

FRONTIERS OF THE ROMAN EMPIRE GRANICE RIMSKE IMPERIJE



ROMAN LIMES IN SERBIA RIMSKI LIMES U SRBIJI

Miomir Korać, Snežana Golubović, Nemanja Mrđić,
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Sonja Jilek, David J. Breeze



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Institute of Archaeology, Belgrade	Arheološki institut Beograd
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1. Map of the Roman Empire in the mid-second century under the Emperor Antoninus Pius (AD 138–161)
 1. Mapa Rimskog carstva sredinom II veka u vreme vladavine imperatora Antonina Pija (138–161)

FOREWORD

The Roman Limes, or the boundaries of the former Roman Empire, now stretching over 7,500 km through 20 countries that surround the Mediterranean Sea, making it the largest and longest monument in the world. If in our country is not the most beautiful part, then certainly it is the most exciting. Archaeologists in the area of the Iron Gates were already pretty busy in the second half of the twentieth century during the construction of Hydroelectric Power Stations Iron Gate I and Iron Gate II, using the last chance to explore and salvage what is left after several millennia of great cultures that had developed along the Danube. In the world were then sent images of the oldest stone sculptures from Lepenski Vir, of remains the longest bridge built in antiquity near nowadays Kostol, of Roman road cut into the rocks of the Iron Gates Gorge, of moving Trajan's tablet... Items enriched the museums, knowledge about ancient cultures have influenced the new generation researchers and new cultural theories, and ancient heritage is, unfortunately, largely submerged and remaining photos and drawings are the only testimonies of their existence. However, as the world is changing and modern technology is affect daily lives, it turned that what is submerged is not lost in fact. It still exists there and, even, can be protected! After decades of rescue excavations, then conservations of what is left (*Diana, Pontes*), we are able to put our part of the Limes under the protection of UNESCO. Obviously, we still have to do a lot to protect sites in the meaning of physical and legal protection, but the first steps have already been made. Parts of the Roman limes in Britain and Germany have been already put on the World Heritage List, and from 2012 the Archaeological Institute has participated in an international project that aims to put the whole Danube Limes under the protection of UNESCO. As long time ago, nearly 2.000 years ago, we shall become the part of the Roman Empire, this time without the use of military force and with the only purpose of popularization and promotion of cultural heritage.

The aim of this publication is not only to inform about historical and archaeological facts on the Limes in Serbia but also to act as a guidebook as well through the Danubian Limes.

Miomir Korać
 Institute of Archaeology, Belgrade, Serbia

PREDGOVOR

Rimski Limes, odnosno granice nekadašnjeg Rimskog carstva, danas se prostiru na preko 7.500 km, kroz 20 zemalja koje okružuju Sredozemno more, čineći najveći i najduži spomenik kulturne baštine na svetu. Našoj zemlji pripada ako ne njen najlepší deo, onda svakako najzbudljiviji. Arheolozi su na prostoru Gvozdenih vrata već bili prilično zaposleni u drugoj polovini XX veka, tokom izgradnje hidroelektrana Đerdap I i Đerdap II, koristeći poslednju priliku da istraže i spasu ono što je nakon nekoliko milenija preostalo od grandioznih kultura koje su se razvijale duž Dunava. U svet su tada poslate slike najstarije kamene skulpture sa Lepenskog Vira, ostataka najdužeg mosta sagrađenog u antici kod Kostola, rimskog puta usečenog u stene Đerdapske klisure, premeštanja Trajanove table... Predmeti su obogatili muzeje, saznanja o drevnim kulturama uticala su na nove generacije istraživača i nove kulturne teorije, a antičko nasleđe je, nažalost, najvećim delom potopljeno, dok su preostale fotografije i crteži jedina svedočanstva o njihovom postojanju. Međutim, kako se svet menja i savremene tehnologije ulaze u svakodnevnicu, tako i ono što je potopljeno, ustvari, nije izgubljeno. Još uvek postoji i može se zaštititi! Nakon decenija zaštitnih istraživanja, potom konzervacije onoga što je preostalo (*Diana, Pontes*), u mogućnosti smo da naš deo Limesa stavimo pod zaštitu UNESCO-a. Naravno, do toga se još mora dosta uraditi na zaštiti, i fizičkoj i pravnoj, ali prvi koraci su već napravljeni. Delovi Rimskog limesa u Britaniji i Germaniji su stavljeni na listu svetske kulturne baštine, a od 2012. godine Arheološki institut je učesnik u međunarodnom projektu čiji je cilj da ceo Dunavski limes bude pod zaštitom UNESCO-a. Kao nekada, pre skoro 2.000 godina, postaćemo deo Rimskog carstva, ovog puta bez upotrebe vojne sile i sa jedinim ciljem popularizacije i promocije kulturnog nasleđa. Publikacija koja je pred vama napisana je sa ciljem da pruži istorijske i arheološke podatke o rimskom Limesu uošte, ali i da posluži kao svojevrsan vodič kroz Dunavski limes u Srbiji.

Miomir Korać
 Arheološki institut, Beograd, Srbija



FRONTIERS OF THE ROMAN EMPIRE

2. Boljetin fort during excavations (Serbia)
2. Utvrđenje u Boljetinu tokom iskopavanja (Srbija)

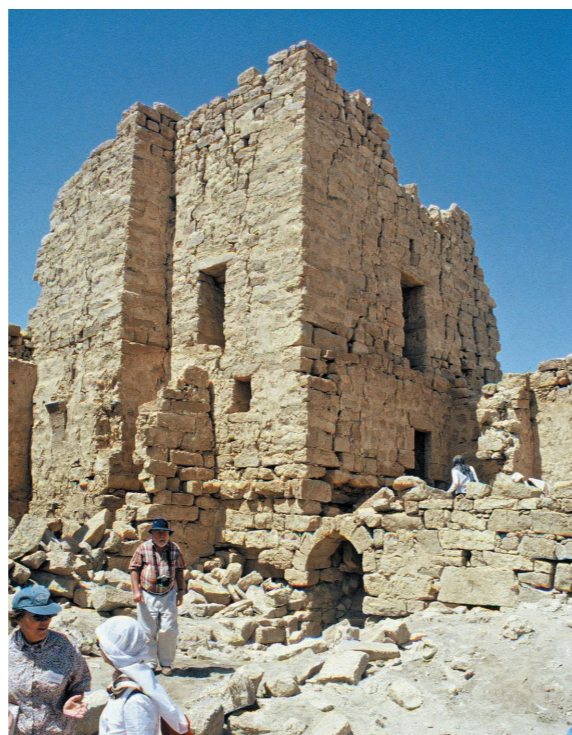
Common cultural heritage of the Roman Empire

Roman frontiers are part of a common heritage of the countries circling the Mediterranean Sea. Successive generations have built on that heritage and modified it thus helping to create our modern world. Today, our world appears to be diverse, divided by language, religion and traditions. Yet, our heritage is more common than we sometimes appreciate. Much knowledge of the ancient world has come to us through the Arab world, the real inheritors of the late Roman Empire.

How the Romans managed to rule their enormous empire with a relatively small professional army is a spectacular statement of power and a constant fascination. The Romans were not only experts in the use of power – and force – but also in portraying a strong image about themselves. Indeed, that image was so strong that it still excites our imagination today. Great literature and fantastic films demonstrate our continuing fascination with that image.

The Roman Empire

The Roman state, in one form or another, survived for over 2000 years. Its empire was one of the greatest states which the world has seen, close



3. Fortifications and corner tower at the fort of Gasr Bishr (Jordan)
3. Utvrđenja i ugaona kula na tvrđavi u Gasr Bišr (Jordan)



4. The walls of Constantinople (Turkey). It was in 1453 that they fell to the Turks and the Roman Empire came to an end
4. Zidovi Konstantinopolja (Turska). Rimsko carstvo je konačno srušeno padom grada pod tursku vlast 1453. godine

only to China in its size and longevity. Indeed, our knowledge of the administrative arrangements of the Chinese empire, which have survived in better condition and more detail than those for the Roman empire, aids our understanding of the workings of Roman frontiers.

Many great monuments of the Roman Empire are World Heritage Sites, including Rome itself, but also many of its important cities such as Mérida and Lugo (Spain), Orange and Arles (France), Split (Croatia), Istanbul (Turkey), Petra (Jordan), Leptis Magna (Libya) and Volubilis (Morocco). Yet these most developed parts of the Roman world were protected and at the same time defined by frontiers. It was as if these frontiers were, as Aelius Aristides remarked in the second century AD, “enclosing the civilised world in a ring”. The frontiers did indeed define the Roman empire and were essential for the stability and therefore economic growth of the interior: they allowed the cities of the empire to flourish.

An essential part of the Roman genius was its ability to win the support of the people it conquered. It respected local traditions and ethnic characteristics, so long as the superior status of Rome was not challenged. It encouraged local self-government, merely placing on top the relatively small imperial administration. This imperial administration helped to hold the whole fabric of the empire together. Members of the aristocracy criss-crossed the empire from one appointment to another. The army brought a touch of Rome to the furthestmost

GRANICE RIMSKOG CARSTVA

Zajedničko kulturno nasleđe Rimskog carstva

Rimske granice, takozvani Limes, deo su zajedničkog nasleđa zemalja oko Sredozemnog mora. Mnoge generacije odrasle su na tom nasleđu prilagođavajući ga savremenom životu. Danas je taj raznoliki svet podeljen jezikom, verom i tradicijom. Pa ipak, to nasleđe je mnogo više zajedničko nego što nam se čini, a njegovo poznavanje dugujemo, pre svega, arapskoj kulturi koja je bila pravi naslednik poznog Rimskog carstva.

Način na koji su Rimljani uspevali da vladaju ogromnim carstvom sa relativno malo profesionalne vojske izuzetan je vid moći koji i danas opčinjava. Rimljani nisu bili samo vešti u korišćenju moći i snage, već su umeli da nametnu sliku o sebi kao moćnoj i neumoljivoj sili, toliko jakoj da čak i danas podstiče maštu. Vrhunska književnost i sjajni filmovi dokaz su te naše stalne opčinjenosti starim Rimom.

Rimsko carstvo

Rimska država, u svim svojim formama, održala se preko 2000 godina. Rimsko carstvo jedno je od najvećih u istoriji i po svojoj veličini i trajanju može se uporediti samo sa kineskim. Naše bolje i detaljnije poznavanje administracije kineskog carstva,



5. The Great Wall of China, World Heritage Site since 1987.
5. Veliki kineski zid, spomenik Svetske baštine od 1987. godine



7. The Roman city of Volubilis (Morocco)
7. Rimski grad Volubilis (Moroko)

corners of the empire. More than that, it was a catalyst, helping to create a new frontier society.

Frontiers and trade

Frontiers were the membrane through which Roman ideas as well as artefacts percolated into the outside world. Roman trade extended eastwards to India and beyond, southwards into the Sahara Desert and northwards to the shores of the Baltic Sea, and, in return, brought a vast range of goods and products into the empire. The museums of many countries beyond the empire contain Roman artefacts and hint at the extent of Roman influence.



6. Military documents of the Han period (China)
6. Vojna dokumenta iz perioda dinastije Han (Kina)

koje se i mnogo duže održalo nego rimsko, ustvari nam pomaže da razumemo funkcionisanje rimskih granica.

Mnogi spomenici iz perioda Rimskog carstva deo su Svetske baštine, uključujući i sam Rim i mnoge važne gradove, kao što su Merida i Lugo (Španija), Oranž i Arl (Francuska), Split (Hrvatska), Istanbul (Turska), Petra (Jordan), Leptis Magna (Libija) i Volubilis (Maroko). Ovi nekada najrazvijeniji delovi rimskog sveta bili su zaštićeni, a istovremeno su označavali i granicu Carstva. Te granice su, kako je Elije Aristid primetio u II veku nove ere, «zatvarale krug civilizovanog sveta». Granice su zaista definisale Rimsko carstvo i bile od suštinskog značaja za stabilnost i ekonomski rast: upravo one neposredno utiču na procvat gradova Carstva.

Sušтина rimske genijalnosti bila je sposobnost da osvoje podršku pokorenih naroda. Lokalne tradicije i etničke posebnosti poštovani su sve dok status Rima nije bio osporavan. Na taj način je ohrabrivana lokalna samouprava, dok je sama carska administracija bila je relativno malobrojna. Upravo ovakvo upravljanje doprinelo je da se Carstvo održi toliko dugo. Pripadnici aristokratije krstarili su u diplomatskim misijama sa jednog na drugi kraj Carstva, a vojska je donosila dah Rima u najudaljenije krajeve imperije. Čak i više od toga, bila je glavni pokretač promena koje su uticale na stvaranje novog društva na granicama Carstva.

其二封皆張掖太守章詔是封署一封皆十一封十月戌戌起皆詣居延都尉府二封河東太守章詔是封署一封皆十一月丁卯起一封府君章詔肩水



8. Relief with soldiers wearing elephant helmets, Tell el-Herr (Egypt)
8. Reljef sa vojnicima koji nose "slonovske šlemove", Tel el-Her (Egipat)



9. The Arch of Titus at the Forum Romanum in Rome (Italy)
9. Titov slavoluk na Forumu u Rimu (Italija)

The World Heritage Site "Frontiers of the Roman Empire"

In 1987 Hadrian's Wall (UK) was added to the list of World Heritage Sites. In 2005 the German frontier between the rivers Rhine and Danube, known locally as the Obergermanisch-Raetische Limes, achieved the same accolade. By this act a new, transnational World Heritage Site, Frontiers of the Roman Empire, was created. This, it is hoped, is the first step towards the creation of a truly transnational World Heritage Site encompassing countries in Europe, the Middle East and North Africa. In 2008, the Antonine Wall in Scotland was added to the World Heritage Site. To date, the three main artificial frontiers at the Roman Empire have been included in the World Heritage Site. Now, the fo-



10. Tombstone of civilians from Aquincum (Hungary) wearing the local Pannonian dress
10. Nadgrobni spomenik građana iz Akvinkuma (Mađarska), koji nose lokalnu panonsku odeću

Granice i trgovina

Granice su bile neka vrsta membrane kroz koju su se, baš kao i predmeti, filtrirale rimske ideje u spoljni svet. Rimski trgovci stizali su na istok do Indije, na jug do Sahare, na sever do obala Baltičkog mora, a u povratku obezbeđivali imperiji širok asortiman robe i proizvoda. U muzejima mnogih zemalja izvan granica nekadašnjeg Carstva čuvaju se mnogobrojni predmeti rimskog porekla koji ukazuju na zone uticaja Rima.

Svetska baština "Granice Rimskog carstva"

Godine 1987. Hadrijanov zid (Velika Britanija) je uvršten na listu Svetske baštine. Godine 2005. germanska granica između reka Rajne i Dunava u Nemačkoj, lokalno poznata kao Gornjegermanski-recijski Limes, dobila je isto priznanje. Ovim činom je formirana nova međunarodna Svetska baština pod nazivom "granice Rimskog carstva". To je, nadamo se, prvi korak ka stvaranju prave međunarodne Svetske baštine koja obuhvata zemlje u Evropi, na Bliskom istoku i Severnoj Africi. Godine 2008. Antoninov zid u Škotskoj je uvršten na listu Svetske baštine. Do danas, tri glavna dela granica Rimskog carstva su uključeni u Svetsku baštinu. Sada su najbitnije nove nominacije koje se odnose na rečne granice, na Donju Rajnu i na osam podunavskih zemalja.



12. A graffito in Tamil-Brahmi on a Roman Dressel 2–4 amphora dating to the mid-first century AD. The text mentions a man named Korra, a south Indian chieftain (Berenice, Egypt)

12. Grafit iz Tamil-Brahmija na rimskoj amfori tipa Dresel 2-4, iz sredine 1. veka n.e. Tekst pominje čoveka po imenu Kora, južnoindijskog vođu (Berenis, Egipat)

cal point for new nominations concentrates on river frontiers along the Lower Rhine and the eight Danube countries.

This project is a truly challenging concept with no real precedent. It involves the co-operation of archaeologists and cultural resource managers in many countries – and in international agencies. Certain rules have to be accepted and standards met. Yet, each country has its own traditions of undertaking its archaeology, protecting and managing its sites, and presenting and interpreting its monuments to the public. There is no intention to force each country to change its traditions. Rather, archaeologists and administrators are working together to create over-arching frameworks within which each country can adapt and enhance its own ways of working.

Projekat “Granice Rimskog carstva” je pravi izazov, koncept bez predsedana koji podrazumeva saradnju arheologa i menadžera kulturnih resursa u mnogim zemljama i međunarodnim organizacijama. Podrazumeva prihvatanje određenih pravila i standarda koji se moraju ispuniti, ali ipak, svaka zemlja ima svoje načine sprovođenja arheoloških iskopavanja, zaštite, upravljanja nalazištima, predstavljanja i tumačenja spomenika kulture javnosti. Ne postoji namera da se sve zemlje primoraju da promene svoju tradiciju, već da arheolozi i administratori rade zajedno, da bi stvorili sveobuhvatne okvire unutar kojih svaka zemlja može da se prilagodi i unapredi svoje načine rada.

Definicija Svetske baštine

Sa tim ciljem, koordinatori zemalja koje su već izrazile nameru da nominuju svoj deo Limesa, odnosno rimske granice za Svetsku baštinu, formirali su takozvanu Bratislava grupu, nazvanu prema gradu u kome je održan prvi sastanak marta 2003. godine. Grupu čine predstavnici iz Austrije, Bugarske, Hrvatske, Nemačke, Mađarske, Holandije, Rumunije, Srbije, Slovačke i Velike Britanije.

Bratislava grupa deluje kao savetodavno telo koje se bavi arheološkim i naučnim aspektima rimskih granica. Grupa je predložila sledeću definiciju za granice Rimskog carstva kao dela Svetske baštine: «Granice Rimskog carstva Svetske baštine treba da slede linije(u) granice na vrhuncu Carstva, od Trajana do Septimija Severa (otprilike od 100. do 200. godine) i vojne građevine iz različitih perioda koje su na toj liniji (21-23). Građevine uključuju



11. Artefacts from Berenice (Egypt): obverse and reverse of a silver coin of the Western Indian monarch Rudrasena III (AD 362)

11. Nalazi iz Berenisa (Egipat): avers i revers srebrnog novca zapadnoindijskog monarha Rudrasena III (362. godina)

The definition of a World Heritage Site

To that end, the co-ordinators of those countries which have already declared their intention to nominate their stretches of the Roman frontier as a World Heritage Site have formed themselves into a group. Named the Bratislava Group after the location of their first meeting in March 2003, it contains delegates from Austria, Bulgaria, Croatia, Germany, Hungary, The Netherlands, Romania, Serbia, Slovakia and the UK.

The Bratislava Group acts as an adviser on archaeological and scientific aspects of the frontier. It has proposed the following definition for the Frontiers of the Roman Empire World Heritage Site:

“The Frontiers of the Roman Empire World Heritage Site should consist of the line(s) of the frontier at the height of the empire from Trajan to Septimius Severus (about AD 100 to 200), and military installations of different periods which are on that line (21–23). The installations include fortresses, forts, towers, the limes road, artificial barriers and immediately associated civil structures”.

This definition excludes outpost and hinterland forts. But it has the main advantage that it is relatively simple, an important element when seeking to undertake an entirely new concept. Roman military installations stretch across many kilometres of the Roman empire and to seek to include all within this single World Heritage Site would involve enormous tasks of definition, too complex to undertake at this most early stage in the process. It would, of course, be possible to amend the proposed definition in due course.



14. Fragment of Chinese silk from Palmyra (Syria) with an inscription in Chinese characters

14. Fragment svile iz Kine otkriven u Palmiri (Sirija), sa natpisom kineskim slovima

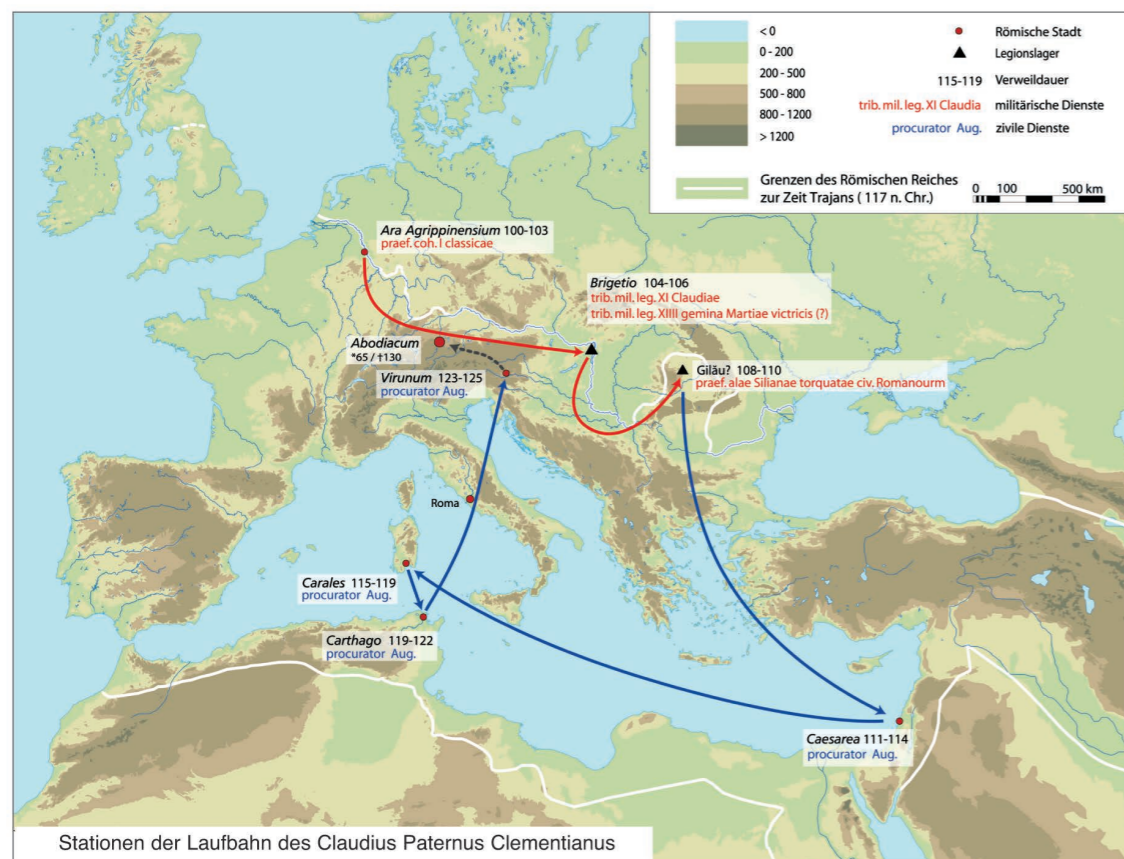


13. The tombstone of Regina, wife of Barathes of Palmyra, from South Shields (UK): The lower inscription reads in Palmyrene: “Regina, the freedwoman of Barathes, alas”

13. Nadgrobnni spomenik Regine, supruge Barata iz Palmire, nađen u Saut-Šildsu (Velika Britanija): natpis u donjem delu na palmirskom glasi: “Regina, oslobođenica Barata, Alas”

tvrdave, utvrđenja, kule, put duž Limesa, veštačke prepreke i sa tim povezane civilne strukture «.

Ova definicija isključuje ispostave i utvrđenja u zaleđu, ali je njena glavna prednost što je relativno jednostavna, što je važan element kada se traži predstavljanje potpuno novog koncepta. Rimske vojne građevine protežu se duž hiljada kilometara Rimskog carstva i da bi se sve obuhvatile u okviru ovog jedinstvenog spomenika Svetske baštine, moralo bi se početi sa njihovim definisanjem, što je i previše složen zadatak za ovu ranu fazu procesa nominacije. Naravno, u dogledno vreme biće moguće dopuniti predloženu definiciju.



15. Career-map of Cl. Paternus Clementianus, a senior officer, who made his way from the lower Rhine, to the Danube, to the Middle East, to Sardinia, Tunisia and finally Austria through a succession of military and civilian posts

15. Karijerna mapa, mesta na putu karijere Klaudija Paterna Klementijana, višeg oficira koji je krenuo na taj put sa donje Rajne, preko Dunava, Bliskog istoka, Sardinije, Tunisa i na kraju Austrije kroz niz vojnih i civilnih ispostava

The task ahead

The present task is daunting enough. Agriculture, and later industrialisation and the growth of towns and cities, has dealt harshly with some sections of the frontier. Many sectors are now no longer visible to the naked eye, yet they remain in the ground as an important archaeological resource. Their preservation is imperative for they hold the key to understanding frontiers better through controlled scientific research. The Frontiers of the Roman Empire are therefore well suited to convey the

Budući zadaci

Sadašnji zadatak je već dovoljno veliki. Poljoprivreda, a zatim industrijalizacija i rast gradova, razarajuće su uticali na neke delove granice. Mnogi od njih više nisu vidljivi, ali ostaju u zemlji kao važan arheološki resurs. Njihova zaštita je imperativ za one koji drže ključ za bolje razumevanje granice kroz naučna istraživanja. Granice Rimskog carstva su stoga pogodne da prenesu poruku da je zaštita arheoloških lokaliteta, bilo vidljivih ili nevidljivih, od vitalnog značaja za očuvanje kolektivnog sećanja čovečanstva. Tek treba utvrditi najbolji način da se zaštite ostaci Limesa u urbanim kontekstima, što je veoma važno, jer su savremena iskopavanja pokazala da se arheološki objekti često bolje očuvaju u gradovima nego u selima. Sledeći problem proističe iz načina na koji se štiti naše nasleđe. Muzeji ne mogu biti Svetska baština, ali materijal koji potiče sa Limesa - natpisi, skulpture, keramičke posude, razni predmeti, ukratko, sav materijal koji pomaže našem razumevanju života na granici, izložen je i čuva se u muzejima.



16. Bandoleers with the depiction of eagles from the war booty sacrifice at Vimose (Funen, Denmark)

16. Dugmad sa prikazom orlova iz ratnog plena, prinetih na žrtvenik u Vimosi (Funen, Danska)

message that the protection of archaeological sites whether visible or invisible is vital for the preservation of the collective memory of mankind. The best way to protect the remains of the frontier in urban contexts has yet to be determined. This is all the more important because modern excavation has demonstrated that archaeological deposits often better survive in towns than in the countryside. A further problem stems from the way that we protect our heritage. Museums cannot be World Heritage Sites. Yet parts of Roman frontiers, – inscriptions, sculpture, pottery, artefacts, in short all the material which aids our understanding of life on the frontier – is displayed and stored in museums. Inscriptions are vital to our understanding of frontiers. They inform us when they were built, why and by whom, and what the constituent parts were called. Cramp holes demonstrate that they were once fixed to frontier buildings. In some manner, a way has to be found to associate them with the World Heritage Site itself.

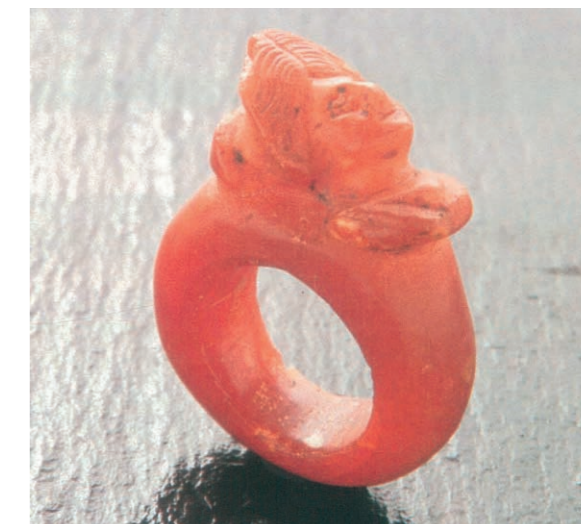
History and extent of frontiers

The Roman perspective was that they had subjected the entire *orbis terrarum* to the rule of Roman people – as far as they had knowledge about it or considered it worth conquering. This philosophy did not encompass the idea of boundaries at all except

Od posebnog značaja su natpisi jer nas izveštavaju kada je nešto izgrađeno, zašto i ko je to preduzeo i kako su se nazivale pojedine deonice. Rupe od utega pokazuju da su nekada bili fiksirani na građevinama na Limesu. Neophodno je pokazati da su ti natpisi u direktnoj vezi sa samim lokalitetom Svetske baštine.

Istorija i širenje granica

Namera Rima bila je da svojoj vladavini potčini ceo svet (*orbis terrarum*), sve dokle su imali svest o njemu ili ga smatrali vrednim osvajanja. Ova filozofija nije podrazumevala ideju prave granice, već ideju da "varvari" treba da ostanu izvan rimskog koncepta civilizovanog sveta. Međutim, granice Rimskog carstva su retko bile stabilne. Stalne političke krize, ratni pohodi, pa čak i granične čarke, stvarali su situacije na koje je Rim morao da reaguje. Tokom vremena nastala je čvrsta granična linija. Vladar koji je učinio najviše da bi utvrdio granice rimske države bio je njen prvi car, Avgust (27 pre n.e. -14 n.e.). Na prelazu era završio je osvajanje Alpa i Španije, definisao je istočnu granicu ugovorom s Parćanima, poslao ekspedicije do Nila i u Saharu i doveo rimske snage do Dunava i Elbe. Dao je čuveni savet da se Carstvo zadrži u postojećim



17. Fingerring with the depiction of a female bust from Aquileia (Italy) made of amber from the Baltic Sea region

17. Prsten sa predstavom ženskog poprsja iz Akvileje (Italija), od čilibara iz regiona oko Baltičkog mora



18. Stone masonry in Bratislava-Dúbravka (Slovakia), beyond the empire, built in the Roman manner, is just one of the buildings beyond the frontier which imitated Roman styles

18. Građevina od kamena u Bratislavi-Dubravka (Slovačka), izvan granica Carstva, sagrađena na rimski način, predstavlja jedan od objekata izvan granica koji imitira rimski stil

the idea that “barbarians” should stay outside the Roman concept of the civilised world. However, Rome’s boundaries rarely remained stable. Constant political crises, major warfare and even border skirmishes created situations to which Rome had to react. In time, firm lines came into existence. The man who did most to define the edges of the Roman state was its first emperor, Augustus (27 BC–AD 14). Towards the turn of the Era he completed the conquest of the Alps and Spain, defined the eastern boundary by treaty with the Parthians, sent



19. The east-gate of the Roman fort at Traismauer on the Danube (Austria) dates to the fourth century, but qualifies for nomination under the proposed definition 19. Istočna kapija rimskog utvrđenja u Traismaueru na Dunavu (Austrija) potiče iz IV veka, ali se kvalifikuje za nominaciju pod predloženom definicijom



20. Statue of the Emperor Trajan (AD 98–117), who conquered Dacia (Romania) and Parthia (Iraq and Iran)
20. Statua cara Trajana (98-117 n.e), osvajača Dakije (Rumunija) i Partije (Irak i Iran)

granicama; savet koji su njegovi naslednici uporno ignorisali, iako su njihova dostignuća bila mnogo manja od njegovih.

Rimska spoljna politika

Ipak, širenje Rimskog Carstva je počelo da se usporava i glavni cilj postaje održavanje bezbednosti. Da bi sačuvala svoj superiorni status, rimska spoljna politika koristila je čitav spektar različitih instrumenata i strategija. Rimska vojska se nije oslanjala samo na snagu, već i na slavu Rima kao instrumenta politike. Adrijan Goldsvorti je govorio,

expeditions up the Nile and into the Sahara Desert, and brought Roman arms to the Danube and the Elbe. He famously gave advice to keep the empire within its present boundaries; advice conspicuously ignored by many of his successors, though their achievements were much less than his.

