

REVIEW
of the book **"Coal – the last fissure"**
author eng. **Mihai Bujor BOGDAN**

In the beginning of 2017, Universitas Publishing House published the book **Coal – the final fissure**, written by eng. **Mihai Bujor BOGDAN**, who lives in the Jiu Valley area, well known in the mining branch, but also by many people in the area where he grown, learned, worked and lives.

On the inscription page of the book I got, the author wrote me: *"for a witness and participant to Jiu Valley's tumultuous history..."*

Indeed, like me there are many others who know very well this land, but few of them dared to write about its history, however Bujor Bogdan does it in a special way: combining the precise information with his state of mind, considering the lives of the people he cooperated with for decades, for the development of mining and of this gorgeous land represented by Jiu Valley.

Born and educated as mining engineer in Jiu Valley, passing through all the professional steps from probationer, first line supervisor, chief engineer and mine director, the author has many memories but also a rich experience in the beautiful, manly, and dangerous craft of mining.

The book is read breathlessly, as you become more curious after every chapter to see another face of the hard but also simple life of the miners from this area. When you finish, you think and review in mind a world which now looks unreal, but had its mark on the centenary history of this land.

Although the events from the book refer especially to the economical, social and cultural state of Jiu Valley after 1948's nationalization until now, the author makes a well documented presentation in the dark past of the people from this land.

Thus, we find out that the few inhabitants of this place were mostly sheppards hundreds of years ago and exploited the *yellow gold* in the past, before discovering the *black* one.

Together with capitalizing the use of this *black gold* or *the black stone which burns*, the Jiu Valley got the attention of the authorities and was transformed in 50 years from a forest land into a mining basin which offered work and life conditions at the level of most european mining areas, and the cities attracted a number of specialists of various domains and professional levels from most Europe, but also from traditional mining areas of Romania, which put the name of *little America* to Jiu Valley, as the author states in the book.



Bujor Bogdan rightly considers that the stepstone of mining in Jiu Valley was the nationalization, when it turned from a competitive economy to the state socialism, not taking into consideration the economic market laws but only the ideology.

The author describes largely to the communist period, since it took place for many years and it registered the most spectacular evolution in Jiu Valley's life. This period is underlined by the increased growth of the coal production, the main priority of the unique party, important investments, more or less justified, increase in the number of mining employees and modernization of the exploitation technologies. As a consequence, the region develops as a whole, the small locations becoming cities and municipalities.

Unfortunately, Jiu Valley became a mono-industrial area, fact which will have bad consequences after 1989, when the mining will endure a cruel fate.

We notice the narrative talent of the author in telling the events, combining the rigor specific to the engineer (deposit geology, underground work techniques, exploitation methods, work protection, economic efficiency) with the sentence beauty of a journalist (the description of the mountain area, of

the local habits and traditions, the faces and souls of the people he met). The ones who know him are not amazed: they knew Bujor Bogdan as a high class engineer and good journalist.

Every chapter is worth its own description, but I will just underline some of them.

The chapter *Technologies* is important to be detailed, due to its mining specific. The author presents, with the words of a mining engineer, the specifics of the technologies used to extract the black coal from Jiu Valley underground due to the complexity and diversity of the deposit. It goes through all the exploitation methods used, at first in open pits for the outcrops of third layer, then underground (after 1868) at Petrila, Lupeni, Vulcan, Aninoasa, Lonea, Petroșani and Sălătruc, where the exploitation was done in chamber works, with wooden supports and upwards advance and lining of the exploited space. Since the method caused the cracking of the coal massif above the work chamber and started endogenous fire it started with the exploitation of descending horizontal slices. We remind the exploitation method with overturned steps, applied to thin layers with high slope, accepted by miners, but disliked by visitors. It is mentioned also the technical advancement in 1938 with the introduction of the mechanical support sections of frontal works from the third layer, called *bears*, done in Petrila mining mechanical workshop, coordinated by engineer Kasper. The author notes the fate of the valuable inventor: arrested after 23 august 1944 as *enemy of the state*. Starting with the '60's the frontal works from Jiu Valley used metal support with hydraulic pillars operated by a central pump, and where possible there were introduced work mechanized complexes. Among the technical achievements designed and applied in Jiu Valley, the author notes the metal articulated beam resistance ceiling type Wanversch and the hydraulic pillars, applied to the front works exploitations from the third layer, technology perfected by local specialists, which was extremely safe and efficient. The author regrets that after 1990 this method was replaced by the *undermined bank* exploitation method, less safe for both the deposit and the workers. Also in this chapter the author turns to the evolution of other exploitation processes: underground transport, mining works digging and support, shaft extraction installations. I find interesting the story about *Loti*, the last mining horse in Jiu Valley mining, which the author met during his internship in 1966 in Petrila mine.

