Cultural Heritage –
Cultural Heritage – Cultural Promotion – Tourism in the Danube Region
Conservation and presentation of monuments in the Archaeological Park Carnuntum (Austria)

Franz HUMER
Archaeological Park Carnuntum

General
Around 2000 years ago the area covered by Austria today was part of the Roman Empire. In those days the city of Carnuntum (nowadays 45 km east of Vienna; fig. 1) had an important position and is mentioned in the year 6 AD as a Celtic town.

In the year 8 AD the region of Pannonia finally became a Roman province. The Danube and the Rhine thus became borders of the Empire and remained so for the next centuries. Throughout the first century AD the northern border was also secured in the Austrian sector by a regular sequence of watchtowers and smaller camps. In contrast to the *limes* in Germany, an unbroken line of defence consisting of walls and ditches was not needed in the Carnuntum region because the erosive action of the River Danube had created a natural break in the landscape (which in places reached a height of 40 metres).

Under Emperor Claudius (41 – 54 AD) Carnuntum was erected as a fortified military camp. Carnuntum played an important role in protecting the fortified Roman borders. From the middle of the 1st century AD Carnuntum thus developed into one of the most important Roman cities north of the Alps.
When the Province was divided into Upper Pannonia (Pannonia superior) and Lower Pannonia (Pannonia inferior) between 103 and 107 AD Carnuntum became the capital of the Province Upper Pannonia and therefore the seat of the governor. The full name of the city was now municipium Aelium Carnuntum, later Colonia Septimia Aurelia Antoniniana Karnuntum.

Finally, however, the provinces on the Danube were abandoned in 433 AD and ceded to the Huns. Army and administration were withdrawn and with them went the – now unprotected – Romanized population. The city was not destroyed by violent means, but abandoned by its inhabitants at the end of antiquity. In contrast to other cities along the Danube limes (Regensburg, Passau, Linz, Vienna, Budapest) the buildings in Carnuntum were not built upon during the Middle Ages and in the modern age, but rather became a quarry, from which material was gradually carried off and used for new buildings (fig. 2):

From the middle of the 19\textsuperscript{th} century excavations have taken place in Carnuntum (with interruptions). A large part of the excavated areas has been covered once more and can only be recognized by certain characteristics in the terrain.

\textbf{Actual state}

Today Carnuntum is Austria’s largest archaeological landscape (fig. 3). It has been obvious for a long time that this unique landscape between two European capitals (Vienna and Bratislava) in such close proximity to one another, with its combination of untouched nature (Nationalpark Donau-Auen), culture (Celtic and Roman excavations, town fortifications from the Middle Ages, baroque palaces, music, etc.) and exquisite viticulture has to be preserved and used.
Thus the Province of Lower Austria, as the owner of the excavated Roman monuments open to the public, has established the Archaeological Park Carnuntum over several stages.

South of Petronell Castle in the so-called “Spaziergarten,” the excavations of a Roman city quarter give some idea of Carnuntum’s inner-city development structure (fig. 4). Moreover, investigations over the past few years have brought to light important findings concerning the historical development of buildings in the city centre.

Archaeological investigations in this area began in 1938; between 1948 and 1957 the site of the ruins that could be seen since that time were excavated, covering an area of about 1.45 hectares (fig. 5).

The aim of investigations in those days was to create an open air museum and thus convey an impression of Roman architecture and building methods on the Austrian Danube limes. The ancient remains had to be preserved for this purpose: the original remains were therefore restored immediately after excavation with modern grey cement mortar and the walls partially re-erected.

Because of the conservation methods used at that time and damage caused by weather, the ruins are now in a wretched state: places where old lime mortar and modern cement mortar from the 20th century meet have cracked open and for years moisture has been able to invade the original walls (fig. 6, 7). As the neighbouring walls were “packed” with cement mortar, the water was unable to drain away and has since destroyed the last original remains. In many places the ground and apparent path levels have frozen and can no longer be recognized for what they are.
Fig. 4 – Roman city quarter south of Petronell Castle with recent excavations (2003)

Fig. 5 – Former excavations in the area of "Haus II" (1949)
Fig. 6 – Stages of destruction of the former restorations with cement mortar in the public bath (2004)

Fig. 7 – Stages of destruction of the former restorations with cement mortar in the public bath (2004)
For this reason, the city quarter has been re-examined since several years within the framework of the project “Archaeological Park Carnuntum”. Using methods of modern field research and processing of findings, the answers to questions are being pursued in order to gain insights into the historical development of buildings in this part of the civilian city. After clarification of these chronological problems, the uncovered ancient buildings will be conserved – following the usual international guidelines on archaeological preservation of historical monuments – and put on display. This will be in the form of media presentations such as virtual reality or else as restorations, partial and complete 3D-reconstructions.

The situation in the city quarter is as follows (fig. 8):

The so-called Houses I to V are situated on a somewhat higher southern terrace. A roughly 6-metre wide paved road (Südstrasse) running from west to east separates this southern terrace from the northern, lower lying building complex (insula VI). This is bordered on all four sides by paved roads. The north side has a 3-metre deep portico facing the paved road consisting of several different buildings: public bath, long warehouse and private villa urbana.
Paved roads

The paved road (Nordstrasse) running from east to west in the north of the Open Air Museum has been uncovered along 82 metres of its length and it is 7.5 metres wide. The road is paved with limestone and granite slabs, which show ruts of ancient carriages in many places. This road here was in use for 400 years. Because it was in use for so long, investigations into the roadbed and its foundations have shown that there were five different building periods with different characteristics, ranging from the 1st to the 5th century AD. A brick drain (dating from Hadrian’s time and built with quarry stones) runs under the middle of the road (fig. 9).
Fig. 9 – Ancient sewage system under a paved roman road (1989)
Large slabs with a weight of up to two tons form the covering of the drain. On top of this is a layer of gravel, which formed the base for the paved road.

After completion of investigations, a modern drainage system was laid in the ancient sewage system. The ballast filling the ancient middle sewer was kept separate from the original brickwork using geotextiles so that this measure can be reversed at any time.

Orthophotographic documentation was first used to establish the exact position and height of the paving which could then be re-laid exactly, so that the surface of the road now looks just like the ancient route 1600 years ago (fig. 10).

Parallel to this road and some seventy metres further south an ancient road (Südstrasse) divides the two settlement terraces of this quarter. This paved road is 6 metres wide and 120 metres long. The paving of the road was chiefly made of limestone and had large gaps (caused by ancient stone robbing) when it was first excavated between 1949 and 1951 (fig. 11).

Because the terrain drops considerably northwards to the Danube, the Südstrasse was supported in ancient times by a terrace wall roughly three metres high along its border to insula VI. In 1958 a reinforced concrete wall was erected in place of the no-longer extant east wall. However, the pressure of the south part of the roadbed along with the technically inadequate drainage system caused the partial collapse of this modern supporting wall.

The stone paving was removed as well as the roadbed during necessary measures to secure this area, and what remained of the ancient supporting wall was investigated. After the archaeological features were investigated, the supporting wall was re-erected on the north side of the street as it was necessary for structural reasons. As with all restoration work carried out here, the original finds were conserved as such and the modern additions were set over them. The dividing line between original and added brickwork can always be clearly seen. A modern drainage system takes all rainwater and groundwater from the south and pipes it to the north, to the existing drain under North Street. The surface of the road was carried out as with North Street: the existing gaps in the paved surface were filled with crushed material to the level of the remaining stone slabs (figs. 12, 13).
Fig. 10 – Restored upper surface of the paved “Nordstrasse” (2004)
Fig. 11 – Ancient stone robbing at the paving of “Südstrasse” (1994)
Fig. 12 – Restoration work at the pavement of the “Südstrasse” (2000)

Fig. 13 – Restored upper surface of the “Südstrasse” (2005)
Residential building with ornamental garden (House I)

This building is situated in the most south-westerly part of the open excavations. So-called House I is the completed form of the partial reconstruction of a Carnuntum residential building dating from the 4th century AD. The building complex covers 1200 sq. metres and comprises three connected elements. In the centre is a large rectangular building of 255 sq. metres with an adjacent garden to the south.

The decision was taken to erect House I once more as a partial reconstruction of building Period V because of the results of the excavation from 2001 - 2002, which showed connected and therefore easily presented building features (fig. 14). As much of the original masonry as possible has been used in the reconstruction (below the level of the path for reasons of preservation: better protected), upon which the newly erected stone walls were then built. The wall copings are slightly wavy and the tops are irregular (fig. 15). This slightly sloping double-pitched coping enables rainwater to run off quickly. Doors as well as passages (thresholds, door jambs) have been restored as far as they have been archaeologically established. Where they can only be supposed to have been or where they were presumed to have been for functional reasons, these areas have been indicated by lower wall copings.

Fig. 14 – New excavations in “Haus I” with a catwalk for the visitors (2001)
Apart from the walled layout, there are a number of other clues as to how the original building looked or else the function of individual complexes:

- The room in the most south-westerly corner of this house was decorated in Constantine’s time with a mosaic with geometrical patterns (coloured woven bands and moon-shaped shields). Unfortunately the mosaic was lost after it was uncovered in the last century. Using rectified pictures and entries with measurements in the excavation diary, the geometric outer pattern was able to be reconstructed and can now been seen on a modern system of supports. The missing (probably figurative) middle depiction has been kept neutral (fig. 16).

- The room decorated with mosaics in this house had colourful plasterwork depicting plants. The base has been decorated with murals once more.

- The course and construction of a brick sewer (which ran from the north veranda to South Street and had stone slab coverings, dating from the beginning of the 3rd century AD) can be seen through a window display.

- The levels of paths are shown using different coloured crushed material of different grains (indoor and outdoor areas). The addition of crushed bricks indicates functional use (heating). The uncovered brick mosaics of the floors in the rooms have been indicated by the use of modern reproduced brick stones over small areas.
The garden to the south of the house measuring 17.9 by 17.5 metres has been “brought back to life”. The garden shows an ideal reconstruction, i.e. it demonstrates how such Roman gardens in Pannonia could have looked. The plan of the garden and the plants chosen (ornamental plants, culinary and medicinal herbs) correspond to the customs and preferences of those times as far as we can tell from archaeological features, literary references and figurative depictions (fig. 17). Naturally the plants have been chosen because they existed in ancient times or could have existed.
Residential building with orchard (House II)

This building lies immediately to the east of the partial reconstruction of House I and was the subject of an archaeological investigation from 2003 to 2005. A model reconstruction in 3 D of the central residential building with fully decorated inner rooms was taken shape here.

Exact and extensive archaeological investigations were the basis for this planned reconstruction. During the investigations different building periods covering roughly 350 years were established, reaching back to the 1st century AD (at this time simple wooden buildings). Sufficient comprehensive scientific results were available from the beginning of the 4th century to allow a model reconstruction of the central residential complex on the original site. In addition an ancient orchard was planted next to the central building. First normal plan (fig. 18) and an virtual 3D-reconstruction were made (fig. 19), then a model scale M 1:200 was built (fig. 20).

![Fig. 18 – Drawn model reconstruction of “Haus II” (2005)](image)

The 3 D-model of a full-size Roman town house was built on the original site using ancient building technology. The original remains were covered and above them were built the “new” walls (fig. 21). The house was opened in 2006. During the building phase scientists and craftsmen working there have showed and explained to visitors how the individual building materials (such as stone, wood, plaster) are worked according to ancient traditions and with reconstructed roman tools. Structural models on individual themes of Roman building technology (making stone walls, plasterwork, construction of floors, roof construction and roof coverings…) completed these educational measures.
So a Roman town house had been completely reconstructed using ancient building technology. Each individual stone of the outer walls was laid by hand to re-create ancient uncoursed masonry and the inside walls used Roman timber framing (fig. 22). Even the construction of the wooden parts (especially the roof structure) was carried out by hand following ancient craftsmen’s traditions and without using modern machines (fig. 23, 24). The building phase thus became a living journey back in time where one could experience in great detail and at first hand Roman architecture and interior decoration (fig. 25-31).
Fig. 22 – Reconstructed timber framing for the inside-walls of “Haus II” (2005)

Fig. 23 – Reconstructed wooden parts by using ancient craftsmen’s traditions (2005)

Fig. 24 – Reconstructed ancient tools for wood, mortar and stone (2005)
Fig. 25 – Full reconstruction of the western part of “Haus II”

Fig. 26 – Full reconstruction of “Haus II” east of the partial reconstruction of “Haus I”

Fig. 27 – Southern corridor of “Haus II”. In the front the reconstructed garden of “Haus I”

Fig. 28 – Full reconstruction of the eastern part of “Haus II”

Fig. 29 – Reconstruction of the roof structure of “Haus II”

Fig. 30 – Roofing of “Haus II”

Fig. 31 – Roofing of “Haus II” (all 2005)
Fig. 32 – Reconstructed loam oven in the northern area of “Haus II” (2005)

Fig. 33 – Suspensura of the under floor-heating, burnt in the reconstructed loam oven (2005)

Fig. 34 – Reconstructed hypokaustum of “Haus II” (2006)
The building work also gave invaluable scientific insights into experimental archaeology. One very important fact in the project was that we tried to build in an experimental way. So first the loam oven in the northern area was reconstructed (fig. 32). There we then burnt the huge and heavy tiles of *suspensura* for the underfloor-heating (fig. 33), the tiles for the pillars of *hypokaustum* (fig. 34) and oil lamps. Directly from “producing” the materials were carried only few metres for “building”. So all these materials were produced *in situ*. For the very first time it was be possible to give precise information concerning the time it took to erect a building, the technical structure, the practicality of ancient tools (fig. 30), and particularly the costs for the owner of the building in Roman times.

After completion of the town house in summer 2006 all rooms with their different functions were open to the public and showed examples of interior decoration in Roman residential buildings like mosaic pavements, lightening, wall painting, under floor-heating, furniture e.g. (fig. 35-41). And the visitors are not only to see, but also to smell the origin function (for example kitchen, under floor-heating...).
Fig. 39 – Reconstruction of the geometric and vegetable patterns of wall painting in “Haus II” (2006)

Fig. 40 – Reconstructed inner court of “Haus II” with part of the local drainage system (2006)

Fig. 41 – Reconstructed kitchen of “Haus II” (2006)
Villa urbana

This building is situated in the north-eastern part of the so called Insula VI (fig. 42). Recent excavations after 1956 started in 1988 but were interrupted again for 17 years. In the meantime a tent of steel was put there for protection of the ruins (fig. 43).

New excavations started in 2005 and were finished in 2007. After demolishing the conservations of the 20\textsuperscript{th} century new excavations took place (fig. 44). The monuments were documented by 3D-Laserscan (fig. 45) as every excavation in the Archaeological Park Carnuntum and the result of the excavation (7 different periods from 1\textsuperscript{st} – 15\textsuperscript{th} century) was discussed and the project of the reconstruction of period V from the beginning of the 4\textsuperscript{th} century AD started.

First a possible virtual reconstruction was made (fig. 46, 47), followed by a built one in scale 1:200. Then the detailed plans were produced (fig. 48).

Fig. 42 – Roman city quarter with the reconstruction of “Haus II” and villa urbana (2008)
Fig. 43 – Protective roof above the remains of villa urbana (2004)

Fig. 44 – New excavations in villa urbana (2007)
Fig. 45 – 3D Laser documentation of different building periods of *villa urbana* (2006)

Fig. 46 – Virtual 3D-reconstruction of *villa urbana* (2007)  
Fig. 47 – Virtual 3D-reconstruction of *villa urbana* (2007)
Like in House II we worked only with ancient material (stones) or ancient-like material because of the making-of wood. The products made of clay (tiles, suspensura, mosaics) were again produced ourselves (fig. 49-52). After finishing the walls and a hemi-dome we reconstructed the interior after objects from excavation and presentation from ancient wall paintings and stone-reliefs as well after statements of ancient authors (fig. 53,54).