Rome’s foreign policy

Yet, Rome’s expansion was slowing down and her main aim became the maintenance of imperial security. In doing so Rome’s foreign policy used a wide range of different instruments and strategies to maintain her superior status. Her army did not rely only on force but also on the image of Rome itself as a policy instrument. As Adrian Goldsworthy states, “the Roman genius was to combine the practical with the visually spectacular so that the army’s actions were often designed to overawe the enemy with a display of massive power before they actually reached him”. Thousands of military buildings and installations erected along the border of the empire, many of which have survived until today, represent this two-fold demonstration of Roman power and influence, at once both architectural and imaginative.

22. Hadrian’s Wall at Cuddy’s Crag near Housesteads (UK)
22. Hadrijanov zid kod Kadis Krega - Haustids (Velika Britanija)



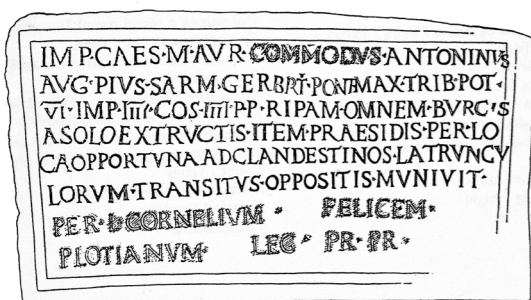
21. Coin depicting the Emperor Septimius Severus (AD 193–211), who campaigned on many frontiers and expanded the empire to the east, south and north
21. Novac cara Septimija Severa (193-211 n.e.) koji je vodio kampanju na mnogim granicama i proširio Carstvo ka istoku, jugu i severu

«Rimski genije se iskazivao u objedinjavanju praktičnog sa spektakularnim, na taj način da su akcije vojske često sprovedene sa ciljem da neprijatelja preplaše samo nagoveštajem ogromne snage, pre nego što bi vojska i stigla». Hiljade vojnih objekata podignutih duž granice Carstva, od kojih su mnogi sačuvani do danas, predstavljaju ovu dvostruku demonstraciju rimske moći i uticaja, istovremeno i arhitektonsku i imaginativnu.



The location of frontiers

The Roman empire encircles the Mediterranean Sea – *Mare Nostrum*, Our Sea, as they called it – and beyond that lay its frontiers. These, in time, stretched from the Atlantic Ocean, across Europe to the Black Sea, through the deserts and oases of the Middle East to the Red Sea, and thence across North Africa, skirting the edge of the Sahara Desert, to the Atlantic Coast of Morocco. In the UK the frontier became established on the line of Hadrian's Wall, though for a time even that was abandoned in favour of a more northern fron-



24. This inscription from Intercisa (Hungary) is one of several recording the erection of watch-towers to protect the empire from the illicit incursions of bandits during the reign of the Emperor Commodus (AD 180-192)
24. Natpis iz Intercise (Mađarska), jedan od nekoliko koji svedoče o podizanju kula stražara s ciljem zaštite Carstvo od upada bandi za vreme vladavine cara Komoda (180-192.)

23. The wood-covered frontier in the Taunus mountains (Germany)
23. Zona granice zarasla u šumu u planinama Taunusa (Nemačka)

Definisanje granica

Rimsko carstvo je okruživalo Sredozemno more – *Mare Nostrum*, kako su ga zvali Naše More. Granica se protezala od Atlantskog okeana, preko Evrope do Crnog mora, preko pustinja i oaza na Bliskom istoku do Crvenog mora, a odatle u Severnoj Africi, ivicom Sahare i izbijala na obale Atlantika u Maroku. U Velikoj Britaniji granica se protezala linijom Hadrijanovog zida, da bi kasnije bila napuštena zbog pomeranja granice na sever, na liniju Antoninovog zida. Kroz veći deo Evrope granicu su činile prvobitno reke Rajna i Dunav. Krajem I veka n.e. preduzeti su prvi koraci da se skрати granična linije između gornjih tokova reka. To je izvedeno, pod Antoninima, kroz izgradnju drvenih palisada dugih oko 500 km. Za razliku od uobičajene prakse čisto odbrambenih funkcija, njihov kurs je često matematički ravan potpuno ignorišući topografiju. Novo područje Carstva razvilo se u bogati poljoprivredni region koji je mogao da izdržava mnoge vile i imanja. Od Bavarske (Nemačka) do Crnog mora (Rumunija) granice su vodile duž Dunava. Izuzetak je Dakija (moderna Transilvanija u Rumuniji), koju je car Trajan osvojio 106. godine n.e. Granica se tada pomera



25. The Roman fort at Gerulata lies in the outskirts of Bratislava (Slovakia)
25. Rimsko utvrđenje Gerulata leži na obodu savremene Bratislave (Slovačka)

tier, the Antonine Wall. Through much of Europe the frontier lay initially along the rivers Rhine and Danube. In the later first century AD, the first steps were taken to shorten the line between the headwaters of the rivers. Under Antoninus, this was formalised through the construction of a palisade for about 500 km. In contrast to the usual practice for pure defensive installations, its course is often mathematically straight, completely ignoring the topography of the land. The land now brought into the empire developed into a rich agricultural area supporting many villas and farms. From Bavaria (Germany) to the Black Sea (Romania) the frontier ran along the river Danube. An exception to this was Dacia (modern Transylvania in Romania) which was conquered by the Emperor Trajan in AD 106. The frontier now moved from the river to the more difficult terrain of the Carpathian Mountains. In the East, the Romans faced two enemies, the powerful kingdom of the Parthians and the desert. Together, these defined Rome's eastern frontier. No running barrier was erected, unnecessary in the desert, though a major river, the Euphrates, was used. A significant feature of this frontier were the roads running for hundreds of kilometres along the edge of the desert and to all intents and purposes defining the frontier itself. The Sahara Desert defined most of the frontier in North Africa. The rich cities of Egypt and the Mediterranean coast were protected by a relatively light

od reke ka nepristupačnijem terenu karpatskih planina. Na istoku, Rimljani su uočili dva neprijatelja, moćno kraljevstvo Parčana i pustinju. Zajedno, predstavljali su istočnu granicu Carstva. Nisu zidane prepreke, koje bi bile nepotrebne u pustinji, ali je na jednom delu granica definisana velikom rekom Eufkrat. Karakteristika ove granice su putevi koji su vodili stotina kilometara ivicom pustinje. Bili su korišćeni u sve svrhe, a predstavljali su i samu granicu. Sahara čini veći deo granice u Severnoj Africi. Bogati gradovi Egipta i mediteranska obala bili su



26. An inscription from the Antonine Wall (Scotland, UK) recording the construction of a section of the frontier
26. Natpis sa Antoninovog zida (Škotska, Velika Britanija) koji svedoči o izgradnji dela granice



28. Recent archaeological investigations have led to the discovery of timber towers erected beside the Rhine in the Netherlands under Claudius

28. Nedavnim arheološkim istraživanjima otkrivena je drvena kula podignuta pored Rajne u Holandiji za vreme cara Klaudija

screen of forts. Where necessary, as in modern Algeria, barriers controlled the movement of the transhumance farmers.

The army and frontiers

Rome always reacted to the local situation and developed individual solutions to its different problems. The military installations on every frontier were connected by a road, often forming a major highway. Indeed, it appears that the very name of a frontier – *limes* – derives from the Roman name for a frontier road.

The Roman army used local materials to construct its forts and frontiers. Stone, turf, clay, mud-brick, timber, tile, slate, thatch, mortar and plaster were amongst those used. Nor were these plain, unadorned or make-shift structures. Walls, whether of stone or timber, were often plastered and even painted. Painted wall-plaster has even been found in barrack-blocks.

The purpose of frontiers

Although bristling with military structures of every kind, and the base of armies whose main purpose was to defend the empire, the primary function of the frontiers themselves was the control of movement

zaštićeni sa relativno malim brojem utvrđenja. Gde je bilo potrebno, kao i danas u modernom Alžiru, na punktovima je kontrolisano kretanje nomadskih stočara.

Vojska i granice

Rim bi uvek reagovao na lokalne situacije i razvijao sasvim specifična rešenja za svaki pojedinačni problem. Vojna utvrđenja na svim granicama bila su povezana putem, koji je ujedno bio i najveći i glavni put. Ustvari, čini se da samo ime granice - *Limes* - potiče iz rimskog naziva za pogranični put.

Rimska vojska je upotrebljavala lokalne materijale za gradnju utvrđenja i pratećih objekata. Kamen, treset, glina, čerpiči, drvo, pločice, škrljac, slama i malter su među onima koji su korišćeni. Ali to nisu bile obične, bez ukrasa ili na brzinu napravljene građevine. Naime, zidovi, od kamena ili drveta, če-



27. The Tropaeum Alpium at La Turbie (France) commemorates the conquest of the Alps by the Emperor Augustus

27. Tropaeum Alpium u La Turbi (Francuska) obeležava Avgustovo osvajanje Alpa



29. Dura Europos on the Euphrates River (Syria). As in many cities along the Eastern frontier, it contained a regiment of the Roman army

29. Dura Europos na reci Eufkrat (Sirija). Kao i u mnogim gradovima duž istočne granice, i u njemu je bio odred rimske vojske



30. Soldiers, including the flag-bearer (vexillarius) painted on the wall of a room in Dura Europos (Syria)

30. Vojnici, uključujući barjaktare (vexilariji) naslikani na zidu prostorije u Dura Europosu (Sirija)

sto su malterisani, pa čak i oslikavani. Zidno slikarstvo konstatovano je čak i u vojnim barakama.

Svrha granica

Sa vojnim objektima svih vrsta i vojskom čiji je glavni cilj bio da brani imperiju, osnovna funkcija samih granica bila je kontrola kretanja. Zgrade - zidovi, utvrđenja i kule - dopunjeni su izvidnicama čije su dužnosti bile da se održi nadzor nad kopnom, dok su mornari i flota održavali nadzor nad rečnim i morskim granicama Carstva.

Jezgro provincijskih vojski bilo je formirano od legija. Čak oko 30 legija je postojalo u svakom trenutku, nanizano duž granica Carstva, ponekad na stvarnoj granici, a ponekad na drugom mestu, malo dublje u pozadini. Glavni jezgro provincijske vojske bilo je formirano od pomoćnih jedinica - podržavajućih trupa koje su zauzimale mnoga manja utvrđenja od legija. U nestabilnim i teškim vremenima nakon pada Rimskog carstva, samo su zidovi



31. The northern fringes of the Carpathian mountains (Romania)

31. Severni obodi Karpata (Rumunija)

into and out of the empire. The buildings – walls, fortlets and towers – were supplemented by scouts whose duties were to maintain watch on land, and fleets whose sailors maintained surveillance over the river and sea boundaries of the empire. The core of the provincial armies was formed by the legions. Only about 30 of these existed at any one time and they were strung out along the frontiers of the empire, sometimes on the actual line, elsewhere some distance to the rear. The main body of the provincial army was formed by auxiliary



32. The limes-gate of Dalkingen (Germany). It has been argued that this special façade was created to mark the visit of the Emperor Caracalla in AD 213

32. Limes-kapija Dalkingen (Nemačka) – smatra se da je njena fasada napravljena zbog posete cara Karakale 213. godine

utvrđenja obezbeđivali zaštitu. Mnogi od današnjih velikih gradova u svom centru imaju legijsko utvrđenje.

Vojnici i civili

Gotovo svako utvrđenje u Carstvu privlačilo je civile koji su se starali o snabdevanju vojnika. Civilna



33. A reconstruction of a section of the palisade and a tower in Germany

33. Rekonstrukcija dela palisada i kule u Nemačkoj



34. The legionary fortress of Novae (Bulgaria)

34. Legijsko utvrđenje u Novama (Bugarska)

units – literally support troops – and these occupied much smaller forts than the legions. In the disturbed times following the fall of the Roman empire, fort walls provided protection. Many of today's major cities have at their centre a legionary fortress.

Soldiers and civilians

Nearly every fort in the empire attracted civilians to cater for the needs of the soldiers. Civilian settlements sprang up along the frontier. The military



35. Towers, such as this one in Turkey, aided communication along the frontier roads

35. Kule, kao što je ova u Turskoj, služile su za komunikaciju duž puteva na granici

naselja nicala su duž granice. Vojna utvrđenja zajedno sa civilnim naseljima imala su značajnu ekonomsku moć, što se može porediti samo sa velikim



36. The Antonine Wall (Scotland, UK) was built of turf

36. Antoninov zid (Škotska, Velika Britanija), sagrađen od busenova trave



37. The remains of the headquarters building of the legionary fortress at Lambaesis (Algeria)
37. Ostaci zgrade štaba legijskog utvrđenja u Lambezi (Alžir)

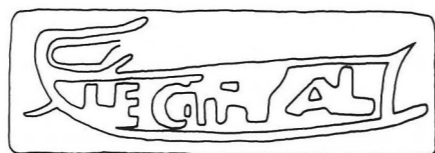
installations together with these civilian settlements created a significant economic power, which can only be compared to the great cities of the interior of the empire. This market sucked in goods and attracted trade from both its hinterland as well as from the people beyond the frontier.

Military administration

Both soldiers and civilians required management. The Roman army was excessively bureaucratic, even to our eyes – a receipt in quadruplicate, for example, survives. Every soldier had his own file, and even every horse. Each regiment created a day report. Strength returns were regularly made to



38. Aerial view of the fort of Intercisa (Hungary)
38. Pogled iz vazduha na utvrđenje u Intercisi (Mađarska)



39. Tile stamp of the First Legion Italica from Novae (Bulgaria) depicting a boat
39. Pečat na opeci Prve legije Italike iz Nova (Bugarska) koji prikazuje brod

gradovima u unutrašnjosti Carstva. Ovo tržište je usisavalo robu i privlačilo trgovce sa obe strane, kako iz Carstva tako i izvan njega.

Vojna uprava

I vojnicima i civilima je bila potrebna uprava. Rimski vojska je imala izuzetno birokratsku upravu, čak i za današnja merila. Izveštavanje u četiri primeraka, na primer, održalo se do danas. Svaki vojnik imao je svoj dosije, pa čak i svaki konj, a svaki puk bio je dužan da daje dnevni izveštaj. Izveštaji o prinosima redovno su slati u Rim. Mali broj takvih dokumenata iz graničnih utvrđenja je nađen do sada, ali bacaju pravo svetlo na funkcionisanje rimske vojske.

Istraživanje rimskih granica

Rimska književnost i drugi antički spisi odavno su nam dragoceni izvor podataka o graničnim utvrđenjima i objektima. Ovi izvori uključuju nekoliko vojnih rasprava koje opisuju rimsku vojsku i njene strukture, međutim, nažalost ne onu na granici. Oni takođe uključuju posebne dokumente, kao što je izveštaj guvernera Arijana o utvrđenjima duž istočne obale Crnog mora.

Rome. A small number of such documents survive from frontier forts, but they cast strong light on the workings of the Roman army.

Research on Roman frontiers

Roman literature and other ancient sources have long provided a valuable source of information about frontier installations. These sources include several military treatises describing the Roman army and its structures, though, alas, generally not frontiers. They also include specific documents such as the report of the governor Arrian on the forts along the eastern shore of the Black Sea.

Inscriptions and documents

Literary sources are supplemented by thousands of inscriptions from every frontier describing the construction and purpose of military structures as well as providing details of the careers and movements of the officers and soldiers of the Roman army. More recently, documents on papyri, parchment and wood have been discovered through excavation and provide another valuable source of information.

Scholars started describing and planning Roman remains in the sixteenth century. Their records are especially valuable today in view of the great changes in the landscape and the damage to the archaeological remains inflicted during the follow-



41. Strasbourg (France), one of the seats of the European Parliament, has at its core the fortress of the Eighth Legion Augusta
41. U centru Strazbura (Francuska), jednog od sedišta Evropskog parlamenta, bilo je utvrđenje Osme legije Auguste

Natpisi i dokumenti

Književni izvori su dopunjeni hiljadama natpisa sa svih granica koji opisuju izgradnju i svrhu vojnih objekata i pružaju nam detalje vojnih karijera i kretanja oficira i vojnika rimske vojske. Nedavno su otkriveni i dokumenti na papirusima, pergamentima

40. The military fortification at Hân al-Manqûra (Syria), probably dating to the middle of the second century AD
40. Vojno utvrđenje u Han al-Mankouri (Sirija), datuje se verovatno do sredine II veka n.e.





42. Aquincum museum in Budapest (Hungary) founded in 1896

42. Muzej Akvinkuma u Budimpešti (Mađarska) osnovan je 1896. godine

ing centuries. They also collected inscriptions and sculpture, and these frequently form an important element of great national and regional collections.

Survey and excavation

Although excavations were undertaken in the earlier nineteenth century, it was the 1890s which saw the beginning of the modern era of scientific archaeological investigations. This work did not just encompass excavation; an important element was



43. Coin of Hadrian, emperor from AD 117 to 138, who ordered the construction of the German limes and Hadrian's Wall

43. Novac cara Hadrijana (117-138) koji je naredio izgradnju Germanskog limesa i Hadrijanovog zida

i kori drveta koji predstavljaju još jedan dragoceni izvor informacija.

Naučnici su počeli da opisuju i proučavaju rimske ostatke u XVI veku. Njihovi podaci danas su posebno dragoceni imajući u vidu velike promene u pejzažu i oštećenja arheoloških ostataka tokom prošlih vekova. Takođe, prikupljali su natpise i skulpture koji danas čine važne delove velikih nacionalnih i regionalnih kolekcija.



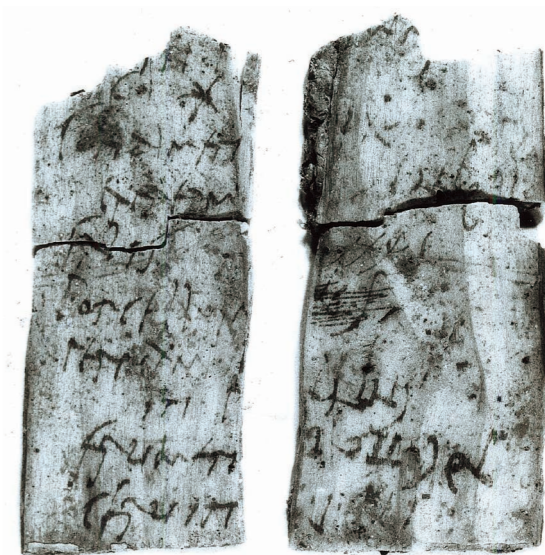
44. Al-Heita, a way-station on the road from the Nile north-eastwards to the quarry site at Mons Porphyrites (Egypt)

44. Al-Heita, stanica na putu od Nila severoistočno do kamenoloma u Mons Porfiritu (Egipat)



45. Aerial view of the town outside the legionary fortress of Carnuntum (Austria)

45. Pogled iz vazduha na grad izvan legijskog utvrđenja Karnuntum (Austrija)



46. This writing tablet found at Vindolanda by Hadrian's Wall (UK) is a list of food

46. Tabla sa natpisom na drvenoj kori nađena u Vindolandi pored Hadrijanovog zida (Velika Britanija) ustvari je spisak namirnica

Istraživanja i iskopavanja

Iako su iskopavanja preduzeta početkom XIX veka, tek 1890-e se uzimaju kao početak modernog doba naučnih arheoloških istraživanja koja nisu samo



47. The timber palisade in Germany, excavated in 1894

47. Drvene palisade u Nemačkoj istražene 1894. godine

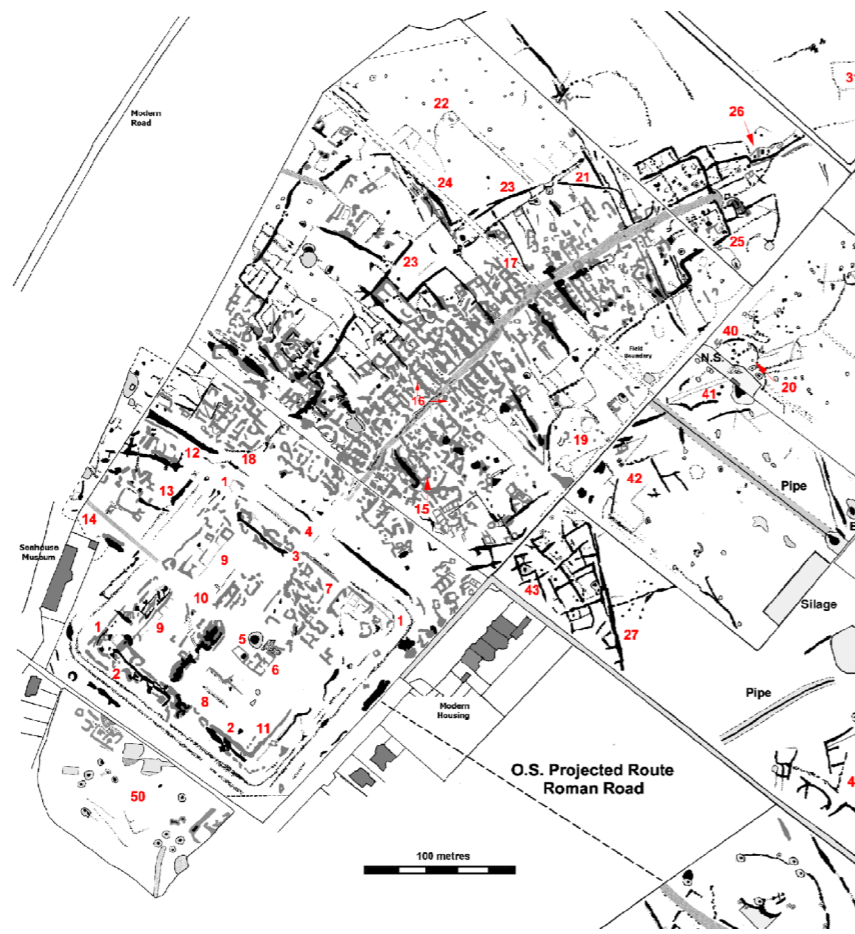


48. After 25 years of service the auxiliary soldiers were awarded with the Roman citizenship, which was confirmed and certified by a military diploma
 48. Nakon 25 godina službe, vojnici pomoćnih jedinica dobijali su rimsko građansko pravo, što je bilo potvrđeno i overeno tzv. vojnom diplomomom



49. Tourism is not a modern phenomenon. This bowl was probably made as a souvenir of Hadrian's Wall (UK) in the second century AD
 49. Turizam nije moderan fenomen. Ova zdela je verovatno napravljena kao suvenir, podsećanje na Hadrijanov zid (Velika Britanija), u II veku n.e.

obuhvatala iskopavanja, već su važni elementi bili rekognosciranja i tehnička snimanja postojećih ostataka. Ovakve radove često su preduzimale institucije poput Carske - Limes komisije u Nemačkoj,



50. Geophysical survey of the fort and civil settlement at Maryport (UK)
 50. Geofizička istraživanja utvrđenja i civilnog naselja u Mariportu (Velika Britanija)

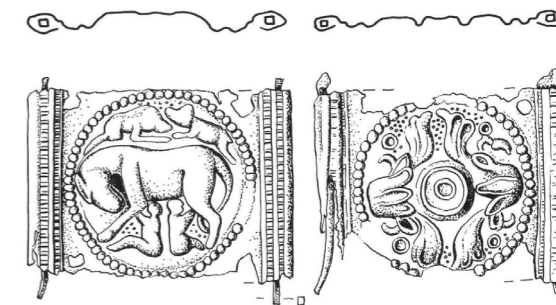


51. Virtual reconstruction of the military hospital (valetudinarium) at the legionary base at Novae (Bulgaria)
 51. Virtuelna rekonstrukcija vojne bolnice (valetudinarijum) na lokalitetu Nove (Bugarska)

the surveying and recording of existing remains. This work was often undertaken by institutions such as the Reichs-Limeskommission in Germany, founded in 1892 by the great German historian and winner of the Nobel Prize Theodor Mommsen.

Aerial survey

Aerial photography provided another valuable tool. Aristide Poidebard's great survey of Roman military sites in Syria, undertaken in the 1920s, and Sir Aurel Stein's survey of Jordan remain a major source for the study of the Eastern frontier. Jean Baradez's



52. Roman military equipment from August (Switzerland)
 52. Rimski vojna oprema iz Augsta (Švajcarska)

čiji je osnivač 1892 godine bio veliki nemački istoričar, dobitnik Nobelove nagrade, Teodor Mommsen.

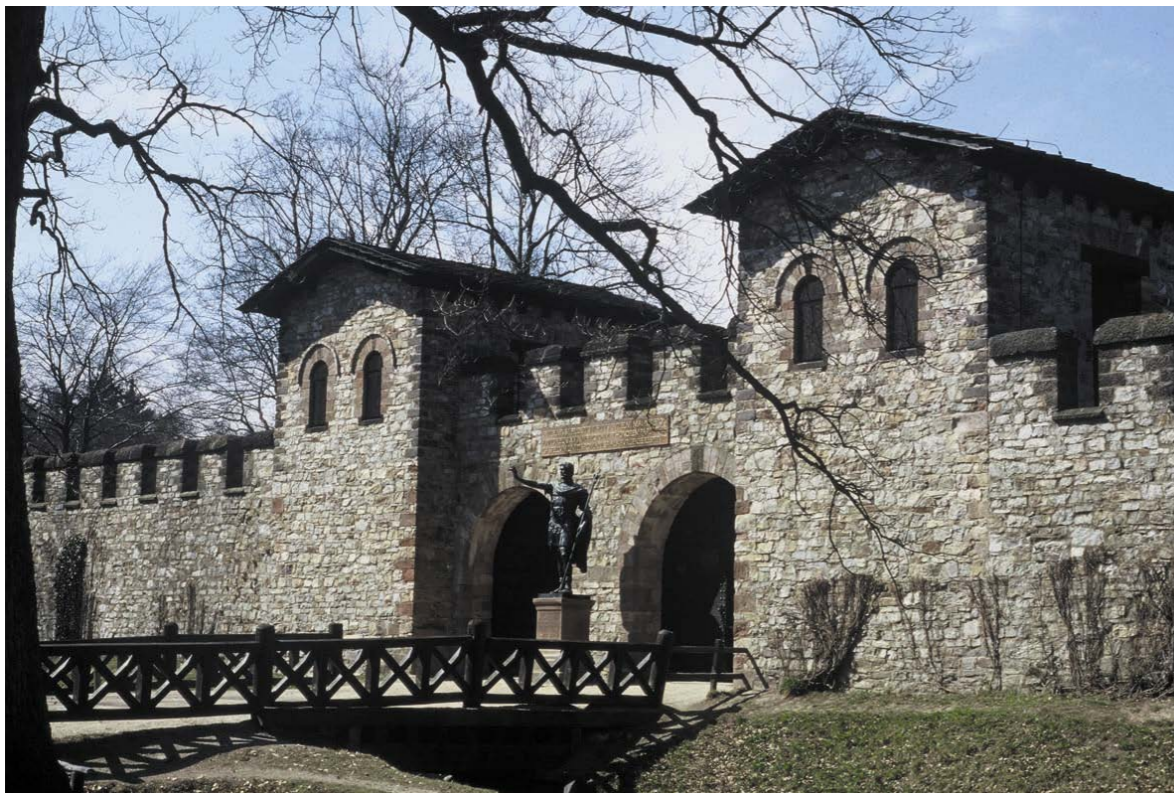
Snimanja iz vazduha (aerofotografija)

Aerofotografija predstavlja još jedan dragoceni način dobijanja arheoloških podataka. Sjajno istraživanje rimskog vojnog lokaliteta u Siriji koje je Aristid Puadebar preduzeo 1920. godine i rekognosciranja Ser Aurela Štajna u Jordanu i dalje su glavni izvor za proučavanje istočne granice. Delo Žana Baradea *Fossatum Africae*, objavljeno 1959. godine, zasniva se na snimanjima iz vazduha Severne Afrike i ostaje početna tačka za bilo kakvo proučavanje ove oblasti.

U XX veku apsolutnu dominaciju preuzimaju arheološka iskopavanja. Rana istraživanja bila su fokusirana na otkrivanje arhitektonskih ostataka,



53. At Iža (Slovakia) an impression of the south gate is provided by the timber sculpture
 53. Na lokalitetu Iža (Slovačka) rekonstrukciju južne kapije pruža struktura izrađena od drveta



54. One of the earliest archaeological parks was that at the Saalburg (Germany) in the Taunus mountains. Here, in the 1890s, the walls and some of the internal buildings of a Roman fort were rebuilt
54. Jedan od prvih arheoloških parkova je osnovan u Zalburgu (Nemačka) u Taunus planinama. Godine 1890. obnovljeni su zidovi i neki od unutrašnjih objekata rimskog utvrđenja

Fossatum Africae, published in 1959, is based upon his aerial reconnaissance of North Africa and remains the start point for any study of this area. Research in the twentieth century was dominated by excavation. Early work focussed on uncovering structural remains often neglecting the more detailed history of each site. Whole forts might be laid open. Yet at the same time, members of the Reichs-Limeskommission in Germany were able to confirm that the frontier had indeed a timber palisade, while in Scotland it was revealed that the Antonine Wall was built of turf as described in the *Historia Augusta*. Techniques soon improved. Better use was made of dating evidence such as coins and pottery and, in time, weapons and other small finds. The advantages of stratigraphy in helping understand the history of sites was also appreciated. Today, terrestrial and aerial survey is supplemented by remote sensing, in particular geophysical survey.

često zanemarujući specifičnu istoriju svakog lokaliteta. Čitava utvrđenja mogla su biti nakon iskopavanja ostavljena bez nadzora. Ipak, u isto vreme, pripadnici Carske – Limes komisije u Nemačkoj potvrdili su iskopavanjima da je granica u Germaniji ustvari drvena palisada, dok je u Škotskoj ustanovljeno da je Antoninov zid zidan od busenova trave, kao što je opisano u delu *Historia Augusta*. Tehnike su uskoro poboljšane. Ustanovljen je bolji način datovanja uz pomoć novčića, keramičkih posuda, oružja i sitnih nalaza. Takođe, počinju više da se cene prednosti stratigrafije u tumačenju istorijskog razvoja nalazišta. Danas su snimanja iz vazduha i sa zemlje dopunjena daljinskom detekcijom, naročito geofizičkim istraživanjima. Napredak kompjuterske tehnologije olakšao je u velikoj meri dokumentovanje i mapiranje lokaliteta. To će predstavljati veliku prednost za međunarodnu saradnju tokom istraživanja



55. The reconstructed north gate of the fort at Porolissum (Romania)
55. Rekonstruisana severna kapija utvrđenja u Porolisumu (Rumunija)

So much of this work is facilitated by advances in computer technology in helping documenting and mapping. This will be great advantage in international co-operation in the study of Roman frontiers. International co-operation in work on Roman frontiers began in the nineteenth century. In 1949 the Congress of Roman Frontier Studies was founded and has met regularly since in various countries. Today, research on the Frontiers of the Roman Empire brings together scientists from all over the world: the 22nd Congress in Ruse in Bulgaria was attended by 300 scholars from 30 countries in all 5 continents. Many universities are specialised in the study of Roman history and of the sites along the edge of the Roman Empire.

Protection and presentation of frontiers

The survey, excavation and recording of archaeological sites are but one part of the story. From the very beginning of excavation in the late nineteenth century, visitors wanted to see the remains which had been uncovered. Often, such archaeological sites were left open and unprotected. Archaeologists removed the valuable finds to museums, but visitors also wanted their own souvenirs and as a result some sites practically disappeared. The same years saw the first steps towards protecting ancient monuments. Country after country passed legislation to secure the future of their herit-

rimskih granica.

Međunarodna saradnja u proučavanju rimskih granica počela je u XIX veku. Godine 1949. održan je prvi Limes Kongres i od tada se redovno održava u različitim zemljama. Danas, istraživanje granica Rimskog carstva spaja naučnika iz celog sveta: 22. Limes kongresu u Rusama, u Bugarskoj, prisustvovalo je 300 naučnika iz 30 zemalja sa svih pet kontinenata. Mnogi univerziteti su se specijalizovali za proučavanje rimske istorije i nalazišta duž granica Rimskog carstva.

