open sea and the Kvarner Gulf (*Sinus flanaticus*). The fate of the maritime villas in Late Antiquity was diverse. Due to their monumental architecture most were diverted into new functions, oftentimes not less luxurious. Production facilities such as *fulonicae* were attached to some maritime villas (Barbariga, Verige on Brioni, Fornace near Piran), others were transformed into late antique settlements or maritime military bases on the vitally important routes along the Adriatic (Katoro, Castrum – Verige on Brijuni islands, Vižula near Medulin, Ubli on Lastovo island). Pottery finds, coins and architectural remains support the thesis that several maritime villas, probably those that became imperial possessions, served as military and naval bases and seats of military commanders in Late Antiquity. Other maritime villas attained in that same period their full splendour, e.g. Polače on Mljet. Much remains to be done to explore the known sites and elucidate the fate of these extraordinary architectural creations.

**ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTI</td>
<td>Atti e Memorie Soc. Istria arch. storia patria</td>
</tr>
<tr>
<td>Izdanja HAD</td>
<td>Izdanja Hrvatskog arheološkog društva, Zagreb</td>
</tr>
<tr>
<td>Ljetopis JAZU</td>
<td>Jletopis Jugoslovenske akademije znanosti i umjetnosti, Zagreb</td>
</tr>
<tr>
<td>JRA</td>
<td>Journal of Roman Archaeology</td>
</tr>
<tr>
<td>Obavijesti HAD</td>
<td>Obavijesti Hrvatskog arheološkog društva, Zagreb</td>
</tr>
<tr>
<td>PPUĐ</td>
<td>Prilozi povijesti umjetnosti u Dalmaciji, Split</td>
</tr>
<tr>
<td>Prilozi IARH</td>
<td>Prilozi Instituta za arheologiju i Zagrebu</td>
</tr>
<tr>
<td>Radov IPU</td>
<td>Radov instituta za povijest umjetnosti, Zagreb</td>
</tr>
<tr>
<td>VAHD</td>
<td>Vjesnik za arheologiju i historiju dalmatinsku</td>
</tr>
</tbody>
</table>
SOURCES

APPITANUS 1912  Appianus of Alexandria, Appianus Roman History (Historia Romana), The Loeb Classical Library 4, Cambridge: Harvard University Press

KASSIODOR 1894  Cassiodori senatoris Variae, Th. Mommsen, Berlin


PLINY THE ELDER 1942  Pliny the Elder, Natural History (Naturalis Historia), LCL, Cambridge: Harvard University Press

PLINY THE YOUNGER 1962  Pliny the Younger, Epistulae, Bloomington: Indiana University Press

VITRUVIUS 1999  De Architectura libri decem, translation F. Granger, LCL, Cambridge, Harvard University Press

BIBLIOGRAPHY


ARTHUR A., 1997.  The villa at San Giovanni in Lucania, JRA 10, 598 – 611

ASHBY T., 1970.  The Roman Campagna in Classical Times, Tonbridge

BEGOVIĆ DVORŽAK V., 1990  Antička vila u uvali Verige na Brijunima, VAMZ 3, sw. XXIII, Zagreb, 97 – 110


BEGOVIĆ V., SCHRUNK I., 2001  Preobražbe rimskih vil na istočnom Jadranu u kasnoj antici i ranom srednjem vijeku, Transformations of Roman villas on the eastern Adriatic coast in late classical antiquity and the early middle Ages, Prilozi IARH, Zagreb, 157 – 172

BEGOVIĆ V., SCHRUNK I., 2002,  Rimski vile Istre i Dalmacije, I dio: pregled lokaliteta, Roman Villas in Istria and Dalmatia I, Prilozi IARH, Zagreb, 113 – 130

BEGOVIĆ V., SCHRUNK I., 2003,  Rimski vile Istre i Dalmacije, II dio: tipologija vila, Roman Villas in Istria and Dalmatia, Part II: Typology of Villas, Prilozi IARH, Zagreb, 95 – 111