The visitors of Carnuntum were able to consume special didactic guided tours: so each day the (virtual) ancient owner of the villa and his wife visited the ancient architect and wanted to know, how the growing of the villa with all architectural details went forward (fig. 55). This was a very great success as the modern visitors learned a lot about roman architecture and were not disappointed that this part of the park was closed because of being a building site.
Fig. 51 – Reconstructed inner court of *villa urbana* with Mediterranean plants (2008)

Fig. 52 – Full reconstruction of a Roman *villa urbana* from the 1st half of 4th century AD (2008)

Fig. 53 – Main room of *villa urbana* with semi-dome and wall-painting (2008)

Fig. 54 – Main room of *villa urbana* with furniture and wall-painting (2008)

Fig. 55 – Guided tours for visitors in *villa urbana*: meeting the ancient architect (2007)
Public bath

Our actual project is the reconstruction of a public bath, situated in the western part of Insula VI (fig. 56). New excavations there took place 2005 – 2007 (fig. 57) and the following steps are the same like in the former examples: excavation – virtual reconstruction (fig. 58) – built model scale 1:200 (fig. 59) – reconstruction (fig. 60).

The bath will be full in function and opened at 15th of April 2011 for the start of “Lower Austrian National Exhibition” in Carnuntum (therefore I will invite you to this event!).

Fig. 56 – Roman city quarter with reconstructions of villa urbana and the new excavations of the public bath (2008)

Fig. 58 – Virtual 3 D-reconstruction of the public bath (2007)

Fig. 59 – Built model of the public bath, scale M 1:200 (2009)
Fig. 57 – New excavations in the public bath of the Open Air Museum (2007)

Fig. 60 – Actual state of the full reconstruction of the public bath (2009)
So, what’s the conclusion?
In this area of the Archaeological Park Carnuntum the securing and preparing of the excavated features will thus be the focus of the conservation and presentation measures for the coming years, i.e. once the archaeological follow-up investigations have been completed, the building remains will be conserved and prepared for presentation in the museum.

We try to give the impression of the architecture and “room-feeling” of a roman city quarter from the 1st half of 4th century AD. The visitor should see the different roof landscapes, the narrowness of the alleys and the function of different technical installations of that time.

Further full reconstructions are not planned at the moment. It may be said that "Archaeology restores what history has destroyed." But before this happens, the process of excavation destroys part of a historic source forever. And whatever can be preserved is often no longer comprehensible. Often the reconstruction of ancient layouts of a certain building period in stonework can only be carried out with limestone mortar. However, individual complexes can be partially restored.

The visitor should have the feeling of making a time warp back to 4th century AD. He should dive into another period. So the didactical informations about chronology, excavation, Making-of-the reconstruction are placed outside the buildings intentionally. But leaving the area of the reconstruction his senses should be sharpened for to understand also a partial reconstruction or just only simple basements of the roman period. But, first of all, however, the archaeological investigations have to be carried out before an interdisciplinary discussion about how conservation and presentation for visitors can take place.

In Carnuntum we try to do so!

Photo credits
Fig. 1 – Amt der Niederösterreichischen Landesregierung – Archäologischer Park Carnuntum, Bad Deutsch-Altenburg (Gestaltung: 7reasons MedienGmbH, Absdorf)

Fig. 3 – ZAMG Archaeo Prospections – VIAS, Vienna

Fig. 4 – Amt der Niederösterreichischen Landesregierung – Archäologischer Park Carnuntum, Bad Deutsch-Altenburg (Foto: Institut für Ur- und Frühgeschichte, Vienna)

Fig. 46, 47, 58 – Amt der Niederösterreichischen Landesregierung – Archäologischer Park Carnuntum, Bad Deutsch-Altenburg (Gestaltung: Kunst & Kultur, Vienna)

All the others – Amt der Niederösterreichischen Landesregierung – Archäologischer Park Carnuntum, Bad Deutsch-Altenburg:

References (selected)


Bd. 4: F. Humer, The Roman City Quarter In The Open Air Museum Petronell (Wien 2004).
Bd. 5: F. Humer, Ein römisches Wohnhaus der Spätantike in Carnuntum (Wien 2009).
Promoting Austrian Cultural and Scientific Heritage via Europeana

Gerda KOCH / Sigrid REINITZER

Europeana

On September 30, 2005 the European Commission published the “i2010: communication on digital libraries” where it announced its strategy to promote and support the creation of a European digital library on European scientific and cultural heritage (Europeana). The European Commission's goal is to make European information resources easier to use in an online environment by means of combining multicultural and multilingual environments with technological advances and new business models. The Europeana prototype (www.europeana.eu) went live at the end of year 2008, launched by Viviane Reding, European Commissioner for Information Society and Media.”

The overall aims of Europeana are to provide easy access to digitized cultural and scientific material, to attract new generations of internet users, to make national (regional, local) cultural heritage and scientific research international visible, to create synergies between the different content institutions (exchange of knowledge, working groups, work on international themes...) and to stimulate the creation of new products and services for tourism and education.
Europeana should evolve into THE European access point that directly leads to the digitized content held online by the various European cultural and educational organizations. Europeana therefore is collection (harvesting) the metadata (catalogue data) and integrates it in a joint virtual catalogue from where links point to the local web sites and digital objects (images, videos, audios, texts). That way Europeana provides a unique possibility for cultural and scientific institutions of any size to promote their holdings to a wide international audience. In February 2010 the European Parliament again stated that the Europeana on-line library should be enlarged and should be able in future to offer in-copyright as well as out-of-print and orphan works. It urged governments and cultural institutions to co-operate closely in speeding up digitisation as to make Europeana “one of the main reference points for education and research purposes”\textsuperscript{125}. In January 2010 Europeana provided already access to some 6 Mio. digital objects from around 1000 content contributing institutions in Europe. Still less than 1% of the content stems from Austrian institutions!\textsuperscript{126}


In spring 2009 two projects (Europeana V1 and EuropeanaConnect) with the common task to develop the final operational services of Europeana started. Europeana Version 1.0, the first release of the operational service, shall launch in July 2010 with links to over 10 million cultural and scientific digital objects. The second release is planned for mid 2011.

In close cooperation with Europeana V1 and EuropeanaConnect a number of other projects concentrate on the aggregation of content for the Europeana portal. Among these are EuropeanaLocal (for local and regional content) and BHL Europe (the Biodiversity Heritage Library Europe).

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**EuropeanaConnect**

EuropeanaConnect\(^{127}\) is a Best Practice Network funded by the European Commission within the area of Digital Libraries of the eContentplus Programme. The overall objective of the project is to deliver core components which are essential for the realisation of Europeana as a truly interoperable, multilingual and user-oriented service for all European citizens. In addition EuropeanaConnect will also add the music dimension to Europeana by aggregating a critical mass of audio content via its Audio Aggregation Platform.

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\(^{127}\) [www.europeanaconnect.eu](http://www.europeanaconnect.eu) [3.3.2010]
powered by DISMARC\textsuperscript{128}. The Austrian National Library is coordinating the project that unites 30 Partners from 14 countries.

![EuropeanaConnect web presence](image)

**Fig. 4 – EuropeanaConnect web presence**

**EuropeanaLocal**

EuropeanaLocal is designed to involve and help local and regional libraries, museums, archives and audiovisual archives to make the enormous amount of content that they hold available through Europeana (the European Digital Library) and to deliver new services. In each European country a National Content Coordinator is supporting the regional institutions on their way to provide content to Europeana. The Austrian platform\textsuperscript{129} offers a searchable union virtual catalogue that functions as data provider platform for Europeana and provides extensive information services (e-lists, news section, workshops, events) for interested institutions. In November 2009 a nation-wide working group for the digital library Austria initiative was established.

\textsuperscript{128} www.dismarc.org [3.3.2010]

\textsuperscript{129} www.europeana-local.at [3.3.2010]
BHL Europe

The Biodiversity Heritage Library for Europe (BHL-Europe)\(^{130}\) is a 3 year project, involving 28 major natural history museums, botanical gardens and other cooperating institutions. The objective of the project is to make available Europe’s biodiversity information to everyone by improving the interoperability of European biodiversity digital libraries. The project will provide a multilingual access point for biodiversity content through a global portal (BHL) with specific biological functionality and to a wide European cultural audience through Europeana.

\(^{130}\) http://www.bhl-europe.eu/ [3.3.2010]
Fig. 6 – BHL Europe web presence
A Cyber-museum of European Roots having the Danube as backbone

Marco MERLINI

F-MU.S.EU.M. network / EURO INNOVANET - Prehistory Knowledge Project, Rome, Italy / Lucian Blaga University - IPCTE, Sibiu, Romania / Archaeomythology Institute, Sebastopol, USA

Abstract: Five challenges / goals characterize the Virtual Museum of European roots, held by the F-MU.S.EU.M. Network: a) disseminating toward a wide audience the acknowledgment that a major civilization flourished in Neolithic and Copper Age in Southeastern and Central Europe (the Danube civilization) and documenting how the European matrix is in part founded upon it; b) making accessible collections that are normally inaccessible to a wide public as well as to scholars; c) exploiting the augmented comprehension and appeal from 3D view; d) generating the necessary capacity building in order to empower the associated museum as protagonists; and e) experimenting a narrative model of museum.

The partnership of the F-MU.S.EU.M. Network is comprised of about thirty national and regional museums of archaeology and history settled in this macro-region.

The Virtual Museum of European roots is based on an assessment of expertise to be used for the creation of 3D collections delivered online, on a map of related jobs and on the analysis and forecast of professional and skills needs. Consistently, four e-learning courses are provided in the public area of the web Portal. They are addressed to key professional positions involved in the design and management of a virtual museum: the Museum manager, the Web master, the Archaeologist, and the E-museum communicator.

Keywords: cultural heritage, virtual museum, Danube civilization, Prehistory, learning model.

A major civilization that flourished in Central and Southeastern Europe throughout Neolithic and Copper Age times is documented and explored by an eye-catching virtual museum delivered online. Having the Danube valley and its hinterland as backbone, it is recognized as the Danube civilization. It blossomed for three millennia, from c. 6400 BCE to c. 3500-3300 BCE (MERLINI 2005, 234; MERLINI 2009, 3 ff).

Dealing with this original topic, the Virtual Museum of European roots exploits the mobilization of innovative synergies between cultural heritage and internet added with virtual reality enchantments as to attract tourism and generate social-economic benefits able to trigger local economic development.

The Virtual Museum of European roots is held by the F-MU.S.EU.M. Network comprised of historical and archaeological museums of national, regional and local level. It displays and explores, on the Web and in 3D, exceptional prehistoric artifacts held in trust by the partner museums.

The Virtual Museum of European roots is accessible from the portal http://www.europeanvirtualmuseum.net. It offers visitors the opportunity to surf on and across several different waves of information in 4 languages: English, Bulgarian, Romanian and Italian.
Fig. 1 – The Home page of the F-MU.S.EU.M. Portal that provides access to the Virtual Museum of European roots (Copyright: F-MU.S.EU.M. Project).

The Virtual Museum of European roots is a museum of museums. The partners of the network compose an international interacting and learning community where they develop capacity building and technical cooperation on the subject of digital representation methods, exhibitions online of prehistoric cultural heritage and 3D virtual reality. Museum institutions that are partners of the European network are:

- Austria - Natürhistorisches Museum - Prähistorische Abteilung, Wien
- Hungary - Historical Museum, Budapest
- Bulgaria - National Museum of History, Sofia
- Bulgaria - Regional History Museum “Academician Jordan Ivanov”, Kyustendil
- Bulgaria - Regional Museum of History, Veliko Tarnovo
- Bulgaria - Regional History Museum, Rousse
- Bulgaria - Regional History Museum, Vratza
- Bulgaria - Regional History Museum, Dobrich
- Bulgaria - Abritus Museum, Razgrad
- Bulgaria - Regional History Museum, Targovishte
- Germany - Museum für Vor- und Frühgeschichte, Berlin
- Greece - National Archaeological Museum, Athens
- Romania - Muzeul National de istorie a Romaniei, Bucharest
- Romania - Brukenthal National Museum, Sibiu
- Romania - Banat Museum, Timisoara
- Romania - National Museum of Transylvania, Cluj
- Romania - Complexul Muzeal Arad
- Romania – Oltentia Museum
- Romania – Calarasi Museum
- Romania – Sf. Gheorge Museum
If potentially virtual museums online rely on many factors of success, at the starting of the F-MU.S.EU.M. experience partner museums were characterized by ICT gaps (in terms of competences, knowledge and abilities) in the field of Internet in general and virtual reality in particular. Web sites, if directly generated by them, were static and boring provisions of listed artifacts. The more active museums have requested to an external expert to develop a dedicated Web site, but he was in general unqualified and unconcerned to cultural heritage. Specular inadequacies of museum staffs and external experts to collaborate have created a loop, which effects were (F-MU.S.EU.M. 2008):
- high costs
- expropriation of museum contents
- pure replicas in HTML of actual collections
- low added value in terms of additional information or increased culture compared to the original museum
- Web pages not updated.

F-MU.S.EU.M. network tries to “think different”, answering to the following questions:
- How to migrate high motivated museum institutions to virtual museums online, even if they are affected by inadequate ICT competences, low Web presence and penurious financial resources?
- How to create a methodology in building such virtual Web exhibitions according to which the participant museums are actually protagonists?
- Through what means does such an experience be developed without any expensive software or muscular hardware?
- How to concretize the idea that even a frugal virtual museum online should not be just a clone of the real world, instead imagining it as a tool partnering the traditional museum institution by performing distinct expositive and educational duties?
- Can the method of learning by doing be effective? How can a museum institution make successful the experience of learning how to deal with the Web and virtual reality while creating a virtual museum online from its collections?
- How to generate an international learning community able to develop capacity building within museums on the topic of Web exhibition and 3D virtual reality?

Consequently, five challenges / goals characterize F-MU.S.E.U.M. Network:
- Documenting how the European matrix is founded upon a common ancient background with a hub in the Neolithic and Copper Age of Southeastern Europe.
- Making accessible collections that are normally inaccessible to a wide public as well as to scholars.
- Exploiting the augmented comprehension and appeal from 3D view.
- Generating the necessary capacity building in order to empower the associated museum as protagonists.
- Experimenting a story-driven model of museum.

Concerning the first challenge/goal, the Virtual Museum of European roots is disseminating toward a wide audience the acknowledgment that the European identity was built over the millennia and is founded upon a common ancient matrix with some significant sources in the prehistory of Southeastern Europe. Since prehistory, Europe is the fruit of the absence of rigid boundaries, continuous migrations, wide interactions, and a plurality of cultural imprints. Several millennia ago, this continuous mix was a cause of conflicts, compromises and stratifications between different populations and languages, divergent cultures and economies. But at the same time, it formed the basis of the present European originality: the cultural wealth and age depth of the "Old Continent" (MERLINI, VELICHKO 2009, 8).

The Danube civilization composed an institutional, economic, and social network of developed societies organized as a network of nodes, i.e. micro-regions and settlements that shared the same milieu with different level of authority keeping the social systems stable. This ancient European civilization developed according to a model far from the traditional state-bureaucratic political centered prototype, being centered on the concept of network (MERLINI 2009).