Zaštita i prezentacija granica

Istraživanja, iskopavanja i snimanja arheoloških nalazišta samo su jedan deo priče. Od samog početka iskopavanja krajem XIX veka, posetioci su želeli da vide ostatke koji su otkriveni. Često su takva arheološka nalazišta ostajala na otvorenom i potpuno nezaštićena. Arheolozi bi sklonili vredne nalaze u muzeje, ali posetioci su takođe želeli neki suvenir i kao rezultat toga neki lokaliteti su praktično nestali.

Tih godina napravljeni su prvi koraci ka zaštiti antičkih spomenika. Naime, države su sukcesivno donosile zakone kojima se obezbeđivala budućnost kulturnog nasleđa. Poljoprivreda je dugo ugrožava opstanak arheoloških ostataka, a sada to čini industrija i njena infrastruktura svojom razornom moći. Ogroman ekonomski razvoj svuda u svetu poste-



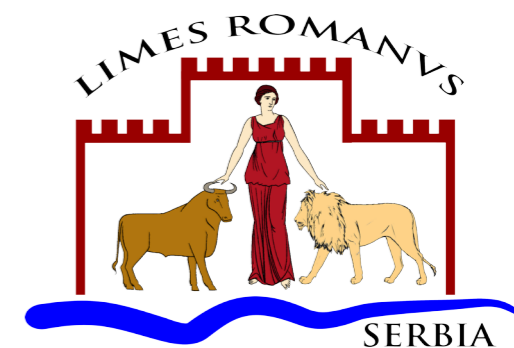
56. Late Roman fortification at Siscia (Croatia)
 56. Kasnorimsko utvrđenje u Sisciji (Hrvatska)

age. Agriculture had long threatened the survival of archaeological remains; now industry and its infrastructure competed with its destructive power. Vast economical developments everywhere gradually changed the face of archaeology, leading to large and complex rescue excavations.

The needs of increasing numbers of visitors needed to be catered for. Military sites were laid out for public inspection; museums were built to house the large collections of artefacts, and, in time, other facilities were provided, such as archaeological parks, many containing reconstructions.

peno menja lice arheologije, što dovodi do velikih i složenih zaštitnih iskopavanja.

Suočavamo se i sa sve većim brojem posetilaca čije potrebe treba zadovoljiti. Arheološki lokaliteti su otvoreni za javnost, muzeji su izgrađeni za smeštaj velikih kolekcija i, vremenom se formiraju i drugi objekti, kao što su arheološki parkovi, od kojih mnogi sadrže i razne rekonstrukcije.



ROMAN LIMES IN SERBIA
 RIMSKI LIMES U SRBIJI



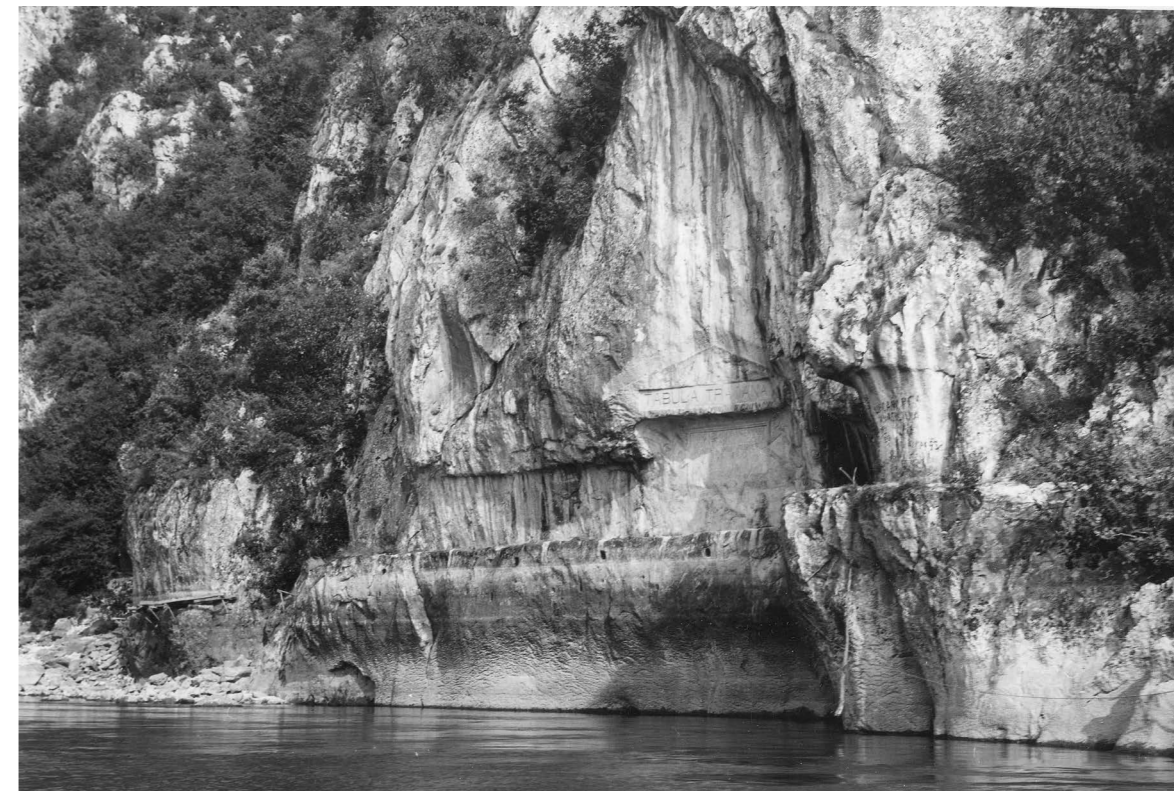
57. Iron Gate gorge. Position of Hajdučka vodenica, and sculpture of Decebalus are visible
 57. Đerdapska klisura. Vide se položaj utvrđenja Hajdučka vodenica i skulptura Decebala

Preparation for the Nomination of the Serbian Limes Section

Being inscribed to the UNESCO World Heritage List means that the site must be physically protected, presented and possessing an organised management system. Since this is not the actual situation in the field, work must be undertaken in order to prepare it for nomination. An effective management system depends individually on the type, characteristics and needs of the site and its cultural context. Government, regional and local authorities must all be involved in presenting archaeological remains. Popularisation and education related to Roman heritage are essential since they will help raise awareness of its importance among the local population and help with the preservation of archaeological remains.



58. Diana, interior side of defensive walls and towers
 58. Dijana, unutrašnja strana bedema i kula



59. Roman road cut into the cliffs of Iron Gate Gorge
 59. Rimski put usečen u stene Đerdapske klisure

When major sites are concerned, the presentation and protection of the Danube limes in Serbia is actually a part of the already ongoing project “*Itinerarium Romanum Serbiae*”.

The Tentative List is the first step in the nomination of all sites. It is only a preliminary list, an inventory of those properties which each State Party intends to consider for nomination. This list is flexible, can be modified prior to nomination and is not binding. When the nomination is accepted and the property becomes part of the World Heritage List, states are obliged to respect all conditions prescribed by UNESCO.

At the moment, the Republic of Serbia has four World Heritage sites, out of which three are mediaeval monasteries with other archaeological elements (fortified city etc.). Only one site belongs to the Antique period – Gamzigrad (*Felix Romuliana*). The Institute for Protection of Cultural Monuments of the Republic of Serbia is the institution bearing competence in preparing nomination of cultural heritage. The government has a Permanent Del-

Priprema za nominaciju srpskog dela limesa

Da bi neki lokalitet bio upisan na Listu svetske baštine UNESCO-a podrazumeva se da je fizički zaštićen, prezentovan i da ima organizovan sistem upravljanja. Pošto to nije svuda postignuto, mnogi koraci moraju biti preduzeti kako bi se nalazišta pripremila za nominaciju. Efikasan sistem upravljanja zavisi od tipa, karaktera i potreba samog lokaliteta, kao i njegovog kulturnog konteksta. Nominacija podrazumeva da se državne, regionalne i lokalne vlasti uključe u prezentaciju arheoloških ostataka. Naravno, popularizacija i obrazovanje su od suštinskog značaja jer podižu svest o značaju rimskog nasleđa među lokalnim stanovništvom što neposredno pomaže očuvanju arheoloških nalazišta. Kad su u pitanju najveći lokaliteti, prezentacija i zaštita Dunavskog limesa u Srbiji zapravo predstavlja deo postojećeg projekta “*Itinerarium Romanum Serbiae*”.

Izrada preliminarne liste prvi je korak u nominaciji svih lokaliteta i predstavlja popis lokaliteta koje

egation in the UNESCO in Paris and the Commission of the Republic of Serbia for UNESCO that is part of the Ministry of Foreign Affairs of the Republic of Serbia.

Serbian nomination of the Danube limes will not be an individual nomination, which is most common when UNESCO is concerned. This will be an extension of the existing transnational and serial property "Frontiers of the Roman Empire" as discussed in previous chapters.

Experts from all the institutions in Serbia are now organised in a work group that began its activities in autumn 2013. A preliminary register of archaeological sites has been formed and preparation of the tentative list is in progress. The Archaeological Institute and the Institute for the Protection of the Cultural Heritage of the Republic of Serbia are the leading institutions in the workgroup.

Danube Limes Brand SEE project

Danube Limes Brand is the project co-funded by the European Union and one of the best examples of multinational cooperation of experts from countries along the Danube. Nine partners from seven countries gathered to prepare the base for the

svaka država ugovornica namerava da razmotri za nominaciju. Ova lista je fleksibilna, odnosno može se modifikovati do nominacije i nije obavezujuća. Jednom kada nominacija bude prihvaćena, a predloženi lokaliteti postanu deo svetske baštine, države su dužne da poštuju sve uslove koje propisuje UNESCO.

Do sada, Republika Srbija ima četiri lokaliteta na listi Svetske baštine, od kojih su tri srednjovekovni manastiri sa drugim arheološkim elementima (utvrđeni grad itd.). Samo jedan lokalitet je antički - Gamzigrad (*Felix Romuliana*).

Zavod za zaštitu spomenika kulture Republike Srbije je nadležna institucija koja priprema nominaciju kulturnog nasleđa. Vlada ima stalne delegacije pri organizaciji UNESCO-a u Parizu i Komisiju za UNESCO koja je deo Ministarstva spoljnih poslova Republike Srbije.

Nominacija srpskog dela Dunavskog Limesa ne predstavlja pojedinačnu nominaciju, kakve su inače najčešće kada je u pitanju UNESCO, već će biti u sklopu proširenja postojećih međunarodnih i serijskih lokaliteta tzv. «granica Rimskog carstva», kao što je objašnjeno u prethodnim poglavljima.

Stručnjaci iz svih institucija u Srbiji organizovani u radnu grupu koja je počela sa radom u jesen 2013. godine, formirali su registar arheoloških lokaliteta

nomination – an extension of the project "Frontiers of the Roman Empire".

The DANUBE LIMES BRAND Project fosters sustainable utilisation of the cultural Danube Limes heritage (archaeological sites, monuments and landscape) under the UNESCO World Heritage designation. The DANUBE LIMES BRAND project concentrates on:

1. Preparation of additional Danube Limes UNESCO heritage nominations in the Lower Danube area (Croatia, Serbia, Romania, Bulgaria);
2. Development of general branding for the future joint exploitation of the economic and tourism potential of the Danube Limes heritage with the input of best practice models from all participating countries;
3. Investigation of the regional potential for the exploitation of the Limes heritage on a national/regional level and the preparation of national/regional presentation concept studies in all partner countries;
4. Implementation of some measures of the presentation concept as pilot actions on a local/regional/national level to function as role models for the exploitation of a common perspective Danube Limes World Heritage Site.

It is important to make basic preparations for the

i pripremaju preliminarnu listu. Arheološki institut iz Beograda i Zavod za zaštitu spomenika kulture Republike Srbije predstavljaju vodeće institucije u radnoj grupi.

Dunavski limes kao brend SEE projekat

"Dunavski Limes kao Brend" je projekat koji sufinansira Evropska unija i jedan je od najboljih primera multinacionalne saradnje stručnjaka iz zemalja Podunavlja. Devet partnera iz sedam zemalja okupilo se na pripremi baze za nominaciju, odnosno proširenje projekta "granice Rimskog Carstva". Projekat Dunavski Limes kao Brend podstiče održivo korišćenje kulturne baštine Dunavskog Limesa (arheološki lokaliteti, spomenici i pejzaži) pod zaštitom UNESCO-a. Projekat se usredsređuje na:

1. Pripremu dodatnih nominacija za Svetsku baštinu u donjem Podunavlju (Hrvatska, Srbija, Rumunija, Bugarska);
2. Razvoj opšteg brenda za buduće zajedničko korišćenje privrednog i turističkog potencijala baštine Dunavskog Limesa, sledeći najbolje modele prakse iz svih zemalja učesnica;
3. Istraživanje regionalnih potencijala za korišćenje

60. Roman legions crossing Danube into Dacia (Trajan's Column, Rome)
60. Rimske legije prelaze Dunav u Dakiju (Trajanov stub, Rim)



nomination of all sites (documentation, conservation, presentation and visualisation). Media attention and tourist promotion are also important to achieve.

An important focus is also the exchange of knowledge and experience through the tight coordination of experts from all partners.

Within the project, each partner has a different role and different goals, since every country follows its own legislation related to the process and is in a different phase of nomination. Among the goals of Serbia are the preparation of the tentative list, the preparation of an example of the nomination file (Viminacium is the site that has been chosen), to improve the presentation of the sites where it is possible and to prepare a web site and a booklet for our section of the limes.

Roman Limes In Serbia – an Overview

Limes in Serbia is the natural extension of this project, especially recommended by the UNESCO authorities. An advantage for inscribing the limes in Serbia to the World Heritage List is that all the major argumentation has already been justified and attested. This would be the main obstacle for nomination. The basic undertakings of Serbian archaeologists now are to finish the recording of all the sites, prepare technical documentation and make a detailed assessment of the situation in the field. Selection of the sites that will be inscribed to the list is of no less importance, since not all of them can be included. The relationship with the local population to the site is one of the most important issues. Unfortunately, no previous steps towards the nomination of the limes have been taken. The advantage of our long term archaeological research is that many sites are excavated, identified and, at least partially, published. This is an excellent starting point, since at least the tentative list can be prepared without major research.

Serbia holds a significant part of Danube length (587/2888 km). The length of the Serbian limes section is actually 450 km. Serbia and Croatia share 137 km, where Serbia holds the left bank that is, in fact, part of *Barbaricum*. Along the rest of the length that Serbia holds, either both or only the right river bank was part of the Empire. This means there are almost 100-120 roman sites in this



61. Miloje Vasić, one of the first researchers of Limes in Serbia. Excavations at Viminacium 1902/1903
61. Miloje Vasić - jedan od prvih istraživača na Limesu u Srbiji. Iskopavanja Viminacijuma 1902/1903.

nasleđa Limesa na nacionalnom / regionalnom nivou i priprema nacionalnih / regionalnih koncepata prezentacije u svim zemljama učesnicama;

4. Sprovođenje nekih mera koncepta prezentacije kroz pilot akcije na lokalnom / regionalnom / nacionalnom nivou sa ciljem da postanu uzori za korišćenje zajedničkog nasleđa Dunavskog limesa. Izuzetno je važno izvršiti osnovne pripreme za nominaciju svih lokaliteta (dokumentacija, konzervacija, prezentacija i vizualizacija). Pažnja medija i turističke promocije su takođe bitne za postizanje ovog cilja. Naravno, razmena znanja i iskustava i tesna saradnja stručnjaka svih partnera važan su preduslov. U sklopu projekta, svaki partner ima drugačiju ulogu i različite ciljeve u zavisnosti od toga u kojoj su fazi kandidature i od vlastitih propisa u tom procesu, koji se razlikuju od zemlje do zemlje. Među ciljevima Srbije je priprema preliminarne liste, zatim jednog nominacionog dokumenta (Viminacijum je nalazište koje je izabrano), poboljšanje prezentacije lokaliteta gde je to moguće, kreiranje internet stranice i štampanje publikacije o ovom delu Limesa.



Programme co-funded by the
EUROPEAN UNION



zone. So far, at least 80 sites are documented and partially published. Unfortunately, the procedure of legal protection has not been completed for the half of them. Only a few sites have physical protection, video surveillance or guard service.

Archaeological research on the sites of the Serbian Limes Section has lasted for more than 130 years. However, unfortunately, not all parts of the limes are equally explored and published.

Geographically, the limes in Serbia can be divided into 4 sections:

Section 1: Lower Pannonian section from Neština (border with Croatia) to *Taurunum*.

Section 2: Upper Moesian part from *Singidunum* to *Cuppae*.

Section 3: Iron Gate gorge (Djerdap I).

Section 4: Part of the limes from *Pontes* to Radujevac/Rakovica (Djerdap II).

This division more or less corresponds to the geographic and relief characteristics.

The Lower Pannonian section (section 1) was ex-

Rimski limes u Srbiji – opšti pregled

Kandidovanje Limesa u Srbiji je očekivani nastavak ovog projekta, posebno preporučenog od strane UNESCO-a. Prednost za upis limesa u Srbiji na listu svetske kulturne baštine je da su svi glavni argumenti za to već razmatrani i prihvaćeni. To je mogla biti glavna prepreka za imenovanje. Osnovni zadatak srpskih arheologa je da završe proveru svih lokaliteta, pripreme tehničku dokumentaciju i naprave detaljnu procenu situacije na terenu. Veoma je važan i izbor lokaliteta koji će biti upisani na listu, jer ne mogu svi biti uključeni. Jedno od najvažnijih pitanja je odnos lokalnog stanovništva prema arheološkom nalazištu.

Do sada nisu preduzeti nikakvi koraci ka nominaciji Limesa. Arheološka istraživanja na lokalitetima srpskog dela Limesa traju više od 130 godina. Prednost tih dugotrajnih arheoloških istraživanja je da su mnogi lokaliteti istraženi, identifikovani i, barem delimično, objavljeni. Nisu svi delovi limesa podjednako istraženi i objavljeni, ali preliminarna lista može biti pripremljena bez preduzimanja velikih istraživanja.

Kroz Srbiju protiče veliki deo Dunava (587 od 2888 km). Dužina srpskog dela Limesa je zapravo 450 km. Naime, Srbija i Hrvatska dele 137 km, gde Srbija drži levu obalu koja je, u stvari, deo *Barbaricum*-a. U ostatku kroz Srbiju, ili je samo desna ili su obe obale Dunava bile deo Carstva. To znači da se skoro 100-120 antičkih nalazišta nalazi u ovoj zoni. Najmanje 80 lokaliteta je do sada dokumentovano i delimično objavljeno. Nažalost, za polovinu nije završen postupak pravne zaštite, a samo mali broj lokaliteta ima fizičku zaštitu, video nadzor ili čuvarsku službu.

Geografski, Limes u Srbiji može se podeliti na četiri dela:

Sekcija 1: Donjopanonski deo od Neština (granica sa Hrvatskom) do Zemuna (*Taurunum*).

Sekcija 2: Gornjomezijski deo od Beograda (*Singidunum*) do Golupca (*Cuppae*).

Sekcija 3: Đerdapska klisura (Đerdap I)

Sekcija 4: Deo limesa od Kostola (*Pontes*) do Radujevca / Rakovice (Đerdap II)

Ova podela više ili manje odgovara geografskim i reljefnim karakteristikama oblasti.

ploded during the mid 20th century, but almost no excavations were undertaken in the past several decades.

Establishment and History of the Limes in Lower Pannonia and Upper Moesia

At the beginning of 1st century AD, when Romans conquered the Danubian region, the former territory of Serbia was populated by several barbarian tribes whose disposition was documented by ancient writers (Strabo, Appianus, Plinius and Ptolemy). In western area from Sava to the confluence of Pek (Pincus), the land was inhabited by parts of once powerful Celtic tribe of Scordisci. They were seriously weakened after the war with Tribali and separated into several smaller communities named according to local toponyms – *Tricornenses* (after settlement *Tricornium* in the vicinity of *Singidunum*) and to the east of them *Picenses* around river Pek. Between the rivers Pek and Isker large parts of tribe Tribali lived, while the rivers valleys of Timok and Cibrica were populated by the Moesi, the tribe which gave its name to the whole province.

The area around the Middle Danube was included in the Roman military and economic sphere of influence as early as in the time of Augustus. This is when the first successful battles against Dacia were fought.

Under Tiberius, who strived to organize one unique defensive system along the entire Danube frontier, first roads were built in the region of the Iron Gate. For fast movement of troops and better defense of the Empire, a road was built in 33/34 AD. Tablets of the emperor Tiberius celebrate building of the first limes road through the Iron Gates at Gospođin Vir by two legions: *III Scythica* and *V Macedonica*.

It was widened and improved during the reign of Claudius. This was also the time when temporary earth and timber fortifications were built.

The eastern section of Limes was exposed to attacks of the Dacians and the western section was endangered by barbarian tribes settling on the left bank of Danube in Pannonian plain. When forces from Limes left for Italy to take part in civilian war in 68-69 AD, this area showed how dangerous its inhabitants were. Only by chance Roman troops from eastern provinces that were passing along the Danube, also heading for Rome, saved forts



62. Roman Festival at Viminacium
62. Rimske svečanosti na Viminacijumu

Osnivanje i istorija limesa u Donjoj Panoniji i Gornjoj Meziji

Početkom I veka nove ere, kada Rimljani prodiru u Dunavski region, ovaj prostor je bio naseljen varvarskim plemenima o čijem rasporedu saznajemo od antičkih pisaca (Strabon, Apijan, Plinije i Ptolemej). Zapadni deo, od Save do ušća Peka (*Pincus*) naseljavali su delovi nekada moćnog keltskog plemena Skordiska. Nakon rata sa Tribalima bili su znatno oslabljeni i podeljeni na nekoliko manjih zajednica nazvanih u skladu sa lokalnim toponima – *Tricornenses* (prema naselju *Tricornium*), a istočno od njih *Picenses* oko reke Pek. Između reke Pek i Isker prebivao je veliki deo plemena *Tribali*, dok su oko reka Timok i Cibrica živeli *Moesi*, pleme po kome je provincija i dobila ime.

Područje oko srednjeg toka Dunava uključeno je u rimske vojne i ekonomske sfere još u vreme Avgusta, kada su se vođene prve uspešne bitke protiv Dačana.



63. Roman Festival at Viminacium
63. Rimske svečanosti na Viminacijumu

and settlements from almost inevitable destruction. Roman tensions with Dacia lasted for more than a century. The beginning of conflict went all the way to Julius Caesar and Burebista. Total war broke out under Domitian. Romans suffered serious losses including the entire legion with their standards under *Cornelius Fuscus* (*Legio V Alaudae* - the first battle of Tapae). In the winter of 85/86 AD, the Dacian army lead by *Diurpaneus* attacked the Roman province of Moesia and made havoc. In fierce fighting even the Moesian Governor *Oppius Sabinus* was killed. The peace treaty achieved was humiliating for Romans.

Domitian's Dacian wars (86-88 AD) demanded a larger concentration of troops in the Iron Gate. During his reign, roads were restored in sections. When military architecture is concerned, there was a major change - old earthen fortifications were rebuilt in stone.

For the rational functioning of the Roman admin-

Pod Tiberijem, koji je nastojao da organizuje jedinstveni odbrambeni sistem duž celog Dunava, izgrađeni su prvi putevi u regionu Đerdapa.

Za brze pokrete trupa i bolju odbranu Carstva 33/34 godine izgrađen je put. Natpis na tabli cara Tiberija obeležava gradnju prvog puta kroz Đerdap, u kome su učestvovala dve legije *III Scythica* i *V Macedonica*.

Tokom vladavine cara Klaudija put je popravljen i proširen. To je, takođe, vreme kada su izgrađena privremena zemljana i drvena utvrđenja.

Istočni deo limesa bio je izložen napadima Dačana, dok su brojna varvarska plemena nastanjena



64. Roman military formation
64. Rimska vojna formacija



65. Roman stone monument and sarcophagi exhibited at Belgrade fortress
 65. Rimski nadgrobnji spomenik i sarkofazi izloženi u Beogradskoj tvrđavi

istration, Moesia was divided into two provinces, Upper and Lower (*Moesia Superior* and *Moesia Inferior*). Upper Moesia now had two permanently stationed legions - *legio III Flavia* and *legio VII Claudia*, whose detachments participated in both military and civilian activities in the Iron Gates throughout antiquity. The danger of a powerful neighbor to the north - the Dacians, finally was removed after Trajan's

na levoj obali Dunava u Panonskoj niziji ugrožavala zapadni deo. Svoj, do tada samo opasni potencijal, pokazali su kada su rimske trupe napustile Limes da bi učestvovala u građanskom ratu 68-69 godine. Na sreću, rimske trupe iz istočnih provincija, prilikom prolaska kroz Podunavlje, sačuvala su logore i naselja od uništenja. Istorija rimskog sukoba sa Dakijom trajala je više od jednog veka. Početak sukoba seže do Julija Cezara i Burebiste, a pravi rat buknuo je pod Domicijanom. Rimljani su pretrpeli ozbiljne gubitke uključujući celu legiju pod Kornelijem Fuskom (*Legio V Alaudae* - prva bitka kod *Tapae*). U zimu 85/86. godine vojska Dačana pod vođstvom *Diurpaneus*-a napala je rimsku provinciju Meziju i ostavila pustoš

66. Reenactment as a tourist attraction Gladiators - Roman Festival at Viminacium
 66. Insceniranje rimskih događaja kao turistička atrakcija Gladijatori - rimske svečanosti na Viminacijumu



67. Defensive ditch in front of the fortification at Singidunum
 67. Odbrambeni rov ispred utvrđenja u Singidunumu

wars, fought in the Danube region between 101 and 106. Large scale preparations brought main Roman forces into the vicinity of Viminacium and Lederata, where the troops were probably assembled. A bridge of barges was built at the foot of the Lederata fort and legions marched into Dacia. This crossing was one of the introductory scenes on Trajan's column in Rome. During Trajan's campaigns against Dacia major efforts were made in finishing basic infrastructure – a waterway was regulated through the Iron Gate; roads were built and repaired, as well as series of stone fortifications and finally the monumental bridge near the village Kostol (*Pontes*). It is interesting to note than one of the legionaries from VII *Claudia* was the one who brought Decebalus' head to Emperor Trajan. Defeating *Dacia* was not just removing threat from

za sobom. U žestokoj borbi, čak je i mezijski upravnik Opije Sabin ubijen. Postignuti mirovni sporazum bio je ponižavajući za Rimljane. Dački ratovi koje je vodio Domicijan (86-88.) zahtevali su veću koncentraciju trupa u Đerdapu. Tokom njegove vladavine obnovljeni su putevi, a stara zemljana utvrđenja zamenjena kamenim. Za racionalno funkcionisanje rimske administracije, Mezija je podeljena u dve provincije, Gornju i Do-



68. Kostol (Pontes), ceremonial helmet with mask
 68. Kostol (Pontes), paradni šlem sa maskom



69. Diana, Eastern gate of the fortification
69. Dijana, istočna kapija utvrđenja

frontiers – former *Dacia*, present day Romania, was enormously rich with gold ore. Converting *Dacia* into the Roman province, fortifications on the Danube lost their primary defensive character. They became checkpoints along the Danube trade route and accommodated troops for other operations in the Balkans. Control of land and river routes and crossings, inspection of goods and people between the two provinces was important but basically diminished role of once formidable frontier line.

Time of prosperity in the Iron Gates, according to archaeological findings, was the period of Trajan (98-117 AD) and Hadrian (117-138), the Antonine (138-192) and Severian (193-235) dynasties. At that time, live trade and economic contacts with various parts of the Empire flourished and local production centers were established, producing utensils for everyday use.

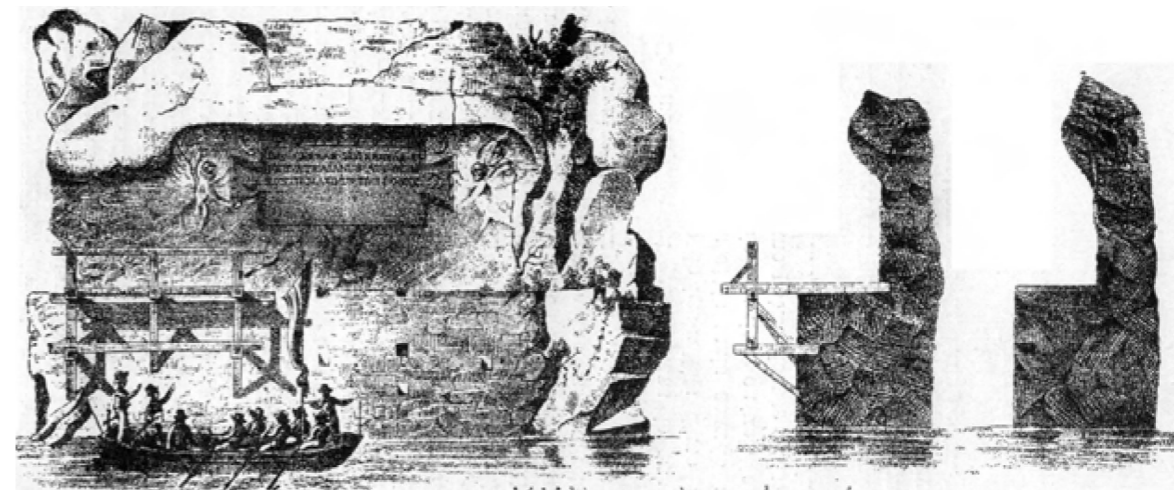
During the mid 3rd century AD, Moesian legions supported several unsuccessful usurpers, leading to grave consequences - this led to punitive

nju (*Moesia Superior* and *Moesia Inferior*). Gornja Mezija je imala dve stalno stacionirane legije - *Legio III Flavia* i *Legio VII Claudia*, čiji su odredi učestvovali u vojnim i civilnim aktivnostima u Đerdapu tokom čitave antike.

Opasnost od moćnog suseda na severu - Dačana, konačno je uklonjena posle ratova cara Trajana, vođenih u Dunavskom regionu između 101. i 106. godine. Pripreme velikih razmera dovele su glavne rimske snage u blizinu Viminacijuma i Lederate gde se okupljanje verovatno i dogodilo. Pontonski most izgrađen je u podnožju utvrđenja Lederate i legije su umarširale u Dakiju. Ovaj prelaz bio je jedna od uvodnih scena na Trajanovom stubu u Rimu. Tokom Trajanove kampanje protiv Dačana završeni su glavni radovi na osnovnoj infrastrukturi – regulisan je plovni put kroz Đerdap; kopneni putevi su izgrađeni ili popravljani, sagrađen je niz kamenih utvrđenja i konačno, monumentalni most kod sela Kostol (*Pontes*).

Zanimljivo je napomenuti da je jedan od legionara iz Sedme Kladijeve legije doneo Decebalusovu glavu caru Trajanu.

Pobeda nad Dačanima nije bilo samo uklanjanje pretnje, već je značila i ekonomska dobit jer je Dakija bila izuzetno bogata zlatnom rudom.



expedition when troops sent by emperor Gallienus crushed rebellion in blood. Both civilians and military were severely punished. One of the negative effects was the closing of the Viminacium mint in order to prevent potential future financing of rebels. The 3rd century crises diminished defence potential of the Danubian region. *Dacia* was overexposed to barbarian attacks.

