

GOLD CULTURE AND THE HISTORY OF INDUSTRIAL HERITAGE AT ROȘIA MONTANĂ

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Abstract: *Gold Culture and the History of Industrial Heritage at Roșia Montană.* Roșia Montană is a Romanian village that appeared and developed due to and for the gold exploitation. The history of this place is closely connected to the mining activity of gold ore extraction and has four significant periods: Antiquity, Feudalism and Middle Ages, Modern Age and the first half of the 20th century and the Communist and after Communist period. Each period has specific characteristics and provides unique cultural values and important material elements of the local industrial heritage.

Rezumat: *Cultura aurului și istoricul moștenirii industriale la Roșia Montană.* Roșia Montană este o localitate din România care a apărut și s-a dezvoltat datorită și pentru exploatarea aurului. Istoria acestui loc este strâns legată de activitatea minieră pentru extragerea minereului aurifer și poate fi împărțită în patru perioade relevante: antichitatea, feudalismul și evul mediu, epoca modernă și prima jumătate a secolului 20 și perioada comunistă și după. Fiecare perioadă prezintă caracteristici specifice, generând atât valori culturale unice, cât și importante elemente materiale ale patrimoniului industrial minier local.

Key words: *gold exploitation, gold culture, industrial heritage, Roșia Montană.*

Cuvinte cheie: *exploatarea aurului, cultura aurului, patrimoniu industrial minier, Roșia Montană.*



1. INTRODUCTION

The mining activity that took place at Roșia Montană from over 2000 years has influenced the local social, economic and environmental conditions and it has also developed special cultural conditions. The gold attracted different ethnic groups in the area, creating old cultural values and a precious cultural and industrial heritage. The village was born because of the mining activity and, in time, it became almost totally addicted to the gold exploitation. This study shows the evolution of the mining activity over significant historical periods highlighting the cultural elements that gold provided for the local heritage. Why? Because this entire rich historical heritage has now an uncertain future, and perhaps only the written aspects of the past will remain as a material evidence of the gold culture at Roșia Montană.

2. METHODOLOGY

In order to reflect the historical elements of gold culture and of the industrial heritage from Roșia Montană this study uses the historical method, presenting chronologically the facts and the events related to gold exploitation. And because all the industrial activity, including mining, takes place in a physical and a socio-economic environment, the analysis of the cultural heritage that results must acknowledge this and work with it. Following the evolution of the mining activity, which was, as we will see, strongly influenced by the political factor, we discover, through comparative research, the economic, social and cultural aspects that were developed in the study area. For each historical period, the extraction techniques and the specific cultural heritage will be presented. Because of all the analyzed elements involved in this study, the result will provide us not only a historical and cultural study, but also a political, an economic and a social one.

Thus the industrial heritage from Roșia Montană includes the selected traces and remains of previous mining activity. This aspect of cultural heritage includes productive and processing buildings and artifacts, including the extraction-based sites, such as underground and open-pit mines, and the places where raw materials are processed, transport infrastructures and socio-cultural elements of the local community. (Timothy, Boyd, 2003). The mining activity, related in this case to gold extraction, may cause a characteristic evolution of human activities, lifestyle, customs and beliefs and the result is a special natural, cultural and social landscape. All these led to the formation of the gold culture at Roșia Montană which was inherited from past generations and still maintained in the present.

3. SHORT PRESENTATION OF THE STUDY AREA

Roșia Montană is a mining center of Alba Country in Apuseni Mountains. It is located on the River Roșia, in the Red Valley. The name “roșia” (red) of the village and of the valley comes from the red color of the water and of the igneous rocks that are to be found in the area. Located at approximately 800 m height in Metaliferi Mountains, the village is surrounded by several massifs (Figure 1) that shelter the deposits of gold ore. The gold ore reserve is estimated at 300 tones and it represents the largest gold deposit in

Europe. Because of this huge mineral resource, Roșia Montană was a multimillenary economic and social attraction, a village that has been developed because and for the gold exploitation.

Roșia Montană is made up of sixteen villages (Figure 1) and it is part of the Țara Moților (Motilor Country), a folk area inhabited by “moți” that has old cultural values and a rich ethno-folkloristic heritage. Roșia Montană has a population of 3.872 inhabitants (data coming from 2002), 3.518 (91 %) of them being Romanians, 55 Hungarians and 289 Roma which belongs to 9 religious cultures. The place is multi-ethnic and multi-cultural and in time has been populated by Romanians, Hungarians, Germans, Polish, Slovaks, Armenians and Jewish (Árpád, 2002), all of them being attracted and united by gold (<http://recensamant.referinte.transindex.ro/?pg=3&id=59>).

