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A LATE ANTIQUE SETTLEMENT IN MADONA BAY, BRIJUNI ISLANDS

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According to all archaeological investigations so far, and the insights obtained by these investigations, we can classify the settlement in Madona Bay into an agglomeration settlement with geographical, cultural and ethnic continuity since antiquity. A naturally protected site on the Brioni Islands, from both sea and land, Madona Bay became in Late Antiquity one of the key points on the Adriatic maritime route. The settlement with high fortification walls was created by successive building alongside a large Roman villa. This villa rustica expanded and developed in time of peace and prosperity, then stagnated and expanded again with the construction of a fullonica and the surrounding settlement. In turbulent times of Late Antiquity the settlement found itself in the anchorage zone of a naval base which was defended, together with the settlement, by massive fortifications. The site became a Byzantine stronghold and refuge in the 6th century and developed the features of a late Roman settlement – castellum. A multi-layered and complex settlement, represents a key archaeological site for documenting the history of Roman colonization and building activity on the islands. The urban matrix of this settlement was created by continuous additions and transformations of antique structures, both civilian and military.

Key words: late antique settlement, villa rustica, Madona bay, Brijuni islands, 2nd century BC - 6th century AD

The late antique settlement is located on the west side of Veli Brijun, in the Bay of Madona, on a low plateau (the difference between the highest part and lowest part is about 2,5 meters), close to the shore and 0,5 m above sea level (2,5 m in ancient times). Madona Bay lies on the western side of Veli Brijun. This spacious, wide and very shallow bay is protected on the northern and southern side by the peninsulas of Rankun and Peneda, on the western side by a small island of Madona (Pusti), and towards the open sea by the broad stretch of the Vanga Island. On the north side, the hilly

peninsula of Turanj and Petrovac hill protect it from the bora and other northern winds. On the eastern side the area is protected by large natural wetlands, which stretch all the way to Saline Bay and by the slopes of gentle hills, which reach the highest peak on the island – Straža (54.7 m above sea level). A path from the east led into this naturally protected bay, winding its way between the wetlands and the slopes of the hill, which were relatively easy to defend. On the other side, the shallow waters in front of the bay prevented an easy access of enemy boats. Presumably, well positioned guard-

1. Aerial photo of Madona Bay



houses on the hills around the bay and on the islands in front of it, enabled an excellent control of the land and sea routes, making Madona Bay a naturally most protected area of the Brioni Archipelago. The multi-layered and complex settlement in this bay represents a key archaeological site for documenting the history of Roman colonization and building activity on the islands. The late Roman settlement was built on the *villa rustica* from the 1st century BC. Fig 1

First structure built on the site (according to archaeological excavations)

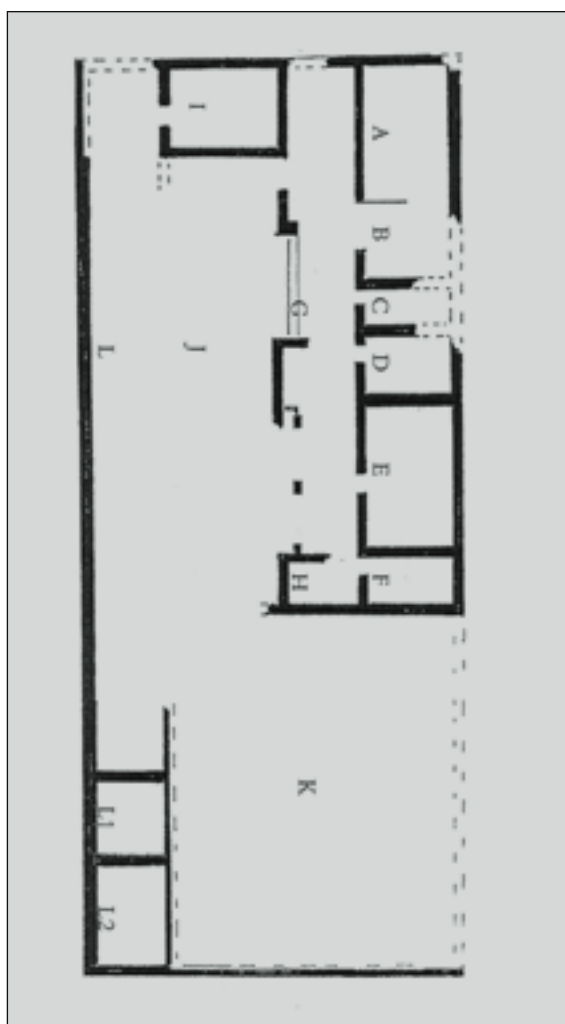
The earliest architectural finds in Madona Bay belong to a modest villa, dated by Š. Mlakar to around the beginning of the 1st century BC. Its remains were found along the shore, below the level of a later and larger, second *villa rustica*, which used two walls of the earlier villa to construct its foundations, leaving the rooms of the earlier villa in its substructure. The first villa had a large production area, which comprised approximately one third of its entire space, testifying to its agricultural function (Mlakar 1976, 3; Vitasović 2005, 161). The rooms are lined up in a row, similar to agricultural

buildings typical of central Italy, as described by N. Terrenato, and which originated from the Archaic Period (Terrenato 2001, 14). Terrenato's typology of Roman villas shows the earlier and later examples of villas and their development. As a consequence of the rise in the sea level from antiquity up to the present by approximately 2 meters, and also of erosion by waves, the sea front of the structure and the first row of its rooms, as well as the retaining wall of the terraces, have been significantly damaged and cannot be defined. R. Matijašić believes the villa marks the first phase of building on the site (Matijašić 1993, 249). According to V. Girardi Jurkić, the villa was built on the site of an older Roman structure from the end of the second or the beginning of the first century B.C. (Girardi Jurkić 1981, 94). Fig 2

