DIFFICULT TERRAIN. A LOOK AT THE FORTIFICATIONS OF THE ROMAN PROVINCE *MOESIA INFERIOR* FROM THE PERSPECTIVE OF TOURISM AND HERITAGE MANAGEMENT

Martin LEMKE

Department of Barbaricum and Roman Provincial Archaeology, Faculty of Archaeology, University of Warsaw Krakowskie Przedmieście 26/28, 00-927 Warsaw, Poland m.lemke@uw.edu.pl ORCID 0000-0002-1213-5426

Abstract: At least since the project "Frontiers of the Roman Empire", funded within the "Culture 2000" framework programme of the EU (2005-2008), and its follow-up "Danube Limes", the Lower Danube region has been engaged in activities connected to the international community of research on the frontiers of ancient Rome, which were aimed not only at discussing the archaeological remains, but also establishing a "best practice" for heritage management, both regarding conservation as well as tourism. This includes the area being addressed in relevant publications regarding scientific reconstruction and touristic accessibility, which were published with the intention of reaching a wider public. In the following I wish to go through some Roman sites on the Danube from Western Bulgaria up to the Delta in Romanian Dobruja and comment on solutions that have been implemented (to my knowledge) so far, as well as common problems and potential for the future, taking into account also the achievements and plans of the ArchLiMar project implemented by the University of Warsaw and the Institutul de Cercetări Eco-Muzeale "Gavrilă Simion" in Tulcea.

Keywords: heritage management, tourism, Lower Danube, Roman limes, best practice, Frontiers of the Roman Empire, Novae.

INTRODUCTION

In the 21st century, "sustainability" has become an important aspect of archaeological fieldwork. While excavations can take place as a rescue measure, e.g. before the construction of a road, or as a trial trench, which is immediately refilled after finds and objects in it have been documented, more often than not there are reasons to unearth an archaeological site with the intention of keeping it "open". Then, various aspects related to the protection of cultural heritage need to be considered, which in the long run can be widened to address tourism as well. In this context, I wish to make the case for EU-funded and cultural heritage-oriented projects, which have grown in number in the last 20 years, proving extremely helpful in helping both researchers and communities in approaching the various problems they encounter on the way towards sustainability.

In the following, I want to illustrate and comment on these aspects of cultural heritage protection in the context of the Roman Imperial frontier fortifications widely known as the "Limes", which in continental Europe ran from the Rhine delta to the Danube delta, following the course of the two big rivers for the most part.² The Romans secured their border by placing garrisons of soldiers there, at more or less regular intervals. These soldiers lived in forts – larger castra for entire legions and smaller castella for detachments of those or other units – which were a permanent manifestation of the famous marching camps of the

In this case, a good example could be the excavations in the fortress Rozafa in Shkoder/Albania (Shpuza et al. 2020). The medieval fortress is a major tourist attraction, but it seemed prudent to investigate various areas within to check for earlier phases. These areas were chosen in a manner to not disturb the tourist flow and also refilled so they would not be a security risk, while the architecture in the trenches is also protected again from the elements after refilling.

A good introduction to the topic: Breeze 2019.

Roman army, which had been in wide use since the times of the Republic, but are more difficult to investigate due to their temporary nature.³

While every Roman fort can be looked at as a stand-alone archaeological site, their sum – the *Limes* – has also become an important topic in current research, with a regular conference – the Congress of Roman Frontier Studies (usually referred to as the "Limes Congress") – devoted to exchanging information from investigations on the various stretches as well as concepts for heritage management in different countries since 1949.⁴ As a result, the aforementioned problems between archaeological investigations, heritage management and tourism have been discussed a lot in the past on the example of *Limes*-sites and the gained experience has been pooled by the scholars to formulate solutions to (at least some of) these problems. I want to highlight the achievements of two projects devoted to creating guidelines for the management of archaeological sites that were part of the *Limes* as a theoretical background and illustrate these by looking at the situation on the Lower Danube, in Romania and Bulgaria, in particular.