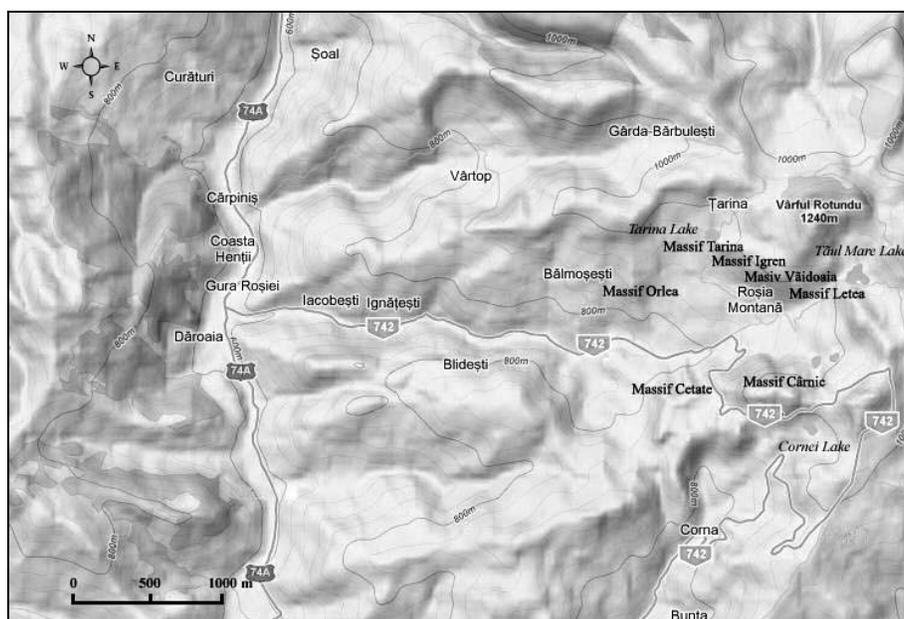


Figure 1: The map of Roșia Montană area (Pașca, 2011)

4. GOLD'S HISTORY BEGINS IN ANTIQUITY

The land of the Apuseni Mountains has offered “Dacia Felix” the most precious metal: gold, a wealth which many people have wanted since ancient times. There is few written evidence which do not help us establish the beginning of the gold exploitation, as well as to identify the first gold searchers at Roșia Montană.

The oldest historical data set the beginning of the exploitation of the natural deposits and the processing of gold 2800-1900 years before our era, in the late Neolithic. It is known that the bearers of the Deccea Mureșului culture (Roman&all, 1982), a cultural

group that appears in the history of habitation in the Apuseni Mountains were the first to start the gold fever.

Because of the archaeological discoveries from all over the Apuseni Mountains the name of “golden age” was given by many archaeologists to the Bronze Age (Roman&all, 1982). In 1831, on the Vâlcoi Hill (near Bucium) four golden rings dating from the Bronze Age were discovered (Albu&all, 2007), which proves that the mining in this rich in gold deposits area has started since ancient times. No material evidence of any exploitation in Roșia Montană from this period has been found although considering the discoveries made in the surrounding areas we can say that this area has been inhabited and valued since the Metal Age.

The most data that history gives us concerning the exploitation, which took place during the years before the Roman conquest and coming from the alluvial gold deposits located in Roșia Montană, refers to the existence of two people that took possession of the precious metal: the *Agatarsi* and the *Dacians*. The *Agatarsi*, people whose origin is unclear, some historians consider them as a Dacian tribe (Mică enciclopedie de etnografie și folclor, Țara Moșilor – România, 2009), while the old Greeks remember them as a tribe of Scythians, who appear in historical sources as ancient inhabitants of Transylvania, who were people rich in gold. The father of history, Herodot, describes them as follows: “*The Agatarsi are rich people and they wear a lot of gold*” (Abrudeanu, 1933, p.57). They obtained the gold by washing the gold alluvial sands of the Dacians rivers.

The Dacian people were dealing with the exploitation of mining deposits from Transylvania, especially from the Abrud Mountains (Abrudeanu, 1933). As history shows us, we know that the ancient inhabitants of our country were skilled artisans in making jewellery and coins from precious metals. The archaeological discoveries indicate traces of the Dacians at Rosia Montana and in the surrounding area. The golden coins with the inscription of Sarmis confirm the intense exploitations of the Dacian people from the Roșia Montană, Corna and Bucium’s gold ores (Abrudeanu, 1928). In that way large treasures have been collected like this for the Dacian Thesaurus.

Ancient underground gold exploitation at Roșia Montană is proven by the existence of some narrow galleries which follow native gold veins. For crushing the rock the Dacians used fire which was then sprayed with water and vinegar (Mică enciclopedie de etnografie și folclor, Țara Moșilor – România, 2009). The Dacians mostly obtained the gold from surface exploitations. The technique through which our ancestors extracted gold from the alluvial sands is described by Ion Rusu Abrudeanu in his historical-political study: “*Moșii, calvarul unui popor eroic, dar nedreptățit*”, (1928), from where the following in formation was collected. They used the “*huca*” a two feet inclined plane, which had the back foot higher. It was covered in hairy wool on which the alluvial sand was thrown. They poured water over the sand and so the sand that contained gold, being heavier, remained on the wool. The process was repeated, and then the wool was washed in a wooden vessel called “*șaitroc*”. The sand containing the gold was then taken from the vessel mixed with mercury and tied in a piece of cloth and then they set it on fire. As a result it condensed in a round piece of gold with a variable purity.