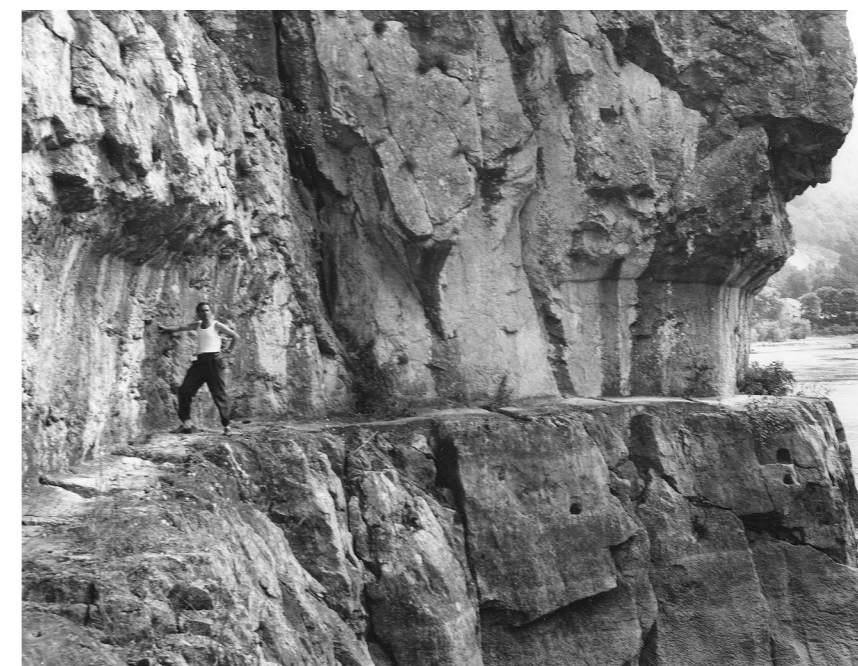
During the second half of the third century, there was a major shift in the organization of *limes*. This was a consequence of Emperor Aurelian's fateful decision in 274. Due to the inability to control the province, he withdrew the Roman army from it and moved the population into the neighboring provinces. The abandonment of *Dacia* had seri-

70. Tabula Traiana and remains of the limes road (according to the drawing of P. Vasarhelyi)

70. Trajanova tabla i ostaci puta u Đerdapu (prema crtežu P. Vašarheljija)

Pretvaranjem Dakije u rimsku provinciju, utvrđenja na Dunavu gube svoju primarnu odbrambenu funkciju i postaju trgovačka središta duž Dunava. U njima se privremeno smeštaju trupe za druge operacije na Balkanu. Kontrola kopna i rečnih puteva i prelaza, pregleda robe i ljudi između dve provincije je važna, ali u suštini uloga nekada jake granične linije bila je smanjena.

Vreme prosperiteta u Đerdapu, prema arheološkim nalazima, bilo su periodi vladavine Trajana (98-



71. Roman road cut into the cliffs of the Iron Gates Gorge
71. Rimski put usečen u Đerdapsku klisuru

ous political and military aftermath. The *legio XIII Gemina* that had garrison in Dacia (modern Romania) withdrew to the newly established province *Dacia Ripensis* and occupied several fortifications downstreams of the Iron Gates. The Danube banks in Djerdap became the frontier with *Barbaricum* again. Old, abandoned or neglected forts had to be restored rapidly.

Frequent incursions of barbarians encouraged Emperors Valens and Valentinian I to build further military facilities and the limes area was again settled by new military forces. The limitanei, s they were named - the low level troops and their families, achieved common everyday activities (agriculture, crafts, etc.) during peaceful times and at the same time manned fortifications. During violent outburst of the Visigoths in 378-380, many settlements and forts on the limes were annihilated. Renewed life in military camps along the limes again suffered heavy blow during Hunnic invasion in 441-443, due

72. G. Hering. *The Danube near Kazan. Roman road was used for two millenia by local population*
72. G. Hering. *Dunav blizu Kazana. Lokalno stanovništvo koristilo je rimski put skoro dva milenijuma*



117), Hadrijana (117-138), dinastije Antonina (138-192) i Severa (193-235). U to vreme, cvetali su trgovina i ekonomski kontakti sa različitim delovima Carstva, a niču i lokalni zanatski centri u kojima su proizvođeni predmeti za svakodnevnu upotrebu.

Sredinom III veka mezijanske legije podržale su nekoliko neuspešnih uzurpatora što je imalo teške posledice, odnosno došlo je do kaznene ekspedicije u kojoj su trupe cara Galijena poslate da uguše pobunu u krvi. I građani i vojska su surovo kažnjeni. Jedna od negativnih posledica bilo je zatvaranje viminacijumske kovnice novca u cilju sprečavanja eventualnog budućeg finansiranja potencijalnih pobunjenika.

Kriza u III veku umanjila je odbrambeni potencijal Podunavskog regiona, a Dakija je bila previše izložena napadima varvara.

U drugoj polovini III veka došlo je do velike promene u organizaciji limesa. To je bila posledica kobne odluke cara Aurelijana 274. godine koji zbog nemogućnosti da kontroliše pokrajinu, povlači rimsku vojsku, a stanovništvo preseljava u susedne provincije. Napuštanje Dakije imalo je ozbiljne političke i vojne posledice. Legija *XIII Gemina* koja je imala garnizon u Rumuniji povukla se u novoformi-



73. *Pectoral breast piece from Ritopek (Castra Tricornia)*
73. *Paradni grudna ploča oklopa iz Ritopeka (Castra Tricornia)*

to which the frontier experienced total economic and demographic collapse for a longer period.

The area along the frontier was completely depopulated. Written sources mention 100.000 Roman citizens taken into slavery by the Huns. The situation was so desperate that soldiers killed in battles were left where they died because there was no one to bury them.

The last attempt to stabilize the situation along the Danube was related to Justinian's activities. In his book *De Aedificiis*, Procopius briefly described all the "glorious building efforts" that emperor initiated in order to secure the frontier. This depleted empire treasury but did not lead to the desired effect. Fortifications either did not have enough soldiers to form crews or troops were of low quality, badly mo-

ranu provinciju Priobalnu Dakiju i zauzela nekoliko utvrđenja nizvodno od Đerdapa. Obale Dunava u Đerdapu ponovo su postale granica sa Barbarikumom. Stara, napuštena ili zanemarena utvrđenja morala su da budu brzo obnovljena.

Česti upadi varvara ohrabрили su careve Valensa i Valentinijana da izgrade nove vojne objekte i oblasti Limesa nasele novim vojnim snagama. Limitani, trupe nižeg ranga, i njihove porodice, u miru su obavljali svakodnevne ekonomske aktivnosti (poljoprivreda, zanati, itd.), a u isto vreme obluživali utvrđenja. Prilikom upada Vizigota 378-380.



74. Legionary brick stamps
74. Legijski pečati na opekama

tivated, untrained and poorly paid. The new limes could not be considered a serious protection of the hinterland. Fortifications with weak garrisons had no chance to withstand strong barbarian pressure. At the time of Justinian I (527-565), extensive reconstruction of the limes in the Danube region had begun. Building new and repairing old forts, made

mnoga naselja i utvrđenja na Limesu su uništena. Obnovljeni život u vojnim kampovima duž granice ponovo će pretrpeti težak udarac tokom Hunske invazije 441-443. godine.

Tada su oblasti duž granica ostale bez stanovništva. Pisani izvori pominju 100.000 rimskih građana uzetih u hunsko ropstvo. Situacija je bila toliko očajna da su vojnici ubijeni u borbama ostavljeni da leže na mestu pogibije, jer nije bilo nikoga da ih sahrani. Poslednji pokušaj da se situacija duž Dunava stabilizuje povezan je sa Justinijanovim aktivnostima. Prokopije u svojoj knjizi *De Aedificiis* ukratko opisuje sve "slavne građevinske poduhvate" koje je car pokrenuo da bi obezbedio granicu. Ali, iako su znatno osiromašili carsku riznicu, nisu imali željeni efekat. U utvrđenjima su se nalazile malobrojne posade, a vojnici su bili neobučeni, nemotivisani i slabo plaćeni. Obnovljeni Limes nije se mogao smatrati ozbiljnom zaštitom zaleđa. Utvrđenja sa slabim garnizonima nisu imala šanse da izdrže jak varvarski pritisak.

Do invazije Avara i Slovena Limes je imao mogućnost da se oporavi, uglavnom zbog toga što su varvari napadali Carstvo radi pljačke, a zatim bi se

75. Hydroelectric power plant Đerdap I, near Kladovo
75. Hidroelektrana Đerdap I kod Kladova



possible at least for several decades to resist frequent attacks of the Slavs and Avars, to its end in 614, when the frontier was completely overrun.

Until this invasion, the limes had possibility to recover mainly because barbarians attacked the empire with intention of simple looting. They always returned to Barbaricum and repeated attacks from time to time. At the beginning of 7th century AD, situation radically changed. Slavic tribes did not leave after the invasion but settled down. With no forces to push them back, the Danube banks were permanently abandoned.

Pannonian Section of the Limes in Serbia

The system of Roman military stations on the right Danube bank in nowadays Serbia was built on series of hills that oversee the plain on the left river bank. Along the limes are the slopes of Fruška gora with a number of small streams running down towards the Danube. At the confluence of these rivers into the Danube, Romans built their garrisons. The whole system is comprised of several major forts, towers and fortified ports.

So far most Roman sites along the banks of the Danube in Srem are now identified, while the remains on the opposite side, in Backa and Banat are also confirmed. Disposition of Roman troops on the Danube after the establishment of the province of Pannonia is not completely known. Forts were distributed along the right bank, but only a small number of them belongs to the period of the first century. Roman sites are mostly remnants of settlements and cemeteries that belonged to population who lived near the military garrisons. One of them, where this early horizon was researched is site Dumbovo. On the left side of the stream first century village was detected, It had simple circular huts half-buried in mud that had imported Italic and ceramic dishes. Opposite the village, on the right side of the stream watch tower was built during the first half of the second century. Remains of similar buildings were discovered in Susek and Neštin. The towers were built in places where the Danube meanders, creating

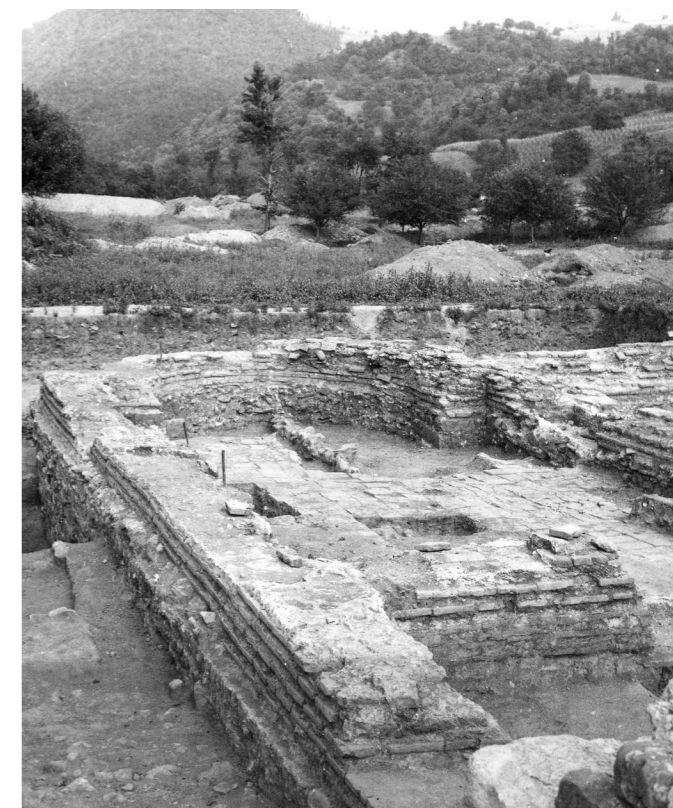
vračali u Barbarikum i ponavljali napade s vremena na vreme. Početkom VII veka situacija se radikalno promenila. Slovenska plemena se nisu povukla nakon invazije, već naselila. Bez snage da ih potisne, Rimsko carstvo zauvek napušta obale Dunava.

Panonski deo limesa u Srbiji

Sistem rimskih vojnih postaja na desnoj obali Dunava u Srbiji bio je izgrađen na brdima koja su nadgledala levu obalu. Duž limesa su obronci Fruške gore sa znatnim brojem malih vodotokova koji teku prema Dunavu. Na ušću tih potoka u Dunav, Rimljani su postavljali svoje garnizone. Ceo sistem se sastojao od nekoliko velikih utvrđenja, kula i utvrđenih luka.

Do sada je identifikovan najveći broj rimski lokaliteta duž obale Dunava u Sremu, a takođe su potvrđenil rimski ostaci na drugoj strani, u Bačkoj i Banatu.

76. Donji Milanovac, site Veliki Gradac - Roman town Taliata
76. Donji Milanovac, lokalitet Veliki Gradac - rimska Taliata





77. View from Octavum towards barbaricum
77. Pogled sa Oktavuma ka barbaricumu

numerous river islands that enabled easy crossing to the other bank. Among them one specific was identified in Bač. It consisted of a central tower from which the defensive walls extended towards the bank, linking up with another two. This port, around which defensive ditch was dug, was constructed opposite the fort *Cuccium* - Ilok located in Croatia today. Additionally on the left bank of the Danube in Barbaricum stronghold in Begeč, identified as *Castelum Onagrinum*, was mentioned as the seat of the legions V Iovia and VI Herculia. On this site large fortress was partially excavated measuring 340x220 meters with round towers. Outside the fort remains of the pillars of the pier were discovered. The fort was built against the city of Bononia (today

78. Street of IV Flavia Legion in Višnjica
78. Ulica IV Flavijeve legije u Višnjici



Raspored rimskih trupa na Dunavu nakon osnivanja provincije Panonije nije poznat sa sigurnošću. Utvrđenja su bila raspoređena duž desne obale, ali samo mali broj se datuje u I vek. Rimski lokaliteti su uglavnom ostaci naselja i nekropola koji su pripadali stanovništvu koje je živelo u blizini vojnih garnizona. Jedan od njih na kome je istražen rani horizont je lokalitet Dumbovo. Na levoj strani potoka ustanovljeno je naselje iz I veka sa jednostavnim kružnim kolibama do pola ukopanim u zemlju. U naselju su nađene keramičke posude među kojima je bio i italski import. Nasuprot sela, na desnoj strani potoka, izgrađena je kula stražara u prvoj polovini II veka. Ostaci sličnih građevina otkriveni su u Suseku i Neštinu. Kule su sagrađene na mestima gde Dunav meandira stvarajući brojna rečna ostrva koja su omogućivala lak prelazak na drugu obalu. Na ovim dokovima su tokom kasne antike podignuta utvrđenja. Među njima je jedno posebno identifikovano u Baču. Sastojalo se od centralne kule od koje su se odbrambeni zidovi pružali prema obali, povezujući je se sa još dve. Ova luka, oko koje je iskopan odbrambeni jarak, izgrađena je preko puta tvrđave *Cuccium* – Ilok i danas se nalazi u Hrvatskoj. Na levoj obali Dunava, u Barbarikumu, uporište u Begeču identifikovano kao *Castelum Onagrinum*, pominje se kao sedište legija V Iovia i VI Herculia. Na ovom lokalitetu delimično je istražena velika tvrđava sa kružnim kulama. Izvan tvrđave otkriveni su ostaci stubova pristana. Utvrđenje je sagrađeno naspram grada *Bononia* (Banoštor danas). Sa ovog lokaliteta potiču brojni natpisi među kojima je najvažniji natpis cara Trajana. Veliki deo tvrđave uništen je eksploatacijom kamena sa bedema za izgradnju kasnijih objekata. Utvrđenje *Cusum* je takođe potpuno uništeno tokom zidanja austrijske tvrđave Petrovaradin. Nala-

Banoštor). Numerous inscriptions originate from this site, among which was the most important inscription of Emperor Trajan. Large part of fort was destroyed when the stone from the ramparts was exploited for construction of later buildings. Fort *Cusum* was also completely devastated since the Austrian fortress Petrovaradin was built over it. Finds from the Roman period have been discovered at many places around the Petrovaradin fortress. At the site Prosjanice in Mihaljevačka šuma near Čortanovci, remains of a fort are still visible, named *Ad Herculem* in written sources. An angular round tower was excavated and parts of the rampart with remains of another tower, a gate tower of the southern gate, all dated into the 4th century. Under the mediaeval fort in Stari Slankamen there are the remains of the Roman fort of *Acumincum*, the headquarters of the cohortes I *Britannicae civium romanorum equitatae* and I *Campanorum*. Its position is ascertained on a high plateau dominating over the mouth of the river Tisa into the Danube. Before the Roman fort was built at the spot, there was a Celtic *oppidum*. In the vicinity of the fort there is a tower. Remains of a bigger fort were discovered in Surduk, Roman *Rittium*, which, according to its dimensions, was one of the biggest fort at this part of the Danube valley. According to sources, there was the equestrian *ala I Augusta Ilyraerorum* was stationed there. Monuments dedicated to Iuppiter Dolichenus give testimony of worshipping this deity from Asia Minor in the Danubian valley. Numerous finds of military equipment from Novi Banovci (*Burgenae*) give testimony about the military, actually the cohortes I *Thracum civium Romanorum*. Under the modern city of Zemun there was the Roman *Taurunum*. During the last century and a half, numerous small finds were discovered, but also remains of several towers, ramparts and Roman buildings, as well as a cemetery. The existence of a Roman port of *taurunum* was not precisely defined through research, also known from the written sources mentioned as the seat of the Roman fleet (*Classis flavia Pannonica*) about which numerous brick stamps give testimony.

79. Porta decumana (southeast gate) of Roman fortress presented in Roman Hall of the City Library in Belgrade
79. Porta decumana (jugoistočna kapija) rimskog kastruma prezentovana u podrumu Biblioteke grada Beograda

zi iz rimskog perioda konstatovani su na mnogim mestima širom Petrovaradinske tvrđave. Na lokalitetu Prosjanice u Mihaljevačkoj šumi kod Čortanovaca i danas su vidljivi ostaci utvrđenja koje je u izvorima zabeleženo kao *Ad Herculem*. Istražena je jedna ugaona kružna kula i delovi bedema sa ostacima kule na južnoj kapiji koji se datuju u IV vek. Ispod srednjovekovnog utvrđenja u Starom Slankamenu nalaze se ostaci rimskog *Acumincum*-a, sedišta kohorti I *Britannicae civium Romanorum equitatae* i I *Campanorum*. Položaj na visokom platou koji dominira nasuprot ušća Tise u Dunav bio je presudan za gradnju utvrđenja. Rimskoj vojnoj postaji je prethodio keltski *oppidum*. U blizini utvrđenja nađena je i jedna kula. Ostaci većeg utvrđenja su konstatovani u Surduku, antički *Rittium*, koje bi po dimenzijama predstavljalo jedno od najvećih na ovom delu Dunava. Tu je, prema izvorima, bila smeštena konjička *ala I Augusta Ilyraerorum sagittariorum*. Spomenici posvećeni Jupiteru Dolihenu svedoče o poštovanju ovog maloazijskog božanstva u Podunavlju, a brojni nalazi vojne opreme o prisustvu vojske u Novim Banovcima (*Burgenae*) gde se nalazilo sedište kohorte I *Thracum civium Romanorum*. Ispod savremenog grada Zemuna nalazio se rimski *Taurunum*. Tokom poslednjeg veka i po nađeni su brojni predmeti, kao i ostaci nekoliko kula, bedem i rimske građevine, delovi nekropola. Istraživanja nisu uspela precizno da definišu položaj rimskog pristaništa koje je postojalo u *Taurunumu*, poznatog iz izvora i pečata na opekama (*Classis flavia Pannonica*).





Moesian Section of the Limes in Serbia

Section from Belgrade to Golubac was explored only at the strong points and major cities like *Singidunum*, *Margum* and *Viminacium*. Space between them is either not known or not adequately explored. This section of the limes in Moesia Superior is the focal point of defence system. River is calm and there are many river islands and potential crossings. Wide valley is accessible and open for barbarian intrusions. That is why the strongest force both Moesian legions were garrisoned on the edges of this region in *Singidunum* and *Viminacium*.

Downstreams from *Singidunum* there is a fort in *Višnjica*, identified as the *castrum Octavum* fort. During the sixties of the 20th century, research was conducted which revealed a tower in the western rampart, the northern rampart and parts of the eastern rampart. Today, *Octavum* is covered with woods, while on the western side, the defensive ditch in front of the rampart is still noticeable. Just like with other fortifications, a civilian settlement developed next to the main communication along the Danube. On several places near the fort, late antique graves were discovered. Numerous Roman remains were discovered on different sites between *Višnjica* and *Ritopek*. Still, due to the lack of systematic research, we can only say that this area was densely populated, since cemeteries were discovered on several places, numerous sarcophagi and architectural remains. At the distance of 14 miles from *Singidunum*, the *Tabula Peutingeriana*

80. North-west wall of Belgrade fortress
80. Severozapadni bedem Beogradske tvrđave

Mezijski deo limesa u Srbiji

Deo od Beograda do Golupca istražen je samo delimično i to samo izuzetna nalazišta i veći gradovi poput *Singidunuma*, *Viminacijuma* i *Marguma*. Prostor između njih ili nije poznat ili nije adekvatno istražen. Predstavljao je najvažniji deo limesa u sistemu odbrane. Dunav je ovde miran, sa mnogo rečnih ostrva i potencijalnih prelaza. Široka dolina je dostupna i otvorena za varvarske upade. Zato su najjače snage mezijskih legija bile skoncentrisane u garnizonima na ivicama ovog regiona, u *Singidunumu* i *Viminacijumu*.

Nizvodno od *Singidunuma* nalazi se utvrđenje u *Višnjici* koje je u identifikovano kao utvrđenje *castrum Octavum*. Tokom 60-ih godina prošlog veka, vršena su istraživanja koja su otkrila jednu kulu na zapadnom bedemu, severni i deo istočnog bedema. Danas je *Octavum* prekriven šumom, a na zapadnoj strani se uočava odbrambeni rov ispred bedema. Kao i u pored drugih utvrđenja i ovde se razvilo civilno naselje pored glavne komunikacije uz Dunav. Na nekoliko mesta u blizini utvrđenja su otkriveni kasnoantički grobovi. Brojni rimski ostaci konstatovani su na različitim lokalitetima između *Višnjice* i *Ritopeka*. Međutim u nedostatku sistematskih istraživanja možemo samo pretpostaviti da je ovaj prostor bio intenzivno naseljen, o čemu svedoče nekropole otkrivene na više mesta, brojni

gives notice about the fort *castra Tricornia*, connected to the local settlement of the *Tricornenses*, a celtic tribe dwelling next to the Danube. Apart from the opeka *cohors I Pannoniarum* bricks, a military diploma from the year 120 was discovered in *Ritopek*. At the end of the 19th century, in *Brestovik*,

sarkofazi i ostaci arhitekture. Na 14 milja od *Singidunuma*, *Tabula Peutingeriana* beleži utvrđenje *castra Tricornia*, koje se povezuje sa prisustvom domorodačkog naselja *Trikornjana*, keltskog plemena naseljenog uz Dunav. Pored opeka *cohors I Pannoniarum* u *Ritopeku* je otkrivena i vojna diploma iz 120. godine. U *Brestoviku* je krajem XIX veka otkrivena kasnoantička grobnica iz koje potiče skulptura uglednog pokojnika koji je bio u njoj sahranjen. Na osnovu predstave može se pretpo-

81. Iron Gates Gorge
81. Đerdapska klisura





82. Excavations of Viminacium in 1902/1903
82. Iskopavanja Viminacijuma 1902/1903 godine



83. Map of Viminacium published in 1905.
according to excavation results in 1903.
83. Plan Viminacijuma objavljen 1905
na osnovu iskopavanja iz 1903.

a late antique tomb was discovered, revealing a sculpture depicting a noble deceased who was buried inside. According to the image of the sculpture, it can be concluded that he was a nobleman who lived here at the end of the 3rd and the beginning of the 4th century. Bricks with stamps of the legions IV *Flavia* and VII *Claudia* were used for constructing this tomb. At the distance of 12 miles from *Tricornium*, ancient sources mention a settlement *Aureo Monte*. In the *Notitia Dignitatum* that was written in Late Antiquity, the *cuneus equitum Delmatarum* was situated in *Aureus Mons*.

From confluence of the Morava to confluence of the Mlava there was a large developed urban and industrial area. *Municipium Margum* at Dubravica and *municipium Aelium Viminacium* (later *colonia Viminacium*) are both situated at river confluences. Administratively Viminacium was the provincial capital, and military command centre. Fertile valleys with plenty of water were suitable for agriculture. Craft centres for local production of *terra sigillata* (*Viminacium – Margum* production centre) and typical Roman provincial pottery as well as glass were positioned between these confluences. Both these centres had ports. *Margum* was distribution point for all goods and specially wheat delivered from *Horreum Margi* (Čuprija). *Viminacium* was most important distribution center for local products as well as major consumer center in the province. It is possible to conclude according to remote sensing data that Viminacium had possibly two ports: one auxiliary on the river Mlava and main at the Danube close to the confluence.

Lederata was positioned on the hill above present day village Ram. It is dominating all area with

staviti da je u pitanju ugledni velikodostojnik koji je boravio na ovim prostorima krajem III i početkom IV veka. U izgradnji ove grobnice korišćene su opeke sa pečatima IV Flavijeve i VII Klaudijeve legije. Antički izvori pominju mesto *Aureo Monte* na dvanaestoj milji od *Tricornium*-a. U Noticiji Dignitatum zabeleženo je da se tokom pozne antike *cuneus equitum Delmatarum* nalazi u Aureus Monsu.

Prostor od ušća Morave do ušća Mlave bio je pogodan za razvoj velikih urbanih i proizvodnih centara. *Municipium Margum* u Dubravici i *Municipium Aelium Viminacium* (kasnije *Colonia Viminacium*) su se nalazili na obe ove pritoke Dunava. Administrativno Viminacium je bio glavni grad provincije i vojni komandni centar. Plodne doline sa obiljem vode bile su pogodne za poljoprivredu. Zanatski centri za lokalnu proizvodnju keramičkih posuda od tera sigilate (*Viminacium - Margum* radionica), kao i centri za proizvodnju stakla bili su locirani između ovih reka. U oba grada su postojale luke. *Margum* je bio distributivni centar za svu robu, a posebno pšenicu isporučenu iz *Horreum Margi* (Čuprija), a Viminacium je bio najvažniji distributivni centar za lokalne proizvode, kao i najveći potrošač u provinciji. Na osnovu rezultata daljinske detekcije moguće je pretpostaviti da je Viminacium imao dve luke: jednu pomoćnu na reci Mlavi i glavnu na Dunavu u blizini ušća sa Mlavom.

Nizvodno je bila pozicionirana *Lederata* na brdu iznad današnjeg sela Ram. Dominira ovom oblašću i vidljiva je i iz Viminacijuma i iz *Pincum*-a (Veliko Gradište). Utvrđenje je u potpunosti kontrolisalo prelaz preko reke koji je u antičkom periodu vero-



84. Excavations of Viminacium in 1902/1903
84. Iskopavanja Viminacijuma 1902/1903 godine

visual communication from *Viminacium* towards *Pincum* (Veliko Gradište), and possibly even further. Fort had full control above river crossing right below it. Actual crossing in antiquity probably went in two stages over the island Sapaja that is now sunken after building of the power plant. Small fortification at this island helped to control transport between the empire and Barbaricum.

Limes road was mostly parallel to the river, although there were some exceptions. Part that went towards east from *Viminacium* had two branches: branch towards *Lederata* along Danube and main road that went directly as a shortcut towards *Pincum*. Similar situation can be found at *Taliata* where one branch went along Danube and the other went over the Miroč Mountain and station *Gerulata* towards *Egeta* (Brza Palanka).

Iron Gate Section

The best known limes sections are the area of the Iron Gates and downstream towards the Bulgarian border. It was also the most complicated organi-

vatno bio podeljen na dva dela preko ostrva Sapaja, potopljenog nakon izgradnje hidroelektrane. Malo utvrđenje na ovom ostrvu je kontrolisalo transport roba između Carstva i Barbarikuma.

Put duž granice je uglavnom bio paralelan sa rečnim tokom, iako je bilo izuzetaka. Deo koji je vodio istočno od Viminacijuma račvao se u dva kraka: jedan ka Lederati Dunavom, a glavni je vodio direktno prečicom ka Pinkumu. Slična situacija sreće se u Talijati gde je jedan ogranak sledio Dunav, a drugi vodio preko planina Miroč i postaje *Gerulata* ka naselju *Egeta* (Brza Palanka).

Đerdapski deo

Najpoznatiji deo Limesa predstavlja područje Đerdapa i oblast nizvodno prema bugarskoj granici. To je i najkomplikovaniji deo za organizaciju života na granici, što je i uslovalo nekoliko arhitektonskih



85. Viminacium amphitheatre, reconstructed section
85. Amfiteatar u Viminacijumu, rekonstruisani deo

zational part with many architectural marvels. Only smaller auxiliary forts are located along the river here. Gorge is narrow and there is limited space for both fortification and troop manoeuvring. Limes road was narrow and easily controlled with patrols. Downstream from the gorge valley widens again and provides space for larger fortifications, ports and urban centers (*Egeta* and *Aquae*).

During rescue excavations in the 1960's and 1970's systematic excavations of numerous sites were undertaken. Unfortunately, many sites in this section were submerged under water when the level of the Danube arose after the building of the dams for the hydroelectric power plants Đerdap I and Đerdap II. Đerdap or the Iron Gate (in Romanian *Porțile de Fier*, Bulgarian *Železni vrata*, Hungarian *Vaskapu*, German *Eisernes Tor*), represent section of the middle Danube region 134 km in length. This is also a border line between Serbia and Romania. It is a compound river valley made up of four gorges (Golubac, Gospođin Vir, Kazan and Sipa) and four valleys (Ljubkova, Donji Milanovac and Oršave Wallachia) cut into the chain of south Carpathian

čuda. Ovde se samo nalaze manja utvrđenja za pomoćne trupe. Naime, klisura je uska i ima ograničen prostor i za utvrđenja i za manevrisanje trupa. Put u samoj klisuri je uzan i bilo ga je lako kontrolisati patrolama.

Nizvodno od klisure dolina se ponovo širi i pruža mogućnosti za izgradnju većih utvrđenja, luka i gradskih naselja (*Egeta* i *Aquae*).

Tokom zaštitnih iskopavanja 60-ih i 70-ih godina prošlog veka istraženi su mnogobrojni lokaliteti. Na žalost, mnogi su potopljeni kada je nivo Dunava porastao nakon izgradnje brane za hidroelektrane Đerdap I i Đerdap II.

Đerdap ili Gvozdena vrata (na rumunskom *Porțile de Fier*, bugarskom *Železni Vrata*, mađarskom *Vaskapu*, nemačkom *Eisernes Tor*), predstavlja deo srednjeg Dunava dužine 134 km, kao i granicu između Srbije i Rumunije. Radi se o kompozitnoj rečnoj dolini koju čine četiri klisure (Golubac, Gospođin vir, Kazan i Sip) i četiri doline (Ljubkova, Donji Milanovac, Oršavska i Vlaško-pontijska nizija). Klisure čije su strane visoke i do 300 m urezane su u ogranke južnih Karpata. Originalni naziv verovatno potiče iz turskog jezika (*gerdap*), sa korenom u Persijskom (*girdap*) i može se prevesti kao vrtlog. Ime Đerdap je novo, a antičko ime, ili bar jedan njen deo je bio «*cataractae*». Đerdap je naj-



86. Plan of Viminacium, according to Marsigli (1680)
86. Plan Viminacijuma, nacrtao Marsilji (1680)

Mountains with cliffs high up to 300 m. The original name probably comes from Turkish language (*gerdap*), with root in Persian (*girdap*) and can be translated as whirlpool or vortex, hazardous area for navigation. Name Iron Gate is a newer one, while antique name, or at least one part of it was «*cataractae*». Đerdap is the longest gorge in Europe. Danube is here both the deepest (originaly 90 m, now 110 m) and narrowest (150 m). Area of the Iron Gate is rich with natural resources. Abundance of water with many tributaries, diverse flora

duža klisura u Evropi i Dunav je tu i najdublji (pre izgradnje hidroelektrane 90 m, a sada 110 m) i najuži (150 m). Područje Đerdapa sa obiljem voda, mnogim pritokama, raznovrsnom florom i faunom, rudama i najrazličitijim sirovinama, bilo je podesno za nastanjanje od najranijih epoha ljudske civilizacije. Istraživanje Đerdapa počinje u prvoj polovini 18.veka (Merci 1716, Marsilji 1726). Tokom 19. veka inženjerski poduhvati i porast zanimanja za istorijska istraživanja u kombinaciji sa otvaranjem Srbije i Balkana ka Zapadnoj Evropi, učinili su da Gvozdena vrata postanu egzotična turistička destinacija. U brojnim knjigama i putopisima objavljeni su podaci o više od 80 različitih lokaliteta - uglavnom rimskih utvrđenja.

