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**Studies
on Disasters, Catastrophes and the Ends of the World
in Sources**

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Catastrophes as an Inevitable Result of Civilisations Flow: Relocation and Dislocation of Historical Physical Structures at the Archaeological Site of Viminacium, Serbia¹

Introduction

Viminacium is an archaeological site located in the land of villages Stari Kostolac and Drmno near the town of Kostolac next to the City of Požarevac in the Eastern Serbia. Archaeological research of Viminacium has begun in 1882, and with the big break during the period between 1903 and 1972, it has been continuing to this day. Archaeological Park of Viminacium was opened in 2006.

Landscapes of lowland villages Stari Kostolac and Drmno are dominated not only by vegetation, agricultural lands and the Mlava river, but also by industrial facilities of the nearby thermal power plant “Kostolac B” and open pit coal mine of “Drmno” (Figs 41-42). Today’s exploration area of coal deposits was typical for rich lowland agricultural Stig in the late 1980s before the plant was built and the mine was open. It consisted of arable land planted with wheat, corn and other crop plants, vineyards and forests. Today, in this place one can see an open pit dent often wrapped with smoke coming from burning of still not excavated coal layers, partially re-cultivated high ground of overburden dumps, thermal power plant complex with coal deposits and other infrastructure facilities, large machinery, widespread drainage facilities over entire area, but also Viminacium presented ancient sites with modern buildings within the archaeological park.²

Most of the arable land above the remains of ancient Viminacium has already disappeared with the spreading of the open pit. Legal decision on establishing the archaeological site Viminacium prohibits surface coal mining in its territory.³ However, this decision covers an area of 355ha, while the remains of this ancient city are spread over more than 450ha. That is why a large number of still not excavated ancient buildings are at risk of future extinction.⁴ The only way to save the buildings is their relocation to other protected sites in the archaeological park.

Catastrophes, interpreted as destruction, irreversible deterioration or disappearance, can be found almost everywhere at the archaeological site of Viminacium. Its history records broken ancient objects in plowed fields, ruined buildings, looted tombs and buildings, as well as other structures that have been physically disappearing due to the exploitation of coal and electricity generation in thermal power plant. How can we search for an authenticity at this site, when its structures physically disappear even today? Maybe, the solution is in

¹ The article results from the project: Viminacium, Roman city and military legion camp – research of material and non material culture of inhabitants by using the modern technologies of remote detection, geophysics, GIS, digitalisation and 3D visualisation (no. 47018), funded by The Ministry of Education, Science and Technological Development of the Republic of Serbia.

² A. JOVČIĆ (ed.), *TE Kostolac B, postrojenje za odsumporavanje dimnih gasova: Studija o proceni uticaja na životnu sredinu*, Beograd 2010, p. 44.

³ ODLUKA o utvrđivanju lokaliteta Viminacium u ataru sela Stari Kostolac za arheološko nalazište, *Službeni glasnik RS* 102 (2009).

⁴ M. MAKSIN *et al.*, *Održivi razvoj turizma u Evropskoj uniji i Srbiji*, Beograd 2011 (hereinafter referred to as: MAKSIN *et al.*, *Održivi razvoj turizma*), p. 342.

perceiving the site as a result of an inevitable civilisations flow which shows us that all the historic periods are equally important and equally authentic in their own way.

Civilisation Flows and the Catastrophes in Viminacium

“A civilization is a heritage of beliefs, customs, and knowledge slowly accumulated in the course of centuries,”⁵ and the places with such a cultural and historical complexity like area of Kostolac has, are very rare.⁶ The complexity resulted from the passage of different civilisations throughout the history of this area. The continuity of life here can be traced back to the 8th millenium, after which various cultures developed, like “Kostolac culture”, as well as one that bore “Kličevački idol”.⁷ Viminacium, the capital of Roman province Moesia Superior or Upper Moesia, (Moesia Prima in later antiquity) and the important legionary camp, was founded in the 1st century AD. The most significant contribution to the formation of the first Roman settlement had a permanent military garrison that built the fortress at the mouth of the Mlava river into the Danube, probably in the beginning of the 1st century, and arrivals of the Romans on the Danube, as a place of defence of the northern border of province. The assumption is that in second half of the 1st century, veterans and retailers began to settle around the camp, and that they formed the first community of Roman citizens in Viminacium, actually a big settlement.⁸ During the following century, Viminacium was flourishing, but later suffered heavily form destruction and conquest, and in the 7th century it finally ceased to exist.⁹ Remains of the ancient Viminacium were found on both banks of the river Mlava. On the hill near the left bank, above the present-day village of Stari Kostolac, there was a medieval town of Braničevo. Whole area of medieval Braničevo was one of the most important areas of the Serbian lands in the Middle Ages.¹⁰ The first survey of coal deposits in the village Stari Kostolac started in 1870, and it is considered to be the beginning of the industrial age in Serbia.¹¹ During the 1881, after the decade of underground exploitation, the share of Kostolac mined coal in total Serbian production was as high as 90%.¹² The biggest thermal power plant in Serbia in that period was built in 1930 in Belgrade, and designed to use only Kostolac coal as a fuel.¹³ Industry was often the driver of creating the urban settlements throughout the history. So was the mine in the village of Stari Kostolac. The town of Kostolac was founded by the descendants of village miners. With the construction of power plants and open pits, old mines were closed one by one during the next years, and in 1966 underground exploitation of coal was stopped.¹⁴ Today Kostolac coal basin covers an area of approximately 400km²,¹⁵ and power generation in Kostolac thermal plants makes 15% of the production of all the electric power facilities in Serbia.¹⁶