The typical problems that need to be addressed are somewhat reminiscent of the monsters Scylla and Charybdis, which Ulysses encountered on his quest in a narrow sea gorge: when navigating dire straits, avoiding one threat often brings us closer to another. As a result, an "omelettes & eggs" approach remains sometimes the only option: coming in contact with one of the "monsters", but at least while moving forward. The issues of conservation start with the trivial fact that sites are deteriorating naturally because of erosion (in this example mostly towards the Danube, such as in the case of Capidava, Fig. 1). But there is also manmade destruction to be considered, stemming from construction works as well as the activity of treasure hunters, the latter of which have caused damage of catastrophic proportions to some of the sites in question here, such as Ratiaria or Augustae. Then, there are issues of heritage management, particularly in the context of creating reconstructions of the monuments: acquiring the necessary finances, but also keeping in mind current regulations formulated by bodies like ICOMOS, which can be necessary prerequisites to achieve UNESCO World Heritage status. This in turn connects to issues of tourism: few people visiting a given site because of the location or lacking infrastructure, or too many people visiting and creating more issues related to the deterioration of the archaeological substance, when climbing walls to take selfies. On the other hand, there is only a thin line between reconstruction and conservation and the latter is quite important to stop or at least delay the natural deterioration of an unearthed site.



Fig. 1. A good portion of the Roman fort Capidava has eroded into the Danube (photo Dan Ştefan).

On the evolution of Roman army forts: Bishop 2013; Campbell 2006.

⁴ On the Limes Congress: Breeze et al. 2022, available for free at the publisher's homepage archaeopress.com.

ICOMOS

The International Council on Monuments and Sites (ICOMOS) is "a global, professional non-government organisation (NGO) established in 1965, which is dedicated to the conservation and protection of the world's cultural heritage monuments and sites. Part of the ICOMOS mission is to help to raise public and government awareness about cultural heritage protection and cultural heritage issues. It also encourages ICOMOS members to volunteer and participate in capacity building and training activities. This provides the general basis for members of ICOMOS ISCs to undertake, and be involved in, awareness raising, training and capacity building activity". Concerned with safeguarding the original substance of archaeological sites, ICOMOS is known for a skeptical stance regarding reconstructions: "Rather than enhancing the significance of the monuments involved, the large-scale replacement of missing original materials and forms is destroying the authentic spirit of these monuments and sites. By substituting original structures, these new constructions actually falsify history and cause an irreversible loss of authenticity. In addition, they may render any further scientific research impossible". While this stance can be perceived as a hindrance for some ambitious project of tourist acquisition, ICOMOS is also well known for providing its authority to help communities stand against treasure hunters, which are naturally detrimental both to science as well as tourism and also point out best and bad practice regarding heritage conservation and protection. Very much like the Valetta Treaty, ICOMOS should be perceived as ally to all professionals engaged in work on the Limes.

Regarding tourism, it should also be conceded that in addition to magnificent national parks and Black Sea beaches both Romania and Bulgaria are extremely rich in monuments and sites that draw many visitors, which are unrelated to the Roman forts, thereby creating significant internal competition in the context of tourism, with the additional disadvantage that the banks of the Danube belong to the rather remote and very thinly populated regions of both countries.

THE FRONTIERS OF THE ROMAN EMPIRE (FRE) PROJECT

The Frontiers of the Roman Empire (FRE) project took place between 2005 and 2008 within the Culture 2000 programme of the European Union which targeted cultural policies. All projects adopted under Culture 2000 had to address at least one of the thematic areas: developing civil society, new technologies/media for creativity, tradition and innovation; linking the past and the future, with priorities in 2004, when the project was accepted, being: cultural heritage (movable and immovable heritage, intangible heritage, archives and libraries, archaeological heritage including underwater heritage, sites of cultural interest and cultural landscapes).⁹

The lead partner was Historic Scotland, the Scottish Government agency responsible for the conservation and cataloguing of immovable monuments and the other partners came from Hungary, Germany, Romania, Slovakia, Slovenia, Spain, and Austria, countries which have remains of the Roman limes on their territory, and also Poland, represented by the University of Warsaw, based on the long-lasting excavations in Novae (Bulgaria). Some parts of the former frontiers of the empire, such as Hadrian's Wall or the so-called Upper Germanic-Rhaetian Limes, were designated as UNESCO World Heritage Sites earlier. In fact, The FRE project grew out of the discussions in 2001 following the nomination of the Upper Germanic-Rhaetian Limes as a WHS. The Antonine Wall received its nomination in 2008, partly prepared in the initial phase of the FRE project.

Other European countries such as Austria, Croatia, Hungary and Slovakia also decided to include sections of the limes on their territories in this ambitious scientific project. The participants share the hope that in the long term, the World Heritage programme should cover more than 20 countries on three continents: Europe, Asia and Africa. While most of the best-known sites of Roman military architecture are under the protection of the law, others, especially those located in modern cities, have often suffered significant

⁵ Staniforth 2014.