Tokom zaštitnih istraživanja pre izgradnje hidroelektrane i navigacionog sistema Đerdap I, oblast je bila temeljno ispitana i pripremljena za iskopavanja u ugroženoj zoni dugoj 109 km, koja je trebalo da bude potopljena novoformiranim akumulacionim jezerom hidroelektrane.

87. Queen Draga Mašin visiting Viminacium during excavations in 1902
87. Kraljica Draga Mašin u poseti, za vreme iskopavanja Viminacijuma 1902. godine





and fauna, ores and different raw materials made it perfect for settling from the earliest epochs of human civilization. Research of Djerdap starts in first half of 18th century (Mercy 1716, Marsigli 1726). During 19th century extensive engineering works and rise of interest for historical surveys combined with opening of Serbia and Balkans towards West Europe made Iron gate something like exotic tourist destination. Number of books and travelogues was published with information about more than 80 different sites - mostly Roman forts. During protective research prior to building hydroelectric power plant and navigation system Djerdap I, area was thoroughly surveyed and prepared for excavations in the 109 km long endangered zone. This was essential since this all area was about to be submerged into the newly formed accumulation

88. Ptolemy, Map of the Roman province Upper Moesia
88. Ptolemejeva karta provincije Gornje Mezije

Iskopavanja su sprovedena u periodu od 1965. do 1970. godine, na području od Golupca (lokalitet Livadice) do Sipa (rimski kanal i utvrđenje). Sve glavne institucije koje se bave arheološkim iskopavanjima bile su uključene u ovaj projekat na čelu sa Arheološkim institutom iz Beograda koji je koordinirao istraživanja i vodio jedinstvenu dokumentaciju. Rezultati ovih radova su objavljeni u seriji izveštaja, kataloga izložbi, studija i aktima konferencija. Druga velika kampanja iskopavanja bila je od 1980. do 1984. godine pre izgradnje hidroelektrane Djerdap II, 80 km nizvodno od prve. Petnaest loka-

lake for the hydroelectric power plant. In this section 76 sites were originally registered from antiquity. Excavations conducted from 1965 – 1970, when power plant became operational, covered area from Golubac (site Livadice) to Sip (Roman canal and fortification). All major archaeological institutions were involved in this project led by Institute of Archaeology from Belgrade that coordinated operations and unified documentation. Results of these works were published in series of reports, exhibition catalogues, studies and conference acts. Second major campaign of excavations was 1980-1984 and was related to building of hydroelectric power plant Djerdap II, 80 km downstream from the first dam. Fifteen sites were included in these excavations (fortifications, settlements, remains of roads) from Karataš (Diana) to Prahovo (Aqua). Results from these excavations were published in special series of publications *Derdapske sveske / Cahiers des Portes de Fer I-IV* (1980-1987). After this campaign small scale excavations were continued only at Diana fort in Karataš to the present day. Archaeological image of the Iron Gate, although research was intensive, unfortunately is not fully known. Focus of research was on fortifications while settlements, villas, sacral objects, cemeteries mostly remained unknown. Excavations of forts themselves resulted primarily in gaining dimensions, shape and size of defensive walls, while interior was not fully excavated. Therefore internal organization of forts was not precisely documented.

Forts and Fortlets along Danube

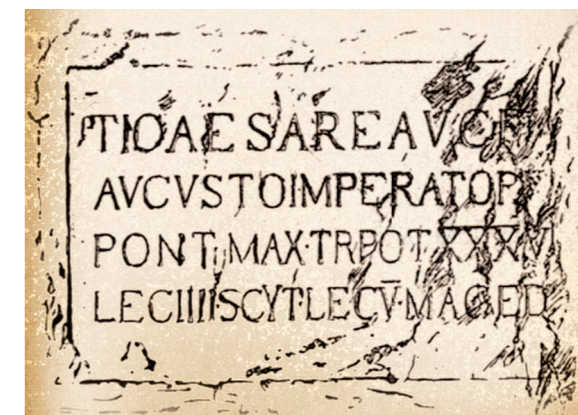
It is not known where the first permanent camps of Moesian legions were. Likely candidates are Singidunum, Margum, Viminacium, Ratiaria and Oescus. At the territory of Serbia two were established as permanent legionary forts during late 1st century AD. The majority of forts in Serbia belong to medium auxiliary forts (*Lederata*, *Boljetin*, *Diana*, *Pontes*, and *Egeta*). Small fortifications *burgus* – *quadriburgia* are *Mora Vagei*, *Mihajlovac*, *Ljubičevac*, while watchtowers are rarely documented. We have no data about them except in the Iron Gate gorge where two of them were excavated – in Lepenski Vir and Zidinac.

liteta je bilo obuhvaćeno ovim iskopavanjima (utvrđenja, naselja, ostaci puteva), od Karataša (*Diana*) do Prahova (*Aqua*). Rezultati ovih iskopavanja su objavljeni u posebnoj seriji publikacija *Derdapske sveske / Cahiers des Portes de Fer I-IV* (1980-1987). Posle ove kampanje do danas sprovede se samo manja iskopavanja na tvrđavi u Karatašu. Arheološka slika *Derdapa*, iako su istraživanja bila intenzivna, nažalost, nije u potpunosti poznata. Fokus istraživanja bio je stavljen na utvrđenja, dok su naselja, vile, sakralni objekti i nekropole uglavnom ostali nepoznati. Iskopavanje utvrđenja je prvenstveno rezultiralo ustanovljavanjem dimenzija, oblika i veličine odbrambenih zidova, dok unutrašnjost nije u potpunosti istraživana. Zato unutrašnja organizacija utvrđenja nije precizno dokumentovana.

Veća i manja utvrđenja na Dunavu

Nije poznato gde su se nalazili prvi stalni logori mezijskih legija. Pretpostavlja se da su mogli biti u Singidunumu, Margumu, Viminacijumu, Racijariji ili Eskusu. Na teritoriji Srbije, dva utvrđenja su formirana kao stalni legijski logori krajem 1. veka n.e. Većina logora u Srbiji pripadaju utvrđenjima pomoćnih jedinica srednje veličine (*Lederata*, *Boljetin*, *Diana*, *Pontes*, *Egeta*). Mala utvrđenja tipa *burgus* – *quadriburgia* su: *Mora Vagei*, *Mihajlovac*, *Ljubičevac*, dok su osmatračnice retko dokumentovane, sa izuzetkom postaja u Lepenskom Viru i Zidincu.

89. Tiberius tablet from the Iron Gate (drawing Bella de Gonda)
89. Tiberijeva tabla iz Đerdapa (crtež Bela de Gonda)





LEGIONARY FORTRESSES

Singidunum

Ancient Singidunum is among important urban settlements at the province of Upper Moesia, which became a town (municipium) during Hadrian's reign and a city during the 3rd century. Still, its greatest importance is connected to the legion IV Flavia, which was stationed in Singidunum ever since the beginning of the 2nd century until late Antiquity. Its strategic position at the crossroads and the connection point of the Upper Moesia and Lower Pannonia, determined the position of the castrum and also of the settlement which developed into a municipium and later on into a colony. After the return of the legion from the Dacian wars, the stone fort was erected upon the cliff above the confluence of the Sava and the Danube. The remaining space on the river banks and on the slopes was used for building the civilian settlement, which developed simultaneously with the fort.

The earliest Roman presence in the Singidunum area was noticed at the Karaburma necropolis, some three miles from the Roman settlement. In several graves, there were objects of Roman ma-

90. Singidunum, remains of the Roman north east wall of the legionary fortress incorporated into later fortification

90. Singidunum, ostaci severoistočnog bedema legijskog utvrđenja inkorporirani u kasniju fortifikaciju

LEGIJSKI LOGORI

Singidunum

Antički Singidunum je jedno od važnijih gradskih naselja u provinciji Gornjoj Meziji, koje je steklo status grada (municipijuma u vreme Hadrijana) odnosno kolonije tokom III veka. Ipak njegov najveći značaj je povezan sa prisustvom legije IV Flavijeve koja je u vojnom logoru u Singidunumu boravila od početka II veka sve do pozne antike. Strateški položaj na raskrsnici puteva, na prelazu iz Gornje Mezije u Donju Panoniju odredio je položaj kastruma, a zatim i naselja koje se razvilo u municipijum, a potom i koloniju. Kameno utvrđenje je podignuto nakon povratka legije iz Dačkih ratova na rtu iznad ušća Save u Dunav. Preostali prostor na obali pored ušća, na Dunavskoj i Savskoj padini iskorišćen je za podizanje naselja koje se formiralo paralelno sa podizanjem logora.



terial culture, dated into the second half of the 1st century. From a later period, from the end of the 1st century, there is a necropolis with cremations, discovered within the walls of the stone fort. Ancient sources are rather silent about Singidu-

92. Singidunum legionary fortress, porta decumana
Belgrade City Library, Roman Hall
92. Legijsko utvrđenje u Singidunumu, porta decumana, Biblioteka grada Beograda, Rimska dvorana

91. Singidunum legionary fortress, via decumana
91. Legijsko utvrđenje u Singidunumu, via dekumana

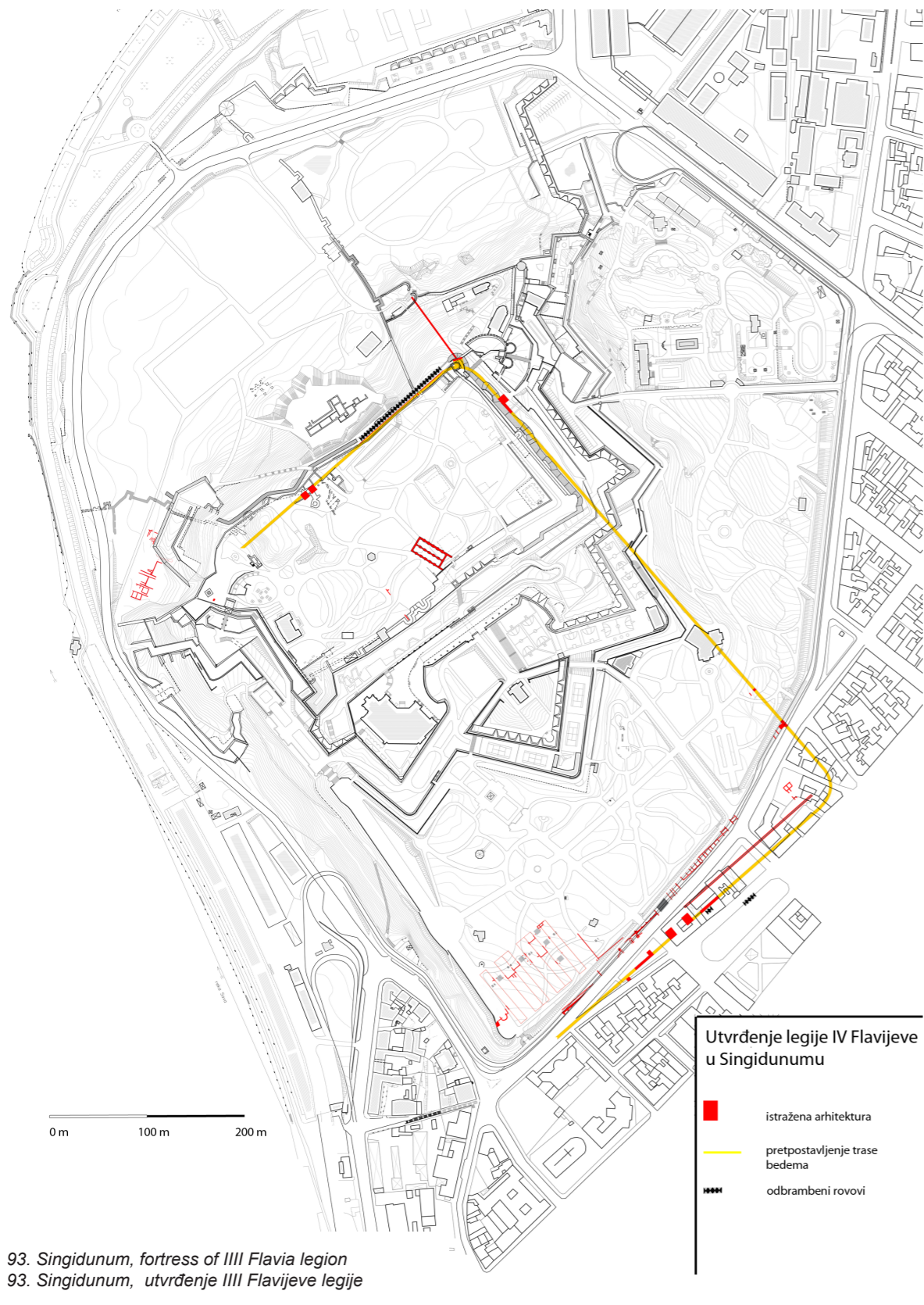
Najranije prisustvo Rimljana na užem prostoru Singidunuma zabeleženo je na nekropoli u Karaburmi udaljenoj oko tri milje od rimskog naselja. U nekoliko grobova su nađeni predmeti rimske materijalne kulture koji se mogu datovati u drugu polovinu I veka. Iz nešto poznijeg perioda – kraja I veka potiče nekropola spaljenih pokojnika, otkrivena u okviru bedema kamenog logora.

Antički izvori o Singidunumu su šturi. Označen je na geografskim kartama i itinerarima, a najvažniji je pomen kod Ptolemeja koji navodi prisustvo legije IIII Flavijeve u Singidunumu.

Veći deo rimskog gradskog jezgra sa nekropolama danas se nalazi ispod modernog Beograda. Vojni logor je jednim delom devastiran izgradnjom srednjevekovnog Beograda i poznijih bastionih fortifikacija, dok su istraživanja sprovedena najviše u predelu parka Kalemegdan i na onim mestima gde su naslojavanja poznijih epoha to dozvolila.

Vojni logor je podignut na završetku rta koji je sa tri strane branjen okomitim stenama, dok je na jugoistočnoj strani zaravnjen prostor koji je omogu-





94. Singidunum - Remains of the late Roman wall of the Lower City incorporated into mediaeval fortification
94. Singidunum - Ostaci kasnoantičkog bedema Donjeg grada prekriveni srednjevekovnom eskarpom

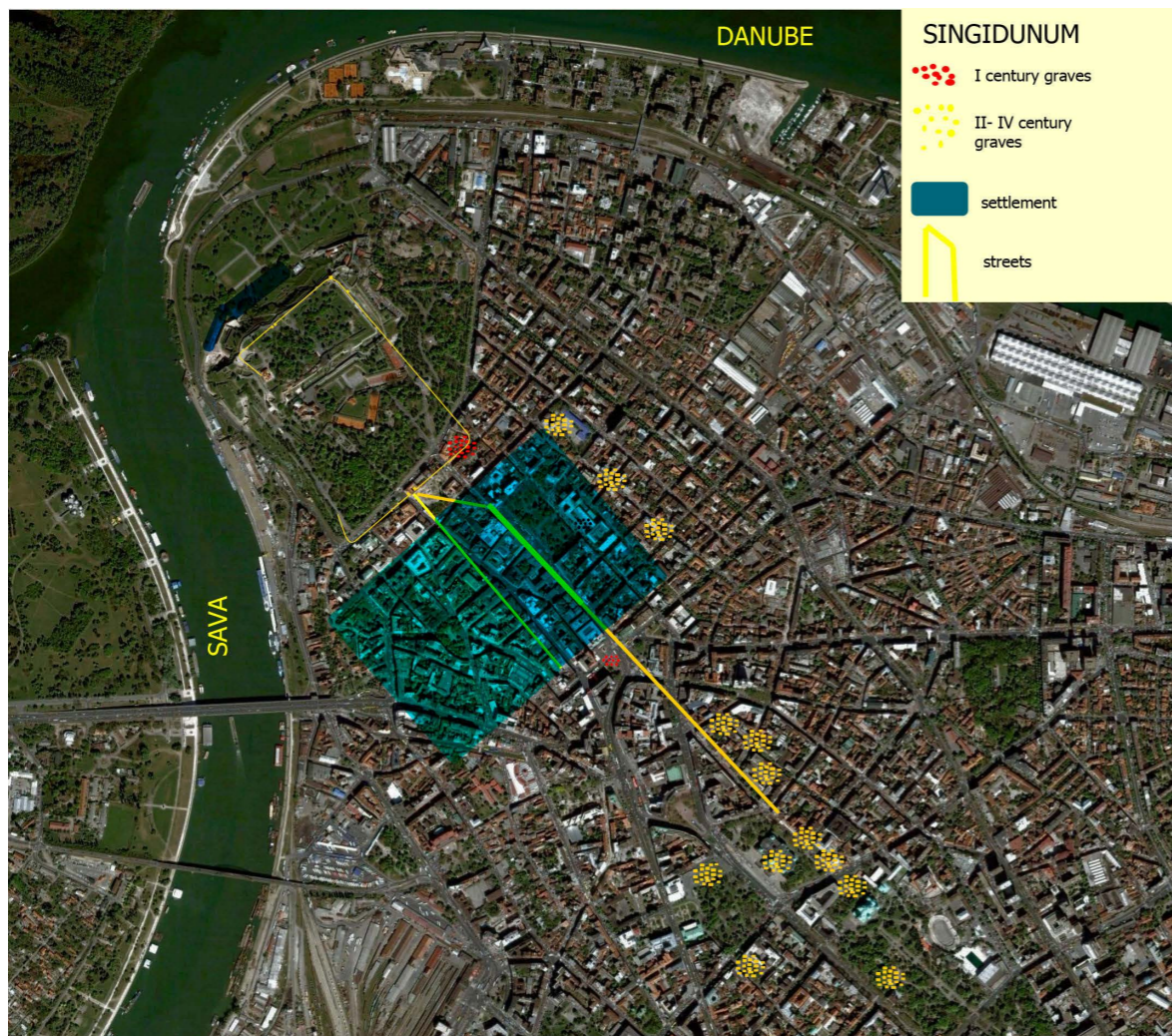
num, while the most important one is Ptolemy's mention of the legion III Flavia in Singidunum, as well as marks on charts and itineraries. Most of the former urban centre with cemeteries is now under the modern city of Belgrade. The military fort was partly destroyed when the medieval Beograd was built, but also some of the later bastion fortifications, while the research is basically conducted in the area of the Kalemegdan park and on those places which are accessible. The military camp was erected at the end of the cliff, three sides of it naturally defended with steep cliffs, while on the southeastern side a plateau was formed on which the civilian settlement developed. Archaeological results show that the fortification and the objects within it were built and renewed in several phases. The first phase includes erection of the camp during the second decade of the 2nd century, then there was a renovation at the end of the 3rd century, while there is another phase in the middle of the 4th century. This basic chronology refers mostly to inner architecture, barracks, *horreum* and *thermae*.

čio razvitak civilnog naselja. Rezultati istraživanja pokazuju da su fortifikacioni elementi kao i objekti unutar utvrđenja građeni i adaptirani u nekoliko faza. Prvu fazu čini podizanje logora tokom druge decenije II veka, zatim sledi obnova krajem trećeg veka, dok se još jedna faza uočava sredinom IV veka. Ova okvirna hronologija se odnosi prvenstveno na unutrašnju arhitekturu, barake, *horreum* i terme.

Od fortifikacije je najbolje očuvan i istražen bedem na severoistočnoj strani logora. Nad soklom je očuvano četiri reda kvadera u visini ispod eskarpe srednjevekovnog bedema. Istražena je i jedna od kula na severoistočnom bedemu, pozicionirana sa unutrašnje strane bedema. Od ove kule očuvani su samo tragovi temelja pošto je devastirana u srednjem veku, kada su kamenovi iz bedema i kula kastruma iskorišćeni za izgradnju bedema srednjovekovnog Beograda. Na jugoistočnoj strani najbolje su očuvani ostaci kapije. I danas se mogu videti u podrumu Biblioteke grada Beograda. Kroz jugoistočnu kapiju (*porta decumana*) u logor se ulazilo



95. Singidunum, open space area in front of porta decumana
95. Singidunum, ostaci trga ispred porta dekumane

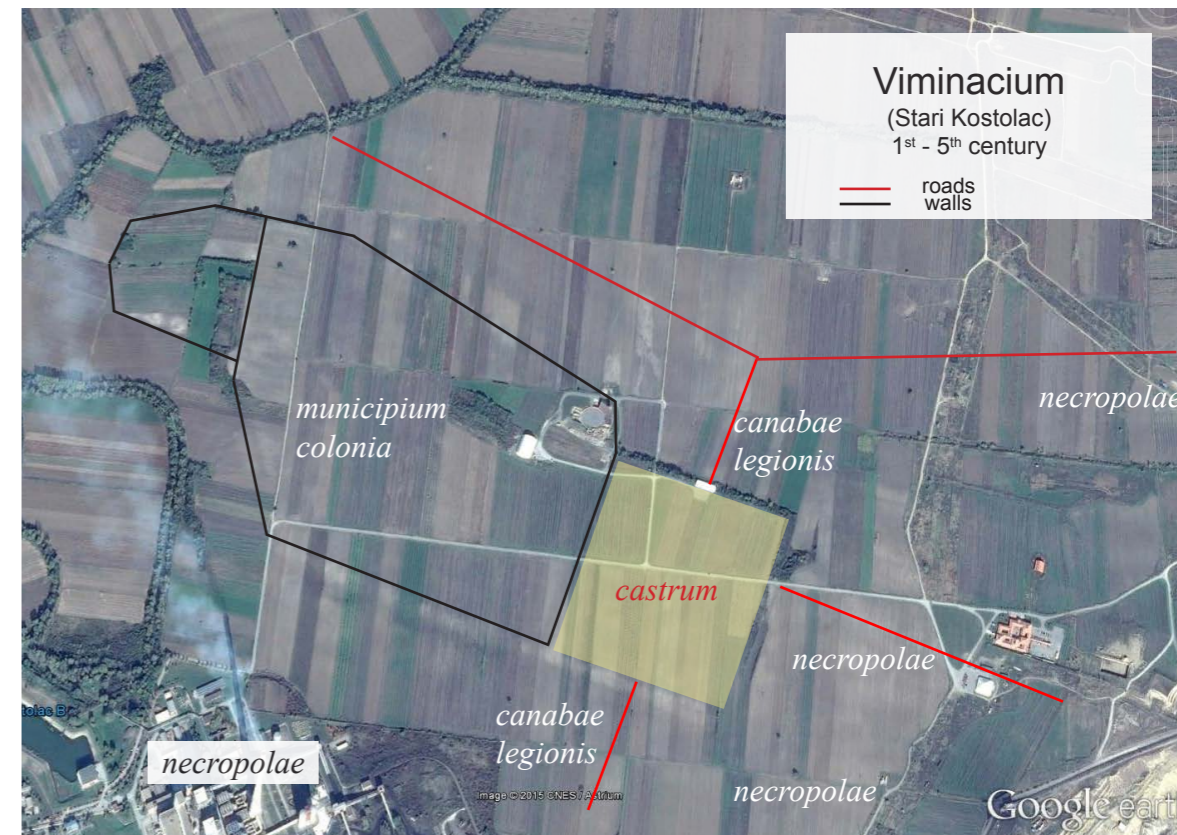


96. Roman Singidunum, situation plan
96. Rimski Singidunum, situacioni plan

The best preserved and excavated part of the rampart is the northeastern side of the camp. Above the socle, four rows of stone blocks were preserved under the lowest layer of the medieval fort. One of the towers at the northeastern rampart was also examined, placed within the wall. Only traces of this tower remained preserved since it was destroyed during the Middle Ages, when stones the walls and the towers were used for building the walls of the medieval Belgrade. At the southeastern side, the best preserved are the remains of the gate. Even today they can be seen in the basement of the Belgrade Library. This gate (*porta decumana*) was used for entering the camp along a street leading

ulicom povezanom sa civilnim naseljem. Kapija je imala tri prolaza, jedan za kola i dva manja pešačka. Unutar logora ulica (*via decumana*) je vodila do središta gde su bili smešteni vojni komandanti. To je bila široka ulica popločana velikim pločama sa bočnim kanalima za odvod kišnice i trotoarima. Ispod kapije je otkrivena olovna cev koja je dovela vodu u utvrđenje.

Tokom četiri veka postojanja kastrum u Singidunumu pretrpeo je različite promene. One su nastajale usled primene različitih iskustava sa bojišta širom Carstva. Jedna od odlika rimskih fortifikacija je da se širina bedema uvećavala i da su kule bile sve isturenije prema neprijatelju. Kule iz različitih perioda su imale i različite dimenzije i položaj. Kule u Singidunumu su pravougaone osnove. Najmonumentalnije su one koje se nalaze na strateški naj-



from the city. The gate had three entrances, one for carriages and two smaller ones for pedestrians. Within the camp there was a street (*via decumana*) leading to the middle, where military commanders had their head-quarters. It was a wide plastered street with side-canals as sewers and with pavements. Under the gate, a lead pipe was discovered which lead the water into the camp. During the four century, the Singidunum camp went through several changes. They were made due to applying different experiences from different battlefields within the Empire. One of the features of the Roman fortifications was that the wall-width grew bigger and that the towers became more and more protruding towards the enemy. Towers from different periods possessed different dimensions and positions. The Singidunum towers possess rectangular basis. The most voluminous ones are those placed at strategically most important positions, the two of them defending the southeastern gate and the northern angular tower, while the side towers were of smaller dimensions. Originally, the towers were placed within the defensive wall line, with defensive ditches directly in front of them. According

97. Viminacium, satellite image
97. Viminacijum, satelitski snimak

značajnijim pozicijama, dve koje su branile jugoistočnu kapiju i severna ugaona kula, dok su bočne kule bile manjih dimenzija. Prvobitno su kule bile postavljene unutar linije bedema, a odbrambeni rovovi neposredno ispred njih. Prema nekim proračunima mogle su biti više od 10 metara. Sa tih položaja stražari su mogli lako da uoče neprijatelja iz daleka, a i da lako dejstvuju projektilima na neprijatelja ispred bedema. Na jugoistočnoj strani, prema gradu, ispred bedema su se nalazila tri rova. Tokom pozne antike ovi rovovi su zatrpani otpadom iz logora, a nad njima su podignute peći u kojima je pečena grnčarija. Singidunum je potpuno uništen tokom hunske invazije 441/443 godine. Utvrđenje je obnovljeno tokom Justinijanove obnove podunavskog limesa, ali konačno pada u avarske ruke 584. godine.



to some calculations, the towers were more than ten meters high. From these spots, guards were able to spot enemies from the far and shoot at the enemies in front of the walls. At the southeastern side, towards the city, in front of the wall there were three ditches. During late Antiquity, these ditches were filled with rubbish from the camp and above them, pottery kilns were built. *Singidunum* was completely destroyed during Hun invasion in 441/443 AD. It was rebuilt during Justinian's restoration of Danube limes but it fell in Avar hands in 584.

Viminacium

The important military centre and Roman provincial capital, Viminacium was built on territory belonging to the Celtic tribe Scordisci. It owed its size and significance to the rich hinterland in the Mlava River Valley, as well as to its exceptionally favourable geographical position, both within the defence system of the Empire's northern borders and as a crossroad for road, river and trade networks. Archaeological investigations of Viminacium have gone on for more than a century. At the end

98. *Viminacium, Mausoleum at East Cemetery*
98. *Viminacijum, mauzolej na istočnoj nekropoli*

Viminacijum

Važan vojni centar i glavni grad rimske provincije, Viminacijum je bio izgrađen na teritoriji koja je pripadala keltskom plemenu Skordiska. Svoju veličinu i značaj duguje bogatom zaleđu u dolini reke Mlave, kao i izuzetno povoljnom geografskom položaju, kako u okviru sistema odbrane severnih granica Carstva, tako i kao raskršće drumskih, rečnih i trgovinskih mreža. Arheološka istraživanja Viminacijuma počela su pre više od jednog veka. Krajem XIX i početkom XX veka, M. Valtrović i M. Vasić preduzeli su iskopavanja na desnoj obali reke Mlave, na lokalitetu Čair i definisali osnove legijskog logora i velikog civilnog naselja pored zapadnog bedema. Njihove konture su se još nazirale u XIX veku: široke avenije koje se seku pod pravim uglom, forum, pozorišta, kupatila, akvadukti i bedemi. Grad je osnovan u I veku nove ere, ali je njegov brz razvoj uslovljen Trajanovim osvajanjem Dakije. Naselje je steklo status municipija (grada) u prvoj polovini II veka, najverovatnije 117. godine, za vre-



of the 19th and the beginning of the 20th century, M. Valtrović and M. Vasić conducted excavations on the right banks of the Mlava River, at the Čair site, revealing the encampment's rectangular base, as well as large civilian settlement not far from its western rampart.

Its contours could already be discerned in the 19th century: broad avenues intersecting at right angles, roman forum, theatres, baths, aqueducts and ramparts.

City was founded in the 1st century AD but its fast

100. *Roman public baths (thermae) at Viminacium*

100. *Rimsko javno kupatilo (thermae) na Viminacijumu*



99. *Viminacium, Amphitheatre. Aerial view during excavations*

99. *Viminacijum, amfiteatar. Pogled iz vazduha tokom iskopavanja*

me vladavine cara Hadrijana (*Viminacium Aelium Hadrianum*). Razvoj Viminacijuma je bio prekinut, ali samo nakratko, zbog epidemije kuge u vreme vladavine Marka Aurelija. Već u prvim godinama III veka grad je ponovo u punoj ekspanziji. Pod Gordijanom III, grad stiče status kolonije, a od godine 239. počinje da radi i kovnica u kojoj se kuje provincijski i carski novac sa karakterističnim reversom. Na reversu je prikaz mlade žene, personifikacije Gornje Mezije, oslonjene na bika i lava, simbole legija VII Klaudije i IV Flavije.

Legija VII *Claudia pia fidelis* bila je stacionirana u Viminacijumu od druge polovine I veka nove ere tokom čitave antike, a iz izvora je poznato da je grad imao i rečnu flotu - *Classis Flavia Histrica*.

Veliki broj rimskih careva prošao je kroz Viminacijum ili boravio u njemu duže vreme. Hadrijan je organizovao lov u dva navrata. Septimije Sever je takođe posetio grad dva puta. U gradu su bili i carevi Gordijan III, Filip Arabljanin, Trebonijan Gal, Hostilijan, Dioklecijan, Konstantin Veliki, Konstan-



101. *Domus scientiarum Viminacium Scientific, Research and Tourist Center - Archaeological Park Viminacium*

101. *Domus scientiarum Viminacium Naučno - istraživački i turistički centar - Arheološki Park Viminacium*

development could be related to Trajan's conquest of *Dacia*. The settlement gained the status of a *municipio* (city) in the first half of the second century, most probably in A.D. 117, during the reign of Emperor Hadrian, receiving the name of *Viminacium Aelium Hadrianum*. Viminacium's subsequent rise was interrupted, if only briefly, by a plague epidemic during the reign of Marcus Aurelius. However, already in the first years of the 3rd century, the city was once again in full expansion. City recovers and was raised to the status of *colonia* in 239 under Gordian III, and in the city operated its own mint that produced both local and imperial coinage with typical obverse. This obverse depicting young woman, personification of Moesia is relying on the bull and lion (symbols of the *Legio VII Claudia* and *Legio IIII Flavia*).

