

*Agnieszka Zaborska-Jagiello **

THE STATE COAL MINE JAWISZOWICE IN BRZESZCZE. THE HISTORY, PRESENT STATE, ARCHITECTURE, VISION OF REVITALISATION WITH THE PARTICIPATION OF CREATIVE INDUSTRIES

1. Introduction

Cultural heritage is the foundation of national and regional identity. Today it constitutes not only the issue of protection, but also the real potential for future economic development. The increased awareness of structures and objects of heritage and providing them with new functions whereby this widespread use can contribute to creation of a competitive and advantageous trend in the region.

The mining culture has played a particular role in developing a common European heritage throughout the ages. Thanks to mining the development of most branches of industry, the economy or technical solutions have been possible.

Mining heritage is an important component of the collective memory and social identity and it is part of the cultural heritage, therefore its elements deserve to be protected.

It is important to highlight that despite the apparent similarities, mining facilities are unique and unrepeated. The structure of the buildings, shape and characteristics of the mineral deposits and method of retrieval are different. Each mine was the center of life for



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* Cracow University of Technology, Faculty of Architecture, Kraków

thousands of miners and their families and built the identity of the region. This specificity of mining facilities requires the individual conducting of the entire process, aimed at protecting the cultural heritage found in the mines.

2. SCM Jawiszowice — the history, present state, architecture

As stressed earlier, each mine is special and unique and as such deserves protection. Similarly, the State Coal Mine Jawiszowice in Brzeszcze is worthy of protection, due to its individuality. A few aspects comprise of the SCM Jawiszowice's uniqueness:

- 1) This was the first and the only Polish state coalmine, built during the Second Polish Republic.
- 2) SCM Jawiszowice was the most modern complex in the mining industry of that time.
- 3) SCM Jawiszowice is distinguished by its 1930s modernist architecture. The cubist, rectangular form of the Andrew III Shaft Pithead and the sorting hall, with a steel frame filled with brick and glass, brings to mind a UNESCO World Heritage Site — The Zollverein mine in Essen, which is recognized as the most beautiful mine in the world.
- 4) The mine is an important component of the memory of the concentration camps. It was here that prisoners of the Jawischowitz sub-camp (an affiliate of Auschwitz-Birkenau) worked¹ [7].
- 5) The construction of the mine contributed to the development of Brzeszcze, which, in 1962, maintained the municipal rights [11].
- 6) SCM Jawiszowice was the centre of life of many thousands of miners who arrived from all over Poland to take up work and settle down in Brzeszcze [11].

2.1. The history [6]

The history of the State Coal Mine Jawiszowice is connected with the founding of the Brzeszcze Coal Mine in 1903. In 1918 construction of the third mineshaft commenced (Andrew III), in the area of Jawiszowice, about 1.6 km away from Brzeszcze. All the shafts with the auxiliary facilities on the surface and underground constituted one mining-economic unit. An intensive expansion of the Andrew III shaft commenced in 1927. In 1931, a permanent hoisting tower of steel construction with a height of 39.5 m was built. A year later, the pithead building, sorting plant, bridges linking the sorting plant with the mineshaft and the machine hall were built (Fig. 1). After the full completion of the shaft construction in 1934, production capacity increased significantly. In 1936, the guildhall building was completed. In 1937, a boiler room, network of railway track lines and a siding were extended and carriage scales, signalling for the mineshaft and heating of the pithead were installed. Thanks to the excellent equipment the mine became one of the most mechanized in Poland before 1939. Under the architectural, structural and technical consideration the entire complex around the Andrew III shaft was the most modern complex in the contemporary mining industry.

1 The Nazis ordered the words: „Räder müssen rollen für den Sieg“. (“Wheels must turn for victory”) everywhere in the mine [2].