⁶ Letter by ICOMOS President Gustavo Araoz to Bulgarian authorities, dated 08.04.2015 and available on the organization's website icomos.org.

⁷ Cf. Sommer 2016.

In fact, the late Sebastian Sommer, head of the Deutsche Limeskommission had been a member of ICOMOS and was one of the most engaged promotors of the *Frontiers of the Roman Empire Project* which will be described below. *Cf.* Sommer 2021.

⁹ https://pl.wikipedia.org/wiki/Culture_2000.

damage over the past decades. Still others are under threat due to the development of house building infrastructure or agricultural activities.

The main objectives of the FRE programme were:

- The creation of an internet domain in the languages of the participating countries dedicated to Roman frontiers and links to national databases
- The production of an exhibition travelling to various institutions in the countries participating in the programme
- Improving the documentation of the frontiers of the Roman Empire (Fig. 2)
- The development of rules for the protection, management and presentation of Roman military installations
- Making research results accessible to a wide audience
- Promoting the UNESCO application for the Antonine Wall
- Raising awareness for the Roman limes in general

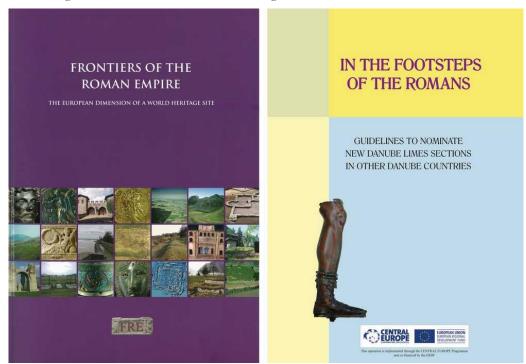


Fig. 2. The final publications within the Frontiers of the Roman Empire and Danube Limes projects (FRE Project / Danube Limes Project).

In the implementation, apart from hosting one of the project workshops, the University of Warsaw carried out the following tasks:

- opening the exhibition "Everyday life in the fortress of the First Italic Legion Novae" and publishing a bilingual catalogue as well as a book on figural bronzes from Novae.
- Non-invasive field prospecting of Roman limes sites in Bulgaria.
- The conservation and partial reconstruction of a Roman latrine in Novae.
- A virtual reconstruction of the Roman army hospital from Novae.

Within the FRE project, the partners decided to develop guidelines on how to identify and protect limes sites, which were published in book form, available for download. Another important archaeological project funded within the Culture 2000 framework was *Transformation*. The Emergence of a Common Culture in the Northern Provinces of the Roman Empire from Britain to the Black Sea up to 212 A.D., also showcasing Novae. Novae.

Breeze, Jilek 2008, available at https://www.univie.ac.at/limes. I am very grateful to David Breeze for his comments on this paper in general and the section on the FRE Project in particular.

¹¹ https://www1.rgzm.de/transformation/home/frames.htm.

THE DANUBE LIMES PROJECT

The Danube Limes project (2009-2012) was implemented within the Central Europe programme of the EU, which was almost completely different from the Culture 2000 programme in its stipulations, but also found a place for cultural heritage.

Since a main objective of the regional policy of the European Union is to eliminate disparities in social, spatial and economic development, the programme aimed to reduce disparities and achieve cohesion between individual regions of the European Union.

Consequently, the European Union has set up in the past a number of programs that bring together potential applicants not on the basis of national borders, but of regions/areas within these countries. The area of Central Europe as defined by the EU programme is approximately one fifth of the land area of the entire Union, inhabited by approximately 148 million citizens, which is 28% of the EU population. The area is characterized by high population density and a high urbanization rate, but at the same time, the economy shows great disparities in income and living standards: The Central European area includes both some of the richest and some of the poorest regions of the Union. Thus, the Central Europe programme aimed to contribute to reducing these disparities by having the regions work together to tackle common problems and by taking measures to make better use of their potential.

Bulgaria, where the Roman camp of Novae studied by archaeologists from the University of Warsaw lies, did not belong to the area defined as "Central Europe". However, Poland, the region of Masovia and by extension the University of Warsaw did. As a result, the Antiquity of Southeastern Europe Research Centre could not account for expenses made on the site itself (as in the earlier FRE project), but it was only thanks to the cooperation with Poland that the project to cover the whole Danube area with the Bulgarian section was possible at all.