The gold from Dacia Felix was a significant reason for which the Emperor Traian fought to have that territory under Roman rule. The Roman conquest of Dacia brought a new phase in the history of Roșia Montană a flourishing stage whose evidence are to be seen even today.

In the year 106 A.D. Dacia was conquered by the Romans and it was proclaimed a Roman Province. All the gold gathered for centuries passed under the Roman Empire's domination, which put its final touch on Roşia Montană's history and which continued extracting gold from the Apuseni Mountains.

Roşia Montană was in Roman times one of the most important gold center of former Dacia (Abrudeanu, 1933). Under the Roman rule the documentation of the place known today as Roşia Montană first appears under the name of Alburnus Major mentioned in the year 131 A.D. on the Roman waxed tiles found by chance in the ancient gold mines from Roşia Montană, between 1786 and 1855. The waxed tiles represent "*judicial documents drawn up following the prescriptions of the Roman law*" (Roman&all, 1982, p. 19). They occupy the most important place among the written documents that show that on the one hand the trades were made with gold during that period and on the other hand they show aspects of the social Roman life in general. Due to the importance that the Romans gave to the exploitation of gold ores, they built a Roman camp at Roşia Montană, which is believed to be the most important mining centre from the Apuseni Mountains.

Traces of gold exploitation from the Roman period appeared in the massifs Carnic and Cetate and also in the Letea, Irgen and Caminita Mountains. In this place a large colony of miners lived, which was located on the site that is today Roşia Montană. Gold ores were exploited then from the following mines: Cetatea Mare, Cetatea Mică, Orlea and Sfânta Cruce (Abrudeanu, 1928). The ingenious way of extracting the gold used by the Romans came as a result of the research conducted in the Cetatea Mare and Cetatea Mica Mines. The massif that hosts the two mines was dug by the Romans and drilled around and from the top to the bottom, through galleries with vaulted arches. Nowadays, some of these almost architectonic created gaps can be still admired. Another important Roman gallery is "Sfântul Simion", where, in the year 1854, 11 waxed tiles were discovered, 9 of them are kept at the National Museum of Budapest (Albu&all, 2007). The galleries dug in the other massifs are no longer currently accessible.

Gold mining by the Romans was done both underground and by washing of the gold alluvial sands, obtaining a higher production, using specific techniques, being partly taken over, but also modified. It seems that the Romans did not know the benefits of using mercury, so they started separating gold using mills. The Romans drilled galleries in the rocky mountains by setting them on fire, on which they then poured water and vinegar, from which the crushing of the stone blocks resulted (Abrudeanu, 1933). Galleries were then lit with special lamps called "opăițe" and hollowed using chisels, named "arrugia". The ore from the galleries was crushed and transported to the mills, where the stone was driven by a stream, so the gold was separated by alluviation. By using this primary system to extract gold from Rosia Montana over 5000 kg of gold were sent annually to Rome (Abrudeanu, 1928), which was a large amount, given the used procedures.

The gold was obtained at Alburnus Maior by the colonized Illyrian miners and by the Italian miners. Although the underground was state property, the ore was also exploited by entrepreneurs (small businessmen), coming from wealthy families, among the urban aristocracy, which hired available miners, especially Illyrians. It is hard to establish the daily pay of a goldsmith due to the insufficient data regarding the number of the non-working days and the regularity of payment. It seems that the miner earned between 7 and 4.5 "asi" a day and the annual number of non-working days was approximately 40-46 (Roman&all, 1928). The daily wage of a goldsmith was not less than the one of other employees from the Roman Empire. Taking into account the hard work that they performed

underground we can say that they were not paid enough. All these data and other aspects of miners' life from the Roman period were obtained from the analysis of the waxed tiles containing employment contracts concluded in the 2nd and the 3rd century A.D.

During the Roman rule, Roșia Montană was the center of mining operations. *Alburnus Minor*, Abrud today, was the regional centre of the mining area, here higher mining authorities being located (Abrudeanu, 1928). The administrative center was placed at *Apelum* (Zlatna).

Roman culture, just like any other past and present culture, has claimed expenses, so the Roman emperors used the gold extracted from Apuseni Mountains to make coins. Between 246 and 256 A.D., at *Apulum* (Alba Iulia) a mint of the Roman Empire functioned, where 42 coin types using the gold and the silver extracted from the mines around, including the ones from Roșia Montană were being made (Abrudeanu, 1933). This is a significant historical aspect for the mining history, given that only cities considered important for the empire possessed a mint.

Lots of material evidence of those times is kept and we can still see it today. The most famous are the Roman mines, with the former mining galleries and shafts, and the Alburnus Major City, where archeologists found housing, tombs, Greek and Latin inscriptions and the wax tiles. Many of these ancient discoveries are to be found in the local Mining Museum, located near the former exploitation area. The museum honors the multimillenary mining tradition and has two sections. It is divided in the outdoor section, which includes a Roman gallery, and an indoor one, a building especially created, where objects, mining tools, photographs and models of the mining area are exposed (Russ, 2001).