Legio VII Claudia pia fidelis garrisoned here from the second half of 1st century AD throughout antiquity and the city was confirmed also as the base for river fleet – *classis Flavia Histrica*.

A number of Roman emperors either passed through Viminacium or stayed for extended periods. Hadrian organized hunting games on two different occasions. Emperor Septimius Severus also

visited the city twice. Emperors Gordian III, Philip the Arab, Trebonianus Gallus, Hostilianus, Diocletian, Constantine the Great, Constantius I and Julian also paid visits. As far as it is known, Gratian was the last emperor to visit Viminacium. Serving as testimony to that time is the marble portrait of Carin's son Carinus, now held at the Požarevac Museum. In the 4th century, Viminacium was a significant Christian Episcopal seat.

At the end of IV and V century economic power of Viminacium is interrupted due to Gothic attacks. Final destruction of the city was during Hun invasion in 441/443 AD, and was never subsequently rebuilt, except as a military fort, during Justinian's reign in the 6th century.

Viminacium is among the very few cities in the Roman Empire that do not have modern settlements over it. The advantage of Viminacium lies in the fact that after city was utterly abandoned it was never rebuilt and now is in the middle of the fertile fields. Both legionary camp and heart of the Roman urban zone are open and accessible for all types of research and provide the excellent possibilities for presentation. Although there are no visible ruins on the surface preservation of architectural remains underground is quite remarkable. Modern thermoelectric plant was built on the southern cemeteries of Viminacium, not far from the urban core. Coal mine that supplies this plant spreads over south east and east cemeteries, villas, suburban settlements, parts of aqueducts and everything else what might be in the vicinity.

The *nekropolae* (burial grounds) of Viminacium, explored over the last three decades of the 20th century, have yielded over 14,000 discovered graves, more than 40,000 objects and more than 30 tombs with frescoes that reveal art of local artists. Pottery and brick production centres are being restored in order to be presented to the public.

So far large parts of two aqueducts were excavated, amphitheater, *porta praetoria* of the legionary fort, monumental city baths and so on.

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Smaller Forts and Settlements in Djerdap

Although geographically rather isolated and owing to the fluvial and inland infrastructure, systematically built in the 1st and during the 2nd century AD, the Iron Gates region was well-connected to many oth-



102. *Viminacium Legionary fortress, porta praetoria. Aerial View*

102. *Legijski logor Viminacijum, porta pretorija. Snimak iz vazduha*

nim zidovima koje su nam posvedočile nadarene lokalne umetnike. Zanatski centri u kojima su proizvođene keramičke posude i opeke su konzervirani sa ciljem da budu predstavljeni javnosti. Do sada su arheološki istraženi veliki deo dva akvedukta, amfiteatar, severna kapija legijskog utvrđenja, monumentalne gradske terme i mnogi drugi objekti.

Manji logori i naselja u Đerdapu

Iako geografski dosta izolovana, oblast Đerdapa bila je, zahvaljujući kopenoj i rečnoj infrastrukturi, sistematski izgrađivanoj tokom I i početkom II veka, povezana sa mnogim delovima Carstva, što je imalo pozitivnih posledica na razvoj urbane strukture i ekonomski prosperitet oblasti. Na najkritičnijim,

103. *Roman public baths (thermae) at Viminacium, Stari Kostolac*

103. *Rimsko javno kupatilo (thermae), Viminacijum, Stari Kostolac*





104. View on the ripa Danubii from Turkish fort in Ram located immediately above remains of Roman road.
104. Pogled na ripa Danubii - obalu Dunava sa turske tvrđave Ram, neposredno iznad ostataka rimskog puta



105. Fort Lederata (Ram), one of the towers
105. Utvrđenje Lederata (Ram), jedna od kula

er parts of the Roman Empire, which was positively reflected in the development of urban infrastructure and economic prosperity of the region. On most critical, vulnerable spots, military camps of different sizes were erected, for surveilling the border and regulation of fluvial transport, while in their vicinities, a whole range of smaller settlements were developed, some of which lived continuously from pre-history to the Middle Ages.

The first settlement one comes upon in the Golubac valley is Veliko Gradište – *Pincum*, built at the mouth of the golden river Pek into the Danube. Unfortunately, almost nothing is known about the settlement type and size, except that there was a rectangular fortification at the left Pek bank (Marsigli) and that one of the fortification walls was still

ranjivim mestima podignuti su vojni logori različitih dimenzija za osmatranje granice i regulaciju plovnog puta, dok su se u njihovim blizinama razvijala manja naselja, među kojima neka imaju kontinuitet življenja od praiistorijskih epoha, i kasnije, kroz srednji vek.

Prvo naselje u Golubačkoj kotlini na koje se nailazi je Veliko Gradište – *Pincum*, nastalo na ušću zlatonosnog Peka u Dunav. Na žalost, o veličini i karakteru naselja ne zna se gotovo ništa, sem da se jedno kvadratno utvrđenje nalazilo na levoj obali Peka (Marsilji) i da je jedan bedem bio vidljiv 1860. godine (Kanic). Delimično je istražena kasnoantička nekropola sa grobnicama. Posada utvrđenja bila je pod komandom legije iz Viminacijuma, a u IV veku odbranu utvrđenja su činile dve konjaničke formacije, *cuneus equitum Constantiacorum* i *cuneus equitum Dalmatarum*.

Nizvodno od Pincuma, na ulazu u Golubačku kotlinu dužine 14,5 km, nalazilo se naselje – *Cuppae* u Golupcu, na 14 milja od Viminacijuma. Arheološki je gotovo nepoznato, sem zabeleške da su 1887. bili vidljivi ostaci rimskih objekata i delovi pristaništa na keju kraj Dunava. Iz naselja je poznat natpis jednog trgovca iz Eskusa (*Oescus*), a u utvrđenom logoru se tokom svog putovanja zadržao car Dioklecijan 299. godine. Posadu Kupa su činili u doba ranog carstva kohorta I *Flavia Hispanorum*, a u kasnoj antici *cuneus equitum Dalmatarum*, *auxilium Cuppense* i delovi legije VII Klaudivije.

Na početku tesnaca u Đerdapu nalazi se rimsko utvrđenje na ušću reke Čezave u Dunav, na 18 km nizvodno od Golupca. Nakon istraživanja, lokalitet je potopljen formiranjem Đerdapskog jezera. Rimsko utvrđenje u Čezavi identifikovano kao *Castrum Novae*, služilo je za smeštaj kohorte nepoznatog sastava. Istraživanjima su otkriveni ostaci kamenog utvrđenja na mestu prvobitne arhitekture od drveta i zapečene zemlje iz I veka. Utvrđenje je izgrađeno u doba Trajana, sa poznatim izgledom glavne komandne zgrade (*principia*). Krajem II i početkom III veka, uz manje prepravke na bedemu, u unutrašnjosti je izgrađena manja trobrodna žitnica (*horreum*), a konstatovani su i temeljni ostaci vojničkih baraka. U doba Konstantina izgrađeni su novi bedemi sa kružnim kulama, dok je u drugoj polovini IV veka logor nastanjen pograničnim trupama (*limitanei*) i njihovim porodicama. U VI i početkom VII veka *Novae* su bile jedna od glavnih baza za vojne operacije protiv Avara i Slovena.



visible in 1860 (Kanitz). A Late Antique cemetery with tombs was partly excavated. The fort crew stood under the command of the Viminacium legion, while in the 4th century, the defence of the fort consisted of two equestrian formations, *cuneus equitum Constantiacorum* and *cuneus equitum Dalmatarum*.

Down the river from *Pincum*, at the entrance of the Golubac valley and in the length of 14,5 km, there was a settlement – *Cuppae* in Golubac, some 14 miles from Viminacium. It is archaeologically almost unknown, except for the note that in 1887, remains of Roman objects were still visible and parts of a port at the Danube. There is an inscription known from the settlement, erected by a salesman from *Oescus*. In 229, Diocletianus, while travelling, spent some time in the fortified camp. In the period of the Early Empire, the *Cuppae* crew consisted of the *cohors I Flavia Hispanorum* and in Late Antiquity of *cuneus equitum Dalmatarum*, *auxilium Cuppense* and some parts of the *legion VII Claudia*.

At the beginning of the Iron Gates gorge there is a Roman fortification of the mouth of the river Čezava into the Danube, some 18 km down the river from Golubac. After being excavated, the site was flooded after the Đerdap lake was formed. The Roman fort of Čezava was identified as *Castrum Novae* and it was used for a cohort of unknown composition. During the excavation, remains of a stone fortification were discovered, built over the remains made of wood and earth from the 1st century AD.

106. Lederata - view on the plateau with fortification from south-east

106. Lederata - pogled na plato sa utvrđenjem sa jugoistoka

Odbrambeni punkt ka prostranoj Ljupkovoju kotlini na dačkoj obali Dunava, predstavljalo je utvrđenje u Saldumu, na ušću potoka Kožice, nepoznatog antičkog imena, koje je u kasnoj antici moglo biti *Gratiana* ili *Kantabaza*. Istraživanja, sprovedena u okvirima ranovizantijskog utvrđenja, potvrdila su slojeve života od druge polovine I do kraja VI veka. Tokom II i III veka postojalo je kameno utvrđenje, koje je nakon napuštanja Dakije pod Aurelijanom 70-ih godina III veka pretrpelo prepravke, ali nije dugo opstalo. Oko 364-365. godine Saldum je ponovo oživeo kao vojni punkt, naseljen limitanima sa porodicama, koji su obrađivali okolnu zemlju i bavili se raznim zanatima (obrađa drveća, kože i metala, izrada tekstila). Nakon gotovih pustošenja 378-380. godine, mesto je ponovo zapustelo, da bi u VI veku Justinijan na mestu starog utvrđenja podigao novo za smeštaj manjih vojnih jedinica, koje su štatile granicu sve do kraja VI ili početka VII veka.

U kanjonsko-klisurskoj dolini Gospođinog Vira, dužine 15 km, bio je podignut niz manjih utvrđenja (*burgi*), koji su obezbeđivali granicu i plovni put (Gospođin Vir, Pesača, Velike i Male Livadice), a o značaju inženjerskih poduhvata na gradnji puta kroz ovu oblast govori više natpisa u stenama kod Gospođinog Vira. Jedno od bolje istraženih utvr-



107. Roman inscription dedicated to Jupiter cut into the rock above the Roman road below Turkish fort Ram nearby Lederata fort

107. Rimski natpis uklesan u stenu iznad rimskog puta koji se nalazi ispod turske tvrđave Ram u neposrednoj blizini utvrđenja Lederata

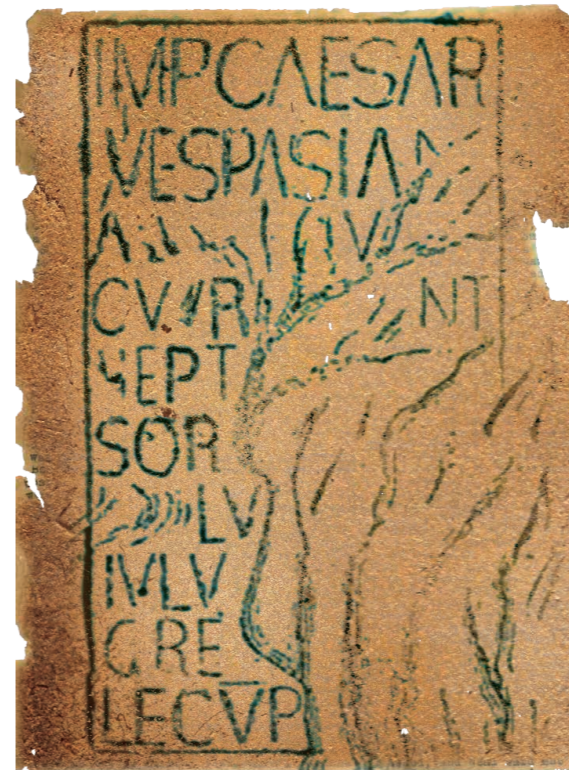
The fortification was built during Trajan's reign, with the well-known appearance of the headquarters (*principia*). At the end of the 2nd and the beginning of the 3rd century, with smaller changes within the fortification wall, in the inside of the fort, a grainary (*horreum*) was built. In the south-eastern corner of the fort, there were remains of the military barracks' foundations. During Constantine's reign, the old plan of the fort was annihilated and new fortification walls with round towers were erected, while in the second half of the 4th century, the border troops (*limitanei*) and their families inhabited the fort. In the 6th and at the beginning of the 7th century, Novae were one of the main starting points for military operations against the Avars and the Slavs.

The fortification of Saldum at the mouth of the Kožica creek, was as a defensive point towards the spacious valley of Ljupkova at the Dacian side of the Danube. The creek's ancient name is unknown, but during Late Antiquity it was called *Gratiana* or *Kantabaza*. The research, conducted within the Early Byzantine fort, confirmed that this space was inhabited from the second half of the 1st to the end of the 6th century. During the 2nd and 3rd century, there was a stone fort, which was reconstructed during Aurelian's reign, i.e. during the seventies of the 3rd century, after the province of Dacia was abandoned. Still, it did not last very long. About 364-365, Saldum was again used as a military point, inhabited by the *limitanei* and their families,

đenja bilo je u Boljetinu na ušću Boljetinske reke (Lepene), podignuto tokom prve polovine I veka, najpre kao zemljano utvrđenje, verovatno u vreme izgradnje puta u doba Tiberija ili Klaudija. Kasnije je utvrđenje opasano kamenim bedemima, verovatno u doba Domicijana, ali je, prema istraživačima, izgubilo svoj vojni značaj u doba Hadrijana. Za smeštaj namirnica za posadu u to vreme je u unutrašnjosti bio podignut *horreum*. Utvrđenje je obnovljeno u drugoj polovini III veka. Intenzivni život na prostoru kastela zabeležen je u drugoj polovini IV veka (nalazi 12 metalurških peći i alata za različite poljoprivredne i zanatske aktivnosti).

Napušteno je početkom V veka, a obnovljeno u doba Justinijana u VI veku, sa jednobrodnom crkvom u središnjem delu. Naselje sa utvrđenjem u Boljetinu identifikuje se sa *Smirnom* (*Smorna*, *Smyrna*), koju pominje Prokopije u VI veku.

Nizvodno od Boljetina nalazilo se utvrđenje u Ravni, na rukavcu Dunava kod Porečke ade. Ovaj punkt je bio naročito ugrožen jer su leti pri niskom vodostaju između ade i leve obale Dunava bili vidljivi peščani sprudovi, a zimi je reka bila na toj deonici zaleđena i podesna za prelazak na mezijsku stranu limesa.



108. Vespasians tablet from the Iron Gate (drawing Bella de Gonda)

108. Vespazijanova tabla iz Đerdapa (crtež Bela de Gonde)

tilling soil in its vicinity and practising different crafts (wood working, tanning, processing metal, weaving). After the Gothic raids in 378-380, the place was again abandoned. In the 6th century, during Justinian's reign, a new fort was erected upon the old one, stationing smaller military units which protected the border against Avaric and Slavic attacks until the end of the 6th or the beginning of the 7th century.

Within the gorge of Gospodin Vir, with the length of 15 km, there was a row of smaller fortifications (*burgi*), which secured the border and navigation (Gospodin Vir, Pesača, Velike and Male Livadice). Several rocks near Gospodin Vir bear inscriptions about building achievements in this area. Among the excavated forts was the one in Boljetin, at the mouth of the Boljetinska river (Lepena), built during the first half of the 1st century, first as an earth fortification, most likely as the roads were built during Tiberius and Claudius. The later fortification was enclosed with stone fortification walls, most likely



109. Military Burial under the shield at Viminacium cemetery

109. Vojnička sahrana ispod štita na nekropoli Viminacijuma

Na adi se verovatno nalazila manja osmatračnica. Fortifikacija u Ravni je identifikovana sa antičkom Kampsom (*Camps*), koju spominje Prokopije u VI veku. Zemljano utvrđenje podignuto u I veku napušteno je u vreme Hadrijana. U II-III veku verovatno je postojalo naselje u kome je nađeno svetište posvećeno Heraklu iz doba Severa. Kameno utvrđenje verovatno je podignuto u vreme tetrarhije i sa prepravkama je opstalo do kraja VI veka.

Na mestu starog Donjeg Milanovca nalazila se antička *Taliata*, na prelazu iz Gornje u Donju klisuru Đerdapa. Fortifikacija na lokalitetu Mali Gradac verovatno podignuta u I veku manjih je dimenzija, dok je kameno utvrđenje na Velikom Gracu služilo za smeštaj kohorte. Potvrđeno je prisustvo *cohors I Raetorum*, kasnije delova legije *VII Claudia*. U IV veku je u njemu sedište prefekta *ripae legionis VII Claudia*, a u drugoj polovini istog veka su posvećene dve jedinice: *auxilium Taliatense* i *milites exploratores*. Utvrđenje je stradalo oko 594/5. godine u avaro-slovenskim naletima.



110. Iron Gate gorge
110. Đerdapska klisura

during Domitian's reign, but, according to the researchers, it lost its strategic importance during Hadrian's rule. Within the fort, a *horreum* was built for storing food and other goods. The fort was rebuilt in the second half of the 3rd century. It was densely populated during the second half of the 4th century (confirmed with finds of 12 ovens for processing metal and tools for different agricultural and craftsmen's activities). It was abandoned at the beginning of the 5th century and renewed during Justinian's reign in the 6th century, with a single naval church in its central part. The settlement and the fort in Boljetin are identified as *Smyrna (Smor-na)*, mentioned in the 6th century by Procopius. Down the river from Boljetin, there is a fort in Ravna, at the Danube sleeve near Porečka ada. This point was especially vulnerable, since in summer, during low tide, between the river island (ada) and the left Danube bank there were sandbanks, and in winter, the river was often frozen at this part and easy to cross over to the Moesian part of the

U unutrašnjosti su detaljno ispitane tri žitnice (*horrea*) iz različitih faza, kao i jednobrodna crkva iz VI veka, prislonjena uz zapadni bedem. Zapadno od utvrđenja nalazilo se kupatilo (*balneum*), kao i trase vodovoda i glavnog kopnenog puta. Od Tali-jate, preko susedne Porečke reke, odvajao se su-vozemni put koji je preko Miroča, stanica *Gerulata* i *Una*, zaobilazio deo oblasti Đerdapa i stizao do Brze Palanke (*Egeta*).

Na ušću Porečke reke u Dunav, u doba kasne anti-ke, nalazila se administrativna granica dve provincije – *Moesia Prima* i *Dacia Ripensis*. Na desnoj obali reke nalazilo se utvrđenje tipa *quadriburgium* koje verovatno nije bilo dugo u upotrebi. Van bedema su nađene zgrade iz IV veka, manji *horreum* i kupatilo (*balneum*). Paralelno sa koritom Porečke reke i Du- nava, bili su podignuti pregradni zidovi (*claustra*), sa osmatračnicama na krajevima. U klisuri Velikog i Malog Kazana, ukupne dužine 19 km, konstatovan je najmanji broj utvrđenja: u Golubinju, Malom Go- lubinju, u Hajdučkoj Vodenici, nasuprot ušću Mra- konije u Dunav. Arheološka istraživanja su vršena unutar ranovizantijskog utvrđenja iz VI veka koje je imalo pristanište sa kružnim kulama na krajevi-

Limes. On the river island there was most likely a smaller watchtower. The Ravna fort was identified as *Camps*, mentioned by Procopius in the 6th century. The earth fortification was built in the 1st century and abandoned during Hadrian's reign. In the 2nd and 3rd century there was most likely a settlement in which there was a sanctuary dedicated to Hercules, built during Severan period. The stone fortification was probably built in the Tetrachic period and, with smaller changes, existed until the end of the 6th century.

At the place of the old settlement of Donji Mila- novac there was ancient *Taliata*, upon the transi- tion point from the Upper to the Lower Iron Gates gorge. The fort was probably built during the 1st century, of smaller dimensions at the site Mali Gra- dac, while the stone fort in Veliki Gradac served for stationing a cohorts. The presence of the *cohors I Raetorum* was confirmed, later also of some parts of the legion *VII Claudia*. During the 4th cenruty, there was the prefectus' seat of *ripae legionis VII Claudia*, while during the second half of the 6th century, two military units were attested: *auxilium Taliatense* and *militēs exploratores*. The fort was destroyed in 594/5, during Avaric/Slavic attacks. Three grainaries (*horrea*) from different periods and within the fort were examined, as well as a single naval church from the 6th century, linked to the western fortification wall. To the west from the fort there was a bath (*balneum*), as well as traces of aqueducts and main landroad. From Taliata, over the neighbouring Porečka reka, there was a lan- droad which led over Miroč, the stations *Gerulatis* and *Unam*, leading around some parts of the Iron Gates and to Brza Palanka - *Egeta*.

At the mouth of the Porečka reka into the Danube, during Late Antiquity, there was an administrative bored between the two provinces – *Moesia Prima* and *Dacia Ripensis*. At the right Danube bank there was a fort of the *quadriburgium* type, which was probably not used for a long time. Outside the fort there were buildings from the 4th century, a smaller *horreum* and a bath (*balenum*). Parallel to the bed of the Porečka reka and the Danube, there were partition walls (*claustra*), with watchtowers at their ends. The fort was erectd upon the cemetery with cremated burials from the 1st and 2nd century. In the Veliki and Mali Kazan gorge, 19 km long, there is the smallest number of fortresses: in Golu- binje, Malo Golubinje, in Hajdučka Vodenica, oppo-



111. Boljetin, fort interior
111. Boljetin, unutrašnjost utvrđenja

ma. Utvrđeno je da najstarije tragove predstavljaju nalazi druge iz polovine I veka. U središnjem delu utvrđenja nalazio se kasnoantički *burgus*. Ranovi- zantijsko utvrđenje iz doba Justinijana, verovatno je bilo delimično na udaru slovenskih plemena, kako je suditi na osnovu nalaza ostave novca iz 552. godine, nakon čega su obnovljene dve kule i bedem, i dodata petougaona kula na istočnoj strani kastela. Nakon izgradnje hidroelektrane Đerdap I, deo utvrđenja se našao pod vodom, dok je jedan deo još uvek vidljiv zahvaljujući činjenici da su be- demi u vreme istraživanja bili očuvani u visini od 4 do 7 m.

Na mestu današnje Tekije, u Oršavskoj kotlini, na- lazilo se civilno naselje sa utvrđenjem – *Transdier- na*, na ušću Tekijskog potoka u Dunav, na prelazu na levu obalu kod Oršave (*Dierna*). Na levoj obali Tekijskog potoka konstatovani su krajem XIX i po-



site from the mouth of the river Mrakonija (*Mraconia*) into the Danube. Archaeological research was conducted within the Early Byzantine fort from the 6th century, possessing a port with round towers at the endings. It was attested that the oldest traces originate from the second half of the 1st century AD. In the middle of the fort there was a Late Antique burgus. The Early Byzantine fort from Iustinian's period was most likely affected by Slavic raids, as a coin hoard from 552 indicates. After this period, two towers and a defensive wall were renovated and at the eastern side of the fort, a five-sided tower was added. After the water power-plant was built, one part of the fort was submerged, while another part is still visible, mostly owing to the fact that the defensive walls were preserved up to the height of 4 to 7 m.

At the place of modern Tekija, in the Oršava valley, there was a civilian settlement with a fort called *Transdierna*, at the mouth of the Tekija creek into the Danube, at the river-crossing to the left bank by Oršava (*Dierna*). At the end of the 19th and the beginning of the 20th century, at the left bank of the Tekija creek, remains of a fort from the end of the 1st century were found. During archaeological research, remains of military barracks, headquarters (*principia*), commander's premises (*praetorium*) decorated with frescos and marble plates, but also a grainary (*horreum*) from Trajan's period, were discovered. Within the fort, the presence of the cohorts *V Gallorum* and *IX Gemina* was attested. At the end of the 3rd century, most likely during Diocle-

112. Diana fort, building with floor heating system (*hypocaustum*)
112. Utvrđenje Dijana, objekat sa podnim grejanjem (*hypocaustum*)

četkom XX veka ostaci utvrđenja s kraja I veka. Arheološkim istraživanjima konstatovani su delovi vojničkih baraka, glavna komandna zgrada (*principia*), stan zapovednika (*praetorium*), ukrašen freskama i mermernom oplatom i, verovatno, žitnica (*horreum*), iz doba Trajana. U logoru je potvrđeno prisustvo pripadnika kohorti *V Gallorum* i *IX Gemina*. Na desnoj obali Tekijskog potoka krajem III veka, najverovatnije u doba Dioklecijana, bilo je podignuto utvrđenje tipa *quadriburgium*, teško oštećeno izgradnjom Đerdapske rečne uprave 1932-1936. godine. Utvrđenje, nepravilne četvorougone osnove sa kvadratnim ugaonim kulama, obnovljeno je verovatno u doba Konstantina (305-337), a potom i u vreme Anastasija (491-518). Istraživanjima ulaza u utvrđenje na zapadnom bedemu, konstatovani su ostaci starije građevine sa bazenom za kupanje (*balneum*).

Na udaljenosti 7 km od Tekije, u Sipu, u doba Trajana je obimnim radovima na regulaciji korita Dunava prokopan kanal, ukupne dužine 3225 m i širine 57 m. Na ulazu u Sipski kanal, na levoj obali Kašajne, na niskom terenu, bilo je podignuto nepravilno četvorougono utvrđenje, oblikom i načinom gradnje slično utvrđenju u Tekiji. Relativno skromni tragovi života upućuju na period gradnje krajem III i početkom IV veka, i obnove u VI veku.



tianus' reign, at the right bank of the Tekija creek, a fort of the *quadriburgium* type was erected, severely damaged in 1932-1936, during the building activities for the Iron Gates navigation command. The fort, of irregular tetragonal plan, with rectangular angle-towers, was most likely renewed during Constantine's reign and later again during the reign of Anastasios. During the excavation of the entrances of the fort at the western defensive wall, remains of an older building with a bath (*balneum*) were discovered.

At the distance of 7 km from Tekija, in Sip, during Trajan's reign, a canal was dug while regulating the Danube bed, with total length of 3225 m and width of 57 m. At the entrance of the Sip canal, at the left Kašajna bank, on low terrain, an irregular rectangular fort was built, in its shape and building technique similar to the Tekija fort. Rather few remains and finds indicate that it was built at the end of the 3rd and the beginning of the 4th century and a renovation in the 6th century.

Diana

Diana was auxiliary fort located near Danube cataracts 8 km upstream from present day Kladovo and 2 km downstream from Hydroelectric power plant Djerdap I. These rapids obstructed navigation and made it extremely dangerous. Within major construction and fortification works in the Iron Gate emperor Trajan dug up a canal near present day village

113. Diana fort, aerial view from the south. Danube and Dacia (modern Romania) are visible in the background
113. Utvrđenje Dijana, pogled iz vazduha sa juga. Dunav i Dakija (savremena Rumunija) se vide u pozadini

Dijana

Dijana je takođe utvrđenje pomoćnih jedinica u neposrednoj blizini katarakte Dunava, 8 km uzvodno od današnjeg Kladova i 2 km nizvodno od hidroelektrane Đerdap I. Ovi brzaci ometali su plovidbu i činili je izuzetno opasnom. Među velikim građevinskim radovima koje je car Trajan preduzeo u Đerdapu je i iskopavanje kanala blizu današnja sela Sip. Trupe su preusmerile reku i "načinile čitav Dunav plovim", kao što je pomenuto na carskoj table otkrivenoj u blizini tvrđave. *Diana*, stanica na kataraktama, kontrolisala je prolaz kroz ovaj kanal. Osnovana je početkom I veka, Domicijan je kasnije obnovio, ali je najvažniju ulogu imala tokom Trajanovog prosecanja sipskog kanala oko 100. godine. Tokom antičkog perioda pretrpela je više razaranja i obnova. Glavni radovi na ojačanju utvrđenja su sprovedeni krajem III i početkom IV veka. Tada je zazidana istočna kapija, a sazidane nove spoljašnje kule. Tvrđava je pretrpela ozbiljna razaranja tokom hunske invazije. Justinijan je obnovio i ojačao, a iz tog perioda poznata je pod imenom *Zanes*. Međutim, zbog nedostatka dobro obučениh trupa i smanjenja garnizona ovi građevinski radovi bili su uzaludni. Nakon invazije Avara i Slovena u VI veku, Limes se nikada nije oporavio. *Diana* je napuštena,

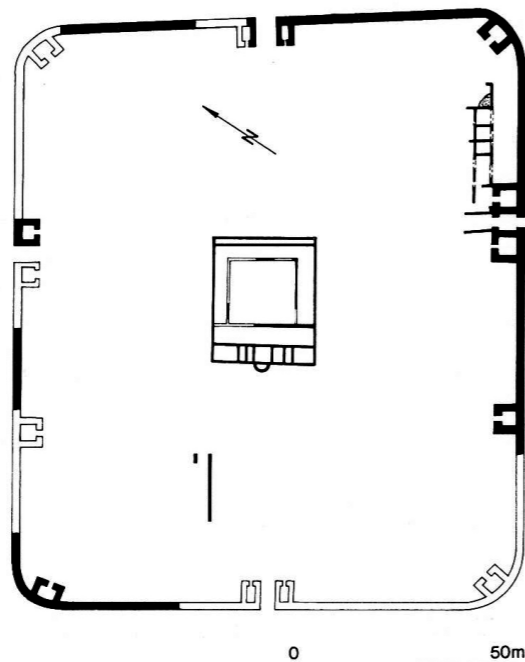
Sip. Troops diverted river and “made entire Danube navigable” as it was mentioned on the imperial tablet discovered near the fort. Diana, station on the cata-racts, controlled passage through this canal.

It is established in early 1st century AD, rebuild later by Domicianus, with most important phase from the period of Trajan’s construction of the Sip canal (around 100 AD). It existed throughout antiquity suffering several destructions and reparations. Major works on strengthening fortifications were conducted at the end of 3rd and beginning of 4th century. Eastern gate was walled up and new outer towers built. It suffered severe destruction during Hun invasion. Justinian rebuild fort and strengthened it further. From this period it is known under the name *Zanes*. Lack of quality troops and reduced garrisons made all these construction works futile. After invasion of Avars and Slavs in 6th century limes never recovered. Diana was abandoned, although Sip canal remained in function for longer time. This provided us with well preserved fortification that has excellent possibilities for presentation, ease of access and basic infrastructure in the vicinity. It is also one of the forts that have the largest area excavated and conserved. The fact that there are no modern buildings over ancient ruins makes it a perspective archaeological park.

Down the river from Karataš-Diana, there was a Late Antique fort (*burgus*) and an Early Byzantine castel (with four round towers and a tower in the east, ending in the shape of an apsis) in Donje Butorke. An inscription was discovered at this spot from Diocletianus’ period (299), most likely used as a *spolia*.

Pontes

Complex at Pontes consists of the remains of the Trajan’s Bridge and small auxiliary fort that protected access to it on the right river bank. Auxiliary fort of Drobeta was located on the left bank of Danube with the same role. Pontes fort protected access to the crossing. It lies on a high right bank of the Danube, opposite the Romanian fortress *Drobeta*/Turnu Severin. It was also known by other name after the fortress on the opposite side - *Transdrobeta*. Fortification was built in the same time as the bridge. In the architecture dominates Trajanic phase and all later modifications did not change original global concept. Repairs were done in the



114. Čezava (*Castrum Novae*), fortification plan
114. Čezava (*Castrum Novae*), plan utvrđenja

mada je sipski kanal ostao u funkciji duže vremena. Usled toga imamo danas dobro očuvano utvrđenje koje ima odlične mogućnosti za prezentaciju, lako je dostupno i ima osnovnu infrastrukturu u blizini. To je takođe jedno od utvrđenja sa najvećom istraženom površinom i najvećim brojem konzerviranih građevina. Činjenica da nema savremenih građevina iznad drevnih ruševina čini ovo utvrđenje perspektivnim arheološkom parkom.