As documented by the collection of the Virtual Museum of European roots, the Danube civilization was characterized by extended subsistence farming economy and lifestyle through the improvement of agrarian land and technology. It was described by a tendency toward sedentary life in permanent settlements, proto-urbanism with concentrated agglomerates organized by planned layout, solidly built dwellings, and a tendency to distinguish profane (abodes, workshops and tribal/communal dwellings) and sacral (sanctified spaces and temples) architecture.
The Danube Civilization was also distinctive for advanced technologies (particularly in weaving, pottery, building and metallurgy), long distance trade, and expansive exchange that even involved status symbols and luxury goods. It exhibited the development of many household activities and skills such as spinning, weaving, leather processing, clothes manufacturing, shoe fabricating, and the manipulation of wood, clay, and stone. It speaks of a specialization of labor and social complexity, even if within the context of a semi-egalitarian social structure.

The socio-economic system was associated with a complex ideological system connected to the agricultural creed of fertility and fecundity, elegant and cultured art, refined patterns of magic-religious imagery, an intense spiritual life, sophisticated religious organization and ritual.

In conclusion, the Virtual museum of European roots disseminates to a wide audience the acknowledgment that, according to proper indicators, the early civilization status has to include the Neolithic and Copper Age cultures of the Danube Valley and beyond. The Danube civilization has to be placed in reference to other better-known ancient civilizations blessed by rivers such as Egypt, Mesopotamia, the Levant, the ancient Indus Valley, Yangtze Valley in China, and the Jiroft Valley in Iran (MERLINI 2004). Besides, this common and dynamic prehistoric background - extending from Turkey to France, from Ukraine to Cyprus - is partly still alive and goes beyond the current borders, political disputes and ethnic conflicts.

The second challenge / goal of the F-MU.S.EU.M. network (make accessible collections that are normally inaccessible) descends from the capability of web exhibitions in 3D Virtual Reality in acting as powerful tools for the preservation of objects that are delicate and fragile or that are locked being state patrimony. Even when available, in general the archaeological collections display nebulous objects due to bad enlighten showcases, dirty and opaque glasses, farness from the eyes of the visitor, little-size and decentralize captions, etc. The Virtual Museum of European roots exceeds the limits imposed by the storage conditions, making collections accessible not only to a wide audience, but also to scholars and researchers as well as to students (masters, doctorates, graduate students). Providing high quality 3D images, information directly from sources and contextualization through multimedia exploitation, it allows a deep study even to pieces that are available with difficulties or unapproachable due to geographical distances, structural fragility, inaccessibility being included into the state treasure, or lack of personnel to ensure access to storerooms.

It is the case of one among the most famous and hyper studied masterpieces displayed by the Virtual Museum of European roots. I am referring to the Copper Age "tablet" or "plaque" from Gradešnica (Bulgaria), which is considered to be flat by the majority of the scholars (WINN 1981, 210; RENFREW 1973, 177; MASSON 1984, 108) in consequence of a noncritical reiteration of the excavator misunderstanding who judged it to be a plaquette en argile, ayant forme d’un petit pot, sur laquelle sont incises des signes écrits (NIKOLOV B. 1974: 33).

Decades of studies did not correct the mistake due to erroneous drawings, confuse photos and the difficulty in checking directly the artifact held by a Bulgarian regional museum. The misinterpretation was fuelled by
The inside of the Gradešnica flat receptacle bears a long inscription that, according to the archaeologist in charge and the majority of scholars, is divided into four horizontal registers (GEORGIEV V.I. 1970: 8; NIKOLOV B. 1974; MASSON 1984; TODOROVA 1986). Nevertheless, if one admires in the Virtual Museum of European roots the humanoid stylized on the outside of the vessel and how it revolves (it does not reverse 90°), one can see that the signs on the inside of the artifact are actually aligned vertically and not horizontally (NIKOLOV V. 1990: 47; CHOCHADZHIEV S. 2003: 115; CHOCHADZHIEV S. 2006: 72). The in column layout has been judged strange by several scholars – blind from contemporary eye - for a written text structured in supposed guidelines for a religious literate adept. Therefore, they decided to loose the pictographic force of the anthropomorphic figure turning it 90°, in order to save the horizontal alignment of the script-like marks on the inner face of the shallow vessel.

However, the vertical set of the signs was employed by several ancient writing systems. If our contemporary eye is costumed to connect *ars scribendi* with a horizontal alignment of the signs because alphabets are generally written horizontally,\(^{131}\) ancient Near East and East Asian writing systems as well as other logosyllabic systems (e.g., Sumerian) were traditionally arranged in column setting. The plumb layout of the marks on the artifact from Gradešnica does not affect their script-like nature (if they have actually a script-like nature).

As any other artifact recorded in the Virtual Museum of European roots, the shallow vessel from Gradešnica is not only viewed in 3D, but is described through a complete identity card conveying appropriate photo details and textual information. The user can chose multimedia deepening for interpretation and contextualization of it visiting - in a natural, simple, ubiquitous and engaging approach (SUMPTION 2006) - the thematic route "Communication in Neolithic and Copper Age, from symbols to writing".

The visual and interpretative adventure of the shallow vessel from Gradešnica substantiates that archaeology is intrinsically virtual for necessity. Understanding here relies upon the archaeologist's

\(^{131}\) However, Western people practise reading vertical text when they search for items from lists in column (e.g. from telephone directories) (LAARNI, SIMOLA, KOJO, NÄSÄNEN 2004: 75) or on coins (such as on the Polish 10 and 200 ZL coins) and notes (like the Lithuanian 500 litas banknote). HUEY (1908) TINKER (1955), COLEMAN and KIM (1961), COLEMAN and HAHN (1966) have studied reading a column format of text from paper, concluding that if vertical text is typically read slower than the standard horizontal text prior to practise, text comprehension may be comparable in the vertical- and standard-text conditions from the very beginning. FREEMAN (1980) found that random English letters were better seen in horizontal rows rather than vertical columns. No acute difference between horizontal and vertical orientation was found for native Chinese (CHEN, CHIEN 2007).
rationalization, which fills the gaps of data through reconstructive drawings, taxonomies, grammatical or formal regularities, and seriations based on experience and acumen as well as osmosis with other disciplines. As currently accepted (HODDER 1999), evidence is moreover based on subjectivity during acquisition and interpretation. Therefore, the virtual provision online of an artifact is just the last link in a chain having more immaterial rings than material rings (NICOLUCCI 2007); and it is a link that sometimes challenges established notions (TRANT 1998, 110-113; DIETZ et al. 2004).

Fig. 2 – Evidence from the Virtual Museum of European roots according to which the Copper Age "tablet" or "plaque" from Gradešnica (Bulgaria) is actually a shallow vessel that bears in column marks (Copyright: F-M.U.S.E.U.M. Project).
The third challenge/goal of the Virtual Museum of European roots is both cognitive and attractive. Not only part of the aura of actual remains is transferred to a virtual gallery (DAVIS 1995; MITCHELL, STRIMPEL 1997), but it is capable exploiting the augmented comprehension and appeal of prehistoric artifacts from a 3D view. The three-dimensional representation of objects provided online invites, induces and allows the viewer into fuller, deeper, proxemic relationships. The 3D view encourages the spectator to find out, to see close-up and inside, to move-around-the-back and see-for-himself what is behind, to glimpse what is below, and what is above. And to move back again.

Walking around, the viewer establishes a radically different relationship with the artifact that he is looking at, than when he engages a two-dimensional representation and has only ever one viewpoint from which to see a single, fixed representation. Accumulating numerous different views, nothing is hidden or left out. This cognitive process provokes the viewer to build up, to assemble, and to collect an understanding of the object being observed. The 3D visual experience triggers the spectator to shift from asking questions about what this artifact is, to interpretative investigation of it as material evidence of people, their behavior and their environment. Which are the physical characteristics of the object? How did it work in people's lives? What did it do and why was it successful in doing what it did? Which were the reactions that it evoked? How did people perceive and utilize it? The comprehension that emerges from 3D view is complex, multi-part, and never banal. It is often absent from the archaeological record (CONNERTON 1989, 72-79; ROWLANDS 1993; VAN DYKE, ALCOCK 2003, 3-4).

For example, the three-dimensionality of the Berlin Golden Hat from Hallstatt A-B period (held at the Museum for Pre- and Early History) is one of the fundamentals for a better understanding of it. The 3D view makes noticeable that it is not just an imposing headdress of a chieftain or a priest. The praise of its conical impressive feature and of the highly decorative discs, rings and concentrically circles in relief leads to a fully comprehension that it is a masterpiece made by a specialized gold-smith in embossed work. With a more significantly step further, one can discover that it is a lunar-solar calendar established 3000 years ago. The "ornamental" circles are actually 1739 astral symbols systematically arranged along 19 horizontal registers and among them 1701 concentric rings identify single days. The gold hat was probably worn by a chief priest during ritual actions connected to cyclical events.

The Virtual Museum of European roots enriches the 3D presentation of the fascinating Berlin Golden Hat with a multimedia information-enrichment according to "multiple perspectives" (MERRIMAN 2004, 87). A distinct path explores the other recovered conical golden hats of the Bronze Age as symbols of power and calendar systems. Similar artifacts are displayed and interpreted as symbols of power since the third and second millennia in the glyptic and plastic art from Mesopotamia to Anatolia, Cyprus and Greece to Sardine. Even in Scandinavian and the Baltic regions, stylized depictions of men wearing conical hats are recognized (GERLOFF 1995: 153-194; GERLOFF 2003: 190-203). The path explain also how the Bronze Age conical gold hats worked as calendars and how such a timekeeping was related to mythological sceneries with astronomic-cosmological background (MENGHIN 2000: 31-108; MENGHIN 2003: 220-237).
Another path contextualizes the Berlin Golden Hat within the Sun cult in the Bronze Age.

![Fig. 3 – 3D view of the Berlin Golden Hat from the Virtual Museum of European roots (Copyright: F-MU.S.E.U.M. Project).](image)

Almost all the photos portraying the Venus of Willendorf (Austria) arrange it in vertical pose. However, the 3D rendering of this Palaeolithic masterwork makes evident that she does not want to stand upright, but asks to accommodate in the hand of the viewer.

The visitor can chose multimedia information-enrichment for personal and engaging interpretation and contextualization of the Venus of Willendorf through a specific narration on the adventure of her discovery.
and the earliest interpretation. It is also is contextualizable through a comparison with other Ice Age female figurines.

Fig. 4 – Multimedia deepening for interpretation and contextualization of the fascinating Berlin Golden Hat (Copyright: F-MU.S.EU.M. Project).

The forth challenge / goal of the F-MU.S.EU.M. network is making the associated museum protagonists of the Virtual Museum of European roots even if they have quite low ICT skills, Web competences and financial resources. Investing in new competence on virtual reality online acts for the re-qualification and the competitiveness of an increasingly relevant economic sector in Europe - the cultural heritage - and for the success of its key organizations – the museums.

A Learning Model has been created to answer to the increasing demand of a set of standard competences needed to create and manage a Virtual Museum online, from the writing of the contents to the 3D photos to the uploading of textual and multimedia data.

Conferring the F-MU.S.EU.M. Learning Model a special attention to the training costs/benefits and the fruitful use of technological supplies, the centrality of the associated museums implies both the development of a friendly and manageable Content Management System (CMS) and the provision of higher professional skills to museums' managerial, technical and operational staff coping with the fast communication innovations in cultural heritage.
Fig. 5 – The 3D rendering of the Venus of Willendorf makes evident that she asks to accommodate in the hand of the viewer (Copyright: F-MU.S.E.U.M. Project).

The Content Management System is the “meeting point” among training experience, networking, communication and technology. It is source of:

- A dedicated database which organizes the information directly uploaded in the system by each partner.
- A platform to insert contents in a uniform way and to guarantee the output communication according to standardized patterns.

- A reserved uploading and updating area that is accessible – in different languages - by each associated museum through password. Each partner can prepare data, fill up Access forms, upload papers, insert 2D and 3D images, check the output, and attend a forum.

- An operational and cultural forum where each museum contributes to implement the project, following the principles of a "social group network".

The F-MU.S.EU.M. network transfers to any associated museum institution all necessary knowledge and skills to create and implement, step by step, one’s own virtual gallery provided on the Web. F-MU.S.EU.M Courseware online and F-MU.S.EU.M Training Laboratories are distinct tools – usable through the Restricted Area - that give to user museums all necessary know-how to manage the section Reserved Area in order to realize their own virtual exhibition online, starting from capacity building of know-how and competences. They explain and accompany in detail all management stages of data.

They provide:

- Detailed information on the building and implementation of a virtual museum
- Practical exercises with the use of the WebCMS (web content management system) provided by the F-MU.S.EU.M. portal and having the Virtual Museum of European roots as background
- Remote Supervision provided by the F-MU.S.EU.M. technical staff
- Individual deepening with the use of Lecture Notes
- Opportunities for interaction and exchange of experiences in presence (internally to the user organization) and at distance (in the network of partners).

The F-MU.S.EU.M. Learning Model is based on an assessment of expertise to be used for the creation of a virtual museum, on a map of related current jobs and on the analysis and forecast of professional and skills needs. Consistently, F-MU.S.EU.M. provides also four e-learning courses available in the public area of the web Portal. They have been addressed to four key professional positions involved in the design and management of a virtual museum giving them the basic expertise required: the Museum manager coping with investment in virtual reality, the Web master specializing in virtual reality, the Archaeologist provider of content for virtual collections, and the E-museum communicator. The coursewares are supplied in four languages: English, Bulgarian, Italian and Romanian.
As a background of the above training provision, the F-MU.S.E.U.M. network utilizes an overall architecture of competences that has been translated in a standard path of learning. The structure is composed of

Process and output ⇒ Roles and core competencies ⇒ Competence Units

The rationale of this methodological procedure is that, starting from the identification of the output for every sub-process, it is possible to identify the roles and core competences more strictly related to the efficacy in producing the output. Afterwards, the core competencies can be nearly stocked and clustered in Units that identify a homogeneous and self-consistent mix of knowledge, abilities, and behaviour. The combining of these variables expresses an effective work performance that is achievable through continuous training.
In short, the associated museums act as protagonists of the F-MU.S.EU.M. virtual collections joining three essential trajectories:

- From a training focus to a learning focus
- Form an individual learning to a collective learning
- From a top-down approach to a peer-review modus operandi.

Crossing these perspectives, the F-MU.S.EU.M. Network implements some broad approaches shared by the OCSE together with the main European and National institutions (UE and National Governments), which are pointing to the central role of learning processes as a determinant competition factor within economy and society.
Changing mental models and paradigms from a focus on training to a focus on learning involves a series of moves that synthesizes appropriately some fundamental options characterizing the F-MU.S.E.U.M. Learning Model:

The narrative model (HODDER 1982; SHANKS, TILLEY 1992; PEARSON, SHANKS 2001) as main exploitation option for the visitor is the fifth challenge / goal of the Virtual Museum of European roots. Being the virtual collection based on a network system that offers to any user dedicated paths supporting the individual knowledge through the potentialities of the centralized database online, the visitor proceeds following the rules of that mental process working through the association of ideas. The journeying through the Virtual museum of European roots can utilize a storytelling model, since it is not exclusively focused on
The conservation and preservation of artifacts as the traditional version of museum is, but it is tailored for revealing appealing stories to a virtual audience and for transforming users into interpreters of the European prehistory starting from finds never seen in that way or that are otherwise inaccessible.