⁵ A. DE SAINT-EXUPERY, *Flight to Arras*, (trans. L. Galantiere), New York 1942 (hereinafter referred to as: DE SAINT-EXUPERY, *Flight*), p. 112.

⁶ Д. СПАСИЋ-ЂУРИЋ, Културно-историјска вертикала Костолца, [in:] М. МИЛОСАВЉЕВИЋ (ed.), *Стратегија одрживог развоја града Пожареваца 2009-2013 године*, Пожаревац 2009, p. 14.

⁷ *Ibidem*, pp. 15-17.

⁸ М. МИРКОВИЋ, *Rimski gradovi na Dunavu u Gornjoj Meziji*, Beograd 1968 (hereinafter referred to as: МИРКОВИЋ, *Rimski gradovi*), p. 56.

⁹ *Ibidem*, pp. 63-73.

¹⁰ П. ШПЕХАР, Средњовековни налази из области Браничева, *Гласник Српског археолошког друштва* 23 (2007), p. 363.

¹¹ М. ВУЧЕГИЋ, *Из историје српских угљенокопа: Јаме костолачког мајдана*, Београд 2010, p. 2.

¹² *Ibidem*, pp. 14-18.

¹³ *Ibidem*, p. 30.

¹⁴ *Ibidem*, p. 29

¹⁵ М. МИЛОСАВЉЕВИЋ (ed.), *Стратегија одрживог развоја града Пожареваца 2009-2013 године*, Пожаревац 2009, p. 19.

¹⁶ ЈП. ЕЛЕКТРОПРИВРЕДА СРБИЈЕ, *Технички годишњак 2011*, Београд 2012 (hereinafter referred to as: ЕЛЕКТРОПРИВРЕДА СРБИЈЕ, *Технички годишњак*), p. 4.

In the list of Viminacium catastrophes one can put historical destructions and conquests, taking the historical building materials away, looting of the archaeological heritage, but also something that is very actual in last few decades, and that is relocating the buildings, other structures, and their elements due the advancement of the open pit.

Historical Destructions

During its existence, Viminacium was repeatedly destroyed and rebuilt on the foundations of the old buildings. According to the conclusions of the research during the 70s of the 20th century, it suffered first destruction in the end of the 1st century AD when, just established settlement, mostly of wooden architecture, was burned in a fire.¹⁷ At the beginning of the second half of the 3rd century, after the revolt in the fortress of Viminacium, the emperor Gallienus punished the rebels in Moesia, citizens and soldiers,¹⁸ and probably destroyed Viminacium on that occasion. One more destruction probably happened in the end of 4th century, when the Goths coming from Western Europe, on their way to Italy, crossed across Viminacium.¹⁹ The Huns destroyed and robbed the city, and the citizens were taken into captivity in AD 441-443. In the end of the 6th century Viminacium was conquered by the Avars, and in the beginning of the 7th century, Viminacium was mentioned as a Byzantine military base, that served for the war against the barbarians north of the Danube. The city ceased to exist during the 7th century AD, under the attacks of the Slavs.²⁰

The Historical Building Materials Taken Away

Using historical building materials for other, contemporary purposes, which might be called “recycling building materials within the community” and actually some kind of sustainability has existed in all times, and “has been customary in all civilizations.” Building materials have been re-used, and buildings got new purposes. After the beginning of the decline and crisis of the Roman Empire, from the 3rd century AD, even Rome became one “huge recycling yard”. Academic interpretations of the material remains and their cultural significance had not been formulated then and actually had not been of any importance.²¹

Historical destructions, but also centuries of Viminacium settlement deconstructions, and removal of the building material after the disappearance of the city, that lasted until beginning of the 21st century and the introduction of the permanent protection of the site, are the reasons why today a very little over-ground parts of its architecture exist.²² Even in the 19th century European authors recorded use of the ruins of the luxurious Roman city as an ordinary quarry.²³ Byzantine, Bulgarian and Serbian fortresses, Serbian churches, but also a large number of houses in nearby rural and urban settlements, were built with the construction materials that originated from the Viminacium ruins (**Fig. 43**).²⁴

¹⁷ LJ. ZOTOVIĆ, Viminacium, *Arheološki pregled* 15 (1973), p. 50.