The main task was creating more awareness for the Roman limes by

- Creating a general concept for the definition and protection of the river limes as part of the UNESCO World Heritage
- Preparation of the nomination of limes in Hungary and Slovakia, and within this:
 - (a) Identification/selection of suitable sites in HU/SK
 - (b) Completing research on these sites
 - (c) Establishing a management plan for the World Heritage Sites in the future
 - (d) Preparing selected sites for public access

The task of the Polish partner (the Antiquity of Southeastern Europe Research Centre) was primarily scientific expertise based on long experience in the subject of *limes* on the river thanks to the excavations at Novae. The project furthermore aimed to stimulate awareness among local and regional authorities, international institutions, the public, the tourism industry and the business world and also formulate ground rules for "best practice" on *Limes*-sites.¹²

The aim was also to nominate not just a few sites, but the complex system of fortifications of the Roman frontier along the Danube as a UNESCO world heritage site: 420 km of terrain with more than 200 sites in Hungary and Slovakia, and also simultaneously prepare an outline for the nomination of the remaining stretch of the Imperial border on the Danube.

In this context, two core project publications were published: "The Danube Limes - A Roman River Frontier" which is a popular science booklet describing the main theme of the project for a wider audience, and the final project publication (Fig. 2) entitled "In the Footsteps of the Romans". 14

The final publication focuses on key aspects of the project: how to draft a nomination proposal to UNSECO and good practice in relation to the management of limes-sites: "Those guidelines will foster the awareness raising process and are intended to function as a best practice example in the area. This will hopefully encourage the remaining countries to join the initiative. The experiences made and lessons learnt during our three-year nomination

¹² Lemke, Dyczek 2011.

¹³ Jilek et al. 2009.

¹⁴ Dyczek, Jilek, Lemke 2011.

process will help to enhance and distribute expertise and knowledge in all Danube Limes countries to better protect the Limes heritage on a national, regional and local level."



Fig. 3. The map of the Danube Limes superimposed on modern country borders elaborated within the Danube Limes project (Danube Limes – UNESCO World Heritage Project / Institut für Österreichische Geschichtsforschung).

Roman sites investigated by the University of Warsaw in Romania and Bulgaria: Porolissum, Tibiscum, Pojejena, Novae, Argamum/Danube Delta

Teams from the University of Warsaw have participated in non-invasive research carried out at the three former Roman forts Porolissum, Tibiscum and Pojejena (Latin name unknown). This research does not interfere with the archaeological remains hidden in the earth, but rather only helps to gauge its extent and type. While non-invasive methods cannot replace excavations entirely, as they forego the small finds which can be crucial and also only allow for an approximate picture of the structures hidden under the surface, it is at the same time complementary fieldwork for its benefits, such as scanning large areas of land in a relatively short time, giving clues as where to excavate trenches and also not upsetting ICOMOS, while at the same time defining areas which should be protected as cultural heritage by the given authorities.

Novae – a model for healthy reconstruction and small scale local tourism?

The legionary fort Novae lies East of Svishtov, a small, quiet town on the Danube in northern Bulgaria. Then again, Svishtov is to this day a significant transshipment point in the region, thanks to its harbour and the railway station. The town also runs one of the few ferry crossings over the Danube with Romania. The main industries in the town of Svishtov include imports and exports via the harbor, wheat and wine production, as well as the big paper mill "Svilosa". 16

Svishtov also carries historical significance for all of Bulgaria: during the Russo-Turkish war of 1877, the town was chosen by the Russian army to collect their troops and to ford the big river from Romania in mid-June of that year.¹⁷ In effect, Svishtov became the first liberated city of Bulgaria. The area where the army landed was once known as Stăklen (because of numerous Roman glass shards visible on the surface),

Porolissum: Pisz et al. 2023; Hegyi et al. 2023. Tibiscum: Timoc et al. 2022; Pisz et al. 2020; Pisz 2018. Pojejena: Pisz et al. 2019; Timoc et al. 2018.

¹⁶ On Svishtov in general: Radkov, Donevski 2007.

¹⁷ Lemke 2008.

but is today called Pametnicite (the Memorials). In the early 1960s, the area around the monuments was arranged as a park. The construction works uncovered vast ruins below the surface, apparently in good condition, and so began the archaeological investigations of Novae, which last to this day.¹⁸

In the 1st century, Novae was built as the home of *legio I Italica*, the first Italic legion. At its centre were the headquarters - *principia* - surrounded by administrative buildings (Fig. 4) and soldiers' barracks and also a very well preserved military hospital (valetudinarium), which has been fully excavated. In late antiquity, the military functionality of the site changed towards more civilian characteristics and public buildings, such as a Christian basilica, were constructed in place of the earlier military architecture.¹⁹