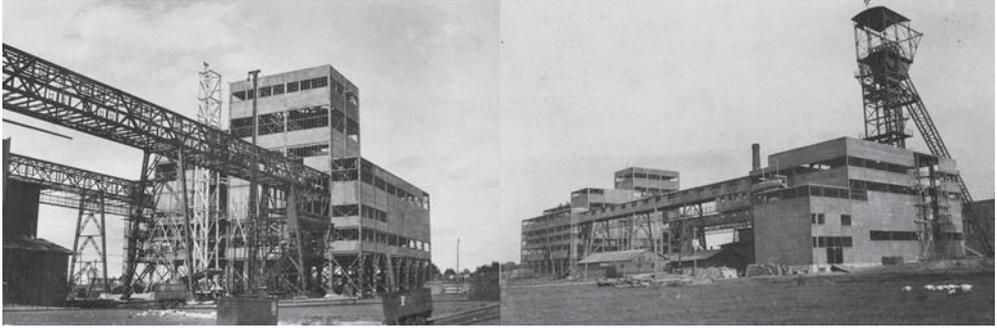


Fig. 1. The State Coal Mine Jawiszowice. Construction of the building around Jowisz (Andrzej III) shaft. The sorting plant on the left. On the right at the forefront pithead building. Photo probably 1932. Archive of the Coal Mine Brzeszcze-Silesia

2.2. Present state

The yield through the Andrew III shaft was stopped in 1995. The process of liquidation of SCM Jawiszowice ended in 1999. However, the shafts are still in working order, serving as ventilation and are used for inspecting the underground workings. The Mine Rescue Station is still in operation at the mine site. Since 2003, the owner of the Brzeszcze mine (including SCM Jawiszowice) is Kompania Węglowa S.A.

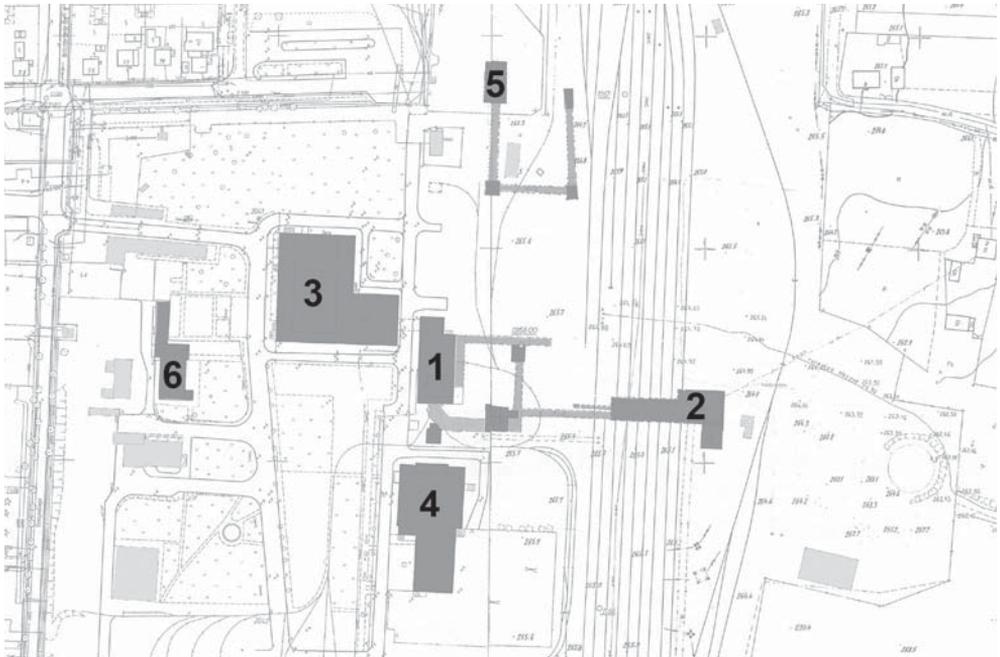


Fig. 2. The State Coal Mine Jawiszowice. Surroundings Andrzej III shaft:
 1 — pithead with hoist tower, 2 — sorting plant, 3 — guildhall, 4 — engine hall,
 5 — retail sales, 6 — emergency station. Elaborated by A. Zaborska-Jagiello

In about 20 years the SCM Jawiszowice will have to stop functioning entirely, however the city of Brzeszcze has already included this area in the revitalisation programme for 2008–2015² [3]. Unfortunately, the parcelling the site commenced, without regard to the rationality of the spatial development in the future. Part of the terrain and buildings have been sold, or even worse, demolished (women's cloakroom, lathes workshops and the sorting plant were partly dismantled (Fig. 3). Buildings taken over by private companies are often converted with little regard for their historical value. Implemented changes distort the architecture, blurring their original nature (guildhall with chain cloakroom).