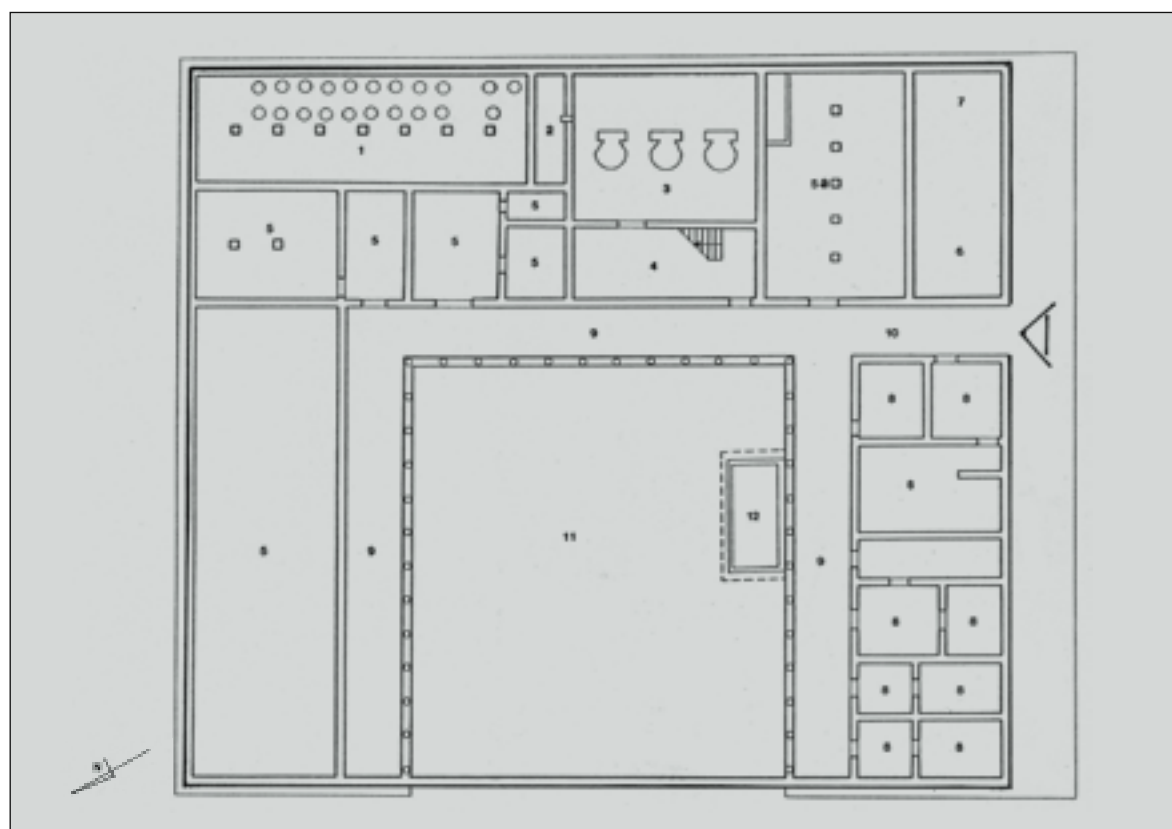
Second structure built on the site - large villa rustica

The second *villa rustica* built over the structures of the first villa described above, was significantly larger in size and had its rooms differently arranged. It was a typical 1st century villa, built on the platform (terrace) retained by walls, like those in the villa at Settefinestre,

near Cosa (Ager Cosanus) and the villa in Boscoreale, with rooms on three sides surrounding a central courtyard, and the high external wall on the fourth side. Its dimensions were 63x51 m (210x170 Roman feet). The construction probably took place in the middle of the 1st century BC. The only find dating it is the roof tile (tegula) with the stamp of (PANS)AE VIBI, dated to the period between 50-40 BC. Another tegula with the same stamp was found at the *villa rustica* in Verige Bay on Brioni Islands. These are the only chronological indicators of the beginning of the villa construction on the island (Bezeczky and Pavletić 1996, 151). The second *villa rustica* went through several rebuilding and expansion phases. The agricultural sector of the villa certainly had two building phases. The spaces for wine production and storage belonged to the first phase, while those for oil were added later. The original villa was a wine producing farm with a large wine cellar and three presses. The building was oriented northeast to southwest. It had a U-shaped plan, with a spacious courtyard and working and living spaces along its three sides. The courtyard was enclosed by porticoes on three sides and by a fence wall on the fourth, facing the sea, and open to a panoramic view. Figure 3 The villa had its harbour facilities with a dock, which is still visible on aerial photographs and has been explored during the



2. Ground-plan of the first villa rustica: E-kitchen, G-corridor, J-courtyard, K-working area, H-room with a stone floor, D-room with preserved mortar (Vitasović 2007)



3. Ground-plan of the second villa rustica: 1. cella vinaria, 2. lacus, 3. grape presses, 4. staircase, 5. productive rooms, storage, 6. oecus, 7. kitchen, 8. storeroom, 9. cubiculae, 10. portico, 11. entrance hall, 12. courtyard, 13. cistern (Širec, Vitasović 1984-85; Begović, Schrunk 1999-2000)

4. View of the second villa rustica
in Madona bay



underwater survey in 1985. Several large stone blocks that could belong to a small dock were observed. One of the blocks was perforated (Jurišić, Orlić 1998). The walls of the villa were 45 to 53 cm (1.5-1.7/1.8 R. f.) wide and built of masonry stone blocks (8 to 14 cm), set in mortar. The masonry blocks had the width to length ratio of 1:3, what indicated that it was built in the period from the first century BC to the first century AD.

The orientation and layout of this villa again followed Vitruvius' rules for relationship to the natural environment and insolation in a coastal location (De arch., VI, 129-132). The residential wing was located on the south-western side with the best insolation. The entrance into the villa was on this side, and the entry corridor, leading into the courtyard, set it apart from other spaces. The original layout of the residential rooms was difficult to reconstruct because of later modifications, but it seemed that it was similar to that of the *villa rustica* in Verige. The bedrooms varied in size, and the master bedroom, made for the owner or *vilicus*, had two alcoves. The size of the courtyard was 31 x 28.7 m (106 x 98 Roman feet), while the width of the portico was 4 m (14 Roman feet). The 60 cm wide fence wall on the fourth side was found partially preserved and incorporated into the fortification walls, built in Late Antiquity. On the south-western side of the courtyard, there was a large cistern, 7.35 x 3.3 m (25 x 11 R. f.), which served

for collecting rain water from the roofs of the porticoes. Along the south-eastern side, an *oecus*, a large hall with a central row of columns, used for reception and dining, was located, as well as a kitchen, storage rooms, and a large pressing room with three wine presses, 13 x 10.6 m (44 x 36 R. f.). The pressing room was raised about one meter above the other rooms. The access was provided by a flight of wooden stairs located by the wall of the room in front of it. The floor in the pressing room was paved in *opus spicatum* technique. The size of the *spicae* was 7.5 x 12 x 1.8 cm. A *lacus* for holding must was placed next to the presses. A large *cella vinaria*, 23.2 x 7.9 m (79 x 27 R. f.), with up to 56 *dolia*, was oriented toward the southeast. A row of seven central columns, round in section and placed on square masonry bases, divided the cellar and supported the span of the roof. The columns were constructed of wedge-shaped stones, set in mortar. The rooms facing the courtyard next to the cellar were probably also used in wine-making process. The large space on the north-eastern side, if correctly reconstructed, served as a stable and agricultural storage area. Fig 3

