# Die antike Kultur im Bergbau von Albanien

## Antique Culture in Albanian Mines

Античная культура в горной промышленности Албани

Von

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#### Schlässelworte

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### Zusammenfassung

The exploitation of minerals in Albania is started since in ancient times. Heropot, Aristoteles and other philosophers have mentioned some useful minerals extracted from the underground of Albania.

Ilirians (ancient albanians) have extracted and wrought minerals as cooper, gold, iron, silver, bitumen since 6th century B.C. Pirust tribe were well-known and they were extended from Mati-Mirdita to Elbasani. According to dates taken from the archive, near Vithkuqi has been a cooper mine in Lezha a mine for the exploitation of silver and gold and also a cooper mine in Mirdita.

Selenica Mine is one of the most ancient mines and it is still working nowadays. The bitumen mine of Selenica is the only one in Albania and one of rarest in the world. The bitumen of Selenica has been well-known and exploited since B.C. it has also been exported in many places of the Mediterranean see. It exists also a expression "The streets of Europe and little Asia are paved with Selenica bitumen".

The exploitation of the coal-mines has started in the years of the First World War with this mines Kerraba (Tirana), Mborje-Drenova (Korca) and Memaliaj (Tepelena).

The Austro-Hungarians Societies have exploited only in the surfical stratum for smithery and military reasons. The mine of Mborje-Drenova has been exploited from French and Italian Societies.

Later on in the 1927 the Italian Societies SISM and SAMIA have exploited the cooper mines in Puka and Mirdita.

The exploitation of the chromium mines in Albania has begun during the Second World War in little surficial mines in Pogradec, Kukes, Tropoje, Bulqize.

In the beginning the exploitaion was made with primitive equipment by concessionaire societies Italian AMMI and German ones. Later on the Italian Society Ferr-Alba has made researches and has exploited the iron-nickel (Fe-Ni) mineral in Librazhd and Progradec.

There is a little information about Albania, its ores and mines. Moreover for its antique mining culture.

Albania is located in the south-eastern part of Europe and is one of the countries of Balkani Penisula with a surface of 28 748 km<sup>2</sup>. It is a small country but in a rich country since antiquity.

Albania is bordered on the north and north-west with former Yugoslavia, on the south and southern-east part with Greece, while on west its coasts are wetted by Adriatic and Ionian seas.

Thus, it has a favourable geographic possition, because it is situated in a kay point, just in the crossroad passing from the Western Mediterranean to Balkan and Asia Minor.

Albania is a mountaneous country with a marvellous and breathtaking view. Albanian Alps with their highest peak of Korabi mountain (2751 m) occupy the internal northern and southern part, extending from north-west to south-east.

The rivers and lakes are numerous and picturesque. They are of tectonic origin as the lakes of Ohri, Prespa and Butrinti; of a tectonic and karst origin as Shkodra lake; and of glacial origin as the seven beautiful lakes of Lura, etc.

Albania is really a small country but rich in subterranean and superficial resources. The main subterranean resources of Albania are: oil, gas, bitumen, coal, gibbsites and alabaster, marble, construction maters. While as the most important ores are: chromlum, copper, ferro-nickel, bauxites, etc. The coastal placers are exploited for the ore concentrates as: titanium, zircon, lead, zinc, etc.

Albanian territory is rich in subterranean waters, natural and mineral waters (Glina), sulfhydric and thermal waters (the thermal waters of Peshkopia, Elbasani and Leskoviku).

As far as regards the culture, Albanians speak Albanian language, which is part of the Indoeuropean group of languages originating from Illyria and Illyrians. The old name of Albania is Arberi (Arbani) and the people were called Arberesh. This is testified since the Second Century (our era) by the Greek geographer PTHOLEMEUS and the nomination Albania has served as a basis for the "nowadays" name of Albania.

Albanian soil has been populated since the most remote times. The vestiges of the stone age have been discovered in Xarra and the cave of Shen Marina (Saranda), Korca, Kolonja and Kukes.

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Anschrift der Verfasserinnen:

People used to live in caves and the tools have been made of stones and bones and latter of brass and iron, (respectively in the age of bronzite and iron).

Exploitation of the economic minerals in Albania has started since antiquity. The Greek historians Herodot and Aristoteles have spoken about Albanian antique culture, where minerals of Albanian underground have been mentioned in theIr famous works.

The early Illyrian clanes (predecessors of Albanians) have extracted and processed, the minerals of Illyrian underground as: copper, gold, silver, ferro-nickel, bitumen, etc, since the 6th century (B.C.). During the bronzite age (the years 2 000 - 1100 B.C.) the Illyrians developed the economy, the metallurgy of bronzites, etc. The first fortified centers begun to emerge and latter on these centers the cities as Gaitani (in Shkodra), Dyrrahlum (Durresi), Scodra (Shkodra), Lisus (Lezha), Butrati (Butrinti), Apolonia (Fier). The Illyrians were outstanding miners. Emperor Trajan of Rome settled Illyrian miners in Dacia for the exploitation of its mines. It is found out that Illyrians have worked also in the old mines of Austria. Among Illyrian clanes distingulshed for the exploitation and processing of metals, especially of copper, were the Pirusts. They have been the inhabitants of the actual region of Mati and Mirdita up to Elbasan.

During Middle Age, Albanian mines attracted the interests of Republic of Venetic and latter of Ottoman empirior.

According to the mediaeveal data, in the vicinity of Vithkuq was situated a mine for the exploitation of copper, in Lezha for gold and silver, in Mirdita (Rubik) for the copper, etc.

The first news on gas and petrolium presence in Albania have been testified since antiquity by Greek philosophers and erudite persons. The place named "Nymphaeum" (Selenica of today), according to Strabon, was a rock which blazed up the all over the place. Nowadays the most important source for the extraction of petroleum is Kucova.