BEGOVIĆ V., SCHRUNK I., 2004,  Roman villas in Istria and Dalmatia, III: maritime villas, Rimski vile Istre i Dalmacije, III dio, maritimne vile, Prilozi IARH, 123 – 164

BEGOVIĆ V., SCHRUNK I., 2005  Brioni islands, Zagreb, 2007


GLUŠČEVIĆ Š., BOLŠEC FERRY N. 2003., Izvješće o podmorskim arheološkim radovima u Katoru kod Umage, Obavijesti HAD, br. I, god. XXV, Zagreb 114 – 120
GLUŠČEVIĆ S. 2006. Proizvodnja amfora Dressel 6B u Novalji na otoku Pag, Production of Dressel 6B Amphorae in Novalja on the island of Pag, International Archeological Symposium, Pula, Summaries of Reports, 53 – 54; 141 – 142
GNIRS A., 1901. Uberreste romische Ansiedlungen in der Gegend zwischen Pola und Rovigno, MZK 27, 1901, 128 – 130
LAON X., 2001. La villa de Split et la palace dans l’évolution de la villa maritime romaine in Dioklecijan, Tetrarhija i dioklecijanova palača od 1700. obljetnici postojanja, Književni krug, Split, 295 – 306
VRSALOVIĆ D., 1979. Arkheolška istraživanja u podmorju istočnog Jadrana, Zagreb

SAŽETAK

ULOGA MARITIMNIH VILA U PLOVIDBI JADRANOM

Vlasta BEGOVIĆ, Ivančica SCHRUNK

Maritimne vile predstavljaju odrednice u pejzažu, značajne istaknute orijentacijske točke i bile su opremljene stražarnicama (o kojima piše Plinije Mlađi) s kojih se pružaju panoramske vidice i kontroliraju široki akvatorij, te važne maritimne rute između otoka i kopna. Uz svoju rezidencijalnu funkciju imale su i važnu ulogu u ukupnoj plovidbi uz istočnojadransku obalu. Uz njih se vežu sigurne i zaštićene luke, opskrba brodova vodom, hramom te pružanje usluga popravaka brodova i brodskog opreme. Luka za prihvat brodova u traznitu bila je udaljena od vila kao npr. Soline i Palmizana na Sv. Klementu, nedaleko Hvara; uvala Verige i uvala Madona na Brijunima; uvala Mali i Veliki Lago i Ubli na otoku Lastovu itd. Početkom Rimskog vojnika na istočnojadranskom obalu, grade ih obitelji senatorskog staleže i visokoposojanim zapovjednikima u rimskoj vojsci, posebno mornarići. Veze su uz rimska urban središta, zajedno s kojima čine mrežu plovnih odrednica i zaustavnih punktova. Nažale se na istaknutim strateškim točkama plovnog puta, te imaju važnu ulogu u signalizaciji, kao što je vidljivo na zidnim slikama (vile sa svjetlionicima) iz Pompeja i antikih Stabieh. Ekonomski bazu posjeda čiji centar čini maritimna vil, izvjesno je i prihod od pružanja usluga opskrbe i smještaja brodova (Novi zavjet, putovani sv. Pavla, apostola). Značajna je razlika u korištenju maritimnih vila u ranom carstvu prema kasnoj antici. U ranom carstvu nju kova je uloga vezana uz strateški položaj, plovidbu, signalizaciju, ali i poljoprivrednu proizvodnju. U kasnoj antici ekonomska i strateška funkcija bila je još više naglašena (o čemu svjedoče nalazi keramiike na lokalitetima). Tada one igraju važnu ulogu u osiguravanju vitalno važnog plovnog puta Jadransom, opskrbi i smještaju vojske (Sustjevan kod Cavrata, utvla Verige na Brijunima, Polače na Mljetu). U č. st. vise je što uvijek bile centralne točke u krajoliku istočnojadranske obale kao što ih opisuje Kasiodor (Variae XII,22).