The hypermedia and interactive structure and the virtual reality enchantments of the Virtual Museum of European roots allow individual explorative paths to the visitor. They comprise: a) a chronological voyage; b) a geographical travelling; c) a single museum journey; d) a surfing from museum to museum (because the artifacts are dispersed among a wide net of national, regional, and local museums); e) a object type examination (for example the Bell Beakers phenomenon); f) a thematic routes exploration; and g) a touristic-cultural itineraries that start from museums to explore the territory (often through a downloadable and printable circuit with related GIS map).

Significant is the exploration of the European prehistory through Thematic Routes. They explore the issues that the associated museums have in common despite the geographical farness, in particular for what concerns the legacy of the Danube civilization. The Routes have been conceived and narrated working in cooperation among the museum partnership. They are:

- Civilization, gift from the river
- Trade and early exchanges in prehistoric societies
- The religious places
- Cult and religion in the earliest human societies
- Thermal baths and sacred water places in ancient times
- Fashion in prehistoric times
Ancient wine regions: The savior of a drink-food for Gods
To be a farmer in prehistoric times
Clay house models
The beginning of metallurgy
Communication in Neolithic and Copper Age, from symbols to writing
The modern way of making music in Prehistory
Sport and role games in prehistoric times
The Hidden Roots of Europe: Thracians, Dacians and Etruscan
Ritual connected to the burn of the old year
How will build up an exhibition.

The Thematic Routes map the conceptual relationships being hypertexts structured in content description, active 2D and 3D images of the related items (with the possibility to enlarge them and explore links), videos, drawings, interviews, and deepenings.

The Virtual Museum of the European roots and the possibility to activate personal explorations within a narrative model of exploitation (Copyright: F-MU.S.E.U.M. Project).

The proposed model-experience is obviously not the best way to manage Web exhibitions and 3D virtual reality (DELOCHE 2001; MANOVICH 2001; DIETZ et al. 2004; COPELAND 2006). However, it is an ambitiously realistic approach to support the associated museum institutions to migrate to a Virtual Museum exploiting any good opportunity putting in sync culture, innovation, network, and ICT even if their technical skills, Web competences and financial resources are quite low as usual for the European archaeological museums.

It is also a way to force museums to think to themselves as tourism units skilled in the management of knowledge. The realization of a virtual collection online cannot be decontextualized from other key issues such as destination management, strategic plans making, synergies and co-operative management with
other entities, extended range of cultural activities on offer, pooling of resources, cross marketing, cultural mediation, and new opportunities from increased customer benefits.

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Synergies between cultural tourism enterprises effected through cooperation and the pooling of resources in Lower Austria as seen with “Archäologische Kulturpark Niederösterreich Betriebs GmbH”

Matthias W. PACHER
Archäologische Kulturpark Niederösterreich Betriebs GmbH

Abstract: Cultural tourism has become one of the most important sectors in the tourist industry throughout the world. Also in Lower Austria, increased demand has often led to a satiated leisure market quite independent of the wide range of cultural activities on offer. However, not only intensified competition between various providers, but also the tendency towards privatization in the public realm has forced cultural institutions to change. The lines defining the different branches of tourism are disappearing, and the enterprises’ range of activities is changing. Cultural institutions must strive to make strategic plans for the future and to act – where possible – as tourism units. Through the management of knowledge, the exchange of ideas and joint professional marketing not only can savings be made but also a successful front can be presented to the public. “Niederösterreichische Kulturwirtschaft GmbH” (NÖKU) which is structured as a private sector institution in Lower Austria, joins a lot of enterprises that come together under this holding company to have a co-operative and coordinated management. The aim of NÖKU as a cultural holding company is to enable a successful joint effort to increase market share in the cultural tourism sector. A much frequented exhibition enterprise in Lower Austria, which is subsidiary of NÖKU, namely “Archäologische Kulturpark Niederösterreich Betriebs GmbH”, works already very successfully concerning cooperative cultural management and cultural mediation. This article shall examine the advantages and risks of cooperation and the pooling of resources for a cultural institution such as the Archaeological Park Carnuntum.

Keywords: Archaeology – cultural mediation – destination management – cultural tourism - marketing

The aim of this paper is to give a small glimpse into the recent development of one aspect of promotion of cultural heritage in Lower Austria: the aspect of “teamwork” between cultural institutions and the possibility to create synergies within these organizations, for being a very current theme which has reached an important level in today’s cultural work. Besides all the other forms of preserving cultural and scientific heritage, one target is to preserve it by acting in a professional way to make the “products” fit for the tourism market. It doesn’t make sense to mention all the affected institutions in Lower Austria here, but it is useful to point out one of the most important players these days, namely the Archaeological Park Carnuntum.

During the last decades cultural tourism has become one of the most important sectors in the tourist industry throughout the world. Holiday and excursion destinations with a cultural background are in great demand: there are holidaymakers traveling great distances, as well as those who do not stay too far from home. In contrast to the past the potential customer is now enabled to choose the best and most individual offer he can find, nowadays mostly with the help of the World Wide Web. A look into travel magazines will show that
the range of cultural offers spreads from a visit at a small local monastery to places, which are world wide well known. Of course this is characteristic for cultural sites all over the world, also for Lower Austria. The diversity of these sites is the promising part of cultural tourism, but meanwhile increased demand has led to a satiated leisure market, quite independent of the many cultural activities on offer. Potential customers are faced with an almost confusing range of choices. For the providers of cultural attractions this means harder work because of a fast growing market. Everybody tries to realize new and outstanding ideas to catch the customers’ attention and make him choose the “right” offer. However, not only intensified competition between various providers, but also the tendency towards privatization in the public realm and the decline in promotional funds from the state, has forced cultural institutions to change. Rapid developments in information and telecommunication technology have also altered the competition. Newly configured customer systems have led to the transformation of branches. All this means the classical way of getting “to the people” by advertisements in printed form for instance, becomes less important whereas networking with the help of the web 2.0 gains even more in importance. The lines defining the different branches of tourism are more and more disappearing, and the enterprises’ range of activities is changing. For example one can notice that many tourists who are interested in a specific cultural theme don’t travel to see only one site, but they wish to visit a bundle of attractions within a defined region. It is a collection of businesses which makes up the tourist industry: one travels by bus to a cultural site, enjoys a meal in a restaurant, goes to another place of attraction nearby and finally travels back. What affects the visitor is not only the main attraction he came for, but the whole impression he takes back home. Cultural institutions must therefore strive to make strategic plans for the future and to act – where possible – as tourism units and not compete with one another. They have to concentrate on cooperation with hotels, restaurants and other tourist attractions, even if these are amusement parks which do not “offer” cultural or scientific heritage.

Following that way, a lot of cultural institutions try to unite in one way or the other and act under a certain brand, mostly defined by a trademark or a special “Logo” which should give a high recognition value to the visitors. The following statements examine the closer links that will enable Lower Austrian excursion destinations to be perceived by customers as quality brands. Besides has to be mentioned that strategic marketing - which includes professional teamwork – can only be realized when political and economic conditions are at least sympathetic to the actions of the cultural institutions. In the case of “Archäologische Kulturpark Niederösterreich Betriebs GmbH” these requirements can be seen as fulfilled. This company consists of three institutions, namely the Archaeological Park Carnuntum, the Kulturfabrik Hainburg and the Museum of Prehistory of Lower Austria. The Archaeological Park Carnuntum132 is a very well known site of Roman heritage. Today Carnuntum is the most important site of archaeological excavations in Austria showing careful reconstructions by using experimental archaeology and exciting programmes. Due to the numerous Roman findings in this area, the Kulturfabrik Hainburg133 became the centre for scientific research,
processing and archiving of the archaeological finds from this Province of Lower Austria. From the second floor visitors can glimpse the world of science through a glass atrium, looking into the restoration workshops which lie directly beneath it on the first floor. This establishment thus creates a first-class infrastructure for basic scientific research in Carnuntum and Lower Austria, where quality standards are unparalleled even on an international level.\textsuperscript{134} The Archaeological Park Carnuntum and the Kulturfabrik Hainburg are both located in the east of Lower Austria besides the Danube, between Vienna and Bratislava. The \textit{Museum of Prehistory of Lower Austria}\textsuperscript{135} is situated a little bit more in the north; in former times know as the “Barbaricum” beneath the Danube, now called “Region Weinviertel”. This museum has very exciting exhibition spaces dealing with the history of the development and culture of mankind in Austria. Numerous reconstructions of prehistoric buildings in the open air exhibition grounds provide “snapshots” of 40,000 years of human history.

As an example for mood management and cultural heritage the \textit{Archaeological Park Carnuntum} shall be described a little bit more in detail. In the year 6 AD Tiberius, who later became emperor, erected a fortified winter camp in the Carnuntum area. In the following centuries Carnuntum, as the capital of the province of Upper Pannonia, was often in the limelight of world politics. In its heyday the city covered about 10 sq. kilometres, had about 50,000 inhabitants and was the base of the Roman Danube fleet. After its prime, Carnuntum slumbered for more than 1500 years, until the enthusiasm of archaeologists rescued the former metropolis from the mysteries of the past. Due to the dimension of the lost Roman settlement, only few parts of Carnuntum have been excavated and kept alive: the famous “Heidentor”, two amphitheatres, an open air museum showing a small part of the civilian settlement and – last but not least - the Museum Carnuntinum, the "treasure house" of the Archaeological Park Carnuntum. While the open air museum in Petronell-Carnuntum provides information of the old civilian settlement\textsuperscript{136}, the Museum Carnuntinum in Bad Deutsch-Altenburg completes the story by presenting marvel and unique findings from the Roman town. A problem has always been that the fascination of Carnuntum is more based on the historical importance the city beard about 1800 years ago than on the architectonic relicts. Therefore it has been difficult to impart knowledge of Roman culture and civilisation to the visitors. This challenge seemed even more evident when it got to explore international tourist markets. Carnuntum has been very well known as an excursion destination for schools and universities for years now. But for a longer time it wasn’t possible to attract families and individuals who were not that into archaeology or Roman history. One reason for starting the Archaeological Park Carnuntum in 1996 as an own company on the private sector was to get more importance for individual people above all national borders. Over the past few years it has been possible to interest more and more

\textsuperscript{134} The Kulturfabrik Hainburg also shows special exhibitions, which are very strongly involved in the regional history and geography.

\textsuperscript{135} \url{http://www.urgeschichte.at}

\textsuperscript{136} The Open Air Museum Petronell sets a course with the reconstruction of roman buildings. Experimental archaeology means using as far as possible only technologies and skills that were known 2000 years ago. The first project to be realized in that way was a Roman residential building, called house of Lucius Maticius Clemens, the cloth merchant. Even bigger is the Villa Urbana, which allows the visitors a glimpse into the luxury life of Roman aristocracy.
visitors in Carnuntum and life in Roman times. Now, more than ten years after, it seems that the operating company succeeded: In the beginning the average number of visitors was about 60,000 each year. Since then Carnuntum has become a point of attraction for more than 100,000 people every year. Of course a lot of reasons can be named to be responsible for these astounding results, some have already been mentioned above. A further reason is the good collaboration between the operating company of the Archaeological Park and the provincial government of Lower Austria: Whereas the science-based administration of Lower Austria is still in charge of the archaeological excavations including conservation, restoration or else reconstruction, the private company shows responsible for the suitable presentation of the findings and architectonic relics. In order to maintain authenticity and amusement they sketch special guided tours, which allow more involvement of the visitor. Instead of giving a simple lecture, so called “journeys back in time” bring authentic tales from Carnuntum’s heyday to the people. Annual events like the Big Roman Festival or the gladiators’ performances contribute to the fascination of “Roman life” in Carnuntum. In general, in order to act successfully on the tourism market a cultural institution needs a professional performance like every other market-led product creation does. This should be done with a clear mission statement concerning the unique selling proposition (USP) of the cultural place of excursion, a professional back office for reservation and booking, a user-friendly ticketing system and a perfect telecommunication technology, just to name a few factors of success.

Another condition to prosper can surely be ascribed to the realization of strategic and operating marketing plans, which lead to more publicity and attention. One aim for “Archäologische Kulturrpark Niederösterreich Betriebs GmbH” was to become a member of Austrian destination management companies which act and succeed worldwide. Now the Archaeological Park Carnuntum benefits from marketing-synergies with partners like Vienna Tourism, Convention Bureau Lower Austria, “Österreich Werbung” or “Top-Ausflugsziele
Niederösterreich”. These strategic partnerships help to break into new, international markets. Nevertheless not only destination management companies are among the partners of the Archaeological Park Carnuntum, also some other cultural institutions in Lower Austria which are subsidiary of NÖKU, for example “Kunstmeile Krems Betriebs GmbH” and “Schloss Schallaburg Kulturbetriebs GmbH”. At intervals of some month, the heads of marketing and directors of sale meet to communicate about their strategies, to match their events for the next season and to discuss if there are any marketing activities they can share. A very important theme in these meetings is the marketing tool “cross-marketing”: There it gets to coordinate the marketing plans and to try to benefit from each other, for this is one way cultural institutions can force their promotional capacity by spending only little money. This statement shall be underlined by an example: The Archaeological Park Carnuntum starts an extensive direct-mailing for the Big Roman Festival in June. Due to the fact, that the “Museumszentrum Mistelbach” opens a new exhibition at the same time, which has a strong connection to Roman antiquity, they both decide to let the “Museumszentrum Mistelbach” take part in the mailing of the Archaeological Park with a special flyer promoting the new exhibition. On the other hand, the “Museumszentrum Mistelbach” mentions the Big Roman Festival in their newsletter. Another example for cross-marketing can be presented when it comes to advertising: For example, a lot of the cultural institutions invest money in outdoor advertising. If a great number of prospective clients come together, most advertising companies allow quantity discount. As a result the cultural institutions which are interested in outdoor campaigning join together and make one big subscription, so each institution pays less money than they would if having booked separately.

To make cross-marketing and transfer of knowledge work the way described above, the help of a special force is needed: Behind the scenery operates a big holding company, namely “Niederösterreichische Kulturwirtschaft GmbH” - short form “NÖKU” -, which heads more than 25 Lower Austrian cultural enterprises, like “Archäologische Kulturpark Niederösterreich Betriebs GmbH”.
At present further subsidiaries of NÖKU are for example: “Landestheater Niederösterreich Betriebs GmbH”, “Grafeneg Kulturbetriebs GmbH”, “Niederösterreichische Museum Betriebs GmbH”, “Schloss Schallaburg Kulturbetriebs GmbH” and “Österreichische Filmgalerie GmbH”.

In the case of the holding company “NÖKU”, which is structured as a private sector institution, all cultural enterprises that come together under this holding company have a co-operative and coordinated
management, thus enabling a successful joint effort to increase market share in the cultural tourism sector. The aim of “NÖKU” as a cultural holding company is to coordinate its enterprises’ events and exhibitions, as well as to increase public awareness of the subsidiaries. So “NÖKU” supports cooperative marketing to pass in a successful strife for market shares. At the same time it is important for the heading company to ensure the high standards of all these enterprises. For this purpose the necessary infrastructure, IT-know-how and communication channels have been made available, thus creating synergy effects. Furthermore, NÖKU coordinates the entire range on offer in the subsidiaries in order to avoid unnecessary duplication of work and the clashing of dates.