The important archaeological site prompted new investments and the development of the area. Based on archaeological and architectural documentation from the Polish team, two Bulgarian architects "prepared in 2011 a project of visualization in the open-air of the Roman headquarters building and the consolidation of the adjacent ruins of the Early Christian buildings". This was done within the project "Novae – the Heart of the Legion", supported financially by the Operational Programme Regional Development 2007–2013 of the European Commission, by the Bulgarian Ministry of Culture and also by the Municipality of Svishtov.²⁰ In 2014, these reconstructions were the main attractions during the opening of the Archaeological Park Novae. About a decade earlier, the decision had been made to create an on-site museum and visitor centre just next to the former West gate of the legionary fortress.



Fig. 4. Novae – view onto the reconstructed principia and adjacent Christian basilica as well as current fieldwork area (photo Martin Lemke).

In this context, a crucial investment was also the renovation of the road leading from Svishtov to Novae with features like car parks, a new pavement and bicycle paths. Thanks to the newly created infrastructure, archaeological excavations have contributed to the enhancement of cultural and entertainment related events, organised both by local authorities and institutions as well as private individuals. The biggest of these events is the annual "Eagle on the Danube" festival, which brings together amateurs and professionals of ancient Roman culture, with many attractions and presentations by re-enactment groups for the interested public. While the implementation of the reconstruction may appear at odds with ICOMOS regulations, one has to consider it in the wider context of the aforementioned "omelettes &

On the history of research: Dyczek 2021

¹⁹ On the archaeology of Novae with further literature: Sarnowski 2012.

²⁰ Sarnowski 2018, 356.

eggs" approach: it has been clearly marked, where the original Roman walls end and the reconstructed superstructure begins, and the walls and roofs of the reconstructions do provide additional protection for the underlying ruins. Most importantly however, with the enhanced visibility of the site, the possibilities of treasure hunting have been drastically reduced – an important contribution for heritage protection, although looting still is a problem here as well.

Today, the ancient name *Novae* has become a brand for Svishtov businesses - a practice quite common in many former provinces of the *Imperium Romanum*. The excavations and the history associated with the site are embraced by various businesses and local entrepreneurs, most of all the local winery: many of the labels on the bottles of wine and brandy produced in Svishtov were inspired by the history of Novae.

Argamum and the Danube Delta

The Danube Delta has long been a true paradise for archaeologists, geologists/geographers, biologists (particularly ornithologists and ichthyologists), historians and ethnographers, so a joint Romanian-Polish team set out in 2017 to consider whether or not it might also be well disposed towards divers. The answer: a somewhat complicated "yes". The then initiated *Archaeology of the Limes Maritimus Scythicus* project was to some degree inspired by a discovery from 2016, when a Romanian-German team found the phenomenal shipwreck Portița A, a Roman transport ship, likely headed towards the limes with more than a thousand preserved amphorae, just off the coast of Argamum in the Black Sea.²¹

The idea behind the *Archaeology of the Limes Maritimus Scythicus* project is to clarify how important the Danube river and the Black Sea were for the Roman Empire from a military and economic standpoint by carrying out land and underwater archaeological prospection in north-eastern Dobruja (Romania), while at the same time considering aspects of heritage protection.²² The Danube route played an important role in supplying the Roman army, at a time, when the big river marked the border between the Empire and the outside world.

In particular, during fieldwork campaigns (on land and underwater) selected areas are investigated with non-invasive archaeological prospection methods, scanning, one might say, the ground or the water to have an idea, what might be hidden below the surface. The chronological scope of the project focuses on Antiquity and Late Antiquity: the times of the Greeks and Romans, but is by no means discriminatory to these periods, since all findings are duly recorded in order to create a holistic archaeological map of the area²³ and any shipwreck can be like a time-capsule holding condensed data on supply lines and economics.

Around the Black Sea, significant settlements had appeared during the Greek colonization, and a number of these cities were located on what would later become the coastline of the Roman province *Moesia inferior* – today Romania and Bulgaria. An important site is the Greek and Roman town Argamum, which is under investigation on land and from the perspective of the nearby Lake Razim, using underwater methods.²⁴

For the future, such underwater surveys are also planned further away from Argamum towards the south as well as two sites inland, which might have been Roman forts. Both are located in the valley of the strategically important Taiţa river, the natural land route crossing the Dobruja, connecting the Black Sea with the Danube. By using the non-invasive methods, we ensure the unaltered preservation of the ancient remains. Many ancient structures at Argamum and other sites are made of brittle walls which collapse shortly after being excavated therefore our investigations can help excavate only as much as necessary to understand the architecture. A major achievement of the underwater investigations in the project at Sulina – Bazinul Mare (Fig. 5) was the inclusion of this area in the Romanian List of Monuments as an important

²¹ Nuțu et al. 2017; Dimitriu et al. 2017.