¹⁸ MIRKOVIĆ, *Rimski gradovi*, p. 72.

¹⁹ М. ПОПОВИЋ, Светиња, нови подаци о рановизантијском Виминацијуму, *Старинар* XXXVIII (1987), pp. 1, 5.

²⁰ MIRKOVIĆ, *Rimski gradovi*, pp. 63, 65, 71-73.

²¹ D. RODWELL, *Conservation and Sustainability in Historic Cities*, Oxford 2007, pp. 189-190.

²² First researcher of Viminacium, Михајло Валтровић, wrote in the end of the 19th century, after his excavations, that the walls of the buildings that would be excavated in future would be rarely higher than 1m. See in: М. ВАЛТРОВИЋ, Откопавања у Костолцу, *Старинар* 1/1 (1884), p. 8.

²³ Ф. КАНИЦ, *Србија: Земља и становништво од римског доба до краја XIX века II* (trans. Г. Ерњаковић), Београд 1989 (hereinafter referred to as: Каниц, *Србија*), p. 542.

²⁴ КАНИЦ, *Србија I*, p. 179; С. ЦВЕТКОВИЋ, Античка пластика Смедеревске тврђаве – преглед досадашњих истраживања, *Смедеревски зборник* 2 (2009), pp. 29-44.

Travel writer and ethnologist Felix Kanitz, during his long journeys with significant recordings of the Serbian towns and villages, churches, fortresses and archaeological sites, in the second half of the 19th century, after being a witness of Viminacium destructions done by local residents, wrote about huge quantities of dug Roman building material prepared for dragging. He wrote about the four thousands of full wagons that transported Roman brick and stone to nearby places,²⁵ but also about the beautiful relieved sarcophagus in which he found residing pigs.²⁶

Over time, the dispersal of the Roman brick and stone turned into crime, actually into trade of the movable cultural properties in and out of the state.

Looting and Trade of Movable Cultural Properties

Looting of archaeological treasures is a characteristic of all the civilisations and it seems it will never be stopped. The Romans looted Greek tombs and temples, the Vandals robbed Rome, European colonialists robbed almost everything. That led to the development of the modern market of antiquities in the 18th century.²⁷

Until the beginning of the 21st century, the introduction of the permanent protection of the site and the revival of the site by the arrival of the tourists, digging of Viminacium was a part of residents' everyday life in the nearby villages. For decades, the tombs were looted in search for gold and other treasures that were sold inside and outside of Serbia (**Fig. 44**).

Felix Kanitz wrote that local people offered him many finds, bronze idols, fibulae, bracelets, pins, lamps, vessels etc and always too expensive.²⁸ Mihailo Valtrović, researcher of Viminacium who conducted the first official archaeological research in 1882, wrote that, in that period, about two hundreds of graves were opened and broken up, and that everything that was found there was taken away.²⁹

Relocation of Immovable Cultural Properties

Today, when there are no classical wars of conquest, when Viminacium is physically protected and the looting and delivery of building material stopped, historic buildings are destroyed as a result of a coal exploitation. Some of them cannot be saved, but in trying to save as much as it is possible, the only solution is the relocation of buildings and dislocation of wall paintings to the other safe places. One of the main issues that arise is the preservation of their authenticity.

International charters and declarations in the field of preservation and protection of cultural and historical heritage,³⁰ as well as the conventions³¹ and guidelines³² for the

²⁵ Каниц, *Србуја I*, p. 179.

²⁶ *Ibidem*, p. 181.

²⁷ R. Atwood, *Stealing History: Tomb Raiders, Smugglers, and the Looting of the Ancient World*, New York 2004, p. 11.

²⁸ Каниц, *Србуја I*, p. 178.

²⁹ М ВАЛТРОВИЋ, Откопавања у Костолцу, *Старинар* 1, 1 (1884), p. 3.

³⁰ Most cited and with most influence are The Venice Charter from 1964, and The Nara Document on Authenticity from 1994. See: ICOMOS International, International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter) 1964, http://www.international.icomos.org/charters/venice_e.pdf (accessed 28 September, 2012), and ICOMOS International, The Nara Document on Authenticity 1994, <http://www.international.icomos.org/charters/nara-e.pdf> (accessed 28 September, 2012).

³¹ UNESCO, Convention Concerning the Protection of the World Cultural and Natural Heritage 1972, <http://whc.unesco.org/archive/convention-en.pdf> (accessed 28 September, 2012).

³² First version of Operational Guidelines for the Implementation of the World Heritage Convention was adopted in 1977, and the last one in 2011. See: UNESCO, Operational Guidelines for the Implementation

implementations of these conventions, brought in the 20th century and defined later in the 21st century, various terms and conditions that are put in front of the monuments and sites. However, contemporary theorists and historians in this area, under the influence of conservation practices which proved that any rules cannot be taken as undisputed, because every monument or place is unique and requires different approach, have always had different attitudes toward the conservation and preservation of cultural and historical heritage.