But cooperation can be also done in another way: Synergies and strategic partnerships must not only be installed by institutions of the same kind, which have a historical background for instance. As already mentioned above, one must not forget that cultural tourism can never be completely detached from other branches of tourism. Thus cooperation between different branches must be taken into consideration when speaking about the marketing of cultural heritage. Generally, every enterprise has to look to regain as much audience as possible by pooling of resources with the local partners in tourism, like hotels, restaurants as well as with other excursion destinations. So they can create quite new opportunities with increased customer benefits, which would not be possible for a lone effort. As an example, the Archaeological Park Carnuntum can be presented again: In the past, the inhabitants of Petronell-Carnuntum and Bad Deutsch-Altenburg near the excavation sites often were offended at the work of the archaeologists. They felt disturbed and usual didn’t share the opinion that Carnuntum - as an extraordinary place of cultural heritage - had to be protected in that way the scientists proposed. But since 2001, when the first projects of reconstruction started with financial support from the government, bit by bit the positive aspects for the vicinity and the near environment came to the fore. The investment showed to be profitable for the township of Petronell-Carnuntum and Bad Deutsch-Altenburg in different ways. One achievement can be called the result of encouragement for small enterprises. They have special knowledge of techniques and are often important in producing the suitable materials needed for reconstructing Roman buildings, like the roofing tiles. The average for the employment situation in the region can be seen as another synergistic effect: For the completion of the buildings more workers are needed for special repairs, maintenance or garden-works. Last but not least one positive effect of the investment also relates to the local tourism: The local gastronomy and hotel industry became encouraged because of the increasing number of tourists and accommodations year by year. Therefore lots of different packages for potential tourists were made to add as much value as possible for the whole region Auland-Carnuntum. As a result of all that, the work of the Archaeological Park Carnuntum and its partners is highly responsible for finding a new identity within the local population. To shape the opinions it is necessary to show the people who are directly affected by the growth of the Park and its visitor numbers at all time, that media work and public relations help the region to become an official notice.

This presentation should have given a better understanding of the practical considerations mentioned here, regarding the subject of culture management and cooperation in the field of cultural tourism in Lower Austria.
It should be clear that through the management of knowledge, the exchange of ideas and joint professional marketing not only can savings be made, but also a successful front can be presented to the public.
Cultural Heritage –
Internet Trade of Cultural Objects

The papers of this session represent the author’s positions which do not agree in all cases with the editor’s point of view and their ethical principles.
Illicit Cultural Property Trade Over the Internet

Melek CANGA

Abstract: Anatolia has a fundamental place among world archaeology with its wealthy archaeological reserves still not brought to light. This forms a natural basis for cultural property smuggling, which dates back to the Hittite Empire.
Even though the problem of cultural property smuggling is tried to be solved through national laws and international agreements, certain deficiencies about smuggling of cultural properties of Anatolian origin has not yet been settled.
The main problem among the countries of origin is not the theft of artefacts registered in museums, but unearthing the artefacts that are unknown and naturally not registered, through illegal excavations and their transfer via illegal means.
After mentioning briefly the cultural property smuggling problem, it is impossible to ignore the case in the internet.
The internet creates a sale media that requires low capital and is widespread in terms of the commercial businesses. However, it is seen that it is open to abuse
The internet dimension of the illegal cultural property trade exists in two different parts.
The first one is the artefacts offered for sale through on-line catalogues of the auction houses.
The auction houses are obliged to obtain the artefacts legally and to certify that. If an annotation is made about an artefact offered for sale, the company is obliged to inform the origin.
Deterrent punishments and sanctions in the legislation of the countries in the centre and target of smuggling should be arranged as well as international agreements.
Secondly, the companies engaged in trade over internet should be evaluated.
Within this framework, in addition to the supervision of the state as legislator, new steps should be taken towards the protection of cultural heritage through regular investigations by the administrators and supervisors of websites, and cooperation should be achieved between countries.

Key Words: Cultural property, illicit trade, internet

Illicit Cultural Property Trade Over the Internet

Anatolia has a fundamental place among the world’s archaeological map with its existing rich archaeological finds and reserves still not brought to light. Absolutely, this position forms a natural basis for cultural property smuggling, which dates back to the Hittite Empire.
Though there were not any legal regulations concerning cultural properties in Ottoman Empire until 1869, the Empire issued excavation licences to encourage legal excavations and allowed the acquisition of the property by the excavator on condition that half of the found artefacts should be given to the Ottoman Empire. With 1872 regulation, the antiquities law became effective. In 1884, this law was amended by Osman Hamdi Bey to prevent the export of antiquities. The antiquities law of 1906 also prohibited the export of cultural properties. After the declaration of the Turkish Republic, the antiquities law that prohibited the
export of cultural properties was preserved. The extended version of this law, which was effective until 1983, is still in use.

The events that took place before 1970, which is accepted as a milestone, aggrieved the Republic of Turkey and other countries of origin.

The looting and illicit export of antiquities from their origin countries are a threat to the cultural heritage of many nations. In recent years, some international agreements, such as 1970 UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, are adopted. Many countries enacted laws to protect their cultural heritage and restricted the ownership and export of certain types of objects.

1970 UNESCO Convention is beneficial for solving especially registered theft cases, which occurred after 1970. However, certain deficiencies about smuggling of cultural properties of Anatolian origin have not yet been settled.

These agreements and laws are not retroactive. Therefore, the enactment date of a national ownership legislation or an international agreement is significant in determining legal ownership of cultural property.

The main problem among the countries of origin like our country with high archaeological reserves is not the theft of the artefacts registered in the museums, but is unearthing the artefacts that are unknown and naturally are not registered, through illegal excavations and also their transfer via illegal means.

In the 2nd paragraph of the 3rd article of UNIDROIT Convention, this issue is embodied with the following expression: “For the purposes of this Convention, a cultural object which has been unlawfully excavated or lawfully excavated but unlawfully retained shall be considered stolen, when consistent with the law of the State where the excavation took place”.

However, because the expression in the 3rd paragraph of the 3rd article of the same convention “any claim for restitution shall be brought within a period of three years from the time when the claimant knew the location of the cultural object and the identity of its possessor, and in any case within a period of fifty years from the time of the theft” means that the time limitation is accepted by the state party and causes reservations, UNIDROIT Convention is not signed by each country of origin.

After mentioning the cultural property smuggling problem briefly, it is impossible to ignore the case in the internet, which is the latest area of commercial concern and activities.

The main areas of the antiquities market were public auctions and sales by means of the dealers. The internet now provides a new area through the web auctions. These became an established market where the sale of antiquities is a standard. Online platforms like e-bay, well known auction houses like Sotheby’s, Bonham’s or Christie’s as well as renowned or small art dealers or private persons offer cultural objects from all periods and all regions of the world.

In Turkey, the protection of cultural and natural properties is the duty and responsibility of Ministry of Culture and Tourism. As a result of carried out studies, it is established that cultural properties within the scope of the Law on the Protection of Cultural and Natural Properties with the number 2863 are offered for sale on some commercial internet platforms. As a result of researches carried out within this context, Our Ministry filed criminal complaint against the ones who offered cultural properties for sale.
Owing to the facts that the internet creates a sale media that requires low capital and it is widespread in terms of the commercial businesses, it seems very attractive. However, it is seen through concrete cases that it is open to abuse.

The internet dimension of the illegal cultural property trade exists in two different parts. The first one is the artefacts offered for sale through on-line catalogues of the auction houses. The electronic market provides only transient documentation. The page that you see an item may disappear soon.

The auction houses are obliged to obtain the artefacts legally that they trade and to certify that. If an annotation is made about an artefact offered for sale, the company is obliged to inform the origin. However, because UNESCO Convention cannot be enforced prior to 1970 (the laws, agreements, and conventions are not retroactive), the issue is open to abuse.

If an example is needed; it was seen on the online catalogue of Hermann Historica in 2007 that a cauldron of Anatolian origin was offered for sale, and the origin information was requested from the related country. SLAYT

The origin information about the artefact was given until 1970 and was limited excessively. The sale continued using this opportunity.

However, in accordance with the 3rd article of International Code of Ethics for Dealers in Cultural Property (UNESCO 1999), a trader who has reasonable cause to believe that an object has been the product of a clandestine excavation or has been acquired illegally or dishonestly from an official excavation site or monument, where that country seeks its return within a reasonable period of time, will take all legally permissible steps to cooperate in the return of that object to the country of origin.

Deterrent punishments and sanctions in the legislation of the countries, which are in the centre and target of smuggling, should be arranged as well as international agreements.

Secondly, the companies engaged in trade over internet should be evaluated. The websites, which are based on this, make their members sign a conditional agreement on the beginning of membership.

Within this framework, in addition to the importance of supervision of the state as the legislator, new steps should be taken towards the protection of the cultural heritage and acting pursuant to the laws through regular investigations by the administrators and supervisors of the websites, which are engaged on-line trade, and cooperation should be achieved between countries.
The “INTRA MUROS” encouraging factors for illegal traffic with archaeological artifacts

Case study: Romania

Marius-Mihai CIUTĂ1 / Beatrice CIUTĂ2

1 Lucian Blaga University Sibiu, Police Inspectorate of Alba County / 2 1 Decembrie 1918 University Alba Iulia.

Abstract: In the present study, the author’s presents few examples intending to demonstrate that sometimes, the ignorance of certain archaeologists and their irresponsible attitude about the professional deontological ethics represent concrete situations in which archaeological pieces were destroyed or stolen and subsequently used in the illegal traffic with antiquities. Unfortunately this kind of unusual situation must be accepted and assumed. Although there are specific laws and specific deontological code, and also exist special administrative organized structures regarding protection of the National Cultural Heritage (NCH) in order to apply these laws there are frequently situations when archaeological sites and artifacts have been used within criminal activities by certain kind of peoples.

Keywords: legislation, archaeological sites; stolen artifacts, illegal traffic.

The phenomenon of illegal traffic with artifacts belonging to the cultural heritage is relatively new in Romania. Apparently generated and encouraged by many different factors: the vacuum of legislation and lack of administrative power implementation during 10-15 years after the “Fall of Iron Curtain”. There are few factors such: the interlopes desire of fast enrichment the and of peoples who live in vicinity of the archaeological sites; the persistent request for new pieces on the “black market of antiquities” from Europe and U.S.A.; the existence of open channels in neighbour countries (e.g. Yugoslavia, Hungary, Bulgaria) into direction of the “black market of antiquities”; the weak reaction of the law enforcements; the free movement of peoples and goods etc. Some of the factors described above are well known and presented in details in studies and papers already consecrated in the bibliography137. But a specific category is rarely or less enounced by the authors, sometimes even not remember it for reasons that can be explained by embarrassing situations. And also of subjective conceal of realities whose origins are the lack of professionalism of some archaeologists, regarding the regime of protection of cultural goods discovered in their excavations.

137 The practices of theft, looting, pillaging, and/or illicit import and export of cultural property are well known: Legal and Practical Measures against Illicit Trafficking in Cultural Property UNESCO HANDBOOK, United Nations Educational, Scientific and Cultural Organization, International Standards Section Division of Cultural Heritage, 2006; Combating the criminality against the European Archaeological Heritage. Patrimonium I. Bucharest, 2008; Combating the criminality against the European Cultural Heritage. Patrimonium II, Cluj-Napoca, Ed. Mega, 2009.
In the next author’s intention is to present the hypotheses about hidden origins of the phenomenon of illegal traffic with archaeological artifacts. Most suggestive are cases of lack of a responsible attitude from specialized structures and also of the academic authorities. These kinds of situations will exist and increase, generating a real threat for the cultural heritage and, why not, will put in danger the scientific credibility of the entire “guild” of the archaeologists. The term „intra muros”, is used by the authors expressly for exemplify the members of this so called “guild”, but also of the employers of the special structures within Ministry of Culture who sometimes are more interested to represent the interest of the investors or collectors than the interest of the state or of the NCH.

Romania is one of the countries whose international network for the protection of cultural goods is as dense as possible. Romania is part to all international legal Instruments of UNESCO in the field of the protection of the cultural heritage (1954 Hague Convention, 1970 Illicit Traffic Convention, 1972 World Heritage Convention, 1999 Second Protocol to the 1954 Hague Convention, 2001 Underwater Convention, 2003 Intangible Heritage Convention, 2005 Cultural Diversity Convention). Furthermore, Romania has adhered to the “Valetta Convention” of the Council of Europe for the protection of the archaeological heritage as well as to the 1995 UNIDROIT Convention. Since Romania was incorporated in the E.U, the level of commitment for the protection of the cultural heritage through international legal instruments concerning the exports and returns of cultural goods has increased more and more.

The last 10 years represent also a time of onset of some important internal special laws adopted for the protection of the archaeological sites: the Government Ordinance 43/2000 regarding the protection of the archaeological heritage and the declaration of some sites as national interest areas; Standards and procedures in Archaeology, 2004; the Law nr. 182/2000 concerning the protection of the movable national cultural heritage; the Law 440/2000 concerning the protection of the historical monuments; and finally, the Deontological Code, for the archaeologists (adopted in 2000).

In a recent publication regarding the subject of problematic protection of cultural heritage, the lieder of an important cultural PHARE project in Romania, financed by the European Union - “Institution building, secondary legislation drafting and training concerning the movable cultural heritage and cultural goods” – has stated about the invoked complex legislation: what we should not forget in the context of all these national and international connections (“networks” might be the modern word for it): let’s use them138

Another specialist in the field, also member of the team of the mentioned project has advanced in the same volume the next conclusion: the sanction-regimes are very similar between Austria and Romania. Whereas the concepts of penalties are similar, the amount of sanctions are considerable different. Generally speaking, it can be concluded that the Romanian system is stricter concerning the duration of imprisonment – which does not, however, give any indication concerning the actual implementation of the rules139.


Coming from two specialists who know very well the realities from Romania (after 3 years of the development and implementation of the project) I consider that these two declarations are symptomatic for the actual situation in Romania in the domain of N.C.H protection.

The phenomenon of gathering cultural artefacts, of collecting rare and ancient pieces (archaeological, art, historical, cultic etc.) has increased after 1989. According to the legislation the collecting of heritage artefacts is not prohibited when the origin of pieces is legal and justifiable. Now an important hobby of the most majority of rich peoples from the high-society (medicines, architects, lawyers, business people, political people etc) is to achieving huge collections of cultural artefacts in order to create their own small exhibitions. The phenomenon has determinate the encouraging of the small and massive illegal traffic with stolen artefacts from archaeological sites, museums, libraries, private collections, churches etc. In this situation organized crime raised in some cities, with pyramidal structures and specific activities. The art dealers and the antiquity auction houses owners operate at the edge of legislation, enriching the “black market of antiquities”.