The original layout of the rooms on this north-eastern side is hard to reconstruct due to later modifications. Large oil-producing facilities with three olive presses, built in a later phase, are protruding out of the original ground-plan. Drainage channels built of bricks



5. Wall of the building from 1st or 2nd century AD and behind it the fortification wall from the 5th or 6th century AD

in this area also indicate a later construction. The *cella olearia*, storage rooms and decantation tanks are placed next to the pressing room. The walls of the room in front of the pressing room are 88.71 cm (3 R. f.) wide, and indicate the second floor construction. Another later addition to the villa was a complex of small rooms built as an annex to the north-eastern wall. Their size varies from 2.4 x 3.6 m, 3.9 x 3.3 m to 4.3 x 4.1 m. The layout is irregular and the narrow communication spaces between the rows are about 2 m wide. These structures could have served as slave quarters, as they are similar in dimensions and layout to such quarters identified in the villa at Settefinestre near the town of Cosa, northwest of Rome (Carandini 1985:2, 171-181). These structures can be associated with the construction of the large maritime villa in Verige Bay in the course of the first half of the 1st century.

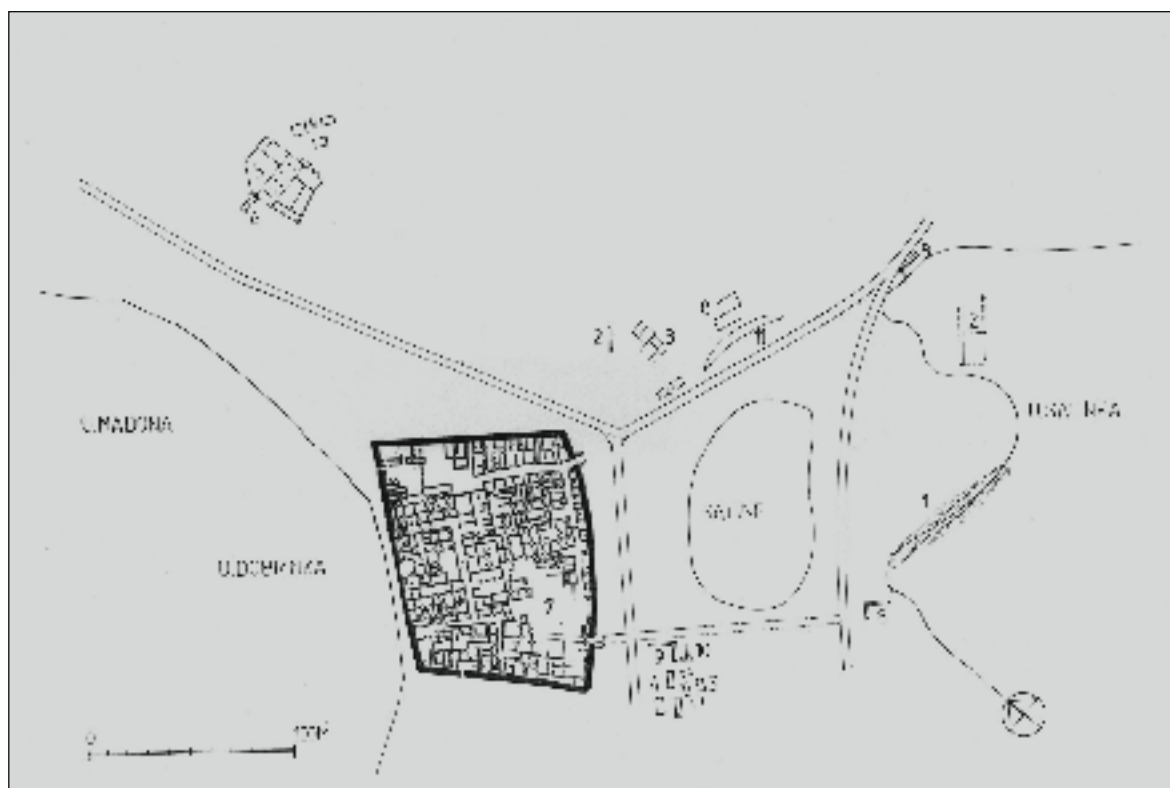
The *villa rustica* in Madona bay expanded and developed in times of peace and prosperity, then stagnated and expanded again with the construction of a fullonica and the surrounding settlement. Fig 4

Building constructed on the south east side of the *villa rustica*

On the south-eastern side of the second *villa rustica*, a new villa was later built, a detached building with a tower on the eastern side. Its estimated dimensions

were 42 x 21 m. The elongated building comprised of rooms grouped on both sides of a longitudinal corridor and a semicircular corner room on the east end. On the west side, a semicircular pool at the west end possibly served as a small spa. (Vitasović 2005, 176). M. Mirabella Roberti dated the building to the 1st or 2nd century (Mirabella Roberti 1936). The structure was completely built in accordance with the construction methods of classical antiquity. Rows of cut stone using the *opus isodomum* technique are today extraordinarily well visually separated from the subsequently later built fortification wall (Mlakar 1976, 21; Vitasović 2005, 173). Fig 5 The structure was built certainly before the fortifications that took advantage of its walls and followed its layout. Its functional relation to the former villa is not clear. It can be assumed that the building was added in order to increase the residential space of the *villa rustica* or perhaps its administrative capacity. The nearby saltworks and quarries also made up part of the estate. Judging from its position and the later built small door in the fortification wall, the building was connected with the saltworks in Soline bay and might have represented the centre of the imperial procurator (*conductor salinares*). The main façade facing the south east cannot be defined (reconstructed) with certainty, because it was built into the defensive wall later. The main entrance had to be from this side.