Fig. 3. Actual state of the sorting plant. Photo A. Zaborska-Jagiełło 2011

2.3. Architecture

The buildings around the SCM Jawiszowice Andrew III shaft are an outstanding example of the country-wide modernist industrial architecture. The complex reflects optimisation and rationalisation, both in terms of complex functionality and architecture. The rationalisation was reflected in the reduction and coherent language of modernist architecture.

The pithead building with a 39.5 m high hoisting tower (Fig. 4) is the focal point of the complex. The building has a cuboidal form of a steel structure filled with red brick and glass (Fig. 5). Longitudinal strips distributed on the façade windows provide light to the needed interior parts. The large glazed areas running from the bottom to the top of the building underline the vertical shape of the hoist tower. The painted blue steel construction of the shaft tower stands out in the landscape and is a reference point in the region.

The pithead is connected to the sorting plant by reloading bridges. The sorting plant was originally a monumental cuboidal form of steel construction filled with brick and glass (Fig. 6). The building is suspended over the tracks, which carriages drove up to, in order to get the sorted coal back. A grading tower was located, to the east, which was a counterpoint to the Andrew III Shaft.

2 The programme proposes that an economic activity zone be created at the mine site. It is suggested that the historical mining facilities be preserved and adapted for economic purposes. A need to create the comprehensive vision of the spatial development was emphasized as along with the introduction of such functions which will compensate for the employment lost as a result of the liquidation of the mine [5].



Fig. 4. Pithead Andrzej III. Photo A. Zaborska-Jagiello 2011

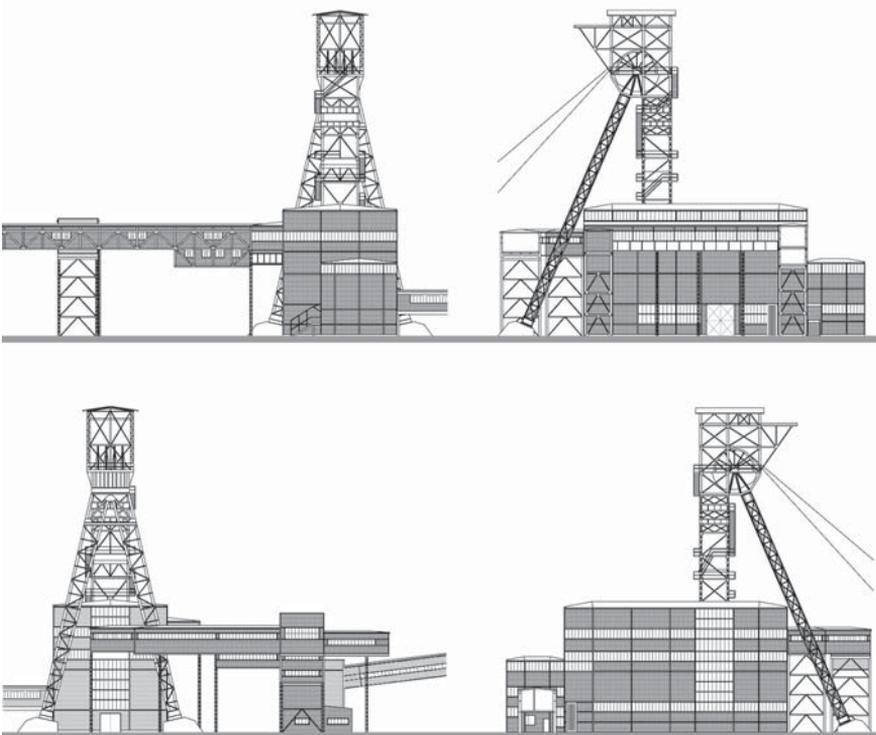


Fig. 5. Pithead Andrzej III with hoisting tower. Elaborated by A. Zaborska-Jagiello 2011