The *Venice Charter* adopted in 1964, emphasised that the monument was inseparable from the history witness of which it was, as well as from the environment it was located in, and that moving the monument or any part of it could not be allowed unless the preservation of the monument had required the process, or it was justified by state or international interest of exceptional importance.³³ Coal exploitation and electricity production in Kostolac, if we know that they are important factors in the overall operation of power system of Serbia and actually make up 15% of all the capacities,³⁴ surely are the state interest. Therefore, it is necessary to look up for the compromise solutions, which include relocation of the threatened ancient structures from the area of the open pit mine to the protected area of the archaeological park.³⁵

Since 1960s, there were many attempts in the world to preserve the wall paintings in situ, as well as all of its layers, in order to retain the integrity of the architectural ensemble and the painted surface. Today, separation of the paintings from the wall is considered the last move, the one that is done only when there is no other possibility for their preservation *in situ*.³⁶ However, leaving the paintings *in situ* in threatened areas of Viminacium, due to open pit progression, would mean their complete destruction. In the case of Viminacium, dislocation of the paintings can be considered a necessity and fully justified procedure. The *Italian Restoration Charter* from 1972 (*Carta Italiana del Restauro*) tells about the reasonable separating of the paintings from the walls.³⁷

The Facts

Due to the expanding of the open pit mine “Drmno”, three ancient buildings were relocated so far in Viminacium. First one was excavated and relocated in 2003 and it was an aqueduct that was directly threatened by the progress of the open pit (**Fig. 45**). Second building was another part of the water supply system of ancient Viminacium, actually water cistern with the associated aqueducts, and the excavation and relocation happened in 2008. Both buildings were cut into segments and in steel boxes moved to the protected zone of the park. Third building represents the complex of three brick kilns, excavated during big period of preventive archaeological excavations, before and during the building of the thermal power plant “Kostolac B”, from 1977 to 1992, together with other brick and ceramic kilns, graves, tombs, and different buildings. The complex is situated in the area of the power plant, and until few years ago it was not directly affected. The plans for developing an industrial facility, very important for the protection of the environment from the harmful substances thermal

of the World Heritage Convention 2011, <http://whc.unesco.org/archive/opguide11-en.pdf> (accessed 28 September, 2012).

³³ ICOMOS International, *International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter)* 1964, http://www.international.icomos.org/charters/venice_e.pdf (accessed 28 September, 2012),

³⁴ ЕЛЕКТРОПРИВРЕДА СРБИЈЕ, *Технички годишњак*, p. 4.

³⁵ МАКСИН *et al.*, *Održivi razvoj turizma*, Београд 2011, p. 345.

³⁶ L. RAINER, *The Conservation of decorated Architectural Surfaces, Some Perspectives, Conservation Perspectives* Fall 2010 (2010), p. 6.

³⁷ Ч. БРАНДИ, *Теорија рестаурације* (trans. Б. Шекарић), Београд 2007, p. 187.

power plant produces, made the management of the archaeological park start the projects for relocation of the complex. The relocation is in the process today. The project of the relocation anticipated the making of special steel construction, actually the platform with no deformation, consisting of steel elements which have to be pushed below the each brick kiln, so as to form a continuous surface. The construction, with the help of some temporary steel elements, should be lifted up and moved to a new location. This way of the relocation is really unique, so, the experience gained from this process will surely help in future in similar dangerous situations.³⁸

The fact that wall paintings of the ancient period in Serbia are not much preserved makes Viminacium with its specially preserved painted late ancient tombs and large number of the fragmented wall paintings from different residential and public Roman buildings³⁹ even more important archaeological site. The wall paintings from Viminacium hold the special place in the entire rich fund from this site.⁴⁰

The most preserved wall paintings were detached from the walls and exposed in the National Museum in Požarevac and in the exhibition spaces of the archaeological park (**Fig. 46**). Only one tomb with its wall paintings was kept in situ and was presented in the archaeological park (**Fig. 47**).⁴¹ Wall painting can be dislocated in three ways. First one is called *stacco a massello*, and represents detaching of the painting with the wall holder. Second way, *stacco*, is separating the painting together with layers of mortar. The third one, called *strappo*, represents separating the painting layer only.⁴² In Viminacium, all the paintings were dislocated by use of the *stacco* method (**Fig. 48**).