The Romans also had a strong culture that was pretty advanced for that time. That culture overlapped the Dacian culture (and other past cultures), gaining specific meanings. Some of the cultural elements which were formed survived since then. One of the oldest beliefs of the "moși" miners was born in Antiquity. That is the belief in "vâlva băilor", a goddess of the mines that is considered to be a beneficent deity as she showed our ancestors where to dig in order to find ore rich in gold. Miners feared "vâlva băilor" because she punished them when the deity did not like their actions. The basis of this long-lasting belief, which appears even in Herodot's descriptions, comes from the Dacian mythology (Mică enciclopedie de etnografie și folclor, Țara Moșilor – România, 2009) and it was preserved till nowadays. There are countless legends and stories about good and bad events concerning the involvement of the mine's goddess in the life of the miners, proving the presence of an old and strong cultural spirituality inspired by mining activity.

5. FEUDALISM AND MIDDLE AGE

After the Roman withdrawal (274 A.D.), a period of barbarian invasions of the former Dacia's lands follows, in which the Roșia Montană mining ceased completely. The mining industry suffered because of these invasions and the extracted gold was largely stolen. The resumption of mining operation happened in the 12th century and it was done by the Hungarians, the new occupants of the wealthy Transylvania.

In the 12th century German miners were colonized in order to exploit the underground gold ores from the Apuseni Mountains. A century later, the "moși" goldsmiths, being aggrieved by the monarchy and the feudal owners' interests, began to fight for their free mining rights. Slowly, mining centers acquired their freedom and in the

15th century the local community from Abrud (which included Roșia Montană), but also from other cities enjoyed a part of their appropriate privileges.

Simultaneously, the penetration of capital coming from Transylvanian cities increased, which was soon followed by a foreign European capital. At Roșia Montană some Bavarian dukes investors appeared (Roman&all, 1982). Thus, gold exploitation had a considerable momentum, the main “baiesi” (goldsmiths) being mostly Romanians.

In medieval times gold deposits from Roșia Montană and the surrounding area were exploited without being really profitable. In order to obtain a higher gold production, Transylvanian princes elaborated a series of mining laws, which, along with the improvement of mining techniques, led to obtaining favorable results.

In 1525 the owners of Roșia Montană gold mines sent to the Abrud Mining Court a complaint which regulated the gold washing from the rivers and valleys and the legal right of water use. The Court established that “*the owners of the mines and of the water stamps are also the owners of the water and each of them has the right to use water as their predecessors used it since ancient times, without being hindered by gold washers*” (Abrudeanu, 1933, p.224). In the dispute act the name of the Red River that comes from the red color of the water from the region was first mentioned. In 1592 the first document that mentions the village named Roșia Montană appeared, which is considered to be an integrated part of Abrud city (Albu&all, 2007).

The austrian administration brings changes in goldsmiths work given that the Apuseni Mountains were regarded as the richest gold province of the empire. They begin to develop modernization programs, with effects on both the extraction techniques and the production and producers. In 1733, following an order given by the Aulic Camber in Vienna, artificial lakes (called “tauri”) are built near Roșia Montană. The lakes were needed as water reservoirs and their role was to attract the owners of the stamps near valleys, which were charged with a yearly fee for using the water from the artificial lakes (Albu&all, 2007).

In the 17th and the 18th centuries, the number of the stamps from Roșia Montană increases significantly. Around 1676, there were 77 stamps, located at the Carnic Massif foot (Roman&all, 1982), while, in 1757, 119 stamps were operational (Albu&all, 2007), all of them being located near the artificial lakes. In 15 years their number is almost doubled, reaching 226 in 1772 (Roman&all, 1982).

Given the political situation of the country and the social status of the Apuseni inhabitants, the goldsmiths from Roșia Montană joined the uprising serfs, participating at Horia, Closca and Crisan revolution (1784). On November 7, 1784, Closca was at Roșia Montană, where he ordered that all the mine entrances be put on fire, to drive out the camera officers and other wealthy people that were hidden there (Albu&all, 2007). The big revolution is defeated, but the miners continued to fight for their freedom. Miners, especially those from Roșia Montană, played an important role in the revolt of Horia, and thereby, they contributed to the shaking of feudal society and the transition to capitalism (Roman&all, 1982).

The mode of gold extraction from this period shows some specific features. Goldsmiths began to use gunpowder to reach the underground deposits and some new galleries, which were built in order to drain water (using wooden pumps), were attached to the existing mines. The washing installations are also improved by being fitted with gears that allowed them to operate with a smaller quantity of water. A washing machine that crushed ore deposits using conical drums was invented (Roman&all, 1982), thus saving

labor. The construction of artificial lakes took a great boom, so the number of the “tăuri” from Roșia Montană and the surrounding area was very high. As the technique of planning dams was continuously improved and the lakes were renovated and enlarged lakes, true architectural monuments of the 17th century were formed.

Nowadays, the Roșia Montană landscape keeps artificial lakes as valuable industrial heritage items. Among the lakes build in the 17th century, “Tăul Mare”, “Tăul Corna” and “Tăul Țarina” still have water. “Tăul Mare” is located in the eastern part of the village, at 930 m height, and has a 110 m dam. Its water supply source is formed by three streams. “Tăul Țarina”, placed on the right side of the Red Valley, is supplied by two streams. “Tăul Corna”, from the south-eastern of Cărnic Massif, attracts lots of tourists, being seen as one of the most beautiful lakes from the area. Although their shape has been modified over the years, these artificial lakes stand as an evidence of some distant times, of the hard work that goldsmith miners did more than two centuries ago.