²² A first impulse in this regard was formulated by the late M. Zahariade over a decade ago (Zahariade 2012).

²³ Lemke et al. 2018; 2019.

²⁴ Nuțu, Päffgen 2022.

heritage site, based on the several shipwrecks we discovered there, forbidding any sort of human intervention or construction works.²⁵



Fig. 5. The Sulina branch of the Danube looking towards the Black Sea, with Bazinul Mare, inscribed in the Romanian register of heritage sites on the right (©ArchLiMar Project).

CONCLUSION

Summing up, what can be said about achieving "sustainability" when looking at the situation on the Lower Danube Roman *Limes*?

Next to "sustainability", another important word is "awareness", because the latter significantly facilitates achieving the former. All measures really start with it. Awareness helps raising finances when sites are deteriorating naturally, but the same awareness may also help influence legislature when it comes to fending off treasure hunters. A fine example is the aforementioned site Ratiaria in Northwestern Bulgaria, which had been transformed into a moon-like surface by the looters: "the last 20 years [as of 2012] have seen the site subjected to an ever escalating invasion of treasure-hunters engaged in the illegal traffic of cultural artefacts. Recent investigations have shown that an area [of] some 2km (East-West) by 1km (North-South), covering virtually the entire site, has been systematically ransacked. In some instances, treasure-hunters have dug trenches 10 metres deep, revealing the remains of numerous buildings."²⁶ Meanwhile, certain steps have been taken, including a World Heritage Volunteers initiative endorsed by UNESCO, which among other things had the intent: "In order to sensitise the local community to the richness of the site and the importance of its preservation, a public awareness campaign will be held".²⁷ Ratiaria has also been included on a tentative list of potential World Heritage sites list as part of a larger initiative for nominating the Frontiers of the Roman Empire in Bulgaria²⁸, which is not the same as a nomination, but certainly a gesture of acknowledgement. This initiative also proposes many other sites

The legislation was included as ORDIN nr. 2.102 from 15 February 2019: "ORDER no. 2.102 of February 15, 2019 of the Minister of Culture and National Identity regarding the classification as a historical monument of the building UAT Sulina, F12 intravilan, Hs63/4, nc810 in CF30510 UAT Sulina, Bazinul Mare Portuar, Bazinul Maritim, in the premises of AZL, Sulina city, Tulcea county, in the List of historical monuments, with the name Hydrotechnical and port facilities of the European Commission of the Danube CED from Sulina - Great Port Basin/Maritime Basin, Sulina city, Tulcea county, in category s - site, I - archaeology, in value group A". Register of legislation: https://legislatie.just.ro/Public/DetaliiDocument/220429.

²⁶ Luka 2012, 162.

²⁷ https://whc.unesco.org/document/157385.

²⁸ https://whc.unesco.org/en/tentativelists/6474/.

along the Danube and can be seen as a continuation of the initial FRE project.²⁹ However, the situation is still far from perfect and the initiative is confronted with many problems.³⁰

Regarding issues concerning reconstruction, one has to weigh the arguments on both sides in a given case, but the fact that there is a budding dialogue between the relevant administrations and ICOMOS should be perceived as a positive sign. At the same time, one cannot expect the entire Lower Danube region to become a huge tourist attraction at any point. However, as the example of Novae shows, stimulating local and small scale tourism in connection with archaeology-influenced brand names can create a synergy, thereby resulting in progress in small steps, such as the possibility of cruise ships travelling along the entire big river making Novae a stop on their route.

Synergy is also the observed effect of the implementation of the various EU-funded international projects: the awareness achieved in this way makes it easier to raise funds for the management and maintenance of the sites and marks also an important step towards a UNESCO World Heritage nomination. Just recently, three countries on the Upper Danube Limes – Germany, Austria and Slovakia – were successful in their application to have the Frontiers of the Roman Empire – The Danube Limes (Western Segment) added to the list of World Heritage sites³¹, while also the countries of the Eastern Segment have made their move.³² In addition to the above mentioned projects, also the PICASP project³³ as well as the HERiPRENEURSHIP project³⁴, as part of which this paper has been presented, should be mentioned in this context of awareness-raising. In conclusion, archaeological fieldwork in the 21st century has developed the basics for best practice while striving towards "sustainability" in managing the unearthed heritage. It remains to be seen, how much of the theory will be implemented in practice, but the prospects are promising.