6. All the structures built on the site – 1. prehistoric site on the promontory Gromače; 2. saltworks; 3. late antique garves; 4. sarcophagy in situ; 5. church St. Mary; 6. graves; 7. late antique sttlement; 8. buildings near the saltworks and quarry; 9. late antique building; 10. votive ara dedicated to godness Flora; 11. quarry (Gnirs 1911; Mlakar 1976; Vitasović 2005; Tutek 2006)



The late antique settlement

Although there is no clear evidence that in the Flavian era the Brijuni estate along with Laecanius's *figlina* in Fažana had come under imperial ownership, the production facilities and the defence structures on the Brijuni islands in Late Antiquity indicate a certain state investment in the archipelago. The evidence for the state involvement may be found in the conversion to productive use of the central courtyard of the *villa rustica* in Madona Bay and the industrial activities related to the similar installations in the servicing sector of the maritime villa in Verige Bay. There A. Vitasović found many loom weights in addition to manufacturing installations. The findings of stone basins, drainage channels and presses in both villas could indicate the installations of a *fullonica*. In the course of the 2nd and 3rd century, economic changes took place on the islands (perhaps caused by a decrease in olive oil production), resulting in a new building activity. The large maritime villa in Verige Bay was further expanded in order to include new servicing facilities - *fullonica* - a workshop for dyeing fabrics. Probably in the same period a *fullonica* was installed in the courtyard of the *villa rustica* in Madona Bay (Suić 1987, 201; Matijašić 1998, 241-251). According to Diocletian's Edict from 301, (Bra-

dley 2002, 21) *fullonicae* were controlled as important production facilities. The final processing and dyeing of fabrics had to be standardized, systematized and organized, in other words, supervised by high government officials - the procurators. The quality of finished products was under state protectorate, which implied a quality guaranty. M. Suić interpreted the *fullonica* workshops in Madona and Verige Bays as *Bafium Cissense Venetiae et Histriae*, a state manufacture of military clothing, mentioned in *Notitia dignitatum* from 435 (Suić 1987). This settlement also had an ample supply of water from the nearby natural pond, eastward of the settlement. The water could also have been used for the needs of the *fullonica*.

Massive fortifications erected in the 5th century around the settlement proved, among other things, the special importance of the production facilities situated within the settlement (Suić 1987, 186-201).

In the late antique period the entire complex of structures built on this site became a settlement. We may propose three steps in the formation of that settlement:

1. Slave quarters and quarters for the workers which could be associated with the construction of the large maritime villa in Verige Bay in the course of the first half of the 1st century. It was built on the north east side of the *villa rustica*.



7. Late antique settlement with fortifications, built on the second villa rustica – ground-plan: 1. first villa rustica, 2. second villa rustica, 3. structure built on the south-eastern side of the villa rustica, 4. structure built on the north-west side of the villa rustica, 5. fortifications

2. The process very common in the western part of the Roman Empire in late antique period - the village built on *villa rustica* for the agricultural workers – “agriculture village” (N. Christie 2006)

3. The production workshop - *fullonica* built in the courtyard of the second *villa rustica*.

4. Building of the fortifications around the settlement.

Epigraphic and material finds from the 2nd and 3rd century in Istria are numerous, although the written historical sources are scarce. Latin inscriptions linked to important families, as well as freed citizens and soldiers were found in the towns and on country estates (Zaninović 1991; 1994). The first major threat was the attacks of the Quadi and Marcomanni across the Danube, which happened during the reign of the Emperor Marcus Aurelius in 167. The incursions went deep into the territory of the Roman Empire, all the way to Italy. During the entire 3rd century there were ongoing battles for the defence of the frontier (*limes*). It is very probable that this historical context influenced the life on Brioni, although there is no evidence of any destruction. East of the *villa rustica*, a late antique building was found, with a walled-in *ara* (votive altar) in its foundation, dedicated to the Goddess Flora, implying the importance of agricultural activities (Mlakar 1976, 8). It

was erected by Marcus Aurelius Iustus, whose name is known from the stamps on the amphorae produced in Fažana at the beginning of the 3rd century. **Fig 6** At the end of the 3rd century Emperor Diocletian carried out an administrative reorganization of the Empire. From the year 284 onwards, Milan became its western seat, which implicated that Istria and Brioni should come under the direct authority of the vicar (*vicarius*) in Milan. Struggles for the imperial throne in the 4th century affected the Istrian Peninsula as well. In 326, *Crispus*, the son of Constantine the Great was killed by his father's command, probably in the villa on the Vižula peninsula near Medulin. Significant changes occurred following Constantine's Edict on the tolerance of religions in 313, according to which the Christian Church became legitimate, and gained authority. This, in turn, opened a new era for the Roman architecture and art.

During the 3rd and 4th century, new construction took place around the *villa rustica*, which could have solved the problems of housing a large number of inhabitants. Cisterns, fireplaces and bread ovens were found there (Girardi Jurkić 1981, 93-94). New structures formed along the former access roads towards the villa and new streets were established. The former roads towards the *villa rustica* and its access to the sea remained the key communication lines inside the set-

8. View of the late antique settlement in Madona bay



tlement. The new street network completely outlines the former area of the villa. The settlement was built in a planned manner with two streets lengthwise and one across. Small squares were formed at crossroads, and the most significant buildings were oriented towards these squares. The production part of the settlement was separated from the residential one. The administrator's palace was situated alongside the south-eastern rim of the settlement. Warehouses were located on the way to the harbour. The urban pattern was dense. Fig. 7 In the period of relative political and economic stability during the reign of Diocletian and his successors (end of the 3rd and beginning of the 4th century), until the end of the era of Constantine the Great, the newly formed settlement round the villa was characterized by a period of intensive production and relative prosperity, as witnessed by the late antique necropolises, situated along the access roads towards the settlement (Marušić 1986, 84-91). Mlakar placed the construction of the late antique settlement in Madona Bay in the period of Diocletian – the end of the 3rd century - or of Constantine the Great and his successors (Mlakar 1976, 39). Suić connected the beginnings of the settlement with the building of the *fullonica* in the courtyard of the *villa rustica* (Suić 1987). What is certain is that the settlement had been formed before the fortifications were built in the 5th century.