6. MODERN AGE AND THE FIRST HALF OF 20th CENTURY

In the first half of the 20th century, the mining production had a strong capitalist character; the largest amounts invested belonging to some Austrian, Hungarian, German, but also Romanian private investors. By the middle of the same century, the gold exploitation at Roșia Montană was done by the state and by private associations; there were about 200 associations comprising over 3000 members (Roman&all, 1982). The gold was extracted especially from the Cărnic Massif.

An intense process of modernization and mechanization of the mining activity took place during this period. The extraction mode is improved by replacing the hydraulic force with the steam power and the introduction of dynamite. Processing the extracted ore is no longer made with the wooden stamps. They started using “Californian stamps”, in which wooden arrows that crushed the material are replaced by iron arrows. The advanced means and methods of the new developed mining technology related to other factors, achieved a higher gold production.

In 1852, an ore crushing plant was put into operation at Gura Roșie. A costal railway, over three kilometers long, was built during the same period. In the early 20th century, a new power plant is placed at Gura Roșie that solves the problem of slowdown in the manufacturing process during drought. The power plant also allowed for exploitation at greater depths. Because of the technical momentum produced in the second half of the 20th century, the gold production obtained from Roșia Montană had a significant place at a global level.

The capitalist mode of production led to increased labor which consisted of goldsmiths, technicians, officers, carriers, coal workers, etc. Part of goldsmiths from Roșia Montană became wage workers, a reason that motivated them to stay in the area and to continue the multimillenary tradition of searching for gold.

After the Unification on the 1st of December 1918 new legal regulations concerning the mining exploitation are developed. In 1924, the Romanian State elaborates the Mining Law. The state becomes the underground’s owner, so the produced gold had to be sold to the state. Likewise large mining associations are formed. A fixed price for the gold is set in February 1929. A few months later, another Mining Law is applied and some of the extracted gold became free to run on the gold market (Roman&all, 1982). This has

led to a process of modernization of mining equipments in the state's mines and in the mines belonging to large associations.

The years 1930-1940 were the peak years of the country gold production. One of the most important mining centers was Roșia Montană, whose production greatly increased over these years. In 1933 electricity was introduced and three years later the plant from Gura Rosie was extended (Roman&all, 1982).

This period is also important because of the "production" of written materials that reflects the life of the miners from Rosia Montana. Many historians, geographers, ethnographers, etc. turned their attention to the lifestyle of these "moti", whose destiny was defiantly decided by gold. From the studies "Mică enciclopedie de etnografie și folclor, Țara Moților - România" and "Aurarii din Munții Apuseni" we can find out several elements which are characteristic of the local gold culture of those times which will be presented in the following paragraphs.

The gold washers were the ones who obtained the precious metal from the gold alluvial sands. Their number was quite low at Roșia Montană because of the existence of a poor hydrographic network and the narrow valleys that are not favorable for the settlement of major gold deposits. The gold washing spots could be established only with the license from the local mining authorities, located in Abrud city, which is given for 3 years. The gold washer loses the right for washing if his spot was deserted three consecutive days (except Sundays, holidays and the market days).

The washing was done with the "hurca", but especially with the "hârlostea". "Hârlostea" (Photo 1) is an inclined plane made of boards with a length of 2 to 2.5 m, width of 0.6 to 0.8 m and an inclination angle of 25-35 degrees. It was supported by wooden legs and covered with a traditional peasant cloth. Sands were dragged with the hoe in a special tool named "truck", which was then emptied in the "hârlostea". The water was then poured over from top to the bottom, making the sand move to the lower end while the gold threads remained on the wooden blanket. The linen cloths were washed in the tub and then the free gold was picked out, put into a cow horn or in a cloth and taken home. This work was done mostly by men, but also by women who attended the washing process.

The gold washers or the "hurcași" were small gold producers without miner rights. "Hurca" was their only property and they carried it on their shoulders always searching for new places, with rich alluvial gold deposits. This was a low cost way of exploitation, so the gold washers were content to find a daily quantity of gold whose value was the equivalent of the income that they would receive for a day of work for the state or for a mining association.

Following the origin of the alluvial gold or the tracks to the place where the "galița" (red layer of rust left by some elements of iron that are often found in gold ore deposits) came from, so "moții" got to the gold deposits. The inhabitants of Roșia Montană were skilled gold finders, who knew how to follow the clues that lead to the rich gold deposits hidden in the surrounding mountains. No wonder that the gold seekers' mining activity took on a remarkable development.

Men over 18 years worked at the state mine or in mining associations. At the private mine there was no age limit, even children 8 to 10 years old were needed for the easier work. The miner had special equipment used only for the underground work. With the stick in one hand and the miner's lamp in the other, carrying on his back a bag with food and the metallic box filled with explosive and carbide, the miner first had to stop by the blacksmith to take their shaped tools. Once the goldsmith entered the mine he had to

work 8 hours (the time was unlimited for workers in private mines). Before descending into the underground, miners gathered in the rooms where the roll was called or at the entrance of the mine they said a prayer.