The causes of the damages on wall paintings can be moisture, salts, microflora, plants, insects and other animals, air pollutants, dust, but also the physical influences of a man.⁴³ Viminacium tombs were very often the victims of the demolition, with an aim of stealing the gold and other treasure from the tombs. Those which were painted were demolished most severely, because of the physical impact of the robber, but also due to the changing of the microclimate of the tomb inner space. Even the archaeological excavations lead to the microclimate imbalance in the tomb or some other structure, and then a sudden drying of the painting can happen, together with the migration of salts from the soil through all the layers of the painting. Wall paintings are usually found in tombs, or other underground structures, exposed to a constant temperature and relative humidity, and so they are often in much better condition than those found in overground structures,⁴⁴ which are, in case of Viminacium, most exposed to the weathering impact with harmful substances that pollute the air, water and soil, and lead to deterioration of the paint layer and the plaster structure. The negative effects of power plants and its facilities are actually reflected in excessive emissions of harmful substances and the production of waste materials and heat. According to the standards and the experiences of the European Union, Kostolac area belongs to

³⁸ Information received from the archives of the Institute of Archaeology.

³⁹ Concerning this issue see: D. ROGIĆ, D. DESPOTOVIĆ, B. MILOVANOVIĆ, *Fragments of wall paintings discovered in thermae from Viminacium*, *Archaeology and Science* III (2007), pp.75-82.

⁴⁰ M. KORAĆ, *Slikarstvo Viminacijuma*, Beograd 2007, p. 9. On all the tombs discovered in Viminacium until today see in the same publication.

⁴¹ On the wall paintings exhibited in archaeological park see in the paper: J. ANĐELKOVIĆ GRAŠAR, D. ROGIĆ, E. NIKOLIĆ, *Viminacium, Archaeological park – Modern Code for Re-reading the Past of the Roman City and Legionary Camp*, in this publication.

⁴² P. MORA, L. MORA, P. PHILIPOT, *Conservation of Wall Paintings*, London 1984 (MORA, MORA, PHILIPOT, *Conservation*), p. 247.

⁴³ O.P. AGRAWAL, R. PATHAK, *Examination and Conservation of Wall Paintings: A Manual*, New Delhi 2001, pp. 43-70.

⁴⁴ S. DRAGUTINOVIĆ KOMATINA, *Konzervacija zidnih slika u grobnicama i pećinama*, Beograd 2004, p. 9.

polluted and degraded environment, with negative impacts on humans, wildlife and quality of life.⁴⁵

Keeping the Authenticity

Dislocation of wall paintings is irreversible process which changes the appearance of the building permanently and negatively affects the building integrity.⁴⁶ Mostly, the dislocated paintings are exhibited in museums, so from this setting we cannot know in what kind of a building they were located, whether they were part of the ceiling, inner or outer wall or some other architectural element. Also, a large number of fragments of wall paintings never come to the exposition.

“The spatial patterning of archaeological remains reflects the spatial patterning of past activities.”⁴⁷ The life and the presentation of the wall paintings, after their dislocation from the physical structures of Viminacium, represents the loss of the original archaeological context. “The paintings become only art, and lose their inherent cultural value”⁴⁸ “Interpreting material culture depends upon archaeological context. Without such context, artifact analysis is limited to aesthetic opinion and market value.”⁴⁹ The characteristics of the wall paintings can be divided into two groups. First one include aesthetic characteristics, and the other one is connected with their technological features. For this study, the latter is much more important, referring to painting technique and materials used in the preparation of the wall painting support, i.e. the plaster and the way on which the painting is created, considering that only including all of these, with the accompanying wall, the archaeological context can be visible and comprehensible.

It is important for this study to say that the authenticity is not the same as originality. “It denotes a historical object, whether or not damaged or altered, whereas the term *originality* refers to its first state.”⁵⁰ If we speak about keeping the authenticity of the ancient Viminacium, we can say that there are many meanings of authenticity,⁵¹ and that there is no need for a building or a painting to have all of them to be valuable. The authenticity of the creator (the hand of the master), material (the original material), function (the original purpose), concept (the idea of the creator), history (the history of the artefact), ensemble (the integrity of a whole) or context (the integrity of the location) all can exist together or separated. Relocated buildings and detached wall paintings in Viminacium still have the authenticity of the creator, material, concept and history. The buildings can also have the authenticity of function if we revive it and the authenticity of the ensemble if we dislocate them in whole. The paintings can have the authenticity of ensemble if we dislocate it with the tomb or parts of the buildings it belongs to. The only authenticity that is lost forever is the authenticity of the context.

⁴⁵ Т. МАРИЧИЋ, Б. СТОЈАНОВИЋ, Уређење и заштита простора: Животна средина, [in:] Н. СПАСИЋ (ed.), *Просторни план подручја Града Пожареваца, Нацрт просторног плана, Књига 1: Стратешки документ, Београд, Пожаревац 2012*, p. 51.

⁴⁶ MORA, MORA, PHILIPOT, *Conservation*, p. 246.

⁴⁷ M.B. SCHIFFER, Archaeological Context and Systemic Context, *American Antiquity* 37/2 (1972), p. 156.