The summarily published coin finds from the late antique settlement showed that there was a significant increase in coin circulation in the second half of the 3rd century. A new situation for money economy must have arisen, beside the fact of inflation at that time. However, the great majority of coins belong to the 4th century, particularly to the period between Constantine and Theodosius (Miškec 2002, 181-186). The overall coin emission was certainly greater in the Empire at that time, but the 4th century boom in the commercial activity in the Adriatic is visible on many key sites on the sea-routes, such as Diocletian's palace in Split, Polače on Mljet island, Hvar on the island of Hvar, Ubli on Lastovo island and Lumbarda on Korčula island. The majority of imported pottery finds at those sites, especially from North Africa, date to the 4th century (Schrunk 1989). The pottery finds from the Brijuni sites are not published. We have only occasional reports of sizable amounts of African amphorae and red slip ware of the 4th century from the late antique settlement and the Verige sites on Brijuni, but they show a significant rise in the Empire-wide commercial contacts (Bezeczky 1998, 57; Matijašić 1998, 371). Numismatic and ceramic evidence support the argument for the presence of the *fullonica* and for the officials and perhaps some troops associated with it. Another evidence for population increase and prosperity, and also for identity of the inhabitants of the late antique settlement are the 4th



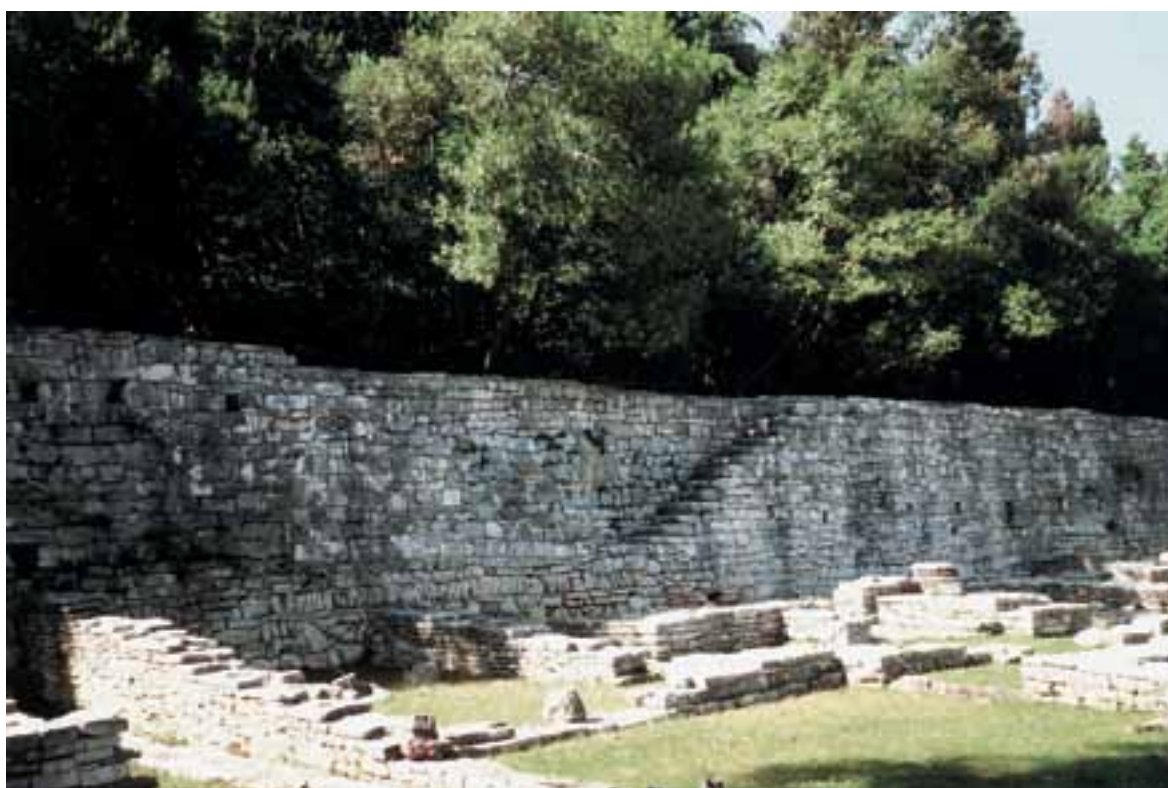
9. Fluted column which served as a lintel on the south-western entrance in fortified settlement

and 5th century tombs found along the roads to the agglomerated settlement. The grave goods in built tombs and sarcophagi included silver and gold earrings and decorative elements of military dress (Marušić 1986, 84-91). We may assume that the *fullonica* was installed on Brijuni sometime between the late 3rd and 4th century. In turn, that created growth in population and in building around a major manufacturing site, which also had a tradition of cash crops and a strategic location in maritime traffic. Fig 8

The Adriatic towns and settlements of the 4th and 5th century were characterized by their location on the maritime routes and their role of administrative and church centres (governors' palaces, church seats and Early Christian churches). They were the refuge of the local population and the population from a broader area gravitating towards these towns (Brusić 1993, 224). The settlements offered the benefit of safe harbours, sometimes even winter berthing places for ships. The craftsmen who lived in the towns helped to repair and service transiting ships, and some locations had full ship-building facilities – *navaliae*. One of them is Novalja on the island of Pag, which got its name from the above Roman word (according to M. Suić). The settlements had accommodation facilities for the passengers and ship crews, warehouses with food supplies, especially grain (*horreum*), and buildings for a permanent or temporary stay of troops.