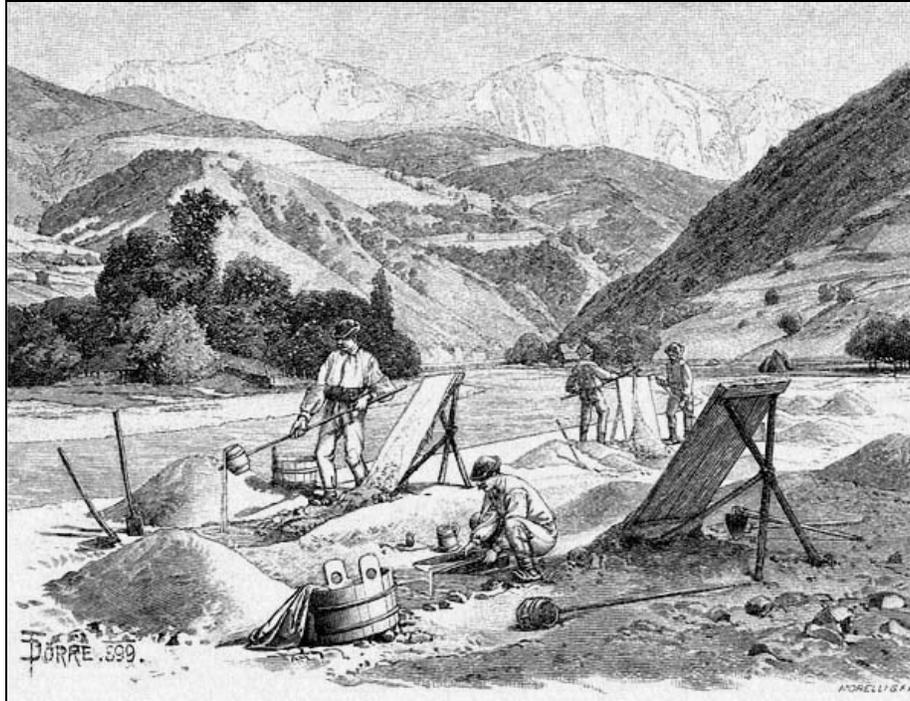


Photo 1: Gold washing spot from the 19th century
(Source: <http://ro.wikipedia.org/wiki/Fi%C5%9Fier:AriesAur.jpg>)

The link between deep galleries was made by vertical and inclined suits and shafts. After the inspection of the working place, the miner began his actual work. They used hammer and the chisel to mark the starting place for the mine hole, then with different sized drills bits they penetrated the rock. The number of holes was calculated very well, so they could be charged with little explosive and break as much rock as possible. The mine holes were then cleaned of dust and blown with gunpowder. The miner filled the gunpowder into a paper bag. The hole was set on fire and the miner left the place immediately, in a secure area.

The ore was brought to the surface using baskets called “corfe” that were often carried by children or women and then took on horseback or wagons to the “șteampuri” (Photo 2). At the end of every week the ore was divided depending on how much each miner worked.

The wooden “șteampuri” were used to grid the gold deposit. They were placed everywhere where water could be provided, especially among the rivers and near the

“tăuri” (pounds). On the 18th of March the “şteampuri” using the water from the pounds, were set to work, operating until the 15th of December. So, using the water, the gold was ground, separated and concentrated.



Photo 2: “Şteampuri” from the 19th century
(Source: http://ro.wikipedia.org/wiki/Ro%C5%9Fia_Montan%C4%83,_Alba)

This is a brief presentation of the traditional gold mining. With these rudimentary techniques, using simple tools, but with an unsurpassed skill and hard work the “roşieni” offered their precious metal to the entire world. The goldsmiths from this village, also called “băieşi”, love the mountains and are known to be hospitable. Their songs, their legends, their stories all speak about the same thing: gold.

7. THE COMMUNIST AND AFTER COMMUNIST PERIOD

After the year 1948 the mines were nationalized by the government. Knowing the value of the gold deposits, the communist regime gave to Roşia Montană a special attention. A vast research program started in the area, so existing resources were assessed. The degree of mechanization became very large, the machines and the installations had replaced almost completely the traditional tools. The plant from Gura Roşie was also upgraded. In 1970 the exploitation of surface started on the Cetate Mountain. The state organized the largest gold mining area of the Social Republic of Romania (Roman&all, 1982). Homes were built and busses were introduced to take the miners home from work. The communist regime did not allow private mining and so they led a new “culture” for that period: the culture of making gold reserves, of hidden gold which was then sold on the black market. At the same time, the regime brought an “innovation”, which is the operation

by treatment with cyanide and mercury. Thus, *“in 1977 scarping at Roșia Montană began and they started to work at the opencast pits. The “Kings Chair”, an important mineral formation of the area, was blown up and then the intensive treatment with cyanide and mercury began which led to today’s water pollution. If you listen to the stories of the inhabitants, you will hear about horrific description of fruit trees that are no longer fruitful, about miners who lost their hair or teeth and so forth”* (Rozei, 2004). Now, we can see the environmental impact of this type of exploitation left in the carved step massifs which are to be found round the village.