In February 2009, the Police patrimony department was appealed by an archaeologist who made a rescue excavation in an archaeological site included on the list of Historic Monuments in Romania. His request was regarded about vandalizing of a rescue excavation in a roman necropolis located in the ancient town Apulum (Alba Iulia). The roman necropolis from Apulum is considered the most important from entire Transylvania area. Also the archaeologist complains was about the missing of some artifacts from archaeological rescue excavation. The archaeologist told that during October-November 2008 were been made rescue archaeological excavations in a certain area from the roman necropolis. The artifacts and roman sarcophagus discovered were been left in situ and after awhile the archaeologists realized that the sarcophagus were been vandalized and some artifacts, such as a part of roman column and a funeral pine (pinia) were missing.
Visiting the site we found that a number of funerary contexts from Roman times were been destroyed and some artifacts with patrimonial significance have been stolen. No doubt this was an extremely serious situation revealed by the fact that many funerary contexts, kept in very good conditions in the area of maximum density from a cemetery of the ancient Roman city with the title of Colonia (from the third and fourth centuries AD), who have been investigated by successive rescue excavation during 10 years; and in this case revealed after a rescue excavation have been irreparably damaged being odd by some stolen piece. Our first question from logical and professional point of view was regarded about the facts which conducted to this kind of situation. After the audition of the archaeologist who complained about the situation mentioned above and who had the scientifically responsibility of the research has resulted the main idea: that at the end of the archaeological research in November 2008, the revealed contexts were been left in situ without any insurance of a minimal protection. In this case in which the research area was not closed being in wide open field it was accessible to any passer who was interested to get free archaeological souvenirs. The research area was in a private propriety and belongs to a local real estate investor. From legislation point of view the archaeologist and the institution organizing the research and also the owner had clear obligations regarding the property regime of contexts and artifacts left in situ. We are witnessing with a situation at least virtually bizarre. In a town where people belonging to high class consider that the collecting of archaeological artifacts is a sign of culture and bonne ton; which sometime exceeds the scope of a simple hobby and the concerning to enrich and design their home with archaeological artifacts stolen from sites by poachers is not such a good idea to let in situ and unprotected the recently revealed artifacts. Also where the main occupation of local dealers is to get ancient artifacts in any manner and even in illicit way; to let anyone free access at recently discovered archaeological site is the only fault of the scientifically in charge person. The worst thing is that the archaeologist responsible asked and obtained the Rescue Archaeological Certificate under which the owner may anytime intervene with excavators for digging foundations!
Certainly the pieces that have been stolen during 3 months from the abandoned site could be in a private collection of some VIP or are the objects of illegal traffic being obtained with minimum effort by any dealer who had the curiosity to pass in the vicinity of mentioned archaeological excavation.

The images presented here (Fig. 1-2), represent the remains of the funeral contexts after the action of the archaeological poachers. Also the image is relevant for the lack of interest from the archaeologist in charge.

Another case from the same ancient roman town Apulum happened in summer of 2006. Inside of castrum of legion XIII Gemina have been carried works on refurbishment of the old sewage built during Austrian
regime (XVIII century). The pipe of canal was passing through the median of legion camp in a previously unexplored area in the vicinity of the hypothetical *Pretorium* building's location. In accordance with legislation the work had to be carried out with the professional archaeological supervising as the new canal had to go deep under the old one being the risk to affect and destroy the roman level. After the work schedule from inexplicable reasons the workers from the mechanical machines (dredger, bulldozer) continued their work not being supervised by responsible archaeologists. So very often the dredger cup has penetrated and disturbed the roman level revealing a series of artifacts which were been loaded into trailers and took in unknown locations; thus the national cultural heritage goods being lost. Or were been recovered by the antiquities dealers who surely have questioned about the place where was deposited the excavated soil. Certainly a number of archaeological contexts have been destroyed. Even a portion of the wall's *Pretorium* was broken with the *Pick Hammer* machine. The testimony of such facts was more than 10 votive altars, more than 15 spindles of columns and blocks of limestone which were left initially on the sewage ditch. We can only hope that some of the excavated artifacts were recovered from dealers and someday, someone will refer to their presence in a private collection.
Another case: within ancient roman town Troesmis from Dobrogea area (Iglita, Tulcea County) in year 2000, a large real estate investment requires the research and rescue excavations in order to release the area. Involved in these archaeological activities were employees and the local museum but also a contractual firm from Cluj-Napoca city. Following the referral from an archaeologist (...) shows that research is carried out with the excavator in which a large part of the site was destroyed. The criminal file opened with that occasion although it started with a strong debut has ended with contravention measures under the circumstances that the museum’s director has forced to retired in pension and the withdrew of the private company from the contract. Over less than 4 years at a British auction houses were put for sale two bronze artifacts representing the laws that were publicly displayed in Roman cities and their text very well preserved “betray” the fact that it is about the: ancient Troesmis city laws! Interesting is the fact that the auction house
is closely related to the manager of company from Cluj-Napoca who had the archeological contract in Troesmis. The connection is too obvious to not suspect the existing connections and ethical concerns of the archaeologist who stole the ancient law tables in order to sell it. The exceptional value of tables from Troesmis (Iglita) is that they contain the law of a Roman city in the second half of the century II, in circumstances in which municipal law has evolved. Then they comprise the law of a Roman city in an area where still were not found such documents. From scientifically point of view the pieces have an exceptional value. They come without any doubt from the Roman city Troesmis (Iglita) being the most important written documents belonging to our ancient history and from territory of Romania. The city Troesmis bearing the name municipium M(arci) Aureli Antonini et L(ucii) Aureli Commodi Aug(ustorum) Troesm(ensium) which means: Troesmis city of Emperor Marcus Aurelius Antoninus and Lucius Aurelius Commodus. This proves the fact that the town received the city status in the year’s 177-180 A.C. from these two emperors.

Fig. 6. Archaeological materials recovered from a private collector. Some of them are offers as gifts by some archaeologists.

All the cases invoked above are under penal law. Towards this direction pleads a series of specific requirements of laws and normative acts.

According to the Ministry Order no. 2071 from 30.06.2000 regarding the Rules of organising the archaeological excavations in Romania, the excavation leader in charge had the next responsibilities: ensure compliance on the record, the protection and conservation of movable and immovable heritage artefacts found on a site; provide evidence of site of archaeological materials and their delivery to the institution according to the protocol for site. Also has the obligation as soon as the ending of campaign to deliver the
archaeological material to the institution that organized the archaeological research. According to same 
normative act mentioned above, the archaeological materials discovered during excavations are becoming 
state public property being under the administration of institution which organized the research (according to 
the stated collaboration protocol). Also the institutions organizing excavations are required to ensure 
adequate means for protecting and conserving the remains resulting from excavations.

In accordance with the Government Ordinance 43/2000, regarding the protection of the archaeological 
heritage and the declaration of some sites as national interest areas, the central public administration 
authorities and specialized institutions subordinated to them and also local government authorities had to 
cooperate and to respond to the activity to protect the archaeological heritage. In order to protect the 
archaeological heritage the local government authorities have the following attributions: ensure protection of 
archaeological heritage as a result of systematic excavations or accidental archaeological discoveries, being 
under private or public domain of administrative-territorial units allocating financial resources for this purpose; 
take appropriate administrative measures and notify the owners and real estate holders on buildings which 
are their obligations to prevent degradation of archaeological finds. According to the same law, the mayor 
has the following specific tasks: ensure security and protection of archaeological finds belonging to public 
ownership, revealed by systematic or preventing research and had to signalize urgently any breach of law to 
the decentralised public services of the Ministry of Culture.

According to article 31 of the same law, the dissolution, partial destruction or degradation of archaeological 
sites which are historical monuments is punishable under criminal law.

In accordance with article 8 from the Law 182, the public authorities, the owners, the titular of other real 
rights, also the managers and owners of the property belonging to the mobile national cultural heritage had 
the obligation to protect them against any acts or omissions committee that can lead to degradation, 
destruction, loss, stealing or illegal export of these. The Article 46 state that the archaeologically, 
epigraphically, numismatic, paleontological or geological artefacts discovered within systematically or rescue 
researches, and those discovered by chance by works of any kind, made in places which shall be exclusively 
public property enter into public ownership, according to the laws (art. 136 from Romanian Constitution).

Also since the discovery of artefacts underlined above (line 1) they are subject to the ranking procedure in 
accordance with this law and shall get in the administration of the institution which coordinate or support the 
research funds. The article 86 from the law regarding crimes against patrimony state that degradation, 
bringing into abandonment or destruction of misconduct of classified cultural goods it is considered a crime 
and is punishable by imprisonment from one month to one year or with amends starting from 1500 lei to 
7500 lei.

Regarding to Archaeological Ethics Code the archaeologists has the responsibility to attract the attention of 
the competent authorities on threats to the Archaeological Heritage including looting of sites and monuments 
and illegal trafficking of antiquities. And to use all means at their disposal to ensure that competent 
authorities take action in such cases.

Finally if made the case in question, in the Introduction of the book Standards and procedures in 
arachaeology, the author states:

Equally serious is the legal inability to punish non-compliance of these unwritten rules. An 
archaeologist who leave only the half excavate graves, or do not collect materials (ceramics) from a
Land that is suitable to the next day to start building and who is considering archaeological research concluded; is even in these circumstances the subject of colleagues opprobrium but is not punishable only morally by the Code of Ethics.

Despite of the existence of specific laws and a specific deontological code of the archaeologists, despite of the existence of special structures for the protection of the N.C.H, and these laws applying of, according whom they must to observe any dysfunction and ask for support of the law enforcement, the archaeological sites and artifacts are frequently in a very grave situation.

Another question rose in this context:

_in order to control the phenomenon of destroying cultural heritage is enough the unilateral intervention of the legal authorities with their specific structures (cultural, administrative, justice, law enforcement etc.)?_ 

Before all, the realities from last years proved that Romanian society is excessively interested in accumulating capital by mercantile collection of material values and is not really sensible regarding the problematic protection of cultural heritage. The mentioned structures with responsibilities on the protection of NCH have failed and they act like the “advocate” of the investors’ interests and not for the interest of the state.

In these situations the protection of archaeological sites and artifacts become an optional issue. This is a predictable reaction in a time when cultural models are missing or are very weak. When education is on a very unimportant position and when the civilization arguments remain in silence. The hierarchical system of socio-cultural values is deeply disturbed by the actual dysfunctions, by the new social structure, by the massive ideological struggle, by the deep efforts for the “general demythisation” of the majority important cultural values, institutes and peoples who define us.

In this context, the mass media cynicism is remarkable when in his priority of pursuit of sensational subjects are disposed to present in media the criminals point of view which are responsible for the problems caused to cultural heritage. Usually the criminals are able to penetrate the media channels with very well masked versions. The media component is unprepared for making distinction among the dilettantes’ versions of criminals and the expert’s opinions regarding the quality of some artefact as being an authentic one or a fake one. Moreover with his aggressive attitude media is irritated by these situations as a form of seeking of the real situation and of incapacity for intervention in a good way.

Now the investors, the most efficient structures of the society in the phase of capital accumulation, are in conflict with legal situations according the protection of cultural heritage. When is about to build in protected urban areas to invest in infrastructure or to “modernize” old historical monuments, the requirement for legal authorization that can delay or stopped the investments make the investors to be tempted to ignore the legislation. Consequently they are using a large gamma of methods and techniques even with the risk of civil or penal sanctions.

The strange manner classify of few files with crimes against the cultural heritage using only symbolic penalties are situations which encourage this type of behaviour making from criminal investors, winners from many points of view (time, influence, capital).

In the last instance we must agree that the attitude of society faced with the criminality with the cultural heritage is a problem of education. A cruel reality is revealed by the lack of the civic spirit and the civilized
Fig. 7-8 – A public archaeological collection, "exposed" in a totally improper manner (Zlatna – Muncipium Ampellum; Alba County). The responsible institutions had no reaction when the situation was presented by the Police officers.

**behaviour.** Concretely in situation of knowledge’s lack regarding the signification, value and the protection regime of cultural heritage the attitude of every citizen will be subordinated only to their own interest, and why not, to their instincts. It is absolutely clear now that an uneducated public is unable to valorise the cultural heritage even if this heritage can define him.

Without any doubt the models for civilised attitude regarding the archaeological sites (distinguish as historical monuments) is a problem of the administrative structures (central and local) in order to inform and to emit legislative acts regarding this topic. Even this can not be enough. The principle of “*carpe diem*” and the wrong understanding of all these realities are now in full development and will be eliminated only **by people’s education!**
Internet trade, coins and archaeology

Hubert LANZ

The traditional means of trade in coins have been public auctions, fixed price lists, private sales, collectors club meetings, coin fairs and bourses, etc.

This type of legal trade and exchange between the legal owners and collectors was restricted sometimes for fiscal reasons and cultural aspects, which sometimes showed a nationalistic approach to ownership of collectables.

In the US for a certain period since 1933 until about 1970 you could not own any gold coins, old or new, in Austria after WWII my fathers company had to apply at the NATIONALBANK to be allowed to sell the few grams of gold in an ancient gold coin to a collector abroad, plus he had to get a permission from the DENKMALAMT. It was obvious that under these bureaucratic restrictions a legal trade was almost impossible and an illegal trade was instantly available. US citizens have been hiding their gold portfolios, Austrian collections and holdings of many types of cultural items went to the free trade countries like Switzerland and Germany, as still today Greek, Italian or Spanish collections.

Since the nineties of the last century the private trade, especially on eBay, Ricardo, one two sold, and other platforms started to replace some of the traditional ways to exchange collectables and used goods, which could be reused and/or just collected. From the beginning some professional traders like myself understood these platforms as an extension to their other business, some used the possibility to sell almost completely anonymous, others realised the tremendous future for the official and legal trade on the web.

As for coins the possibility to sell expensive and rare coins was overrated at the beginning, because the computers have been slow, the sophisticated collectors and investors had limited access to the internet, so many of the internet platforms, like ricardo, one two sold, etc. disappeared. Only ebay survived as a general platform for collectables of all kinds, including low priced coins. In recent years specialised platforms like MA shops and MA auctions, as well as new general platforms like Tamundo appered on the web, since computers and connections are faster and more suitable for internet trading. Market leader is still ebay by far, but faces problems, not so much from competitors, as from all sorts of legal restrictions and bureaucratic obstacles.

With the technical development, bringing internet to any household in the world, private sellers offered their holdings of collectables, including coins and antiquities on the internet and attracted the interest of other collectors and scientists, who now in recent publications, like RIC, ROMAN IMPERIAL COINS, even used ebay offerings as references for coins. Some of the archaeologists, realised, that there are more ancient coins offered in the internet, as they have ever seen in official excavations, forgetting, that they generally never have been interested in coins before. Small little pieces covered with dirt could not give fame to the excavator, who was searching for the palace of Alexander the Great or the brassiere of Cleopatra, but seeing traders trying to make money from these tiny neglected objects made them greedy and jealous, so they called for restrictions and openly demanded eradication of the trade in ancient coins.

The legal situation does not allow them to fulfill their dreams, so some of them are abusing the law by stating that any ancient object has to be a tainted illigal merchandise, claiming that all ancient objects in private
hands are known and have been certified by an official public agency and this since hundreds of years, only those are legal objects, if they accompanied by documentation of origin.

I know I will not make many friends in the archaeological community if I say, what I think is right to say. Most of the restrictive laws are originating from a political background, which we thought we had overcome. Fascist Italy under Mussolini introduced the Italian law, which was only slightly changed recently, and I still received coins from an Italian dealer, a few years ago accompanied with export licences referring to the law of 1939 and not to the EU directive. When NAZI German Empire conducted the Anschluss of AUSTRIA all collectors had to report their collections and get a permission to keep them, the same happens in the EU member states Greece or Bulgaria today. The statement “Zuerst registriert, dann konfisziert” (first registered, than confiscated) became a standard practice, in the fashist and the communist era in Europe. So its not surprising, that the states Mexico, ruled for ages by just one political movement, Peru, with a nationalist president, supported by marxists, and Nigeria, with a nationalist regime, fighting in Biafra, suggested to the UNITED NATIONS in 1960 to negotiate a convention to protect their national heritage from collectors. After 10 years of discussions the UNESCO convention of 1970 was finalised and to no surprise the first few nations ratifying have been mostly nationalist and communist countries. Until today only about 1/3 of all UN nations have signed or ratified this convention and I really hope, many of them will never do. One of the few nations using their own brain in the ratification process was Cuba, in my opinion correctly, stating that this convention has also colonialist elements, since occupied territories or nations have no right of their own. Israel issues export licenses for national heritage from the Palestine areas, as China would have to do for Tibetan cultural objects.