The changes that occurred in Madona Bay during the 5th century were an indirect consequence of wars at the borders of the Roman Empire and insecure living conditions. After the invasion of the Huns in northern Italy and the destruction of Aquileia in 452, intensive work to strengthen and renew the fortifications in Istria began. In this period the first fortification wall around the settlement was probably built. These fortifications did not include all the existing structures at the site, but only a certain part – those buildings whose outer walls could easily be incorporated into the fortifications. The walls enclosed an irregular rectangular area of 124 x 89.4 x 110.3 x 76.5 m. They were 2.6 m wide, with an even greater thickness (2.9 m) at the corners. In the process of their construction, the material from deserted structures on the islands was partly used, such as a fluted column which served as a lintel on the south-western entrance into the settlement. **Fig 9** The column probably originated from the temple area in Verige Bay, what would set the year 391 as a *terminus post quem*. Namely, prior to that year, the permission for the dismantling of pagan temples could not have been obtained. After the downfall of the Western Roman Empire in 476 and the establishment of the Kingdom of the Ostrogoths in the west and Byzantium in the east, the fortifications in Madona Bay were upgraded in accordance with the Byzantine rules of fortification architecture.

10. Byzantine stronghold – the fortification walls



The layout of the buildings in Madona Bay that predate the construction of the fortifications could be reconstructed by the directions of the defensive walls. The walls are not rectangular, they are in the form of an irregular rectangle extend because of the structure built earlier on this side. The solid walls of some pre-fortification structures were strengthen (from 0.60 to 2.60 m) and used for the fortification walls. Fig 5 The fortifications were evidently built in two phases. The lower zone shows the construction that is characteristic for the fifth century. It is made of dressed stone, placed in mortar and laid in relatively regular courses. After several such rows, the courses are levelled by a layer of stone plates. The plates have a function of horizontal strengthening and binding of the wall mass, and demonstrate the same construction method as the insertion of layers of brick in a stone wall (*opus mixtum*). The zone of fortifications built in this manner reaches an average height of about 2.0 m above the foundation. In the lower zone of the fortifications the stone plates are in some places positioned in slanting rows in a fishbone manner by a technique which increases the carrying capacity of the stone plates. In the southern part, the walls are preserved to a maximum height of 4.8 m, but their original height had to be greater, as the parapets have not been found anywhere on the walls. Above the 2.0 m mark, the fortifications were built of dressed stone

blocks of larger dimensions (regularly- and irregularly-shaped), positioned mostly in a reticular (not layered) pattern (Mlakar, 1976, 23–27). We can assume that the fortifications of this period were built according to the Byzantine construction regulations and under the supervision of state architects, following the well known manuscript *De strategica o tactica*, written by an anonymous officer in Belizar's army (Lawrence 1983, 180). Fig 10 At the time of Justinian's Reconquista, the fort probably functioned as a military and ecclesiastic centre.

During the 5th and 6th century an intensive militarization of Istria and of the entire Adriatic changed the character of the settlements on Brioni. There was a continuous military presence in towns, while villas in well-positioned bays became naval bases. The analysis of the long-term history of this settlement on Veli Brijun shows the development from the *villa rustica* from the 1st century BC to the late antique settlement and an important early medieval naval base with two harbours, one protected from the strong northern winds, the other from the southern. The other safe harbour was in Verige Bay, near the maritime villa (Begović Dvoržak 2001, 177). Brioni were an important naval station on the trans-Adriatic routes, which connected the key north Italian cities, Aquileia and Ravenna, with

the south and east Adriatic and the rest of the Mediterranean.

In turbulent times of Late Antiquity, the settlement found itself in the anchorage zone of a naval base which was defended, together with the settlement, by massive fortifications. The site became a Byzantine stronghold and refuge in the 6th century and developed the features of a late antique settlement – *castellum*. Outside the settlement, but in its immediate vicinity, the Churches of St. Mary (5th / 6th cent.) and St. Peter (6th cent.) were built. In the urban matrix of the *castellum*, created by continuous additions and transformations of Roman structures (civilian and military) in an 8-century time span, we recognize the general evolutionary trends, which should be seen as a result of a common heritage, rather than an imitation of a given pattern. In this sense we can speak of a unique cultural horizon which has its roots in survived antique structures. As the layout

of the late antique fortified settlement (the Byzantine *castellum*) did not witness major changes between the 6th and the 16th century - the time when the settlement was abandoned - the preserved matrix from the 5th / 6th century remains a valuable contribution in evaluating the creation, existence, metamorphosis and decay of urban structures from that period. The matrix of this late antique settlement shows a strong classical tradition: an orthogonal grid in the zone of the *villa rustica* and orderly streets whose intersection forms a square. On the other hand, residential blocks are more modest in size and more densely packed, with a slight departure from the orthogonal grid. A similar grid could be found around the Byzantine *castellum*, on the oldest, elevated part of Dubrovnik, around which the medieval settlement developed eastward, departing from the grid due to the land configuration.

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ABBREVIATIONS

AAAd	Antichità altoadriatiche, Atti delle Settimane di Studi aquilesi, Aquileia-Udine
ARR	Arheološki radovi i rasprave, Zagreb
Bilten HAZU	Bilten Hrvatske akademije znanosti i umjetnosti
GZM	Glasnik zemaljskog muzeja, Sarajevo
Izdanja HAD	Izdanja, Hrvatsko arheološko društvo, Zagreb
Izdanja JAZU	Izdanja Jugoslavenske akademije znanosti i umjetnosti

JÖAI	Jahreshefte des Österreichischen Archäologischen Instituts, Wien
JRA	Journal of Roman Archaeology
MZK	Mittheilungen der Zentralkommission für Erforschung und Erhaltung der Denkmäler, Wien
OpArch	Opuscula Archaeologica, Zagreb
Prilozi IARH	Prilozi Instituta za arheologiju, Zagreb
VAMZ	Vjesnik Arheološkog muzeja, Zagreb

SAŽETAK

AGLOMERACIJSKO KASNOANTIČKO NASELJE
U UVALI MADONA NA OTOČJU BRIJUNI

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Aglomeracijsko naselje kasne antike u uvali Madona nastalo je na rimskoj vili iz 1. st. pr. Kr. Prva villa rustica skromnih dimenzija i jednostavnog tlocrta sagrađena je u kasnom 2. st. pr. Kr. ili u prvoj pol. 1. st. pr. Kr. Materijalni i povijesni podaci su općenito vrlo oskudni za razdoblje od 177. g. do polovine 1. st. pr. Kr. Krista te je i tijek upravnih i političko-ekonomskih procesa teško osvijetliti (Matijašić, 1998., 31-36; Starac, 1999.). Postoji važan nalaz novca iz prve pol. 2. st. pr. Kr. u uvali Dobrika – republikanski as (Mišec 2002., 177). Prema rezultatima svih dosadašnjih arheoloških istraživanja i iskopavanja u uvali Madona naš prijedlog za razvoj kasnoantičkog naselja je slijedeći.