After 1990 the mines were declared unprofitable and were closed one by one. In 2006 the mining activity at Rosia Montana ceased. The inhabitants were left without their jobs and with the memory of an “overlaid with gold” past.

Because that mining exploitation stopped and the remaining gold reserve is huge, new exploitation programs appeared. In 1997, a mining company, S.C. Roșia Montană Gold Corporation S.A. (RMGC), established and registered under Romanian laws. The shareholders of the company are Gabriel Resources Ltd., from Toronto, Canada, with 80%, National Company of Cooper, Gold and Iron “Minvest” Deva, from Romania, with 19.31% and other minority shareholders, with 0.23% (www.rmg.ro). RMGC proposes and develops the Roșia Montană Mining Project, the largest industrial project from Romania, using cyanide for the process of extracting gold and silver. In almost 17 years, they plan to extract and process over 220 millions tons of gold and 1 1000 tons of silver. It was established that the only economically viable method to produce gold is to treat the ore with sodium cyanide. *“At Roșia Montană 250 000 tons of cyanide will be used. The resulting tailings will be stored into a tailing settling pond that will occupy an area of approximately 400 ha, with a storage capacity of 250 million tons and a 185 m high dam”* (<http://www.cdep.ro/pls/dic/site.page?id=590>).

Rosia Montana Project is planned for 25 years. In the first 17 years RMGC will conduct the mining operation: until the first 14 in the following four pits: Cârnic, Cetate, Orlea and Jig and between year 14 and year 17 mining will be done in the developed ore stockpile. The last 9 years are for the rehabilitation and the re-vegetation of the affected area.

During the active mining, the project will bring approximately 2 billion dollars into the Romanian economy and will create more than 3000 new jobs (only 500 of them will be long-term jobs), but, in order to extract the precious metal, RMGC needs to demolish the village and to relocate the locals. The studies made by scientific researchers reveal that the proposed project will turn the area into an *“industrial desert”* (Duma, 2009, p.34). Professor Doctor Sigismund Duma captures in his article, *“Mining and Environment at Roșia Montană”* the extent of damage that will be caused, including the industrial cultural heritage impact. He says that the richest archaeological site from Europe will be destroyed with the disappearance of the 975 houses, out of which 41 belong to the patrimony, 7 churches and 11 churchyards. Also the Roman road, the Roman galleries, the Roman castrum, the Roman city and 7 artificial lakes will become history. *“Only 1/20 of the entire historical site will remain and it will be surrounded by opencast pits, mining waste dumps and tailing ponds”* (Duma, 2009, p.39).

The mining project divided the villagers in two camps. Many of the residents - unemployed miners and their kin- favored the project. Some of them sold their houses to the Company, took the money and left. Other villagers were alarmed by the project of this outside investor that plans to bulldoze their living space. In 2000 several locals formed the

association Allburnus Maior. They started to fight to protect their homes recalling Roşia Montană's long history and the local cultural and archaeological patrimony. The group gained national and international visibility, being supported by over 40 others NGOs, by the Romanian Academy of Sciences and by universities, churches and several important people. Opposing Gabriel Resource's project, the NGO initiated in 2002 the "Save Roşia Montană" campaign, drawing the attention to the inherent risks associated with the proposed mining development. The group believes that tourism is a viable future alternative that will promote both the natural and the cultural resources. A member of Alburnus Maior expressed in a peculiar manner the role that gold played for the local community:

"Gold here in Roşia Montană has caused sufferings for people since ancient times. There's always someone coming to take it".

([http://www-management.wharton.upenn.edu/henisz/Rosia\(A\)i.pdf](http://www-management.wharton.upenn.edu/henisz/Rosia(A)i.pdf))

Alburnus Maior wants to value their gold through tourism, to "exploit" the huge heritage that gold has created in time, a heritage that had become more precious than gold itself.

Good or bad, the Roşia Montană Project has written a new memorable page in the history of local gold exploitation. Because of the caused controversy, Roşia Montană and its industrial heritage were discussed all over the world. Most media campaigns were focused against the mining project promoted by RMGC. Articles like "*A (Cyanide) Taste for Gold*" (Balaci&all, 2003), "*Romanian Town to Be Razed to the ground for Gold*" (Schofield, 2004), "*Gold is not enough*" (Eyres, 2004) "*Fighting over Gold in the Land of Dracula*" (Smith, 2007), "*Mountain of Troubles*" (Demian, 2008) all express the unpredictable struggle that appeared at Roşia Montană and the uncertain future of the local people. The debate over Roşia Montană also inspired two pro and anti-mining documentaries "*Gold Future*" (2007) by Tibor Knocsis and "*Mine Your Own Business*" (2007) that present in essence the conflict between economic versus environmentalist interests. Probably the Canadian Gold Company did not predict the resistance their mining project would face at Roşia Montană and we have to admit that, thanks to their plans, the cultural heritage created by gold extraction was brought to life gaining such a large attention.