REFERENCES

Bishop, M. 2013, Handbook to Roman Legionary Fortresses, Pen and Sword Military.

Breeze, D. 2019, The Frontiers of Imperial Rome, Pen and Sword Military.

Breeze, D., Jilek, S. 2008, Frontiers of the Roman Empire. The European Dimension of a World Heritage Site, Edinburgh.

Campbell, D. 2006, Roman Legionary Fortresses 27 BC - AD 378, Oxford.

Dimitriu, R., Nuţu, G., Päffgen, B., Popa, A. 2017, High Resolution Geophysical Investigation of "Gura Portiţa – A" Ancient Ship Wreck Site and Surroundings (Nearshore Northern Romanian Littoral), in: 9th Congress of the Balkan Society, Antalya, 2017. doi: 10.3997/2214-4609.201702620.

Dyczek, P. 2021, Novae. Gate to the Balkans, Warszawa.

Dyczek, P., Harmaydová, K., Jilek, S., Kuttner, E., Lemke, M., Rajtár, J., Reclaw, J., Schmidtova, J., Schwarcz, A., Szabó, M., Visy, Z. 2008, *Documenting the frontiers of the Roman Empire. Work on the Danube Limes in Austria, Slovakia, Hungary and Bulgaria*, in: Breeze, D., Jilek, J. (eds.), *Frontiers of the Roman Empire. The European Dimension of a World Heritage Site*, Edinburgh, 75-79.

Dyczek, P., Jilek, S., Lemke, M. (eds.) 2011, In the Footsteps of the Romans. Guidelines to Nominate New Danube Limes Sections in Other Danube Countries, Warsaw.

Jilek, S., Lemke, M., Dyczek, P., Recław, J. 2009, The Danube Limes - A Roman River Frontier, Wien.

²⁹ Ployer, Polak, Schmidt 2017; cf. Dyczek et al. 2008.

³⁰ http://baa.bgheritage.bg/news_8_en_sub.php.

³¹ https://whc.unesco.org/en/list/1608/.

³² Mrđić et al. 2021.

https://www.picasp-project.eu. The PICASP project (617540-EPP-1-2020-1-IT-EPPKA2-CBHE-JP) aims among other things at "Enhancing the exchanging of best practices with EU partners through mobility of academic and technical staff" to foster sustainable development in questions of heritage management in the Caspian region. Experience gained by the University of Warsaw staff in earlier projects, particularly regarding the heritage management at Novae serves as a teachable asset in the implementation.

³⁴ https://heripreneurship.eu.

Lemke, M. 2008, The Location of the Roman Legionary Fortress at Novae and the Crossing of the Danube by Russian Forces in 1877 - a Comparative Study, in: Derda, T., Dyczek, P. Kolendo, J. (eds.), Novae. Legionary Fortress and Late Antique Town I, Warszawa, 291-297.

Lemke, M., Nuţu, G., Bajtler, M., Trusz, K. 2018, The Danube Underwater Heritage Project — First Steps, Novensia 29, 87-101.

Lemke, M., Bajtler, M., Trusz, K. 2019, Naval Supply Lines for the Roman Army in Moesia Inferior — Basic Considerations for the Danube Underwater Heritage Project, in: "Światowit" Supplement Series U: Underwater Archaeology, vol. II — Archaeology: Just Add Water, Warszawa, 39-58.

Lemke, M., Dyczek, P. 2011, Selected Danube Sites as a Display of "best practice" regarding scientific reconstruction and touristic accessibility, in: Dyczek, P., Jilek, S., Lemke, M. (eds.), In the Footsteps of the Romans, Warszawa, 107-127.

Luka, K. 2012, SOS from ... Ratiaria. The "hidden" face of Bulgarian archaeology, Ancient Planet 3, 162-165.

Mrđić, N., Marcu, F., Matei-Popescu, F., Vagalinski, L., Sabkova, S., Tončinić, D. 2021, La candidature à l'Unesco du limes en Dacie et sur le Danube oriental, Les Dossiers d'archéologie. Hors-série 40, 14-19.

Nuţu, G., Päffgen, B., Pflederer, T., Fiederling, M., Ahl, M. 2017, Epava Rusu. Platforma continentala a litoralului românesc al Marii Negre, între Golful Musura la nord şi zona situata la sud de Gura Portiţei, jud. Tulcea. Punct: Epava Rusu, Cronica cercetarilor arheologice din România. Campania 2016, Bucureşti, 56-58.