Petrolium and gas have been exploited by the Italian, Franch and British societies. After the '30ies the right to run the concessions on this enterprise was given only to the Italian societies AGIP and AIPA. AIPA was created in 1925 as the AGIP's filial for the exploitation of petroleum in the oil bearing basin of Kuçova. The abovementioned companies carried out investments for the construction of the oil pipe lines from Kuçova to Vlora to ship then to Italy.

One of the old mines, which is well exploited in nowadays in Albania, is the mine of bitumen in Selenica in Vlora district, which is the only of this kind in Albania and one of the rarest worldwide. The bitumen was moulded by petroleum which during the up and down migration glated the sandstones, incured changes and formed then numerous bodies in different forms. The natural bitumen of Selenica has been exploited by primitive tools, since antiquity, (according to ARISTOTELES and

STRABON), by the Illyrian clans. Then it was exported into Mediterranean countries. It is still testified by the people the old saying "the streets and roads of Europe and Asia Minor have been paved with the bitumen of Selenica mine".

The exploitation of bitumen and bituminous coal, according to the underground works of the new age, has been carried out in 1835 by the foreign companies as Turkish, British, French (1875), Italian (1918) etc.

The most intensive extraction works have been performed by the Italian concessive company SIMSA up to 1944.

At the beginning the opening of the mine of Selenica was carried out by horizontal works and later by vertical and inclined works. The bitumen, which is being still extracted in Selenica, was melted and moulded to be used for the asphalting of the streets, electric insulating, dampproof, etc, while the bituminous coal after being rendered wealthy is used in metallurgy for the production of the metallurgic coke.

Apart from Selenica, the bituminous showings belongs also to Fierza, Dukati, Kremenare, Patos, Kucove, etc.

The quarrier or the quarriers (the openair mines) have been existed since the ancient times, from which our predecessors extracted stones as: alabaster, gibbsite, marbles, etc. The stones extracted from these quarriers have servet to the construction of the first antique Illyrian cities, streets, bridges, etc, as Egnatia street. This is the most important antique street, which connected the South Illyrian coast with East. Egnatia street, about 395 km long, is admonished in the old manuscripts as the street which passed to Apollonia (Fier) and Dyrrahu (Durresi) up to Saloniki during the 2<sup>nd</sup> Century (B.C). During the 1<sup>st</sup> Century (B.C) this street was lengthened up to Byzant empire.

The most well-known quarries have been those of Karaburuni Peninsula, Shkalla village (Saranda) and Kruja.

The quarries have been exploited in an artisanian way, extracting by bone, brass, stone and iron hand tools the slabs of stones, marbles and alabaster up to the beginning of the 20th Century. The use of the explosive matters begun too later.

Nowadays in Albania exist over 70 quarries distributed countrywide as: of alabaster (Peshkopla), Fushe Bardhe (Gjirokastra), Dhrovjan (Saranda), etc. (see the map).

As it was above mentioned, the Illyrian, especially the clan of Pyrusts, have extracted and processed the mineral of copper. The copper in Albania has been used since the 5th to 4th century (B.C.) either as pure copper (metal) or as bronzite. The copper used to be extracted from the oxid ores and it was melted by tinder and charcoal to be used then for the production of utensils or women adornments, etc.

During the year 1927 the Italian companies SAMIA and SISM have exploited copper extracting it from the

copper ores, especially in the mines of Puka and Mirdita districts. The copper mine of Rubik is one of the oldest mines in Albania and then it can be mentioned the mines of Gjegjan, Munella, Fushe-Arres, etc.

As far as regards the coals, it must be stressed out the chartcoals used since antiquity as combustibile matter for warming and smithery and the melting of the metals (tinder). While the coal as mineral begun to be extracted and exploited after the First World War. It can be mentioned the mines of Krraba (Tirana), Manez (Durresi), Krraba mine started to be exploited in 1917 by the Austo-Hungarian army for military and smithery purposes. Mborje Drenova mine (Korça) was exploited by the French army in 1917, and in 1926 the domestic concessionary companies begun the exploitation of the coal mine of Memaliai (Tepelena), one of the biggest mines in Albania. The first works in these mines have been performed by Italian army extracting about 8000 tons of coal. Later the works were carried out by the Italian Concessionary Company ACAI. After the year 1944 their exploitation and the prospection of the economic minerals have been performed based on the scientific and prospective projects.

Among the numerous chromium mines of Albania, the most important one is that of Bulqiza (Diber). The first prospective works have been carried out by the Italian Companies. At beginning of the Second World War the

chromlum begun to be expiolted in small superficial mines as in: Pogradec, Kukes, Tropoja. All these mines were unmechanically expiolted by the Italian Companies AMMI and later on by the German ones. Mechanization of the mines was performed after the years 1944 according to the prospective studies and mechanized equipments.

#### Albania is the third world chromium producer

Iron is one of the wellknown metals of the antique Albania (since the iron age the year 1100 - 400 B.C.). Illyrians dealt with iron and its extraction and were masters of its processing. It is testified by the arms, adornments, and labour tools and equipments discovered in different Albanian zones by the archaeologists. The iron is shown as bloodstone and limonite in ferronickel ores. The first prospective works for the exploitation of the ferronickel mineral have been performed after the First World War by the Italian Company FEN-ALBA in the districts of Librazhdi, Pogradec, etc. The very real shape these mines have taken during the 1970ies, because firstly the iron was exctracted in quarries as it is the "Guri i Pishkashit" mine or otherwise the dinningtable of Scanderbeg, whose legend has arrived up to our days. It is still exist the saying "In this place Scanderbeg after ate and drunk wine, poured it allover the plateau and then it got redcolored".