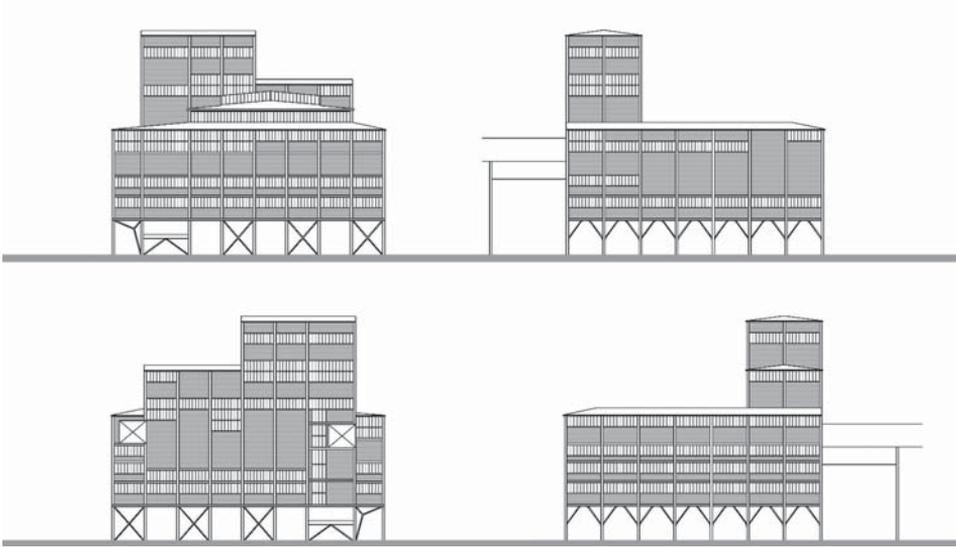


Fig. 6. The sorting plant. The original state from 1932. Elaborated by A. Zaborska-Jagiełło 2011

The pithead building and sorting plant constituted one perfectly, architecturally and coherent, functioning organism. Unfortunately, the sorting plant has been largely demolished, only one sixth of the total part has remained. Later the bridges were dismantled too, leaving only the northern fragment. In the 70's new transport bridges were built, which currently make up an unusual spatial maze, reminiscent of the eighteenth-century muddled drawings by Piranesi (Fig. 7).



Fig. 7. Coal reloading bridges. Pithead Andrzej III with hoisting tower on the right.
Photo A. Zaborska-Jagiełło 2009

The pithead building is connected to the guildhall with an above-ground passage from the east. Fully equipped and ready to work miners with lamps in hand, walked to the pithead, to go down through this very corridor. The guildhall is a two-storey building with a horizontal approach. It has brick façades with parts finished with plaster. The windows are

horizontally spaced along the façade and a chain cloakroom was located in the high, indoor part of the building.

The coal retail sales building is another object of modernist expression worth describing. It is a brick tower over 20 metres high sitting on massive concrete pillars (Fig. 8). Inside the building from the north, there is a staircase, well lit by large vertical strip windows located on both sides of the building. Coal for sorting was transported to the last floors of the building via the brick bridge on a steel construction.



Fig. 8. Coal retail sales tower. Elaborated by A. Zaborska-Jagiello 2011

The complex of buildings around the Andrew III Shaft (Fig. 9) is a well-designed foundation, where we can easily understand the mine's manner of operation. The SCM Jawiszowice's group of buildings with the modernist formal expression, characteristic of the 1930's, is very valuable architectural monument.



Fig. 9. Pithead Andrzej III with hoisting tower. Part of guildhall on the left. Engine hall on the right. Photo A. Zaborska-Jagiello 2009

3. The SCM Jawiszowice protection

The facility of the SCM Jawiszowice is a valuable post-industrial complex of large historical, architectural and engineering value. Presently, however, there seems to be a general

lack of awareness of this value, as evidenced by demolition and conversion which is destroying its original nature.