⁴⁸ A. FORD, Americas, Central: Classic Period of Mesoamerica, the Maya, [in:] D.M. PEARSALL (ed.), *Encyclopedia of Archaeology* 1, Waltham, MA 2008, p. 156.

⁴⁹ B.J. LITTLE, Americas, North: Historical Archaeology in the United States, [in:] D.M. PEARSALL (ed.), *Encyclopedia of Archaeology* 1, Waltham, MA 2008, p. 302.

⁵⁰ W. DENSLAGEN, *Thoughts About Originals And Imitations: Authenticity and Spirituality, Paper presented at International Workshop of the Cluster of Excellence: Asia and Europe in a Global Context, Heidelberg, Germany, June 16, 2008*, http://www.asia-europe.uni-heidelberg.de/fileadmin/Documents/Events/Wim_Denslagen__The_Dual_Meaning_of_Authenticity.pdf (accessed 26 September, 2012) (hereinafter referred to as: DENSLAGEN, *Thoughts*), p. 3.

⁵¹ G. ASHWORTH, P. HOWARD, *European Heritage. Planning and Management*, Exeter 1999 (hereinafter referred to as: ASHWORTH, HOWARD, *European Heritage*), p. 44.

Moreover, we can say that the meaning of the word authenticity depends on the way we want to describe the things from the past. All works have some kind of authenticity, depending on the time in which we contemplate them.⁵² “Fighting battles in period costume while visiting heritage sites is an authentic part of the 20th century society.”⁵³ That brings us to the conclusion that the relocated buildings and dislocated paintings are actually the authentic works of the modern world in which they were created as such.

We can mention ancient Herculaneum here, Roman town that was buried under volcanic lava for centuries, since the eruption of Vesuvius in AD 79, which naturally conserved the structures. Since the excavation of the town, started in the 18th century, it has begun to decline due to the weather conditions and the passage of a large number of the visitors. A lot of Herculaneum wall paintings are in the museum today, but there are also a lot of them under the open sky, exposed to atmospheric conditions that make them slowly deteriorate. There are two solutions here. One is to relocate all of the wall paintings to the museum, leave the walls empty, and then decorate them with copies. That would bring us to the loss of the context authenticity of the painting, but also the ensemble authenticity of the wall that is left after the painting detachment. The other one is to cover the whole location of the town or its parts with the buildings that have painted walls with the protective structure. This would take away the context authenticity of the whole ancient town in its relation to the surroundings.⁵⁴ There is no correct solution. In both cases, the loss of the authenticity of the context is inevitable.

There are many examples of buildings relocated due to the national and international interest. One of the most important examples is the relocation of twenty-two historical monuments and complexes of ancient Nubia, that happened in a big campaign during the period from 1960 to 1980, because of building of the big Aswan Dam on the Nile, that could have caused the increasing of the water level above the monuments. Among them there were two Egyptian temples in Abu Simbel built during the 13th century BC that had to be moved 208 metres horizontally and lifted up to a new location 65m-67m above the original one.⁵⁵ They lost its context authenticity, because the original rock, in which the temples were carved in, was replaced with the new location with artificial hills. New location did not have the original close contact with the Nile and needed different approaches to the site for the visitors and landscape regulation, which changed their context authenticity as well, but gave the complex new aesthetic value.⁵⁶ From that time we can see the temples as one of the most important and magnificent open-air and indoor museum.⁵⁷ The monuments, although relocated, have been on the UNESCO World Heritage List since 1979. This saving of the historical buildings is an extraordinary example of the heritage transmission to the next generations.⁵⁸ The basic aim of the preserving and protection of the historical monuments is keeping them visible and accessible to all next generations, which is actually more important than keeping all the meanings of authenticity.

The most important example of relocation of buildings in Serbia due to the national and international interest is the process that happened in the area of the Iron Gates along the Danube, where the monuments could have been sunk by the increasing water level after the closing of the hydroelectric dam. In these campaigns Trajan's table with the part of the Roman roads from the beginning of the 2nd century AD was relocated in 1969, and the important Mesolithic settlement Lepenski Vir, from the period between 7th and 6th millennium was

⁵² DENSLAGEN, *Thoughts*, pp. 1-4.

⁵³ ASHWORTH, HOWARD, *European Heritage*, p. 44.

⁵⁴ G. RIZZI, Preface, [in:] J. ASHURST (ed.), *Conservation of Ruins*, Oxford 2007, p. xxii.

⁵⁵ L. BERG, The Salvage of the Abou Simbel Temple, *Monumentum* 17 (1978), p. 44.

⁵⁶ *Ibidem*, p. 51.

⁵⁷ *Ibidem*, p. 54.