Nuţu, G., Päffgen, B. 2022, A note on a sigma-shaped mensa from Argamum, in: Mustaţă, S., Lăzărescu, V-A., Bârcă, V., Rusu-Bolindeţ, V., Matei, D. (eds.), FABER. Studies in Honour of Sorin Cociş at his 65th Anniversary, Cluj-Napoca, 541-556.

Pisz, M., Tomas, A., Hegyi, A. 2020, Non-destructive Research in the Surroundings of the Roman Fort Tibiscum (Today Romania), Archaeological Prospection 27 (3), 219-38.

Pisz, M., Mieszkowski, R., Jęczmienowski, E. 2019, Understanding the Anomaly: Multi-Method Geoscientific Research Applied on a Roman Fort in Pojejena, in: Bonsall, J. (ed.), New Global Perspectives on Archaeological Prospection, Oxford, 129-32.

Pisz, M., Lazarescu, V., Hegyi, A. 2023, Understanding the Anomaly: Reinterpreting Porolissum Roman Town with Emerging GPR and ER Data, Advances in On- and Offshore Archaeological Prospection, 421-30.

Pisz, M. 2018, Krajobraz Osadniczy Tibiscum (Rumunia) w Świetle Badań Nieinwazyjnych 2014—2016. Podsumowanie Wyników Projektu Oraz Perspektyny Badawcze, in: Wiewióra, M., Herbich, T. (eds.), Metody Geofizyczne w Archeologii Polskiej, Toruń, 67-68.

Ployer, R., Polak, M., Schmidt, R. 2017, The Frontiers of the Roman Empire. A Thematic Study and proposed World Heritage Nomination Strategy, Vienna-Nijmegen-Munich.

Radkov, R., Donevski, P. 2007, Svishtov – Cultural and Historical Sights, Svishtov.

Sarnowski, T. (ed.) 2012, Novae. An Archaeological Guide, Warszawa.

Sarnowski, T. 2018, In medio castrorum legionis I Italicae at Novae: Preserved Remains, 3D Virtual Modelling and Full-size Visualization on the Original Site, in: Matešić, S., Sommer, C.S. (eds.) Limes XXIII: Proceedings of the 23rd International Limes Congress Ingolstadt 2015. Akten des 23. Internationalen Limeskongresses in Ingolstadt 2015, Mainz, 350-359.

Shpuza, S., Dyczek, P., Lemke, M., Reclaw, J., Sokoli, H. 2020, *Trenches excavated in the upper and lower city of Scodra 2011–2015*, in: Dyczek P., Shpuza S. (eds.) *Scodra. From Antiquity to Modernity* 1, Warszawa, 103-187.

Sommer, C. S. 2016, Bodendenkmäler in der Landschaft In: Vom Ende her denken?!, in: Archäologie, Denkmalpflege, Planen und Bauen. Kolloquium Leipzig, 7. November 2014, ICOMOS Hefte des Deutschen Nationalkomitees 61 Arbeitshefte zur Denkmalpflege in Niedersachsen 46, Hannover, 41-49.

Sommer, C.S. 2021, A European Project: The Frontiers of the Roman Empire – Protection and Communication of World Heritage in an International Context, ICOMOS – Hefte des Deutschen Nationalkomitees 79, 36-41.

Staniforth, M. 2014, The Role of ICOMOS, ICUCH and NAS in Underwater Cultural Heritage Protection in the Pacific, in: van Tilburg, H. (ed.), Proceedings of the 2nd Asia-Pacific Regional Conference on Underwater Cultural Heritage 1, Honolulu, 15-28.

Timoc, C., Pisz, M. Tomas, A. 2022, Noi observații în legătură cu topografia sitului arheologic de la Tibiscum-Jupa (Jud. Caraș-Severin) / New Data about the Topography of the Archaeological Site Tibiscum-Jupa (Caraș-Severin County), Analele Banatului 19, 163–186. https://www.analelebanatului.ro/view-article/481.

Timoc, C., Pisz, M., Jęczmienowski, E., Ardelean, A. 2018, Contribuții la cunoașterea așezării civile de tip vicus militar de la Pojejena, Analele Banatului serie nouă, Arheologie – Istorie 26, 57-64.

Zahariade, M. 2012, Managing Environmental Archaeology: Some Fresh Thoughts on Old Subjects – The Halmyris Fort, Peuce, serie nouă 10, 39-52.