The chapter ends with the appreciation for the contribution Petroșani Central Workshops had to the endowment of mines with supplies and equipment. They had the capacity to produce

anything, from the gliders of the Flight School (from the current district Aeroport) to the great artwork of Constantin Brâncuși from Tg. Jiu *Coloana infinitului*.

The chapter about *Professional training* couldn't miss from an overview to the life of this region. Certainly, the presence of well trained people whom to deal with the complex problems in mining is a *sine qua non* condition. From the start, the Jiu Valley mining had specialists which were instructed in other parts of Romania or from Central European countries. This happened in the beginning of the mining activity, but during the two world wars beside the mining enterprises there were professional schools for miners, electricians, machinists, etc. and afterwards there were founded schools for training middle level technicians (foremen). During the communist ages there were founded the Schools for Factories and Plants meant for quick training of youngsters coming from rural areas. The training of engineers between the two world wars was done only in Bucharest (since 1864), then in Timișoara and Brad. A special moment for the mining high education in Romania was the foundation in 1948 in Petroșani of the Coal Institute which became the Mining Institute and now the University of Petroșani.

Until 1992 the students had a series of material advantages, free costumes (one summer and one winter uniform), overcoats, shoes, while the ones who had contracts with the mining enterprises received a monthly scholarship of 800 lei, an important sum for those years.

Periodically the engineers had training practice at the Center of Professional Training from Petroșani or Bucharest.

About the value of the training, although there were miners, foremen or engineers, for 150 years of organized mining in Jiu Valley, Bujor Bogdan has a conclusion I quote: *until 1990 when in most cases the only promotion criteria was competence, the Jiu Valley mining had great technical performance, even for the existing difficult deposit conditions. After 1990 the situation has changed. Anyone could be promoted based on the political algorithm, anyone could be changed under the pressure of the masses if he shown seriousness or authority or was not in a party or another.*

Reading Bujor Bogdan we will be able to know also *The life of a mine*, which is also a distinct chapter. The entry and exit from a mine, the always changing mining conditions, the worry for the accomplishment of the required daily production, the pleasure of the directors, the professional accidents and diseases, the fight with the underground possibilities, the stories and swears of the miners, the tragedies ending with many dead

or wounded, can be considered a life. The author describes the sinuous course of a mine, in time.

Therefore, the mine Petroșani Est is opened after 1918, closed in 1929, then reopened as a sector of Petrila mine in 1939. In 1971 this sector is closed for good, although there were invested lots of money for the exploitation expansion, the reason being the dissolution of the third layer, extremely false as the author proves in the book.

The mines Vulcan and Dâlja (past Petroșani Vest) had also a tumultuous life, being closed during the economic crisis in 1929-1933, and then reopened later. Unfortunately the Dâlja mine is currently closed again, all the marks of its existence being cleared, while the Vulcan mine still lives !

There could be described other interesting chapters of the book, such as: *Traditions, Militaries, People, Sports, Politics, 1977 – the great strike or Jiu Valley – a city of strong souls* but I will stop at the final one *What is left behind*.

In most chapters we can see the admiration of the author for the people from the area, *people who put all their efforts and took risks in facing the depths of the Earth*, for their activity, for being proud and efficient in everything they do, in this final chapter the author shows his concern for the future of this area and doubts if the followers will know to keep the memory and capitalize the human and natural potential of the area.

The author asks himself: *What is Jiu Valley today ?* And he also responds: *a sad region where life doesn't end, but certainly it ends a way of life !*

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Beside everything written, Bujor Bogdan beautifies the book with many archive photos, making it more attractive and valuable.

I end this modest try to catch the attention of the reader towards an instructive and attractive read about the life of people in this area, sometimes forgotten by the world, with an opposite feeling to the author's, which comes from the book title, explained in the penultimate chapter *The beginning of the end*.

Coal – the final fissure Bujor Bogdan did not put at the end of the title any punctuation mark. From what I've read he agrees with an exclamation mark (!), representing the certitude, the final verdict. What if he would have put the question mark (?), representing the doubt, the hope.

What if, for example, in the year 2100, someone will write that in Jiu Valley, were there weren't exploited in the past century only 40-45% of the black coal reserves, now there is a flourishing area with modern mining, efficient and able to contribute to the security of the country energy sector, despite the unconventional energetic competition. Would this be a way too optimistic supposition ?

Congratulations dear author, I wish you to write even more stories about these people and places !

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