⁵⁸ *Ibidem*, p. 25.

relocated in the period from 1970 to 1971. New location of Lepenski Vir was determined next to the original one, in the same ambient, without changing orientation, with a slight horizontal moving and lifting for 29.50m.⁵⁹ For rescuing the Emperor's Trajan Table that was built during his campaigns against the Dacians, two solutions were proposed. The one that promoted the relocation of the table was realised. The other solution was about fencing the site with the concrete dam of funnel shape, so that visitors could go downstairs to the table. The solution kept the table in its original place, but it meant that the table would be 20m lower than the expected Danube level. This was an attempt to keep the authenticity of the context, but it actually could have brought the loss of the context, which most important characteristic was the place of the table above the river. Thus, the rock with the table was cut and lifted up 20m above the old location. The relation to the new level of the river remained the same.⁶⁰ However, the Danube flooded the Roman road that was passing by the table, built also by Trajan in the same campaign. Until the period of lifting, one could see the table from the road which was still in function then. Today, when there is no road, the table is seen only from the Danube and cannot be approached by land. So, we can say that the creator authenticity is lost, rather than the context one.

However, although the international and national reasons for relocating the historical buildings and dislocating the paintings have to be respected, as inevitable processes the modern civilisation brought to the world, it is also certain that some of them could have been better aligned with preserving the cultural and historical heritage. The planning of the industry is connected to the disposition of the natural resources, but it always has to consider the *distribution* of the historical heritage. The compromises have to be made. Relocation does not always have to be the only solution. Therefore, the open pit mine "Drmno" could have been situated and the thermal power plant could have been built away from the Viminacium area. The Kostolac coal basin is nearly ten times bigger than the area of Viminacium. The protected zone of Viminacium covers 80% of the city. Other 20% has been at risk since the open pit started its production. Thus, the open pit surely could have been located that 20% of area away, actually that area, which is only the fiftieth part of the entire basin area, could have been not planned for exploitation. But, even if the pit was little away from Viminacium, there is a problem with the thermal power plant location, that is built on the Roman cemetery, that is too close to the protected area of Viminacium, and so pollutes the air and the environment severely. Its location should have been also considered better when the state planned the industry facilities distribution. Everything said before imposes the conclusion that the awareness of the need to preserve the cultural and historical heritage was not developed enough during the planning of the industrial activities in the area of Viminacium. Positive example is the ancient archaeological site of Delphi in Greece, dated from the 6th century BC, where the preservation of cultural and historical heritage in the decisive moment was placed above the important interests of the state. The already initiated plans for building a large aluminum plant next to the site was abandoned, with the help of UNESCO, who urged the Greek government to seek a new location for the plant, in order to avoid the possible causes of deterioration of monuments due to the plant construction and its future operations. This was done, and in 1897 the Delphi was inscribed to the World Heritage List.⁶¹

⁵⁹ М. ЧАНАК-МЕДИЋ, Пројекат за спасавање Лепенског Вира, *Саопштења VIII* (1969), р. 12.

⁶⁰ Д.СТ. ПАВЛОВИЋ, Измештање Трајанове табле и други заштитни радови у подручју Ђердапа, *Саопштења VIII* (1969), рр. 58-59, 60.

⁶¹ UNESCO, *Success Stories: Finding solutions*, <http://whc.unesco.org/en/107> (accessed 28 September, 2012).

Conclusion

The development of modern mining industry in the second half of the 20th century is considered the most significant intervention in landscape.⁶² After nearly two millennia from establishing Viminacium, and a lot of catastrophes that happened here, the mining development, as an inevitable catastrophe of the modern civilisation, has caused the most destruction to this Roman city which bigger area has been slowly disappearing. Rescuing entire buildings and wall paintings, with their displacement and dislocation to other locations, has become common practice here.

Cultural and historical heritage is an assemblage of traces from different periods which are put in order as layers, and where each of them is transformed with the next one.⁶³ As every previous generation contributed to the area where it was settled, thus our and next generations will bring equally important contribution.⁶⁴ Archaeological site of Viminacium is a unique area that properly reflects the evolution of society, technology and the relationship with nature, culture and history (**Fig. 50**).

Civilisation can be defined as a heritage of elements existence of which is sometimes difficult to logically justify.⁶⁵ Some landscapes are not necessarily beautiful, but are reminders of history and lessons for the future, and yet, whether we like it or not, part of our heritage.⁶⁶ Viminacium integrity can be perceived as an example of the constant human struggle for survival of space and culture caused by the alternation of civilisations that carry progress or catastrophes. It is placed in entire life of Viminacium, and parts of it are catastrophes and destructions, the relocation of buildings and dislocation of wall paintings, that along with all the other life processes which are taking place in Viminacium, make its own authentic history.

⁶² J. ŠPULEROVÁ, F. PETROVIĆ, Historical Agricultural Landscape as a Subject of Landscape Ecological Research, *Hrvatski geografski glasnik* 73/2 (2011), p. 156.