Prvu vilu je sredinom 1. st. pr. Kr. presljila druga villa rustica dimenzija 63 x 51 m, dok su dijelovi prve vile ostali u njenim substrukcijama. Druga villa rustica, građena preko prije opisanih struktura prve rustičke vile imala je znatno veće dimenzije i drugačiji raspored prostorija. Bila je tip kampanijske rimske vile građena na platformi (terasi) s podzidima kao vila Settefinestre, Cosa (Ager Cosanus), s prostorijama koje su na tri strane okruživale centralno dvorište, s visokim ogradnim zidom na četvrtoj strani koji je bio okrenut prema moru. Jedini nalaz koji je datira je tegula sa žigom (PANS)AE VIBI datirana u 50. – 40. g. pr. Kr. Tegula s istim žigom nađena je na vili u uvali Verige. Strukture koje su dodane u 1. do 2. st. posl. Kr. predstavljaju objekt s kulom s njene jugoistočne strane i nastambe za robove i radnike s sjeveroistočne strane vile. Početkom 3. st. izgrađuju se novi proizvodni pogoni za preradu maslina na rustičkoj vili. Oko vile izgrađuje se kasnoantičko naselje.

Strukture koje se u to vrijeme nalaze na lokalitetu okružuju u slobodnom rasporedu rustičku vilu iz 1. st. pr. Kr. i povezano su u cjelinu tek izgradnjom fortifikacija sredinom 5. st. koje nisu uključile sve gradnje u svoj areal. Morao je i prije toga postojati onaj faktor kohezije koji je strukture na tom području pretvorio u naselje s ulicama, a to je izgradnja proizvodnih pogona koji se smještaju u dvorište rustičke vile i formiranje na Brijunima jedne od niza pomorskih baza na vitalno važnom plovnom putu Jadranom. U razdoblju kraja 3. i tokom 4. st. dogodile su se izrazite promjene koje možemo pratiti u nekoliko segmenta.

Elementi koji su kroz stoljeća od rimske villae rusticae stvorili naselje:

1. Nastambe za robove i radnike zaposlene na gradnji maritimne vile u uvali Verige, građeni, sjeverno od villae rusticae.
2. Nastambe za robove i radnike zaposlene na poljoprivrednim radovima
3. Izgradnja proizvodnih pogona - fullonica (specijalizirana radna snaga vidi se po grobnim priložima na nekropolama - sarkofazi i zidani grobovi – 4. i 5. st.)
4. Izgradnja fortifikacija na kasnoantičkom naselju (druga pol. 5. st. i 6. st.)

Proizvodni pogoni i izgradnja fortifikacija oko naselja na Brijunima u kasnoj antici daju indikacije o nekim državnim ulaganjima na otočju. Evidencije državnog ulaganja mogle bi se prepoznati u promjeni proizvodnih djelatnosti u centralnom

dvorištu villae rusticae u uvali Madona i pogona koji su slični onima izgrađenim na gospodarskom dijelu velike maritimne vile u uvali Verige. Nalazi kamenih bazena, kanala za odvodnju na obim vilama ukazuju na postrojenja - fullonicae. U uvali Verige nađena je kasnoantička izgradnja (s lacunae u centralnom dvorištu) koja je preslojila gospodarski dio maritimne vila i nalazi se uz terme iz 1. st. A. Vitasović piše o nalazima mnoštva utega za tkalački stan na zgradi s vanjskim porticima (Vitasović 2004., 94). Na lokalitetu vile u uvali Sv. Nikola nađeni su keramički utezi za tkalački stan, te prostorije s podom u tehnici opus signinum. Prema rasporedu prostorija i nalazima Gnirs je zaključio da se radi o pogonima fullonicae (Gnirs 1901., 130) koji bi predstavljali dio ukupnih pogona fulonike na Brijunima. Na lokalitetu Porto Colonne u blizini Barbarige na istarskom kopnu nađene su lacunae slične onima u uvali Verige (Schwalb 1902., 2). Gnirs govori o pogonima fulonike na vili u Val Bandonu (Matijašić 1998., 122).

M. Suić je dao povijesna i lingvistička objašnjenja za povezivanje tih pogona s baphium Cissense Venetiae et Histriae carske fullonicae koja se spominje u Notitia Dignitatum oko 435. g. (Suić 1987., 202). Preciznije datiranje fulonike nije moguće kao ni povijesna interpretacija izgradnje u uvali Dobrika dok se ne izvrši obrada svih nalaza s tog područja. Notitia Dignitatum spominje fuloniku koja je bila na području Istre. Možemo zaključiti da se pogoni fulonike nisu nalazili samo na jednom mjestu, već su bili smješteni na nekoliko lokacija. Na području Brijunskog otočja nalazili su se u uvali Verige, uvali Madona (u dvorištu vile) i u uvali sv. Nikole u vili na Malom Brijunu. Na obali njeni su pogoni dokumentirani u Barbarigi, Punta Cissana (nalaz školjaka tipa murex), Porto Colonne i u vili na Val Bandonu.

Nalazi novca s područja kasnoantičkog naselja pokazuju značajan porast optičaja novca u drugoj polovici 3. st. Nova situacija s povećanom novčanom ekonomijom svakako je uočljiva, bez obzira na veliku emisiju novca u to vrijeme. Na području kasnoantičkog naselja nađen je 261 komad novca. Najraniji i jedini novac republikanskog razdoblja datira iz prve pol. 2. st. pr. Kr. (republikanski as). Najkasniji je srebrni novac Karla Velikog (781.-800.) i Henrika IV ili V. (Matijašić, 1983., 217-233; Miškec 2002., 177-194). Zastupljeni su svi imperijalni periodi, no najveći broj pripada 4. st. (Miškec, 2002., 177-194). Komercijalne aktivnosti u 4. st. na području istočne obale Jadrana vidljive su na mnogim značajnim lokalitetima uzduž plovnih puteva, kao npr. na Dioklecijanovoj palači u Splitu, vili u Polačama na Mljetu, Pharia na otoku Hvaru, Ubli na Lastovu, Lumbarda na Korčuli itd. Većina importirane keramike na tim lokalitetima, posebno ona iz sjeverne Afrike, datira iz 4. st. (Schrunk 1989.). Nalazi keramike iz uvale Madona i uvale Verige još nisu publicirani. Imamo samo izvještaje o većoj količini afričkih amfora i afričke sigillata chiara keramike iz 4. st. iz uvale Madona i Verige, koje pokazuju značajni porast širih trgovačkih veza između različitih područja Rimskog carstva (Bezeczky 1998., 57; Matijašić 1998., 371). Numizmatički i keramički nalazi podupiru argumente za postojanje fulonike i za činovnike i administraciju, te neke vojne postrojbe koje su bile s tim povezane.