Until 1998 Germany considered this convention as not complying with the German Grundgesetz, only until the Green Party joined for a left wing government, they pushed for signing and a ratification law, which was finally accepted in 2007, also by the coalition government under the conservative chancellor Frau Merkel, who experienced her education in the DDR.

The UNESCO convention of 1970 has among many negative aspects, only one positive, which is, that the nations have to make lists of their important national heritage in private hands, which they want to be protected from illegal export. But if you try to find informations about these lists, you will be very disappointed, because only Germany has a list of about 1000 cultural objects in a list, which is available as printed issue. The UNESCO offices in Paris have no such lists available for the trade and if you search on the internet, you will find that Australia has a list A and B, one just has categories of restricted items, and the other one only has objects, for which an exportlicence has not been granted and therefore are not allowed to be exported. The other list is so general, that officially nothing can be exported, but until recently nobody in Australia really cared. Canada has also a few single objects listed, but the rest of the world, including Mexico, Peru and Nigeria seem to have no such list, clearly not obeying the convention, they themself wanted to have. Germanys ratification law included the request for a listing of identifiable objects, whoever country sends her list to Germany will have the important objects put on a German list for restricted items. Any object which is not listed can be freely imported, with the only restriction that a member state can claim it as national heritage up to one year after knowing of the existance and provenance from within its national borders. As you might understand, some hardcore archaeologists do not agree with the list system at all and
collectors are not happy with the one year grace period, which again is not acceptable according to the German Grundgesetz, but so far no case went to the Supreme court.

The EU treaties of Rome, Maastricht an Nice, have been aimed at the creation of a united market within its borders and did not want to have any restrictions in a common internal market. Not so for cultural objects, but even here the Chapter 2 regulating the internal trade, Article 36 (Rome and Maastricht) and unchanged the Art. 30 in the Treaty of Nice trade restrictions for cultural objects of National importance are only allowed if they are not aimed to disturb or obstruct the legal trade between member states. Many of the member states unfortunately still have restrictive legislation, which is only aimed exactly at restriction of a legal market. So far there is also no decision by the EUROPEAN COURT, what is really a cultural object of national importance.

In preparation of the lifting of all border controls within the EU, some nations wanted to implement a European legislation for exports outside of the EU and within the EU. Unfortunately the nations with restrictive cultural laws succeeded to get the EU bureaucracy moving. After some years of bargaining mainly between bureaucrats and a few interest groups the coin trade organisations learned by chance of the dangerous developments, we have not been included in the process, as usual in the EU. The proposal of an EU directive to regulate the export outside of the EU included a legal text and an appendix with categories of cultural objects and an annex for their treshold values, which shows that not culture but fiscal greed was the driving force behind. Category 1 of restricted cultural object is including all kind of archaeological objects directly from excavations and from archaeological collections. But to the dislike of archaeologists this category is mentioned in a special forward stating, that member statese not allowed to ask for exportlicences if the the object is of limited scientific value. Again this makes very clear that not every archaeological object has to carry a certificate, only if its of unlimited or supreme scientific value, not contradicting but qite misunderstandable in this case is the ECU 0,- treshold, because a commercial valueless object can have an important scientific value if it is found and staying in important scientific context, but again not just any context is scientific important, even if archaeologists like to claim that.

In the early proposals for category 12 collectors items and collections of numismatic value have been included with a treshold of ECU 0,- value, but the British colleagues did send to every Parliamentarian a little Roman coin from British soil stating that these coins are being found, sold and collected in the millions and their value is less than the stamp on the envelope. If the EU directive would be implemented as suggested, the museum bureaucracy would be derailed if every one of these coins would have to be presented for an EU export licence. So the final category 12 excluded the single collectors items and increased the treshold for collections of numismatic value to ECU 50.000,-. The same categories have been included in the EU directive for the return of illegally transferred cultural objects within the EU. Single coins and coin collections without any special numismatic (scientific) value can be traded and collected without any restrictions by the EU legislation.

But not so understood by some of our member states bureaucracy, who try to treat single coins under category 1, which is clearly contradicting the intentions of this EU legislation.

Another important side of the existing legislation is the different legislative approach to ownership of finds, treasures and hoards in the various countries. Treasure trove, Schatzregal or Hadrianic partition or full ownership by states or the public are situations that could not be more complex to handle for dealers and
collectors, but also by archaeologists, who claim that state property of anything found under and on the ground is the law almost everywhere and anything in the market is illegal. The reality is, that many developed democracies like Austria, Belgium, France and important states within federal Germany, do not have this kind of law, while other democracies, sometimes with a more recent history of undemocratic rule, like Greece, Spain, all the former Eastern Block nations, including these states within federal Germany, have a legislation in place, that disowns finders, landowners and collectors. All these nations have in common, that they have not only corrupt bureaucrats, but also a flourishing illegal market for collectables and antiquities, which not reachable for research, but also not for taxation and money from taxpayers is necessary to fund official excavations, done by archaeologists, and museum budgets.

If there are no dealers and private collectors, there will be no visitors to museums and no private donations, etc.

Archaeologists claim, that only the context, makes a coin valuable for science, which is not completely wrong, but quite wrong, because numismatic is the science of coins, their monetary history, their art, their production and their distribution. What does the context tell us about an Alexander drachma, with mint mark A or B from Miletus? Nothing, they do not even understand what a mintmark could mean to a numismatic scholar or a private collector. The context is important for dating and gives us a lot other informations, without we could not survive, but why do we rarely read about any of such important information in archaeological publications. Did you ever read that an archaeologist detected and praised the artistic style of a portrait on a little follis of Constantine in comparison to others? Archaeologists, who claim to be the only ones to read and understand the ancient world, through the archaeological context, have no idea what the numismatic world could tell them. I have been in many archaeological museums, numismatic museums and excavation sites. Have you ever seen an archaeological context of an ancient coin demonstrated? Not me, not even in Pompeii I have seen a sign, pointing at a coin, covered with earth or dirt, and so kept in the archaeological context. Anyway, there would have to be millions of signs for coins in the context only on one agricultural field near Carnuntum, I do not think the farmers there would be very happy about that. Thanks to the detectorists the numismatic evidence is brought to light and not lost in the archaeological context.

I believe the present legislation in Bavaria and Austria should be used as a role model for legislation, because it protects the interest of the collectors, private and public, science in numismatics and archaeology and the finders and landowners. It means any legally owned coin or collection can be freely traded, collected, sold, exported and imported. NO RESTRICTION for collectors and museum collections. Collector have a positive relationship with scientists and are willing to share their knowledge with them. Finds of any scientific interest have to be reported to the authorities, for scientific documentation, after that the find has to be returned to the owner, who is the landowner and the finder, each of them owns one half. If the numismatic or archaeological museum, or any public museum is interested to own all or part of the hoard, they have to negotiate for a price, which is acceptable for both parties. If the hoard is of extremely high interest, the public can put the hoard on the list of national treasures, so it has to stay intact and cannot be exported without permission. This way Bavaria has a record high report rate of any kind of finds and science has full access to information.

Instead of disowning and punishing, affected nations and interested archaeologists should find a way with the help and support of UNESCO to make unreported hoards available for study purpose, get funding to buy
really important pieces or complete finds, and bring them to the right place to display them for the public eyes.
Archaeologists have to understand, that only in cooperation with a free trading and collecting community they can gather the information they claim to need. In Bavaria its the rule, that if someone reports a find and leaves it in situ, the archaeologists can move in for an aftersearch and whatever is found then still stays in the ownership of the first finder and the landowner.
Restrictive laws, as we see them in many parts of this world only lead to destruction of contexts and an illegal market in those countries.
Finally the Internet itself should be seen positive by archaeologists, because parts of hoards, but mainly so called stray finds can be seen and used for scientific study worldwide, but also makes coin collecting popular among many peoples who normally would not have any access to a real piece of history. Before the internet, these coins have been lost for science, because they only could be sold to telemarketers or jewellers in large quantities, but they always have been on the market and will be on the market, but not accessible for science.
Modus Operandi in the Criminal Electronic Trade of Cultural Objects

Augustin LAZĂR

General Prosecutor’s Office, Alba Iulia Court of Appeal, University of Alba Iulia, Romania

Abstract: Given the globalization of criminality against cultural heritage, when the criminals that live in a country often meet in another country and organize the perpetration of deeds in a third country, while investing the proceeds of such deeds in a fourth country, European investigative structures must have at least the same mobility, communicate information to each other in real time, and must be capable to operatively find in other countries evidence admissible in the country where judgment is to be held. The appearance of e-trade provided an evolved modus operandi to the networks of traffickers that trade cultural goods whose provenience cannot be demonstrated through legal documents. Given that the internet sites provide them with the possibility to perform operations without giving any details to their customers with regard to the origin of goods, this type of rapid trades, with a very low degree of control by site administrators, grants to the involved persons an increased degree of security regarding the preservation of their anonymity.

Fast electronic trades offer the possibility to circulate a huge volume of archaeological pieces within such tenders and to obtain significant amounts of money, resulting from the sale of such goods.

Key words: criminal networks, illegal export, money laundering,

The fall of the “Iron Curtain” in 1989 and its consequences on the free movement of persons, goods and capitals represented new opportunities which were promptly capitalized by the promoters of illegal traffic in cultural goods. The intermediaries of the “grey zone”, particularly those living in the former Yugoslav space that already had the trade connections with central European tender houses surveyed the black market of the regions with archaeological sites, where they contacted the poacher groups concerned with capitalizing the “merchandise”.

Occasional finds of artefacts in these areas triggered an interest in illegal prospection, at the same time with minimizing the risks of punishment by authorities, in the hope of an easy way to get rich, within the general process of capital accrual. Unlike occasional finders, poachers that call themselves “treasure hunters” carry out this activity in a professional manner, consistently and regularly, having very good knowledge on the environment in which they act and the rules regarding the secrecy of their illegal activity. They also know how to approach the locals, to gather information on the areas where occasional finds took place, respectively the locations rich in archaeological vestiges and the channels for the illegal capitalization of artifacts.

The criminal prosecution practice in the last years confirmed the remarks made in the specialty literature\textsuperscript{1}, on the rule regarding the requirement of local intermediaries between the groups of “low profile poachers” and the intermediaries or the traders of antiques that have national or international contacts. These
intermediaries are fully aware of the factual situation on site, they know how to evaluate the trading potential of the finds and they have close relationships with certain representatives of local authorities to make the latter depend on them and to promote their interest through blackmail.

In east-european countries, among which there is also Romania, some local intermediaries of the traffic in archaeological goods, under the protection of public persons having concerns specific to mercantile collectors, accrued fortunes allowing them to become major figures of the underground world, having access to the highest State institutions and enjoying an aggressive support from the mass-media available to them. This way, local intermediaries became leaders of the underground world and carried out a systematic activity of archaeological poaching. They invested the product of their criminal activity in ultramodern and state-of-the-art detection equipment and they organized “poaching teams”, with the necessary logistic support, which started to operate in the sites from the Orăștie Mountains.

Examining the actual, de facto, situation of archaeological poaching in Romania, we find a worrisome development highlighted by the investigative action of judicial bodies. In this way, in addition to the existence of well structured specialized criminal networks, supported by “investors” capable to finance the procurement of state-of-the-art equipment for metal detection, it was found that, even more than that, certain museum employees were recruited as members of the “association of treasure hunters”, an organization for which they render specialty services, while from certain museum institutions, cultural goods are stolen upon order140.

Romanian researchers firmly drew attention to the fact that archaeological heritage became a “gold mine” for the poachers of archaeological sites that hide under the name of “treasure hunters”:

<<… the robbing of Dacian settlements in the area of Dacia’s capital (Sarmizegetusa Regia, Costești, Blișău etc.) by commando teams looking for gold (Koson coins, statues and other precious metal objects)... “Dacia’s gold” and coins reached in “times of peace” the markets of antiques in Eastern and Western Europe (and even across the ocean)... They leave behind devastated ancient settlements, tons of iron tools left on site, ceramic taken out of the context of sites' stratigraphy, all lost and wasted for the people who, with patience and scarce money – teams of archaeologists, have been investigating here or elsewhere for decades. The scourge extended nationwide, persons with more and more sophisticated detectors keep looking. The code of “omerta”, the silence law, has replaced not only the cultural heritage protection laws, but also common sense laws ... let alone the Roman city from Partoș or the ancient gold centre from Roșia Montană where poachers keep looking for monuments, pieces and coins together with various local guides? We feel the obligation to draw attention to these facts. >>141.

140 Prosecutor’s Office attached to the Alba Iulia Court of Appeal, File No. 151/P/2006 (not published).

The European judicial practice revealed *perfected operation methods* used by the networks of criminals, when perpetrating their crimes, in order to illegally take over border or export archaeological goods, conceal the criminal origin and to artificially increase their market value.\(^{142}\) In this way, case law noted the “freezing” practice applied for a minimum term of 5-6 years of the illegally exported cultural goods, with the closest foreign banks, known as firm in preserving the banking secret. Another operation method is the “triangulation”, which is the exporting of artefacts by a third state which did not ratify UNESCO conventions regarding the cultural heritage protection, such being directed to the markets that supply the largest profit. The *fragmentation* of the archaeological objects that were illegally excavated or *failure to restore them*, aims at facilitating their concealing upon the customs check, and at increasing the proceeds of the sale of such fragments, named in the slang of this job “orphans”. Certain cultural goods, resulting from illegal digging works, especially the serial goods, such as the coins, are frequently introduced in private collections or in collections that are not entirely documented, in order to “launder” them, to grant them a legitimate origin.

As compared to these evolved operation methods, specialists proposed *de lege ferenda* to coordinate European legislation with regard to value thresholds, leaving aside any reference to the concept of prejudice, which must be deemed as presumed for the types of classified goods; establishment of *administrative penalties* for deeds with a lower social risk; possibility to *reduce punishments* for the persons that cooperate in the recovery of the goods transferred abroad; possibility to extend the use of *special investigation means* provided for combating the traffic in drugs, in order to investigate all the crimes related to such type of traffic, including simulated procurement or sales; *punishing the deeds aimed at preventing the restitution* of the cultural goods known as the result of illegal export.

*Found and stolen artefacts* are usually deposited in safe hideouts, located in forests, mountain chalets etc., being hidden at the robbers’ domicile only occasionally and with great caution (arranged niches, holes etc.), so that their chances to be discovered by authorities are very low in the absence of certain information.

*The evaluation operation* is conducted by intermediaries, usually on site, their movement being performed with caution, upon receipt of the telephone announcement “there is merchandise”. After examining and consulting the catalogues of the tender houses, the intermediary will decide, based on the value of the pieces, whether or not to contact the representative of the higher rank of the network, the over-regional or international intermediary.

*The intermediary of the “grey zone”* is sometimes contacted on site, according to the pieces value and volume. The meeting is regularly organized in a point that has already been checked: boarding house, motel etc., located half the way the interested persons must go. In this way, the meetings of Romanian

intermediaries from the Hunedoara County, who had on them sample “merchandise”, with the Belgrade and Vienna 
dealers initially took place in Deva, then in one of the Romanian cities located near the Western 
border: Reşiţa, Timişoara, Arad etc. Transport is secured by attendants established by the intermediaries 
from among the concerned poachers, by dividing the treasure in tranches in order to avoid any risk of its total 
loss or of resorting to certain representatives of the authorities subordinated to the network to attend their 
meetings.