⁶³ P. JAIN, Preserving Cultural Landscapes – A Cross-Cultural Analysis, [in:] C. GOETCHEUS, E. MACDONALD (eds), *Exploring the Boundaries of Historic Landscape Preservation: Proceedings of the Twenty-ninth Annual Meeting of the Alliance for Historic Landscape Preservation 2007 Athens*, Georgia, Clemson, SC 2008, pp. 15-16.

⁶⁴ D. RODWELL, *Conservation and Sustainability in Historic Cities*, Oxford 2007, p. 72.

⁶⁵ DE SAINT-EXUPERY, *Flight*, p. 112.

⁶⁶ G. FAIRCLOUGH, Europe's landscape: archaeology, sustainability and agriculture, [in:] G. FAIRCLOUGH, S. RIPPON (eds), *Europe's Cultural Landscape: archaeologists and the management of change*, Brussels 2002, p. 5.



Fig. 41. Arable land of the village Stari Kostolac with the thermal power plant “Kostolac B” in the back, and two presented archaeological sites of Viminacium on the right – the protected area of Viminacium (photo Nenad Petrović)



Fig. 42. Arable land of the village Stari Kostolac with the open pit coal mine “Drmno” (photo Nenad Petrović)



Fig. 43. The spolia – a stele probably originated from Viminacium, built in the Smederevo medieval fortress wall. From: JSPhotomorgana, Dr Josip Šarić – Photography, http://www.jsphotomorgana.com/architecture/337smederevo_spolia.html (accessed 29 October, 2012)



Fig. 44. The looted sarcophagi from Viminacium (from the archive of the Institute of Archaeology)



Fig. 45. Relocation of an aqueduct threatened by an open pit coal mine
(from the archive of the Institute of Archaeology)



Fig. 46. One of the painted tombs that was ruined and its frescoes where detached because of building a thermal power plant. On the right they are presented in the original layout which has its own symbolic meaning, lost by presenting the frescoes separated on the walls of the museum (from the archive of the Institute of Archaeology)

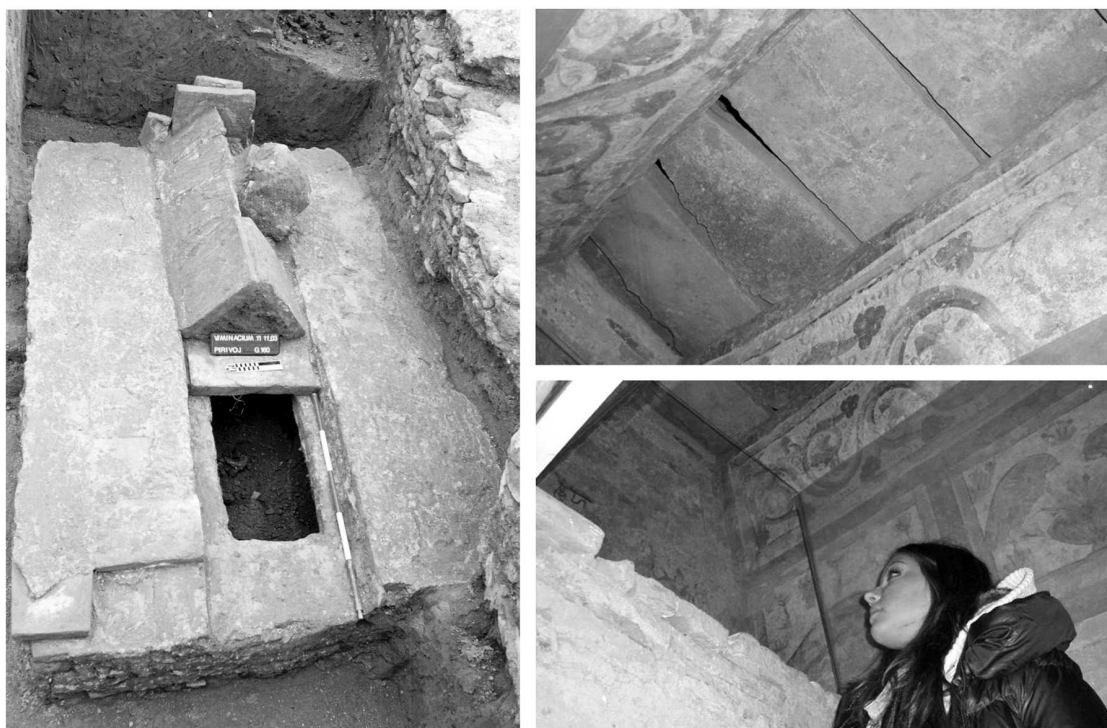


Fig. 47. Painted tomb that is in the protected area and its frescoes are presented *in situ* (from the archive of the Institute of Archaeology)



Fig. 48. Detachment of a wall painting from a tomb threatened by an open pit coal mine
(from the archive of the Institute of Archaeology)



Fig. 49. Roman grave threatened by the machines of the open pit coal mine
– inevitable civilisations flow (photo Svetlana Dingarac)