Nizvodno od Karataša-Dijane, nalazilo se kasnoantičko utvrđenje (*burgus*) i ranovizantijski kastel (sa četiri kružne i jednom kulom koja se završavala u obliku apside na istoku) u Donjim Butorkama. Na ovom mestu je nađen građevinski natpis iz doba Dioklecijana 299. godine, koji je verovatno ovde bio u sekundarnoj upotrebi.

Pontes

Pontes je kompleks koji se sastoji od ostataka Trajanovog mosta i utvrđenja za pomoćne jedinice koje je štitiло pristup prelazu na desnoj obali Dunava. Utvrđenje *Drobeta* koje se nalazilo na levoj obali Dunava imalo je istu ulogu. *Pontes* leži na visokoj desnoj obali Dunava, nasuprot tvrđave *Dro-*



115. Boljetin, view on the fort and its position on the frontier. On the opposite bank was former Dacia
115. Boljetin, pogled na utvrđenje i njegovu poziciju na granici. U pozadini je obala nekadašnje Dakije

time of Marcus Aurelius and major reconstruction in the time of Septimius Severus.

Although it was reconstructed over the next centuries, it retained its original shape, characteristic of the auxiliary Roman fortifications of Trajan’s time. They were square fortresses with rounded corners and square towers on the inside of the stone walls, in corners and at the gates. The North gate – *porta praetoria* and the South gate – *porta decumana*, were placed at the middle of the rampart. The interior was also divided by an axis, according to the rules of the time, with the headquarters building - *principium*, in the center of the intersection of the two main streets.

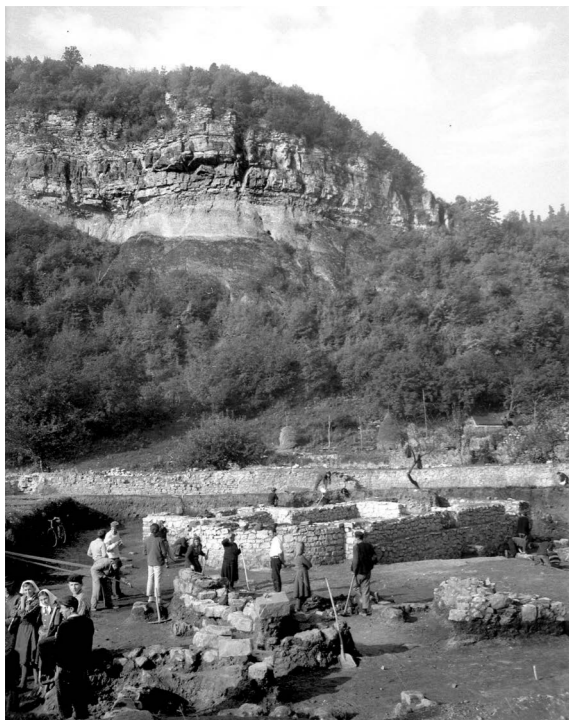
The North and East ramparts were discovered and conserved completely over the course of the previous works, as well as most parts of the West and South ramparts, all four gates, towers, parts of the headquarters building / *principia*, workshops, warehouses, and late Roman structures. After being considerably damaged during the second century, all parts of the fortress were reconstructed during the Severus dynasty at the beginning of the third century, as well as in the later periods. The fortress,

beta /Turnu Severin. Takođe je poznat pod drugim imenom nasuprot tvrđavi na drugoj obali Dunava - *Transdrobeta*.

Utvrđenje je izgrađeno u isto vreme kad i most. U arhitekturi dominira faza iz izgradnje tokom Trajanovog pohoda, a sve kasnije dogradnje nisu promenile njen prvobitni koncept. Popravke su vršene u vreme Marka Aurelija, a velike obnove u vreme Septimija Severa.

Njen prvobitni izgled kvadratnog oblika sa zaobljenim uglovima i četvrtastim kulama okrenutim ka unutrašnjosti u uglovima i na kapijama koji se tako dugo održao bio je karakterističan za rimska utvrđenja pomoćnih odreda Trajanovog vremena. Severna kapija - *porta praetoria* i južna kapija - *porta decumana* su postavljene na sredini bedema. Unutrašnjost je bila takođe podeljena u skladu sa pravilima tog vremena, sa sedištem glavnokomandujućeg - *principium*, u centru preseka dve glavne ulice.

Na severu i istoku bedemi su istraženi i konzervirani u potpunosti tokom prethodnih arheoloških kampanja, kao i većina delova na zapadnom i južnom bedemu, sve četiri kapije, kule, delovi zgrade štaba (*principia*), radionice, skladišta, i objekti iz kasne antike. Nakon što je znatno oštećena tokom II veka, svi delovi tvrđave su obnovljeni tokom vladavine dinastije Severa početkom III veka, kao i u kasnijim periodima. Tvrđava je, kao i samo Rimsko



116. Excavation at Boljetin site
116. Iskopavanja na lokalitetu Boljetin



117. Visitors on the limes road in front of Tabula Traiana before relocation
117. Posetioci na putu duž limesa ispred Trajanove table pre izmeštanja

like the Roman Empire and limes in general, suffered great destruction in conflicts with the Goths and the Huns in the fourth and fifth centuries AD. Without bridge Pontes fort loses its significance and was generally abandoned. On this area develops settlement of the *limitani*. Fort was revived during Justinian's restoration of Limes, but did not last long. There are no traces of occupation after Avar invasion in 6th century AD.

From this site originates one of the best examples of the Roman sculpture art in Moesia – bronze head of the Trajan's father.

During Valens'es and Valentinian's renovation of the Limes, down the river from Pontes, a row of smaller fortifications (*burgi*) was erected in Rtkovo, Ljubičevac, Ušće Slatinske reke, Mihajlovac-Blato, Mora Vagei and Borđej. During the 6th century, in Rtkovo, Vajuga, Milutinovac, Ljubičevac, Ušće Slatinske reke and Radujevac-Karamizar, *castella* were built, mostly smaller, for stationing auxiliary troops. The forts and settlements of Brza Palanka (*Egeta*) and Prahovo (*Aquae*) also represent important military and strategic points.

Due to its geographic and strategic position, Brza

carstvo i Limes uopšte, pretrpela velika razaranja u sukobima sa Gotima i Hunima u IV i V veku.

Bez mosta tvrđava *Pontes* gubi značaj i biva napuštena. Na ovom prostoru se razvija naselje *limitani*. Utvrđenje je obnovljeno tokom Justinijanove obnove Limesa, ali nije dugo trajalo. Nema tragova života u tvrđavi nakon avarske invazije u VI veku. Sa ovog lokaliteta potiče jedan od najboljih primera rimske skulpturalne umetnosti u Meziji – bronzana glava Trajanovog oca.

Nizvodno od Pontesa, u doba Valensove i Valentinijanove obnove limesa bio je podignut niz manjih utvrđenja (*burgi*) u Rtkovu, Ljubičevcu, Ušću Slatinske reke, Mihajlovcu-Blato, Mora Vagei i Borđeju. U VI veku u Rtkovu, Vajuzi, Milutinovcu, Ljubičevcu, Ušću Slatinske reke i Radujevcu-Karamizar podignuta su *castella*, uglavnom manjih dimenzija, za smeštaj pomoćnih odreda. Značajnije vojne i civilne punktove predstavljaju utvrđenja i naselja u Brzoj Palanci (*Egeta*) i Prahovu (*Aquae*).

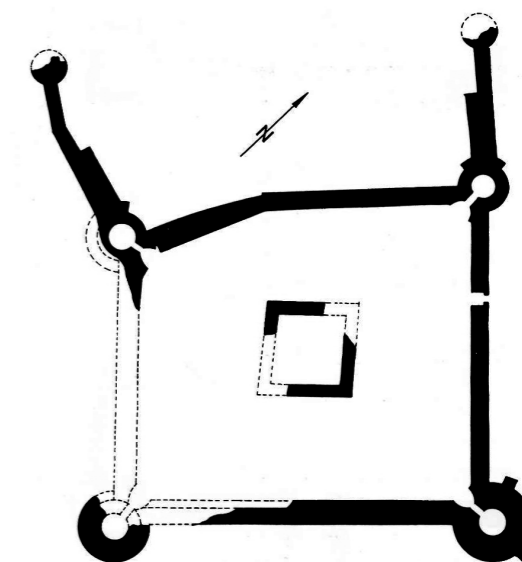
Brza Palanka (*Egeta*), zbog značajnog geografskog i strateškog položaja, bila je naseljena od prastorijskih epoha. Arheološki je relativno malo



118. Boljetin, view on the fort and its position on the frontier. On the opposite bank is former Dacia (Romania)
118. Boljetin, pogled na utvrđenje i njegovu poziciju na granici. U pozadini je obala nekadašnje Dakije (Rumunija)

Palanka-Egeta was populated ever since prehistory. It is archaeologically rather unexcavated. During Trajan's rule, it was the stationing point of the cohorts *I Cretum* and parts of the legion *VII Claudia*, while during Late Antiquity, parts of the legion *XIII Gemina* are mentioned, an archaers' squad - *cuneus equitum sagittariorum* and the fleet *classis Histrica*. Early research notified that there were three forts, only two of them being partly excavated, as well as the remains of a civilian settlement. The first fort, at the right Crkveni potok bank, is only known owing to the terrain configuration, appearing as a huge rectangular formation with a Jupiter Dolichenus sanctuary in its vicinity. At the left bank of the Crkveni creek, a fort was partly examined, with round angle towers, erected most likely during Late Antiquity upon the remains of a settlement or a fort from the 1st or the 2nd century. The third fort, only

istražena. U Trajanovo vreme bila je sedište kohorte *I Cretum* i delova *VII Claudia*, a u kasnoj antici pominju se delovi legije *XIII Gemina*, odred strelaca - *cuneus equitum sagittariorum* i flota *classis Histrica*. Prvi istraživači su zabeležili postojanje tri utvrđenja, od kojih su dva samo delimično ispitana,



119. Hajdučka vodenica, fortification plan
119. Hajdučka vodenica, plan utvrđenja

0 20m



120. Fort Saldum during excavations
120. Utvrđenje Saldum tokom iskopavanja

partly detected, could possess a triangular base, like the castel in Bosman, to which it is also contemporary (6th century). In the area of the civilian settlement, near the modern church, a bath (*balneum*) was built in the 3rd or the 4th century. According to archaeological remains, very little is known about the settlement (*civitas*) in Prahovo-Aquae. It represented a significant settlement. The fort of Aquae probably existed already ever since the 1st century, when it was used for stationing of the *cohors I Cantabrorum*, possibly also of the *III Campestris*. Due to its strategic importance, it surely also possessed a port. The civilian settlement was surely highly developed, since finds of fresco-paintings are known from several buildings, but also remains of an aqueductus, statuettes, while next to the southern defensive wall, there was also a cemetery with cremated and skeletal burials.

kao i ostatke civilnog naselja. Prvo utvrđenje, na desnoj obali Crkvenog potoka, poznato je samo na osnovu konfiguracije terena, kao velika pravougaona formacija, u čijoj blizini je svetište Jupitera Dolihera. Na levoj obali Crkvenog potoka delimično je ispitano utvrđenje sa kružnim ugaonim kulama, verovatno podignuto u kasnoj antici na ostacima naselja ili utvrđenja iz I-II veka. Treće utvrđenje, samo delimično konstatovano, moglo je imati trougaonu osnovu poput kastela u Bosmanu sa kojim je i istovremeno (VI vek). Na prostoru civilnog naselja, u blizini savremene crkve, bilo je izgrađeno u III-IV veku kupatilo (*balneum*).

O naselju (*civitas*) u Prahovu (*Aquae*), veoma malo se zna na osnovu arheoloških tragova, iako je predstavljalo značajnu naseobinu. Utvrđenje u Akvama je verovatno postojalo od I veka n.e., kada je zabeleženo prisustvo kohorte *I Cantabrorum*, moguće i *III Campestris*. Zbog strateškog značaja, u njemu je svakako moralo biti i značajno pristanište. Civilno naselje je moralo biti veoma razvijeno, jer su sporadično nalaženi ostaci fresko-slikarstva iz građevina, delovi vodovoda, statuete, a uz južni bedem je formirana biritualna nekropola.



121. Bosman, one of the corner towers
121. Bosman, jedna od ugaonih kula

River Fleet and its Role Along the Danube

Whenever it was possible, transport of food and other goods was performed along rivers. It is regarded that provincial fleets also transported food for the Roman military (Breeze 2000:59; Kehne 2007:328-329). Supplying was done along all of the major rivers within the Empire. Transport along the Danube can also be seen on Trajan's column. We can also presume that supplies were brought from other parts of the Empire, as well as from the hinterland of the province, mostly along rivers. Actually, the main feature of all of the fortifications along the Danube was fluvial transport. In accordance to this, all of the fortifications had to have a sort of port, out of which only a few were investigated during the great protective excavations of the Iron Gates (Петровић 1990: 207-216). A certain *Ulpus Antonius Quintus* is known, *aedilis* and *questor* of the *municipium* in Drobeta, who decorated the port (*portus*) in Tekija (*Transdierna*) with luno's sculpture (Петровић 1990: 208 with earlier literature). *Classis Flavia Moesica* was confirmed only in Lower Moesia but is unlikely that in the first centuries along the frontier there was no fleet between *Singidunum* and *Ratiaria*.

Rečna flota i njena uloga u Podunavlju

Kad god je to bilo moguće, hrana i drugi proizvodi transportovani su rekama. Smatra se da su provincijske flote takođe transportovale hranu za rimsku vojsku (Breeze 2000: 59; Kehne 2007: 328-329). Snabdevanje se vršilo duž svih glavnih reka u okviru Carstva. Taj prevoz duž Dunava je predstavljen i na Trajanovom stubu. Može se, takođe, pretpostaviti da su namirnice dovožene i iz drugih delova Carstva, kao i iz zaleđa provincija duž reka. Upravo je glavna karakteristika svih utvrđenja duž Dunava rečni saobraćaj. U skladu sa tim, sva utvrđenja su morala imati neku vrstu pristaništa, ali je samo nekoliko istraženo tokom velikih zaštitnih iskopavanja Đerdapa (Petrović 1990: 207-216). Izvesni *Ulpus Antonius Quintus*, *aedilis* i *questor* municipija u Drobeti, ukrasio je luku (*portus*) u Tekiji (*Transdierna*) skulpturom Junone (Petrović 1990: 208 sa ranijom literaturom).

Classis Flavia Moesica potvrđena je samo u Donjoj Meziji, ali je malo verovatno da u prvim vekovima



As ports of the Upper Moesia, Margum (*Classis Stradensis et Germensis*), Egeta (*Classis Aegetensium Sive Secunda Pannonica*), Ratiaria (*Classis Ratiarenses*) and Viminacium (*Prefectus Classis Histricae*) are mentioned. The fleet was confirmed only in 92, although it most likely existed in the previous decades as well (Петровић 1991:207-208). The existence of Neptune's temple as a feature directly connected to the river and fluvial transport was confirmed on several monuments discovered in Viminacium (Mirković, 1986: 75). The most important ports were those next to the legionary camps in Singidunum and Viminacium, about which there is very few information. Smaller ports were in Tekija (*Transdierna*), Čezava (*Novae*), Hajdučka vodenica, Karataš (*Statio Cataractarum Dianae*), Brza Palanka (*Egeta*) and Kusjak near Prahovo (*Aquae*). *Viminacium*, *Aquae* and *Novae* had ports separated from the main fortification, while on the other sites ports were situated next to the fortifications and protected with perimetral walls relying on the main defensive wall of each of the fortifications. Such a positioning of ports is known from *Singidunum*, Hajdučka Vodenica, *Diana*, *Egeta*. In German literature, such fortified ports are described as Landeburg and they are often encountered along the Rhine, although

122. Limes section from Diana to Pontes with Trajans bridge, ideal reconstruction (M. Korać)
122. Deo limesa između Dijane i Pontesa sa Trajanovim mostom, idealna rekonstrukcija (M. Korać)

nove ere nije bilo flote duž granice od Singidunuma do Racijarije. Kao luke u Gornjoj Meziji pominju se: *Margum* (*Classis Stradensis et Germensis*), *Egeta* (*Classis Aegetensium sive Secunda Pannonica*), *Ratiaria* (*Classis Ratiarenses*) i *Viminacium* (*Prefectus Classis Histricae*). Flota je potvrđena tek 92. godine mada je najverovatnije postojala u prethodnim decenijama (Petrović 1991: 207-208). Postojanje hrama posvećenog Neptunu potvrđeno je na nekoliko spomenika otkrivenih u Viminacijumu što se dovodi u direktnu vezu sa rekama i živim rečnim saobraćajem (Mirković, 1986: 75). Najvažnije luke su bile pored legijskih utvrđenja u Singidunuma i Viminacijumu, ali o njima, nažalost, ima veoma malo podataka. Manje luke su bile u Tekiji (*Transdierna*), Čezavi (*Novae*), Hajdučkoj Vodenici, Karatašu (*Statio Cataractarum Dianae*), Brznoj Palanci (*Egeta*) i Kusjaku kod Prahova (*Aquae*). *Viminacium*, *Aquae* i *Novae* su imali luke odvojene od glavnog utvrđenja, dok su na drugim lokalitetima luke bile pored samih tvrđava i zaštićene pe-

less along the middle and the lower Danube valley (Петровић 1991:207-216).

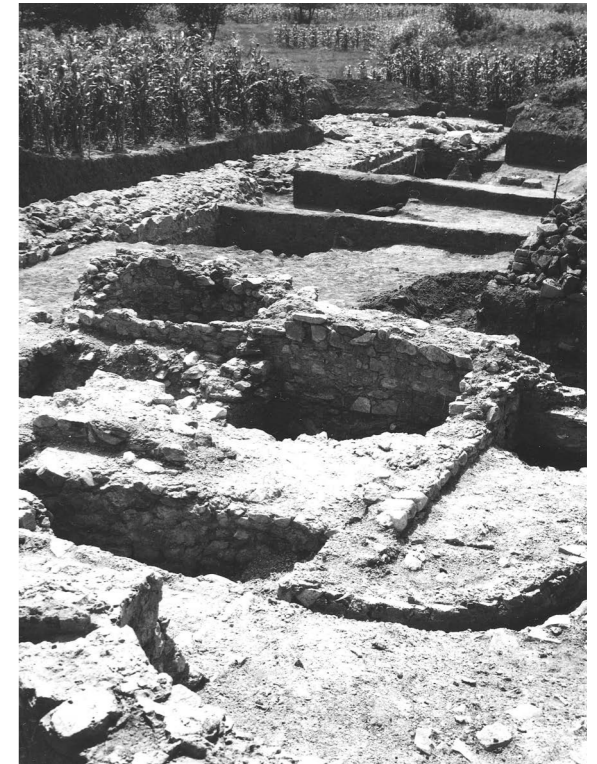
Limes Road

The Roman road through the Iron Gates with imperial tablets (best known is the Trajan's tablet – *Tabula Traiana*) was one of the most iconic marvels of military architecture.

Roads are the most common Roman infrastructure, known from the all parts of the Empire. But roads within Iron Gorge differ significantly. Because of the narrow gorge and steep cliffs there was no space to construct regular roads. Therefore legionnaires had to cut the road into the rock itself and to widen it by constructing walking path on the wooden consoles hanging above the river. This undertaking lasted several decades beginning from 33/34 AD under Emperor Tiberius, with massive works and reconstruction under Domitian and finally finished under Emperor Trajan in preparations for Dacian Wars.

This road was essential for communication, supply and transport between fortifications and settlements along the limes. It was the only supply line during harsh winters when the surface of Danube freezes. Strongholds in these days instead of being relieved by weather conditions had to be even reinforced because barbarians could use icy surface to invade.

Road through the Iron Gates represents unique and innovative number of solutions how to construct walk path in nearly impossible circumstances and with only human labor available. It was the master-



123. Porečka reka Thermae, excavation in 1969
123. Terme kod Porečke reke tokom iskopavanja 1969

rimetralnim zidovima koji su se oslanjali na glavni odbrambeni zid svakog od ovih utvrđenja. Takvo pozicioniranje luka je poznato iz Singidunuma, Hajdučke Vodenice, Dijane i Egete. (Petrović 1991: 207-216).

Put duž limesa

Rimski put kroz Đerdap sa carskim tablama (najpoznatija je Trajanova tabla – *Tabula Traiana*) bio je jedno od najvećih poduhvata vojne arhitekture. Upravo su Rimljani bili najpoznatiji po izgradnji puteva. Ali put u Đerdapskoj klisuri se razlikuje od svih ostalih. Zbog uske klisure i strmih stena nije bilo prostora za izgradnju standardnog puta. Zbog toga su legionari morali da uklešu put u samom kamenu, a zatim ga prošire izgradnjom pešačke staze na drvenim konzolama koje su visile nad rekam. Ovaj poduhvat je trajao nekoliko decenija počevši od 33/34 godine, odnosno vremena Tiberija, nastavivši velikim radovima i rekonstrukcijom



124. Bricks with stamped fortification names - Diana and Drveta
124. Opeke sa žigovima imena utvrđenja - Diana i Drveta



125. Iron Gate - Trajans tablet and limes road cut into the rock, Kazan pass - Litography W. H. Bartlett
125. Đerdap - Trajanova tabla i rimski put usečen u stenu, Kazan - Litografija W. H. Bartlett

piece of Roman military engineering that outlived the Roman Empire for centuries to come. This road was in partial use all the way until 1969 when it was submerged after building hydroelectric power plant Đerdap I. Although it was not destroyed it is not visible any more. Only the section under Trajan's tablet was relocated to a higher location and is still visible.

Trajan's Canal

Trajan's canal at Sip with the Diana and Sip forts on both ends was among the crucial fortification elements on the limes. Unfortunately, the canal is now completely destroyed and there are no elements for its nomination to the World Heritage List. On the other hand, Diana is among the best preserved, excavated and presented sites on our section of limes. Canal was dug in preparation of Dacian

pod Domicijanom, da bi bio završen pod Trajanom tokom priprema za ratove protiv Dačana na samom početku II veka.

Ovaj put bio je od suštinskog značaja za komunikaciju, nabavke i transport između utvrđenja i naselja duž limesa. Tokom oštih zima kada bi se Dunav zaledio nije bilo drugog načina snabdevanja. Uporišta su tih dana morala biti i ojačana, jer su varvari mogli koristiti zaleđenu površinu za brze napade. Put kroz Đerdap predstavlja jedinstven i inovativan niz rešenja za izgradnju puta u skoro nemogućim uslovima i remek je delo rimskog vojnog inženjerstva koje je nadživelo Rimsko carstvo skoro dve hiljade godina.

Put je delimično bio u upotrebi sve do 1969. godine kada je potopljen nakon izgradnje hidroelektrane Đerdap I. Iako nije bio uništen, više se ne može videti. Samo je deo ispod Trajanove table, koji je preseljen na višu lokaciju, još uvek vidljiv.

Trajanov kanal

Trajanov kanal kod Sipa sa utvrđenjima *Diana* i *Sip* na krajevima, bio je jedan od najvažnijih fortifikacionih kompleksa na Limesu. Nažalost, kanal je sada



126. Iron Gate - Limes road cut into the rock, Kazan pass - Litography W. H. Bartlett
126. Đerdap - rimski put usečen u stenu, Kazan - Litografija W. H. Bartlett

campaigns around 101 AD. Canal was dug 150 m away from the Danube on its farthest point. Entire length was 3220 m, 57 m wide at the bottom with large embankments on both sides. Another Trajans tablet celebrating this extraordinary undertaking, today is located at the entrance to the Hydroelectric Power plant Đerdap I.

Trajan's Bridge

The Bridge was one of the marvels of the Roman architecture and the longest bridge in antiquity. Location was carefully chosen between Serbian village of Kostol (Roman *Pontes*), near Kladovo on the right bank of Danube and Romanian city Turnu Severin (Roman *Drobeta*) on the left bank. Remains on both banks are visible, conserved and presented. The fort protecting access to the bridge was also excavated, conserved and partially presented.

potpuno uništen i ne postoje elementi za njegovu nominaciju. S druge strane, *Diana* je među najbolje očuvanim, istraženim i prezentovanim lokalitetima na našem delu Limesa. Kanal je iskopan tokom priprema za pohod na Dakiju oko 101 godine i bio je udaljen oko 150 m od Dunava. Ukupna dužina iznosila je oko 3220 m, a širina 57 m na dnu kanala. Sa obe strane kanala bio je izgrađen dugačak i visok nasip. Još jedna tabla koja je posvećena Trajanovim građevinskim dostignućima danas se nalazi na ulazu hidroelektrane Đerdap I.

Trajanov most

Most je bio jedno od čuda rimske arhitekture i predstavlja najduži most podignut u antici. Lokacija je pažljivo odabrana kod sela Kostol (rimski *Pontes*), u blizini Kladova, na desnoj obali Dunava i rumunskog grada Turn Severina (rimski *Drobeta*) na levoj obali. Ostaci na obe obale kao i utvrđenje koje je štiti pristup mostu su vidljivi, konzervirani i prezentovani. Most je sagradio Apolodor iz Damaska, glavni arhitekta cara Trajana, između prvog i drugog rata



Bridge was built by Apollodorus from Damascus, Trajan's chief architect, under Emperor Trajan between the First and Second Dacian War (in years between 102/103 and 105 AD). Length of the entire bridge was nearly 1135 m, on the location where Danube was 800 m wide. Twenty pillars, built of bricks and stone, supported upper wooden construction that was actually used for the river crossing. Although information in written sources are scarce, depictions on the Trajan's coins and Trajan's column (*Columna Traiana*) in Rome show the grand structure almost in details. Final destruction of the bridge has several versions. According to one already Hadrian removed wooden construction in order to prevent barbarians penetrating to Moesia. But this seems only temporarily and bridge was restored very soon. Final destruction of the Bridge yet remains open.

After abandonment of Dacia Bridge definitely loses its purpose and becomes opportunity for fast barbarian intrusions thus posing a major threat to frontier region. Because of that it was most probably disabled by removing upper construction.

Researchers still argue whether the full length was 1200 or 1135 m, placed on 20 massive pillars of which only few are visible on Serbian and Roma-

127. *Limes road in the Iron Gates before submerging into the water of Danube*

127. *Put duž limesa u Đerdapu pre potapanja*

sa Dačanima (u godinama između 102/103 i 105). Dužina celog mosta je 1135 m na delu na kome je Dunav širok 800 m. Dvadeset stubova, izgrađenih od opeke i kamena, nosilo je gornju drvenu konstrukciju korišćenu za prelaz preko reke. Većina njih bila je vidljiva sve do XX veka, kada su neki od njih uništeni jer su ometali plovidbu. Danas su samo oni uz obale vidljivi. Međutim, nedavnim podvodnim istraživanjima je ustanovljeno da su svi stubovi i dalje u rečnom koritu, doduše različitog stepena očuvanosti.

Iako su podaci u pisanim izvorima oskudni, prikazi na Trajanovim novčićima i na Trajanovom stubu (*Columna Traiana*) u Rimu prikazuju detalje ove velike građevine. O konačnom razaranju mosta ima nekoliko verzija. Prema jednoj je već Hadrijan uklonio drvenu konstrukciju da bi sprečio prodor varvara u Meziju. Ali to je bilo samo privremeno i most je uskoro bio obnovljen. Za sada se još ne zna kada je konačno most bio srušen.

Nakon napuštanja Dakije most definitivno gubi svoju svrhu, a pruža mogućnost varvarima za



128. *Trajan's tablet on its original location above limes road in the Iron Gate*

128. *Trajanova tabla na originalnoj lokaciji iznad puta u Đerdapu*

nian bank of Danube. All masonry pillars were constructed using a wooden caisson. Canals were dug parallel to Danube in order to lower the depth of river and make building of pillars easier. Most of them stood until recent centuries when some of them were destroyed because they hindered navigation. Today only those next to the both banks remains visible. Nevertheless recent underwater research located all the pillars in the riverbed still remaining in different states of preservation.

Economy Overview of the Frontier

On the economy along the limes major influence had constant presence of the army and imperial administration.

Economy bases along the limes were agronomy, agriculture in plains, while farming dominated in hilly parts, wood and stone working, handicraft,

brze upade zbog čega počinje da predstavlja glavnu pretnju pograničnoj regiji. Verovatno je upravo zbog toga i uklonjena gornja konstrukcija.

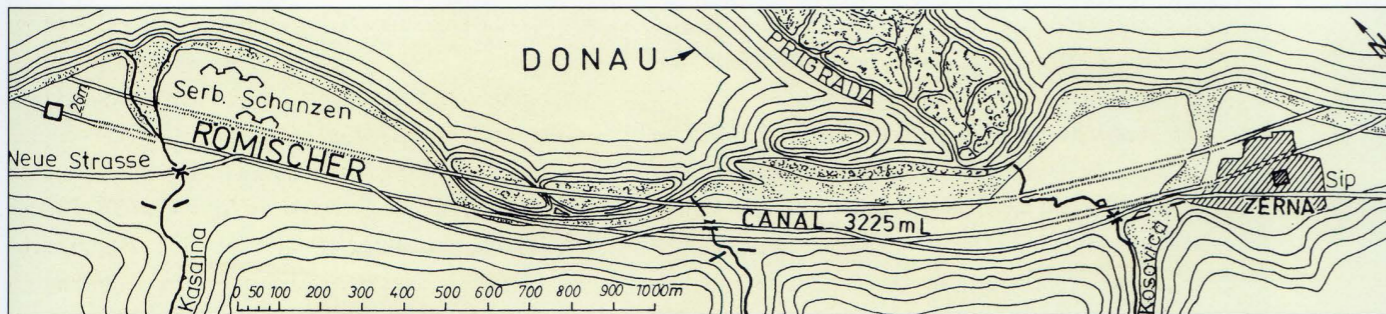
Svi stubovi su bili zidani uz korišćenje drvenih kesa. Paralelno sa Dunavom su bili iskopani kanali kako bi se smanjila dubina reke i olakšala izgradnja stubova.

Ekonomija Limesa

Na ekonomiju u zoni limesa u velikoj meri je uticalo trajno prisustvo vojske i državne administracije.

Osnovu ekonomskog života duž limesa činile su poljoprivreda, u ravničarskim delovima zemljoradnja, dok je u brdskim i planinskim dominiralo stočarstvo, obrada drveta i kamena, zanatstvo, rudarstvo i, naročito, trgovina čiju okosnicu je činio Dunav kao najznačajnija trgovačka ruta.

Intenzivna zemljoradnja u Podunavlju bila je poznata i hroničarima IV veka pre n.e. koji su o tome pisali povodom pohoda Aleksandra Velikog u zemlju Tribala. Od početka procesa romanizacije u Srednjem Podunavlju, zemlju su kupovali ili dobijali uglavnom isluženi vojnici (veterani) ili članovi bogatih rimskih porodica, a postojali su carski i državni



minig and especially trade.

Intensive agriculture in the Danube valley was well-known to ancient authors even before the 4th century BC, who wrote about it in connection with the visit of Alexander the Great to the tribe of Triballi. Ever since the beginning of Romanization in the Middle Danube valley, land was bought and given mostly by/to veteran soldiers or members of wealthy Roman families, while there were also imperial and state domains. These areas were economically developed and sustainable, although import was highly developed.

In the limes area, in military camps and around them, brick production was confirmed (Singidunum, Viminacium, Diana), covering the needs of building and repairing. Pottery production for everyday use, but also production of luxury items, glass vessels and oil-lamps, was confirmed in Sirmium, Singidunum, Margum and Viminacium, also supplying settlements and camps along the Danube. settlements and camps along the limes were supplied with luxury good from all over the Empire, from the western imperial centres (Northern Italy, South Gaul, Germania, Noricum, Raetia), as well as from the eastern imperial centres, especially Syria and Palestine, while agricultural products were imported in amphoras (olive oil, wine, garum

129. Second Trajans tablet discovered near Karataš celebrating building of the canal around Danube cataracts and its plan by Felix Kanitz

129. Druga Trajanova tabla otkrivena kod Karataša koja slavi gradnju kanala oko dunavskih katarakti i njegov plan od Feliksa Kanica

domeni. Ove oblasti su privredno bile razvijene i mogle su da podmiruju sopstvene potrebe, mada je uvoz bio prilično zastupljen.