*The direction* followed by ancient objects from the place of illegal digging works to the tender house has 
three stages: taking artefacts from their area of origin, their illegal taking out from their country of origin and 
their legal introduction in a country with an art market.

Artefact capitalization is made in the countries with art markets, most often by art dealers with very small 
businesses, sometimes even by a single man or by amateur traders, and more seldom by a tender house. 
The main commercial centers where valuable archaeological pieces surface “spontaneously” are: Basel, 
Zürich, Geneva, Munich, London and Paris in Europe, and New York in USA. Artefacts are regularly 
surfacing with *agents or intermediary traders* originating from the provenience country of the “merchandise” 
or from the respective region, who have sound knowledge of the language and mentality from that country. 
Either buying those pieces or taking them under consignment, the agent or intermediary trader is considered 
to be the last stage of the illegal supply market and the first stage on the legal opening market. Although the 
locations crossed by cultural goods until the official access to the country with an art market, are immediately 
forgotten, these intermediaries know the illegal circumstances of the discovery of the pieces in their 
provenience country, and the traffic “actors”. Such intermediaries also represent the connection with the 
owners of art galleries or with the traders known on the sale market.

The trader from the countries with an art market does not usually take the risk to take part in the illegal 
export from the country of origin. In the cases in which he takes this risk, as he has his personal contacts 
and a good knowledge of the mentality, language of he respective country, the discovery of the first deed in 
which he is involved will rapidly entail the closing of his trading activity. This is also the case of a perpetrator, 
a small Romanian trader established in the United Kingdom, having companies in London and Florida, USA, 
who sold to certain New York tender houses two of the Dacian bracelets excavated and illegally taken from 
the Romanian sites of the Orăştie Mountains, which were subsequently recovered by Romanian judicial 
authorities.

“Antiques laundering” is a fraudulent manoeuvre meant to dissimulate the illicit origin and nature of the 
arkeological pieces resulting from the criminal activity, to create the appearance of legality and to insert 
them in the flow of legitimate antiques businesses. *The legality appearance* artificially created for the artefacts 
that cross the “grey zone” and reach the country with an art market is grounded on the opinion that the legal 
or illegal exit manner of an object “cannot be seen on the object”. The trader knows or suspects the country 
from which the piece is coming, but prefers not to be informed of it route of such piece from the place of its 
discovery until the art gallery. Under the circumstances, the buyer perceives the risk taken and may claim
that the artefact price should decrease appropriately. The risk of a request for repatriation increases on a pro rata basis with the price of the artefacts, as it includes both its artistic quality, rare nature and its cultural importance. To mitigate this risk, traders adopted several technical sale procedures such as: taking the cultural good for sale under consignment, subject to the payment of a commission representing a percentage from the sale price; lending the good to a museum in order to be exhibited for a period of time; then, such good is considered as “laundered”, for the reason that no claims were raised during its public exhibition time.

Analyzing the issue related to “antiques laundering” in order to create an appearance of legality, we find similarities with the judicial practice created in the field of combating money laundering. In this way, the specialty literature regarding the combating of money laundering revealed that any crime-related activity may be described by means of three specific items:

- *iter criminis* – the itinerary travelled by the perpetrator from the criminal resolution to the stage related to preparation acts, the execution stage, completed through the perpetration of the crime;
- *modus operandi* – the operation method composed of a complex of activities, customs and procedures used, which characterize a criminal's activity before, during the perpetration of an intended crime;
- *punctum saliens* – the characteristic point, i.e. the perpetration particularities that may be noted through the observation of the criminal itinerary.

With respect to antiques traffic, such items may be revealed through a careful examination of the circuit of acts, merchandise and payment methods, of the succession and logic of the operations performed by traffickers, of the documents genuineness, securities, etc., which activities allow the identification of perpetrators and the evidencing of the fraudulent intent (*dolus ex re*) to offer an appearance of legality to trafficked cultural goods.

The judicial experience with regard to combating money laundering, able to identify the nature of dirty money in this way, the Latin proverb “*Pecunia non olet*” (Money does not smell), through the conclusion “*Pecunia olet*”, money does smell, since they leave tracks, and its track can be verified. Similarly, stolen cultural goods leave tracks, starting with the holes dug in the archaeological site, Internet messages and the images through which the respective goods are offered for sale, the detectors and documents that indicate the

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poachers’ concerns, other pieces (the “orphans”) of the treasure left on them or in the country, contracted by consignment or invoices, the amounts transferred into the accounts of participants in traffic, the procurement of valuable goods (luxury motor vehicles, houses, detection equipment, etc.). A modus operandi similar to that used by the launderers of dirty money is represented by the procurement by traffickers of car washes that will continue to allow them to preserve a legality appearance of the dirty money produced through the illegal capitalization of the pieces that form the object of traffic.

The appearance of e-trade provided an evolved modus operandi to the networks of traffickers that trade cultural goods whose provenience cannot be demonstrated through legal documents. Given that the internet sites provide them with the possibility to perform operations without giving any details to their customers with regard to the origin of goods, this type of rapid trades, with a very low degree of control by site administrators, grants to the involved persons an increased degree of security regarding the preservation of their anonymity.146

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146 In the specialty studies, international traffic in cultural goods is quoted as one of the primary sources for dirty money, used inclusively in financing international terrorist activities. Since the mentioned type of criminal activity is not so known and studied, this source being apparently “cleaner” than the traffic in guns, drugs or persons, well known criminal manifestations, which are carefully supervised by law enforcement bodies, terrorist networks started to express their interest in this field with a particular financial potential. See G. Matei, Em. Stancu, Electronic trade with archaeological artifacts, a potential financing source for certain terrorist activities, in "The contribution of the criminalist science in the investigation of terrorist acts and other events with serious consequences", Romanian Criminalists’ Association, Bucharest, 2006, p. 61.
Investigations conducted in the virtual space highlighted the circumstance that a large number of heritage goods is sold on eBay, genuine art objects, archaeological artefacts, and their reproductions. The frequently used sale method is tender, the seller having the possibility to conceal the eBay identity of the tenders who, under the circumstances, do not know who their trading partners are. Another sale method is that in which the seller who presents its artefact sets a fixed price, a method which is known on the eBay domain under the name “buy it now for this price” (“buy it now”).

Payments are made by the means indicated by the seller, either through the PayPal system, of money electronic transfer from the buyer's account into the seller's account, which may be either controlled, or through the money order system, which allows the money collection from any bank, similarly to a cheque payable to bearer.

Fast electronic trades offer the possibility to circulate a huge volume of archaeological pieces within such tenders and to obtain significant amounts of money, resulting from the sale of such goods. Note must be made of the fact that low and undervalued prices of archaeological pieces traded do not attract attention, and individual sales do not exceed the legal rating so as to be reported as liable to constitute money laundering operations.

Site administrators waive any responsibility regarding the creditworthiness of the trades concluded. eBay system users are personally liable for all the aspects related to the accurate description of the object, its dispatch to the buyer, without any obligation whatsoever to inform any authority in connection with the provenience or ownership right over the sold good, and the respective artefact may belong to the seller or to any other person.

The criminal prosecution practice in the environment of trades with goods resulting from archaeological poaching revealed as the sellers’ cautious operation method the indication as artefacts’ origin location of huge areas belonging to the same culture, avoiding to locate their origin on the site of provenience. For example, a perpetrator, a Romanian citizen, an administrator of commercial companies headquartered in the United Kingdom and in USA, offering for sale golden Dacian bracelets and ancient monetary treasures, originating in the archaeological sites classified as a historical monument from the Orăştie Mountains, Dobrogea and other regions of Romania, presented them on the website of his companies, as artifacts of Thracian origin, coming from the cultural area of the Balkan Peninsula.¹⁴⁷

¹⁴⁷ Prosecutor's Office attached to the Alba Iulia Court of Appeal, File No. 151/P/2005 (not published).
According to the same cautious operation method, sellers are putting up for sale large treasures, divided in tranches of tens or hundreds of pieces at each tender session. In this way, making the offer does not endanger the whole treasure. On the other hand, after selling a lot of pieces, such as Dacian bracelets, upon the sale of the following pieces, the good faith resulting from the public sale of the previous pieces is invoked. Thus, the perpetrators, members of a poaching team from the Orăștie Mountains, after locating and stealing through unauthorized detection and digging works performed in the archaeological site Sarmizegetusa Regia a treasure composed of 3,000 Koson golden coins, offered for sale to the National History Museum of Romania and to the National Bank of Romania lots containing 200 coins each, presented as inherited from their predecessors. Afterwards, dissatisfied with the received amounts, they capitalized the remaining treasure on the internal and international black market of antiques.

The same operation method entails other cautions as well, such as setting reference prices which are concealed to the tenders, named "back-up prices", which offer a tender the possibility to procure pieces when he/she reaches their prices. The artefact is thus sold to the tender only when such price is offered. Otherwise, the piece is replaced in the tender procedure upon a future session.

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148 Prosecutor's Office attached to the Alba Iulia Court of Appeal, File No. 92/P/2006 (not published).
Criminality against the National Cultural Heritage, a field of “white collars” criminality, represent an expanding criminal phenomenon favoured by the globalization of economy and the transition to market economy in the Eastern Europe. In the states of South-Eastern Europe, including Romania, an important influence is exerted by elite of the networks of traffickers from the Central European and former Yugoslav judicial space, coming from the symbiosis of former power structures with the information services and groups of organized crime which elaborate and coordinate the application of scenarios and criminal strategies in the field of interest. A note must also be made of the influences of the criminal networks from the Near East, and of the Italian mafia operating in the sphere of the traffic in heritage objects and of economic and financial frauds, capitalizing the opportunities offered by the transition period.

Criminality against the National Cultural Heritage also proved to be endemic for the States that have an ancient heritage and a developed art market (archaeological poaching, illegal traffic in cultural goods, etc.), an inherent pathological component of the global trade in art objects. Frequently remarked as an articulation of the power, this kind of criminality adjusts its conduct and extent to the responses of the public administration and judicial authorities of each State, as well as of the EU institutions.

Fig. 3 – The Câprărești point: the archaeological context (the pit) from where was stolen, on the 6th of May 2000, the treasure composed by 10 golden spirals.

After evaluating the data characterizing the criminal phenomenon, and the response capacity of judicial bodies, the research effort outlined, as a practical solution of riposte, a rigorous methodology for the investigation of crimes specific to the business environment, which entails the resort to specialized task forces and team action method led by a prosecutor, counsel by specialists in the field of interest and the orientation of investigation according to the methodological directions explained above. The imperatives of the fight against the evolved forms of criminality in the field of the National Cultural Heritage require the application in the criminal prosecution practice of this research methodology, and the achievement of the following strategic objectives:

1. Educating and raising the public awareness with reference to the danger represented by the crimes against the National Cultural Heritage, including the corruption crimes related to such deeds.
2. Increasing the effectiveness of the measures meant to prevent and control criminal activities in the field of the National Cultural Heritage (archaeological poaching, thefts from museums, frauds, money laundering etc); application of preventive measures with an administrative nature (withdrawal of license, professional or commercial authorization); creation of databases regarding persons and business companies that carry out certain illicit activities etc.

3. Protecting the participants vulnerable to criminal lawsuit.

4. Modernizing the investigation means in the repressive field (strengthening of the new specialized structures of the Judicial Police, specialization of magistrates in the investigation of these crimes etc.).

5. Evaluating the effectiveness of investigative structures, stimulating the cooperation of institutions that participate in combating the criminality against the National Cultural Heritage: the Public Ministry, the Romanian Police, the Border Police, the Customs.
Attainment of the mentioned objectives shall also entail the strengthening of the teams of magistrates, police officers, public servants by means of a massive recruitment of professionally well-trained young people, motivated for attractive and well-compensated public careers.

This strategy needs to be incessantly supported by a firm rule of law, able to ensure Romania’s judicial accession at European level and to defeat the negative forecast regarding the continuously ascending tendency of the rate of criminality against the National Cultural Heritage.

Looking to the future, in the context of the evolution of European integration, several fields are outlined to be subject to the reflection of researchers: organization of specialized structures, strengthening of inter-institutional cooperation, elaboration of specific, uniform procedures for investigation and trial, of unconventional strategies for prevention and control. Also, note must be made of several tendencies of the evolution of crimes against the National Cultural Heritage at a continental level.

The phenomenon of progressive globalization of economy sets a rate for the unification and growth of the degree of interdependence of criminal markets and perpetrators that operate within their territory.

The adjustment capacity and mobility specific to criminal organizations determine the relocation of criminal activities from the space of Western Europe, where the qualified pressure of judicial institutions is exerted, to the space of Eastern Europe where new opportunities for illegal business emerged (archaeological poaching, smuggling, money laundering, etc.), while relevant investigative experience and logistic means of authorities are lower. Under such circumstances, the annihilation of the new manifestations of criminal
groups in the field of the National Cultural Heritage, including that of corruption and organized crime “laboratories” created in the space of Eastern Europe (e.g., Transnistria) is possible through the cooperation of investigative structures, mutual transfer of expertise within European programs, support of judicial bodies of the Eastern Europe in their action for emancipation from under the suffocating pressure of the networks of economic and political interests, concerned with the satisfaction of their own interests with respect to fast capital accrual.

Our research revealed that as the integration into the common European market grows, the free movement of goods, persons, and services develops, conditions are created that favour the realization of specialized criminal networks at the European level, characterized by a sophisticated and occult modus operandi, integrated into traditional economic circuits, by means of complex schemes and by their involvement in an international chain of intermediaries. The investigation of these criminal networks requires an acceleration of concerns for the creation of a judicial European space, of the European Criminal Code (Corpus Juris), of the European judicial network (Eurojust) composed of prosecutors, judges, police officers with equivalent competences delegated by each Member State according to its legal system, of the European Public Ministry, and of the institution of the European Prosecutor for the protection of the cultural property interests of the Community.
It is necessary that European investigators should be able to use in an operative manner, in the field of criminality against the National Cultural Heritage, *pro-active or special investigation techniques*, respectively *ante-delictum and special investigations*, such as: infiltrations of under cover agents, “screen” companies that supply services to criminal networks, informers, interceptions, audio or video recordings, use of new technologies for the access to information systems and for the analysis of the information, surveillance of bank accounts, legal measures for decreasing the penalty for the criminals that cooperate with judicial authorities, etc., which proved their efficacy in the application of “surgical” *coup*s to criminal organizations.

Such investigative techniques shall be used by specialized structures, only within a legal framework, exclusive of the arbitrary, with the magistrate’s approval and only for judicial purposes, respectively for the purpose of collecting evidence in cases of organized criminality.

Given the globalization of business criminality, when the criminals that live in one country often meet in another country and organize the perpetration of their crimes in a third country, and hide or invest the outcome of their crimes in a fourth country, European investigative structures must have at least the same degree of mobility, must communicate their information in real time, must be capable to find in other countries evidence admissible in the country where trial is to be carried out. The dynamics of the organization and specialization of criminal networks, the adoption of a more and more evolved modus operandi impose similar dynamics in the organization and specialization of investigative structures, use of special techniques for operative surveillance and research that are adequate to new operation methods and may be applied throughout the European judicial space.