Living behind the past issues, the truth is that Roşia Montană is a poor village with serious economic problems. This is the biggest and the most bizarre controversy: the area that has the largest gold deposit from Europe is a place where people have not many and uncertain future plans. We have seen that these people have lived there because and for gold. They formed their living place, their community, history and culture with priceless heritage in close relationship with the presence of gold. They extracted gold for such a long period of time, but the question is: did they ever really value gold for their own benefits? At Roşia Montană mining is a long historical activity that brought so many economic and social benefits, but not for the local prosperity. Perhaps only when the locals will be the ones that take action for their lives and only when they will start to decide what is the best option for their development a sustainable future can be imagined at Roşia Montană. It will be interesting to observe if this future will represent an obliteration of the past or a normal historical evolution!

8. CONCLUSIONS

This study has shown how an important natural resource created a unique local identity at Roșia Montană. During the 2 000 years of gold exploitation a complex cultural heritage was formed here that includes characteristic cultural issues of the locals' lifestyle and also lots of material elements which represent a veritable industrial treasure of the place. We have seen that the evolution of the society, mostly influenced by the political changes, was closely related to the technological changes that took place at this mining center. Along with the evolution of the society and of the technology the gold culture developed, major changes taking place from one historic period to another. There is one fact that has never changed at Roșia Montană: the gold was always taken by others, while the local community was used almost like a simple tool for the gold exploitation. Whether the mining activity continues or not, defiantly something needs to be done so that the multimillenary gold culture from Roșia Montană would not be destroyed. Maybe by looking in the future and leaving the past behind the time for new changes will come. As Horace, a Roman poet said "[it is] stronger to spurn undiscovered gold (better left where the earth hides it) than to force it into human use with a hand that plunders every sacred thing." (Eyres, 2004), maybe the gold should remain there at Roșia Montană while the touristic exploitation of the cultural heritage should begin!

REFERENCES

- Abrudeanu, R. I.** (1928), *Moșii, calvarul unui popor eroic, dar nedreptățit*, Cartea Românească Printing House, București.
- Abrudeanu, R. I.** (1928), *Aurul românesc*, Cartea Românească Printing House, București.
- Albu, A., Satmari, A., Despi, A., Albu, B., Satmari, L., Cengher, P.** (2007), *Strategie alternativă pentru o dezvoltare durabilă în Roșia Montană*, Fundația SORS Printing House, Timișoara.
- Árpád, V.** (2002) *Fehér megye településeinek etnikai (anyanyelvi/nemzetiségi) adatai 1850-1992*, from *Erdély etnikai és felekezeti statisztikája (1850-1992)*, online at: <http://www.kia.hu/konyvtar/erdely/erd2002.htm>.
- Balaci, D.** (2003), *A (Cyanide) Taste for Gold*, Transitions Online, online at: <http://www.tol.org/client/article/9801-a-cyanide-taste-for-gold.html>.
- Demian, S.** (2008), *Mountain of Troubles*, Transitions Online, 12141615, 9/15/2008, Database: Academic Search Complete
- Duma, S.** (2009), *Mining and Environment at Roșia Montană*, Revista Minelor, nr. 8, p. 34-40.
- Eyres, H.** (2004), *Gold is not enough*, Financial Times, Apr. 8, 2004, online at: <http://search.ft.com/s03/search/article.html?id=040408005037>.
- Roman, B., Sîntimbrean, A., Wollman, V.** (1982), *Aurarii din Munții Apuseni*, Sport-Tourism Printing House, București.
- Rozei, A. I.** (2004), *Munții noștri aur poartă...*, AlterMedia.Info, June 14, 2004 online at: http://ro.altermedia.info/reportajinvestigatii/muntii-nostri-aur-poarta_1395.html.
- Rus, D.** (2002), *Vestigii dacice și romane la Muzeul Mineritului*, Terra Magazin, nr. 11, p. 31.
- Schofield, M.** 2004, *Romanian town to be razed for gold*, Philadelphia Inquirer, May 2, 2000, online at: <http://courses.wcupa.edu/rbove/eco343/040Compecon/Centeur/Romania/040502gold.txt>.

- Smith, C.** (2007), *Fighting over Gold in the Land of Dracula*, New York Times, Jan 03, 2007, online at:
http://www.nytimes.com/2007/01/03/business/worldbusiness/03gold.html?pagewanted=2&_r=1.
- Timothy, D. J., Boyd, S. W.** (2003), *Heritage tourism*, Pearson Education Limited, Harlow, online at: <http://books.google.ro/books?id=LSXZdyt7KpUC&dq>.
- *** (2009) *Mică Enciclopedie de Etnografie și Folclor. Țara Moșilor – România*, Altip Printing House, Alba Iulia.
<http://www.cdep.ro>.
[http://www-management.wharton.upenn.edu/henisz/Rosia\(A\)i.pdf](http://www-management.wharton.upenn.edu/henisz/Rosia(A)i.pdf).
<http://recensamant.referinte.transindex.ro>.
<http://www.rmg.com>.