Duž limesa u vojnim logorima i van njih potvrđena je proizvodnja opeka (*Singidunum, Viminacium, Diana*), zbog potreba gradnji i obnova. Proizvodnja keramičkog posuđa za svakodnevnu upotrebu, ali i luksuznog, kao i staklenih posuda i lampi, potvrđena je u Sirmijumu, Singidunumu, Margumu i Viminacijumu, odakle su snabdevana naselja i logori duž Dunava. U naselja i utvrđenja duž Limesa, luksuzna roba stizala je iz gotovo svih delova Carstva, iz zapadnocarskih radionica (Severna Italija, južna Galija, Germanija, Norik, Recija), kao i istočnocarskih, naročito Sirije i Palestine, dok su poljoprivredni proizvodi u amforama (maslinovo ulje, vino, garum i drugo) dopremani vodenim i kopnenim putevima iz oblasti Crnog mora, Severne Afrike i severnog Mediterana. Za smeštaj i čuvanje namirnica podizani su objekti u te svrhe – *horrea*, najčešće u



etc.) along land and fluvial roads from the areas of the Black Sea, Northern Africa and northern Mediterranean. Special objects for keeping and storage were built – *horrea*, usually within the camps, close to the main road, which made up- and downloading easier. *Horrea* are not very well explored in the Middle Danubian valley. Storages made of stone are known from Singidunum, Sapaja, Čezava, Boljetin, Talijata, Konopište and Kurvingrad. Just like the province of Africa was the “Roman grainary”, the Moesian mines played the most important role in imperial mining, since they brought major profit flowing directly to the imperial treasury. The Iron Gates area belongs to the mining district *metalla Aeliana Picensia*. The mines in the Pek, Porečka and Timok rivers gave silver lead, copper and iron, while gold was the best exploited ore. In the forts along the Danube, traces of working ores were noticed (finds of smith’s tools from Saldum, Boljetin, Porečka reka, Diana, Korbovo).

Cults and Religions on the Fortier

In the Roman provinces there were special *collegia* and priests (*sacerdotes*), usually consisting of former slaves, taking care of religious aspects and maintaining temples and cults. Religion played an important role in lives of soldiers and civilians in the limes area. The best testimony to this are remains of temples, epigraphic monuments, cultic

130. Wall paintings from Viminacium tomb are the best examples of the art life on the frontier

130. Oslikani zidovi iz grobnice sa Viminacijuma spadaju među najbolje primere umetnosti na limesu

unutrašnjosti logora, u blizini glavne saobraćajnice, koja je omogućavala najbrži istovar i utovar robe. *Horrea* su slabo ispitani u oblasti srednjeg Podunavlja. Poznata su kamena skladišta u Singidunumu, Sapaji, Čezavi, Boljetinu, Talijati, Konopištu i Kurvingradu.

Kao što je provincija Afrika bila „žitnica Rima“, tako su rudnici u Meziji igrali najznačajniju ulogu u rudarstvu na teritoriji Carstva, jer su donosili visoke prihode koji su se slivali u državnu kasu. Oblast Đerdapa je pripadala rudarskom distriktu *metalla Aeliana Picensia*. Rudnici u dolinama Peka, Porečke reke i Timoka davali su srebrnonosno olovo, bakar i gvožđe, a posebno je najviše kopano i ispirano zlato. U utvrđenjima duž Dunava konstatovani su tragovi prerade ruda (nalazi kovačkog pribora u Saldumu, Boljetinu, Porečkoj reci, Dijani, Korbovu).

Kultovi i religije na limesu

U rimskim provincijama postojala su posebna udruženja (*collegia*) i sveštenici (*sacerdotes*), najčešće iz redova oslobođenika, koji su se starali o religioznom životu stanovništva i održavanju svetilišta i kultova. Religija je igrala važnu ulogu u životima

sculptures and personal sacred objects. With the process of Romanization, in the limes area, cults of the Roman pantheon are introduced, while local, autochthonous deities are assimilated with them (*interpretatio Romana*).

Among the most popular deities there was Jupiter, the supreme Roman god with different epithets, *Iuppiter Optimus Maximus* being the most common one. One of the favorites was Iuno from the Capitoline Triade, as well as Diana, the mine protectress, being popular in the Iron Gates and in the surrounding areas. She also gave her name to the Karataš fort. As remainders of assimilated local deities, Liber and Libera were respected as the protectors of forests, huntig places and viticulture. Among the local deities, *Genius sanctus pater Daciarum* (Tekija) is known. Hercules was especially respected by the military, as the symbol of military strength. The importance of this cult is reflected in the name *Ad Herculem* (Čortanovci), temple remains of this deity in Ravna (*Camps*), as well as in votive inscriptions, statues and statuettes discovered in Singidunum, Viminacium, Hajdučka Vodenica and other places. During the Empire, among the population and especially among the soldiers, apart from the Roman deities, also Greek and Egyptian deities were

132. *Viminacium cemeteries are the best explored in the Balkans*

132. *Groblja Viminacijuma su najbolje istražena na celom Balkanu*



131. *Reverse of the coins from the Viminacium mint*
131. *Reversna predstava sa novca kovanog u Viminacijumu*

vojnika i civila u oblasti Limesa. O tome najbolje svedoče ostaci hramova, epigrafski spomenici, kultne skulpture i predmeti lične pobožnosti. Sa procesom romanizacije, u oblasti Limesa se uvode kultovi rimskog panteona, a lokalna, domorodačka božanstva se asimiluju sa rimskim (*interpretatio Romana*).

Među najviše poštovana božanstva spadali su Jupiter, vrhovni rimski bog sa različitim epitetima, među kojima je najčešći *Iuppiter Optimus Maximus*. Među omiljenima bile su Junona iz Kapitolske trijade, kao i Dijana, zaštitnica rudnika, lovišta, kojima su naročito oblasti Đerdapa i zaleđe obilovali, a čije ime nosi naselje i utvrđenje u Karatašu. Kao zaštitnike šuma, lovišta, vinogradarstva, a kao trag asimilacije sa domaćim božanstvima, stanovništvo je poštovalo Libera i Liberu. Od domaćih božanstava poznat je *Genius sanctus pater Daciarum* (Tekija). Herkul je kao simbol vojničke snage naročito bio omiljen kod vojske. Rasprostanjenost ovog kulta ogleda se u nazivu mesta *Ad Herculem* (Čortanovci), ostacima hrama ovog božanstva u Ravni (*Camps*), kao u votivnim spomenicima i statuama i statueta nađenim u Singidunumu, Viminacijumu, Hajdučkoj Vodenici i drugim mestima.

U doba Carstva među stanovništvom, a naročito vojskom, omiljena su bila, pored rimskih, i grčka, maloazijska i egipatska božanstva. Na više mesta duž Limesa otkriveni su hramovi posvećeni Jupite-

popular, also those originating from Asia Minor. On several places along the limes, temples were discovered dedicated to Jupiter Dolichenus, a deity from the Syrian district of Comagene (*Acumincum, Burgenae, Diana, Egeta, Aquae*). In the inscriptions, priests of this cult are mentioned (Kličevac near Viminacium) and combinations with the female deity *Dea Syriae* (Rtkovo-Glamija). Also, in several cases, the cult of the Persian god Mithra - The invincible Sun (*Sol invictus*) was recorded. Monuments dedicated to Nemesis, Terra Mater, Hermes/Mercurus, Hygia, Asclepius/Aesculapes are also known.

The cult of the Thracian Horseman (*Deus Hero*) was spread among Roman soldiers and civilians. This cult did not possess any sanctuaries on its own, but votive monuments dedicated to him were discovered in other deities' sanctuaries, most commonly in those dedicated to Capitoline Jupiter. As his parallel, the cult of the Danubian Horseman appears, spread in the regions of the Upper Moesia and Lower Pannonia, with a possible workshop for producing icons of this deity somewhere in the

ru Dolihenu, božanstvu iz sirijske oblasti Komagene (*Acumincum, Burgenae, Diana, Egeta, Aquae*). Na natpisima se pominju sveštenici kulta ovog božanstva (Kličevac kod Viminacijuma) i zajednice sa boginjom *Dea Syriae* (Rtkovo-Glamija). Takođe, na više mesta potvrđen je i kult persijskog boga Mitre - Nepobedivog Sunca (*Sol invictus*). Poznati su spomenici posvećeni kultovima Nemeze, Tera Mater, Hermesa/Merkura, Higije, Asklepija/Eskulapa i drugih.

Među rimskim vojnicima i civilima bio je rasprostranjen kult Tračkog konjanika (*Deus Hero*). Ovaj kult nije imao svoja svetišta, već su zaveti nalaženi u svetištima drugih božanstava, najčešće Jupitera Kapitolskog. Kao pandan njemu javlja se kult Podunavskih konjanika koji je zabeležen na prostoru Gornje Mezije i Donje Panonije, sa mogućim radionicama za izradu ikona ovog kulta negde u Podunavlju, najverovatnije u Sirmijumu i Viminacijumu.

Hrišćanstvo je dugo prodiralo u rimske prostore

133. *Roman road cut into the rock of the Iron Gate*
133. *Rimski put usečen u stenu u Đerdapu*





134. Diana fort, East gate
134. Utvrđenje Dijana, istočna kapija

Danubian valley, most likely in Sirmium and Viminacium.

It took a long time for Christianity to be introduced in the Roman Empire across its borders. Persecution of Christians during the 3rd century and especially during Diocletian's reign, took away many lives. But after the Edict of Milan in 313, Christianity quickly spread among the army and civilians.

In the middle of the 4th century, there were many conflicts with religious background along the limes. Arianism had great influence in the Illyricum, especially because emperors like Constantius II were Arians. It was very strong in the eastern part of the Empire, while during the convocation in Rimini and Sirmium, it was proclaimed as imperial religion. In ecclesiastical polemics, Ursatius, an episcopo from Singidunum, distinguished himself, well known as an important Arian ideologist. His heirs also spoke for Arianism for a while, until it was forbidden by Theodosius I.

Christianity strongly held its positions at the limes. Singidunum, Margum, Viminacium and Aquae became episcopal seats. At the beginning, Christians in Moesia stood under Viminacium's episcopal jurisdiction. During the last decade of the 4th century, the arch-bishop of Thessaloniki gained authorizations referring to the Danubian provinces, while somewhat later, he was proclaimed supreme superior of the Illyricum by pope Innocentius I. The situation remained unchanged until Justinian I, who transferred the religious centre of Illyricum in

duž granice. Progoni hrišćana u III veku, a naročito u Dioklecijanovo vreme, odneli su mnogo poklonika nove vere. Međutim i nakon Milanskog edikta 313. godine, hrišćanstvo se brzo širilo među vojskom i stanovništvom.

Sredinom IV veka Limes je bio poprište verskih sukoba. Arijanstvo u Iliriku je imalo velikog uticaja, naročito što su vladari poput Konstancija II bili arijanci. Bilo je veoma snažno u istočnom delu države, a na saborima u Riminiju i Sirmijumu je čak proglašeno za državnu veru. U verskim raspravama naročito se istakao singidunumski episkop Ursacije, poznat kao značajan arijanski ideolog. Njegovi naslednici nastavili su da propovedaju arijanstvo još neko vreme, dok ga Teodosije I nije zabranio.

Hrišćanstvo je tada čvrsto zaposelo Limes. Singidunum, Margum, Viminacium i Aquae postali su episkopalna sedišta. U početku su hrišćani u Meziji bili pod jurisdikcijom episkopa iz Viminacijuma. U poslednjoj deceniji IV veka arhiepiskop Soluna dobija ovlašćenja koja su se odnosila na kontrolu nad podunavskim provincijama, a papa Inoćentije I ga nešto kasnije proglašava i za vrhovnog poglavara Ilirika. Takva situacija ostala je sve do Justinijana I, koji će novi religijski centar Ilirika uspostaviti u Justinijani Primi.

Najstariji tragovi hrišćanstva na Limesu potiču iz perioda IV veka nakon donošenja Milanskog edikta. U prve građevine sa jasnim hrišćanskim karakterom spada kripta – podzemna grobnica bogato dekorisana mermernim parapetnim pločama u Dijani, u neposrednoj blizini logora. U kripti je bio sahranjen visoki vojni službenik iz perioda Konstantina ili njegovih naslednika.

Tokom VI veka, u vreme Justinijana I, hrišćanstvo

Justiniana Prima.

The oldest traces of Christianity at the limes come from the 4th century, after the Edict of Milan. One of the oldest buildings with clear Christian character is a crypt – subterranean tomb from Diana, richly decorated with marble plates. It was discovered near the military camp. In the crypt, an important military officer was buried, from the period of Constantine or his heirs.

During the 6th century, during the reign of Justinian I, Christianity was spread among the soldiers. Many single-nave churches were built within military camps, also possessing their own baptisteria (Novae, Smorna and Taliata). It is also possible that some of the defensive towers were transformed into Christian chapels, like in Saldum, Ravna and Donje Butorke.

se naročito ukorenilo u vojsci. U utvrđenjima je zabeleženo podizanje niza jednobrodnih crkava, koje su imale i svoje krstionice (Novae, Smorna i Taliata), a moguće je da su neke odbrambene kule adaptirane u hrišćanske bogomolje, kao što je to urađeno u Saldumu, Ravni i Donjim Butorkama.

135. Streets in Požarevac, named after Roman cities
135. Ulice u Požarevcu koje nose imena rimskih gradova





136. Head of Jupiter Dolichenus, Karataš (Diana)
136. Glava Jupitera Dolihena, Karataš (Diana)



137. Heracles with Telephus, Singidunum
137. Herakle sa Telefom, Singidunum

A Vision of Limes Development

Since preliminary research was done in previous decades many of the sites have been almost completely destroyed or are seriously endangered. The best examples of many problems faced along The Danube are *Burgenae* (Novi Banovci) and *Lederata* (Ram). Roman *Lederata*, on the hill above modern Ram, is out of sight of the local population and is systematically looted. The trenches of looters who destroyed significant part of fortification are visible, even from the satellite.

The situation at the sites differs enormously. Some sites, like Singidunum are under modern settlements. Elements of a Roman legionary fort are under Kalemegdan Park and the Belgrade fortress. Roman city and surrounding cemeteries are under the modern city centre. The possibility for the presentation of antique architecture is fairly limited, but almost all the infrastructure still exists. On the other hand, Viminacium city and the legionary fort

Vizija razvoja Limesa

Od kada su prethodnih decenija izvršena preliminarna istraživanja, mnogi od istraživanih lokaliteta su skoro potpuno uništeni ili ozbiljno ugroženi. Najbolji primeri problema sa kojima se istraživači suočavaju duž Dunava su *Burgenae* (Novi Banovci) i *Lederata* (Ram). Rimska *Lederata*, na brdu iznad savremenog Rama, van vidokruga lokalnog stanovništva, sistematski je pljačkana. Pljačkaši su svojim rovovima koji su vidljivi čak i sa satelita, uništili značajan deo rimske fortifikacije.

Situacija se razlikuje od lokaliteta do lokaliteta. Neki su, poput Singidunuma pod savremenim naseljima. Ostaci rimskog legijskog utvrđenja nalaze se ispod parka Kalemegdan i Beogradske tvrđave. Rimsko naselje i nekropole su ispod sadašnjeg centra grada. Time je mogućnost za prezentaciju antičkog arhitekture prilično ograničena, ali skoro sva potrebna infrastruktura postoji. S druge strane, rimski grad i legijsko utvrđenje Viminacijuma su da-



138-139. Pontes view on the Trajans bridge
138-139. Pontes, pogled na Trajanov most

are away from modern settlements or communications. Nothing is visible above the surface, but the objects are well preserved. There are unlimited possibilities for the presentation, reconstruction and visualization, but the entire infrastructure will have to be built from zero. In the eastern section, sites are either under modern settlements or very close to them. Sites like Diana and Pontes are well preserved and have excellent possibilities for presentation. There is one especially interesting idea to use hologram technology for the visualization of the Roman Bridge without interfering with the navigation of modern ships.

Among the stakeholders in the Danube area, it is necessary to include The Electric Power Industry of Serbia in all major activities. It has facilities in the vicinity of some of the crucial archaeological sites. The Accumulative Lake Đerdap directly influenced the research of Roman Limes section because the rising water level resulted in dozens of sites being submerged.

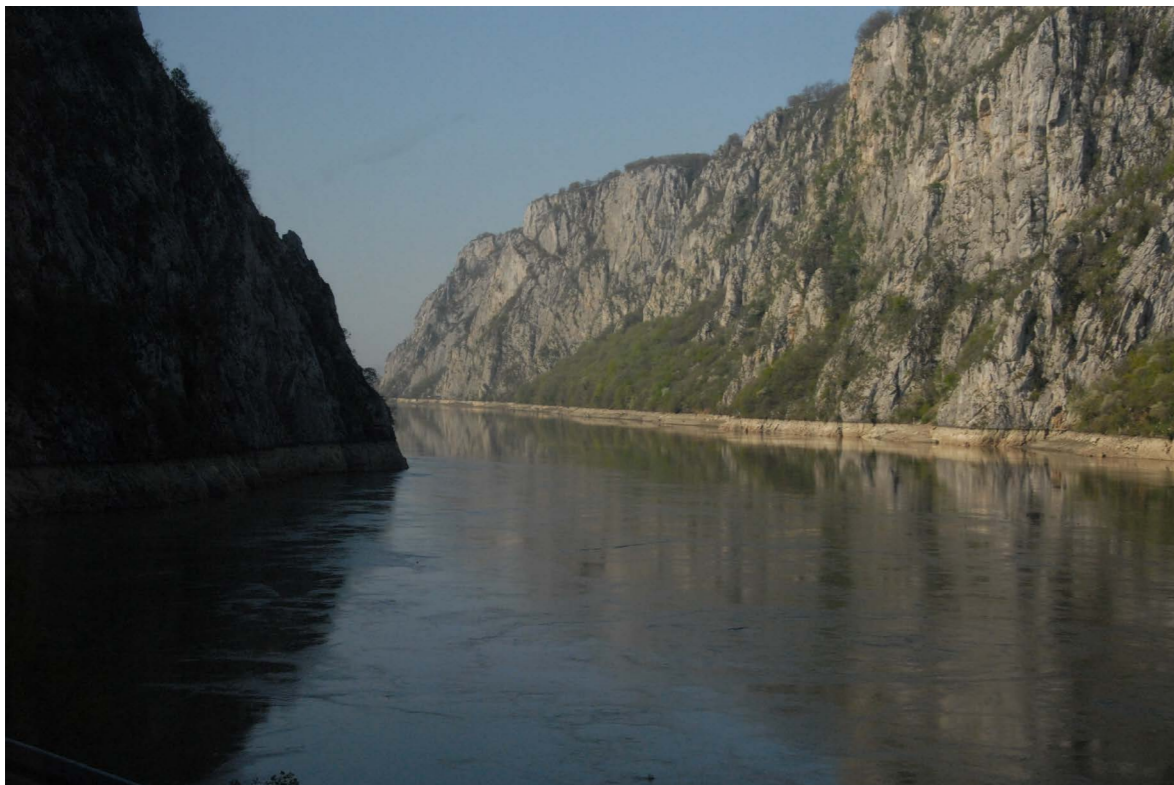
The Electric Power Industry of Serbia can, and often does, influence local and regional development and financing and can help with site management. Here, we should specially distinguish the thermoelectric power plants "Kostolac A" and "Kostolac B", the open pit coal mine "Drmno" and the hydroelectric power plants "Djerdap I" and "Djerdap II". Cooperation with the municipalities along the Danube is also of crucial importance to the nomination. The maintenance, protection, management and utilization of all sites depend a lot on local authorities. Therefore, it is also imperative to have good communication with the local population and to achieve their awareness of the importance that these sites have on the level of the entire humanity. The number of municipalities is large and they must all take part in the nomination of properties.

leko od modernih naselja ili značajnih komunikacija. Ništa nije vidljivo iznad površine, ali ispod zemlje objekti su dobro očuvani. Mogućnosti prezentacije, rekonstrukcije i vizualizacije su praktično neograničene, ali zato se sa infrastrukturnim elementima kreće od nule. Na istočnom delu Limesa, lokaliteti su ili pod savremenim naseljima ili vrlo blizu njih. Nalazišta kao što su *Diana* i *Pontes* su dobro očuvani i imaju odlične mogućnosti za prezentaciju. Posebno je zanimljiva ideja da se hologramska tehnologija iskoristi za vizuelizaciju rimskog mosta, što ne bi ometalo plovidbu na samoj reci.

Među zainteresovane institucije u oblasti Dunava, spada i Elektroprivreda Srbije koju je neophodno uključiti u sve veće aktivnosti. Objekti Elektroprivrede su u blizini nekih od ključnih arheoloških

140. Relief of the God Mithras, Smederevo (Vinceia)
140. Reljef boga Mitre, Smederevo (Vinceia)





141. Voyage through Iron Gate gorge on luxurious river cruisers is one of the most beautiful touristic attractions
141. Putovanje kroz Đerdapsku klisuru na luksuznim rečnim krstaricama spada među najlepše turističke atrakcije

The benefits of becoming a world heritage site are enormous. The development of tourism and the regional economy that normally follows this achievement greatly improves the quality of life of the local populations and brings international prestige. The obligations of the national and local government are now greatly enlarged. Financial expenses, as well as income, rise due to larger tourist traffic. However, all the efforts are futile unless the local population accepts the duty of the protection and management of the property. People living in the vicinity are the first line of defense, and without their cooperation central government has little chance to succeed in managing the site. Being a world heritage site also has limitations that sometimes discourage people from supporting the nomination. These limitations are primarily focused on the prevention of building activities and continuous maintenance. Since there is a 450 km line to be presented and managed, it is suggested to organize regional cen-

nalazišta. Stvaranje akumulacionog jezera Đerdap direktno je uticalo na istraživanje rimskog Limesa, jer je rast nivoa vode doprineo potapanju na desetine lokaliteta.

Elektroprivreda Srbije često utiče na lokalni i regionalni razvoj i finansiranje i može da pomogne u upravljanju lokalitetima. Ovde se posebno izdvajaju termoelektrane «Kostolac A» i «Kostolac B», površinski kop rudnika uglja «Drmno» i hidroelektrane «Đerdap I» i «Đerdap II».

Saradnja sa opštinama duž Dunava je od presudnog značaja za nominaciju. Održavanje, zaštita, upravljanje i korišćenje svih lokaliteta zavisi mnogo od lokalnih vlasti. Takođe, neophodna je dobra komunikacija sa lokalnim stanovništvom svesnim važnosti koju ovi lokaliteti imaju kao deo svetskog kulturnog nasleđa. Broj opština je veliki i njih treba uključiti u proces nominacije lokaliteta na listu svetske baštine.

Koristi od stavljanja na listu svetske baštine su ogromni. Razvoj turizma i regionalne ekonomije koji redovno prate ovaj uspeh u velikoj meri poboljšava kvalitet života lokalnog stanovništva i donosi međunarodni ugled. Obaveze republičkih i lokalnih vlasti su u tom slučaju u velikoj meri prošire-



142. Pontes and Trajans Bridge view from the river
142. Pontes i Trajanov most, pogled sa reke

ters for better control of the UNESCO properties. So far, the idea is to organize 4 centers as regional hubs. The centre for the Srem area could be Novi Sad. Belgrade and Viminacium could manage the central zone. Kladovo would be the eastern centre, controlling Iron Gates and the area downstream towards Bulgaria. There is also a suggestion to appoint one central institution that would be the coordinator for the entire area of the Limes. This tends to be a problem because none of the existing centers has sufficient financial or human resources

143. Diana, crypt to the north of the fort
143. Dijana, kriptna severno od utvrđenja



ne. Finansijski rashodi, kao i prihodi, rastu usled većeg turističkog prometa. Međutim, svi napori su uzaludni ukoliko lokalno stanovništvo ne prihvata obavezu zaštite i upravljanje imovinom. Ljudi koji žive u neposrednoj blizini su prva linija odbrane i bez njihove saradnje centralna vlast ima male šanse za uspeh u upravljanju lokalitetom. Biti lokalitet svetske baštine ima ograničenja koja ponekad mogu obeshrabriti ljude da podrže nominaciju. Ova ograničenja su prvenstveno usmerena na zabranu građevinskih aktivnosti i na obavezu stalnog održavanja lokaliteta.

Pošto 450 km Limesa zahteva mnogo aktivnosti koje podrazumevaju upravljanje i prezentaciju, predloženo je da se formiraju regionalni centri za bolju kontrolu nad lokalitetima pod zaštitom UNESCO. Do sada, ideja je da se organizuju četiri centra kao regionalna čvorišta. Centar za područje Srema može biti u Novom Sadu. Beograd i Viminacijum bi mogli upravljati centralnom zonom. Kladovo bi bio istočni centar, zadužen za kontrolu nad Đerdapom i delom nizvodno prema Bugarskoj. Takođe,



144. Pontes, remaining pilars of the Trajans Bridge before building of the hydroelectric power plant Đerdap I
 144. Pontes, očuvani stubovi Trajanovog mosta pre gradnje hidroelektrane Đerdap I

145. Diana fort, South gate
 145. Utvrđenje Dijana, južna kapija



146. Pontes, excavations of the remains of the Trajans Bridge
 146. Pontes, iskopavanja ostataka Trajanovog mosta

for this task. In ideal conditions, Government would found a new and specialized institution. However, this is unlikely in present financial and political environment.

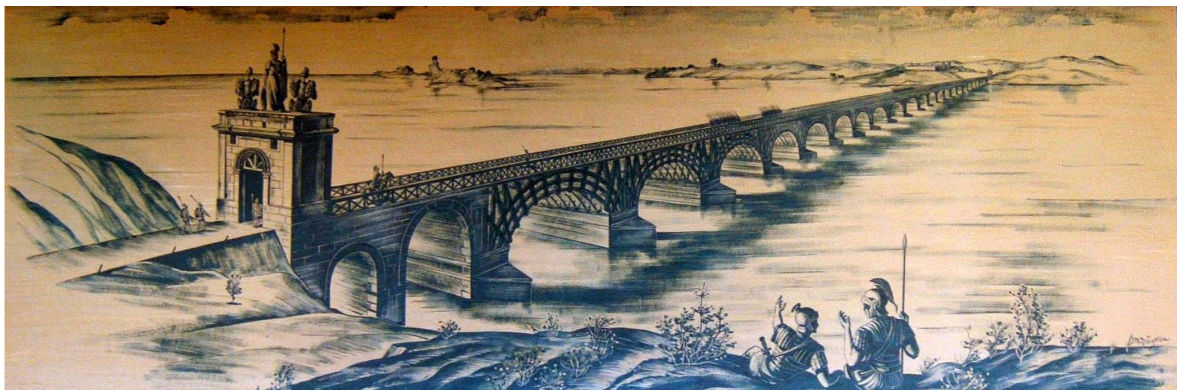
Being part of the World Heritage List is the ultimate recognition of international value. The responsibility of maintaining this status is probably an even harder task than the nomination itself. Whatever the outcome of all of our efforts, the preservation of the Roman heritage for future generations remains the true legacy of this project.

postoji ideja da se odredi ili osnuje jedna centralna institucija koja će biti koordinator za celo područje limesa. Međutim u aktuelnoj finansijskoj krizi ovo je malo verovatno.

Biti na listi Svetske baštine je krajnje priznanje međunarodne vrednosti. Odgovornost održavanja ovog statusa je verovatno još teži zadatak od same nominacije. Bez obzira na ishod svih naših napora, očuvanje rimskog nasleđa za buduće generacije ostaće primarni zadatak ovog projekta.

147. Pontes, view of the fort from the Danube
 147. Pontes, pogled na utvrđenje sa Dunava





149. Reconstruction of the bridge by engeneer E. Duprex in 1907.

149. Rekonstrukcija Trajanovog mosta inženjera E. Duprea iz 1907. godine

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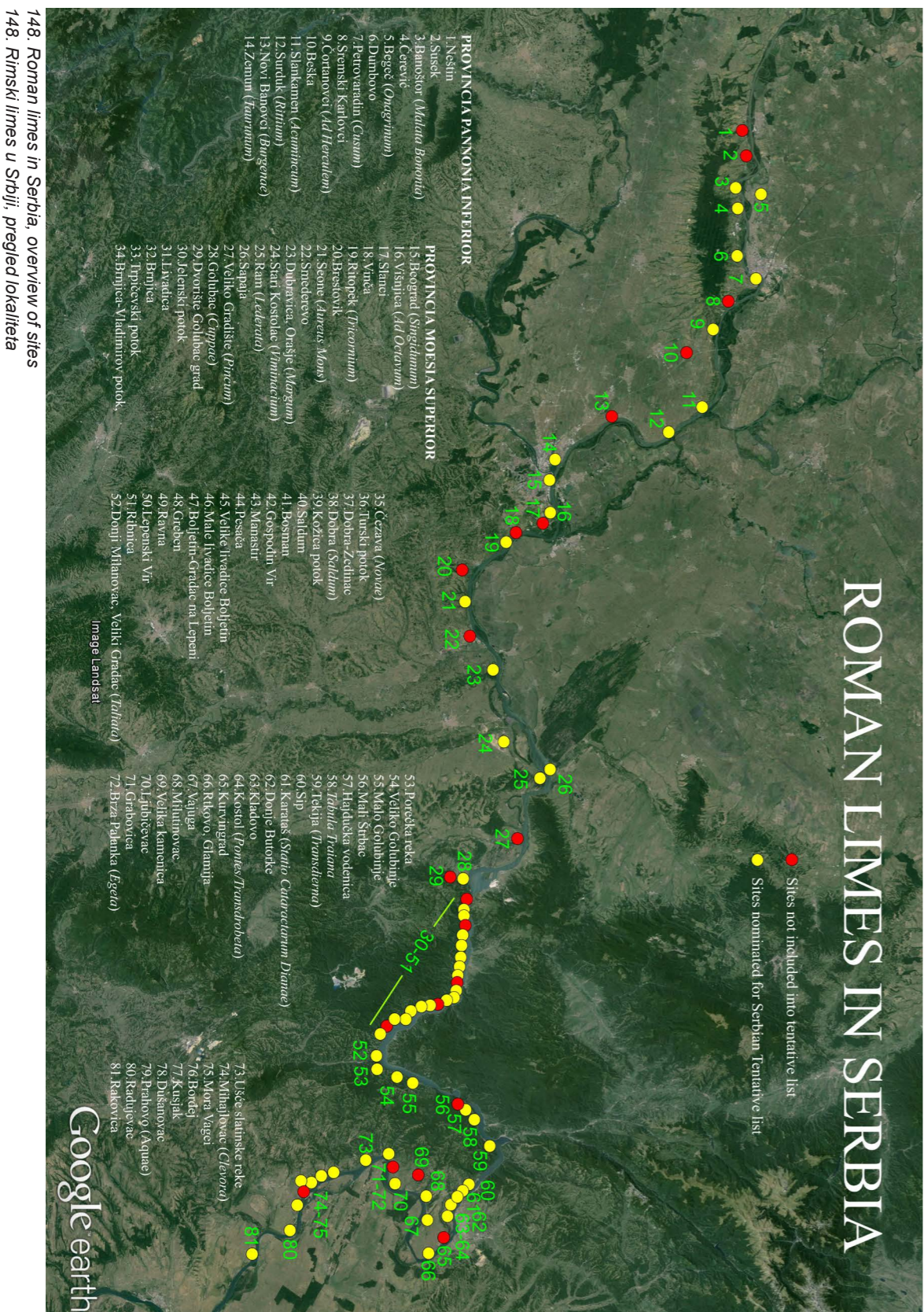


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