In 2011, part of the SCM Jawiszowice buildings complex, clustered around the Andrew III Shaft (guildhall, the Andrew III Shaft pithead, sorting plant, coal retail sales buildings and a system of transport bridges between Andrew III and the sorting plant) was included in the provincial register of monuments as a group of modernist industrial buildings³. Such a record should prevent some of these objects from their which is already planned demolition (transportation bridges). It should also allow for the control of spatial actions taken at the mine, which could lead to the destruction of the existing complex.

However as the conservation practice in Poland has shown, even technical monument listed in the register of monuments is not a sufficient factor to protect the monument. Very often, such a form of protection is reduced to recording on paper. The lack of ideas as to the further functioning of technical monuments causes their gradual degradation, which leads to their complete destruction. For this reason, the valuable resources of industrial heritage have disappeared in an unnoticeable way. The rigor of the legal protection does not replace the revitalisation programmes, with well-defined aims and methods of their implementation.

Recommendation R (90) 20 [1] emphasises that the most effective method for the protection of industrial facilities is revitalisation which would give the complex a new life, while retaining its identity and continuity of cultural traditions. The protection of historic objects of the mining culture requires significant human and financial resources nevertheless, investments associated with them bring both major economic and social benefits [9].

4. Revitalisation with the participation of creative industries

The notion of creative industries has become increasingly popular in the contemporary world. Currently used by politicians, scientists, researchers and journalists, it has gained little recognition in Poland, and sometimes even remains unknown. They are differently named and defined due to the range to which they relate. The most frequently quoted definition of creative industries is that developed in 1997 in the UK by the Creative Industries Task Force for the Department for Culture, Media and Sport (DCMS): *those activities which have their origin in individual creativity, skill and talent, and which have a potential for wealth and job creation through the generation and exploitation of intellectual property*⁴ [4]. The result of these activities are tangible and intangible goods, intellectual or artistic, creative content services, economic value and market purposes. In the creative sector cooperate creative individuals, managers, engineers and scientists [8].

Creative industries are one of the most dynamic economic sectors. In the Lisbon Strategy the European Commission identifies creative industries as *the most competitive and dyna-*

3 Decision of the Provincial Conservator of Monuments in Krakow No. OZKr.5140.32.2001.DW from 23 November 2011.

4 According to the British definition the creative industries include: advertising, film and video, architecture, music, art and antiques market, performing arts, computer games and video, publishing market, crafts, software, design, radio and television, fashion design.

mic knowledge-based economy, able to sustaining economic growth and providing jobs and social cohesion [5]. Creative industries are the engine of economic development and have a great impact on social and cultural development.

The potential of creative industries is more and more often exploited in the process of the revitalisation of post-industrial facilities. Factories, districts and entire fragments of cities, which in the past industrial era represented industrial facilities, today, have become centres of creative industries, generating economic, social and cultural development. Today, instead of natural resources such as coal or gas, human creativity is a new source of power European cities.

Two examples of mining sites, which in the process of revitalisation bet on creative industries, are worth describing. The most significant and best-known example is the Zollverein mine in Essen, the heart of the largest industrial area in Europe - the Ruhr valley. Zollverein is a symbol of the transformation taking place across the entire area. After the long process of revitalisation, the mine became a centre of creativity. Zollverein became not only a centre of the culture, but also a prospering business centre of the new economy. A realisation of 4 projects and institutions, which were supposed to become a catalyst of the economic development, were suggested: "Platform Design" (education), "Interform" (exhibition), "Design Park Zollverein" (creative industries Technology Park) and the "Ruhr Museum" (museum of the region). The primary focus was put on design as a crucial economic factor in the knowledge society, a catalyst for innovative products and services that will cause the further development of the mine.

Another good example of the mining heritage, which uses creativity as a tool in transformation is the Winterslag Coal Mine in Genk (Belgium). The converted mine, opened in 2010, has become an innovative, sustainable and high quality centre of creative industries. The revitalisation project, called C-Mine⁵, is based on the development of the four basic functions: culture, creative industries, education and tourism. Creative spaces, business incubator, a center of culture, Academy of Design and New Media, and an experimental design studio are being created at the mine site. Tourism and recreation supplement the mine's activity [9].