Druga evidencija porasta populacije i prosperiteta kao i identiteta stanovnika su nekropole 4. i 5. st. poredane uzduž puteva na prilazima naselju. Nalazi u zidanim grobovima i sarkofazima su srebrne i zlatne naušnice i dekorativni elementi vojničkih odora (Marušić 1986., 84-91). Možemo pretpostaviti da je fulonika izgrađena na Brijunima negdje između kasnog 3. i poč. 4. st. To je izazvalo porast stanovništva i građevinskih aktivnosti oko proizvodnih pogona i formiralo naselje na ostacima villae rusticae iz 1. st. pr. Kr. U 5. st. naselje i važni proizvodni pogoni dobivaju prve obrambene bedeme. Moramo razlikovati aglomeracije koje su na tom području bila prije izgradnje obrambenog bedema, kao i fazu nakon izgradnje fortifikacija, koje se razlikuju po strukturi i sadržajima.

Izgradnju u uvali Madona prije izgradnje fortifikacija pokazuju smjerovi rasprostiranja bedema koji formiraju nepravilni četverokut. Nepravilni oblik fortifikacija zapravo pokazuje građevine koje su na ovom području bile prije izgradnje bedema. Fortifikacije su upotrijebile ranije strukture tj. jake zidove onih objekata koji su tada bili ugrađeni u bedeme što se izvrsno vidi na jugoistočnom dijelu uz kulu gdje se zid u tehnici opus isodomum vizuelno odvaja od iza njega kasnije izgrađenog obrambenog zida. Na ovom području u vrijeme izgradnje fortifikacija nalazi se velika villa rustica iz 1. st. pr. Kr., skromne izgradnje uz sjeverni zid vile građene u 1. st., objekt građen jugoistočno od vile datiran prema arheološkom materijalu u 1./2. st. (Mirabella Roberti 1936.) i objekt građen sjeverozapadno od vile koji odaje kasnoantički stil gradnje, izgrađen svakako prije 452. g. kada se pretpostavlja da je počela izgradnja fortifikacija naselja. Fortifikacijski četverokut bio je dimenzija 110,30 (jugozapadni bedem) x 76,50 (jugoistočni) x 89,40 (sjeverozapadni) x 124 m (sjeveroistočni). Pet ulaza vodilo je u naselje. Ulazi su različitih dimenzija – sjeveroistočna vrata 2,4 m širine i manja sjeveroistočna 1,7 m širine. Ispred njih nalazile su se ulazne kule, četvrtastog tlocrta s dvostrukim ulazom (propugnaculum). Ulice se formiraju uz rustičku vilu s njene sjeverozapadne, sjeveroistočne i jugoistočne strane, a sjeveroistočna obilazi (pokazuje) i nastambe za radnike građene uz sjeveroistočni zid vile. Također pretpostavljamo prema objektu s leženama građenom južno od ulaza u vilu, da je prvobitni ulazni hodnik vile i pristup u dvorište postao ulica, a ne natkriti prolaz.

Začetak naselja je u gradnjama nastamba za radnike i robove uz sjeveroistočni zid villae rusticae nastao u 1. st. u vrijeme građenja maritimne vile u uvali Verige – radno naselje (slične nastambe nalazimo na vili Settefinestre u Ager Cosanus blizu Cose u Italiji (Etruria Romana).

U 2. i 3. st. događa se tipična izgradnja ruralnog naselja uz rimsku vilu - velike vile transformiraju se u agrikulturna sela (Christie 2006.). Krajem 3. i u 4. st. fullonica ima radnike i obrtnike specijalizirane za pojedine procese proizvodnje. Dio ekonomske baze ovog posjeda su također solane i kamenolomi. Specijalizirana radna snaga i njihov status vidi se u priložima s nekropola (sa sarkofazima i zidanim grobovima). Naselje dobiva prve fortifikacije u 5. st. U bizantskom razdoblju fortifikacije kasnoantičkog naselja bile su pojačane pod kontrolom državnih graditelja i izvedene prema bizantskim pravilima gradnje. Na prostoru veličine cca 95 x 130 m izgrađen je nepravilni četverokut jakih obrambenih zidova debljine 2,6 m, pojačan na uglovima do debljine 2,9 m, s pet ulaza, dvokrakim stepeništima koja su vodila na vrh bedema i tornjem na jugoistočnom dijelu. Naselje s obrambenim zidinama, koje je nastalo sukcesivnom izgradnjom područja uz veliku rustičku vilu, u turbulentnim vremenima kasne antike postaje zona pomorske baze na vitalno važnom plovnom putu Jadranom, a kasnije u 6. st. bizantska vojna utvrda i refugij. Bitno je različita slika naselja u 4. i 5. st. u komparaciji s bizantskom utvrdom izgrađenom na naselju u 6. st.

Fortifikacije su u razdoblju bizantske dominacije (6. st.) ojačane i izvedene pod kontrolom državnih graditelja. Kasnoantičko naselje u vrijeme Justinijanove rekonkviste vjerojatno funkcionira kao crkveni i vojni centar. Franačka dominacija nakon 822. god. zastupljena je brojnom izgradnjom u naselju, te preinakama unutrašnjeg prostora crkve sv. Marije i sv. Petra. Kao važna pomorska baza na plovnom putu Jadranom naselje je u srednjem vijeku izloženo čestim poharama kuge i u 15/16. st. napušteno.