Within the framework of doctoral dissertation the author is conducting research on the new conditions and possibilities of revitalisation of former industrial complexes associated with the development of creative industries. The subjects of the research are post-industrial complexes transformed into creative spaces. Examples in which the strategy of the revitalisation was created based on exploiting the potential of creative industries were selected. Lessons learned from case studies are used to develop a revitalisation model (CInPostIn-dHeR Model *Creative Industries + Post-Industrial Heritage Revitalisation*). The work is to be ended with conclusions that will refer to the Polish context. Developing scenarios of the application of the developed method on selected disadvantaged areas in Poland is a crucial element of the work. One of the areas selected for analysis is SCM Jawiszowice.

5 C-Mine. Letter C refers to the words Creativity and Creation.

4.1. Creative industries as a catalyst for the revitalisation of SCM Jawiszowice — the vision

In the past the Brzeszcze coalmine, and with it SCM Jawiszowice, were the source of power for regional development. They turned agricultural surroundings into a dynamic economic area. In the foreword projection of its tradition, the new SCM Jawiszowice should become the driving force for the development of Brzeszcze and the entire region, which would be characterised by completely different industries and would have to find a new self-definition, a new identity. The vision of the revitalisation bridges the gap between past and future, between the mining-industrial and the contemporary information society.

The vision assumes the concrete architectural realisation that leads to the preservation of the traditional SCM Jawiszowice ensemble and its expansion. The mining complex should be presented in a new and surprising context, through balanced interventions and interpretations. The overall historic facility should remain unchanged whilst productive tension should be developed at the periphery. As in the past SCM Jawiszowice was distinguished by modernity under the architectural, structural and technical consideration, and the new version should also stand out innovative solutions.

The development of the mine plan is based on a cluster of 4 basic functions, which, through synergy and being interwoven, are a special added bonus: culture, education, business and tourism. At the core of the entire concept are creative industries which are supposed to act as a catalyst for the development of the mine. SCM Jawiszowice has become Creative Mine, an inspiring centre, work place, space for innovative and creative enterprises are modern tourism product.

The Jawiszowice Creativity Mine is supposed to be an institution that promotes organisational and entrepreneurial culture. A new cultural center, integrating people of culture, art, science and business, being the place to popularize of their achievements conducted on the site. The historic buildings will be converted into functions associated with culture, art and creativity. They will be a place for producing, exhibiting and consuming cultural goods.

Another element of the project is an educational activity that fulfils an important role in stimulating creativity. Education will be concentrated around the New School of Creative Industries, with the primary focus for design and design management. The Vocational School of the Craft will allow for the retraining of former miners towards new practical professions, will be the second most important educational tool. An experimental design lab to integrate various educational functions and increase their value for innovation and regional economic development will be created at the mine site. A business incubator, helping future entrepreneurs, organisations of culture and artists with the market penetration is an important component, supporting and promoting activities from the creative sector. These functions should be located in thoroughly modern architecture.

A creative industries technology park will be an important component of the new development, where innovative ideas and products generated in the Creative Mine will be produced. Companies from the creative sector and production units, e.g. a furniture factory,

machinery, etc. will be located in the park. Many miners deprived of a job after the closing of the mine will be able to find employment opportunities have after retraining.

Tourism and recreation are supposed to become natural supplementary activity of the mine. A regional tourist centre and underground mining routes will be created. Tourists will be able to experience the history of mining presented in a modern way. The Creative Mine with the centre of history of the mine, mining and the region is supposed to become a modern tourist product attracting crowds of visitors. A hotel and conference center should be founded for tourist purposes, where trainings and conferences could be organised in combination with the use of the attractions at the mine.

The entire area of the mine will be converted into a park where synanthropic vegetation will mix with the modern public spaces. The existing and newly-designed buildings will be immersed in luxurious greenery. The existing railway and sidings would be preserved and woven into the landscape design, or used for various artistic actions. One railway line would be started and transformed into on urban railway linking the mine area with Brzeszcze and Jawiszowice.

SCM Jawiszowice is partly situated no man's land, on the border of two provinces, far away from major metropolitan centres. The creative industries to be characterised by a specific way of working in networks where collaboration often takes place via the Internet. Urban hubs interlinked as net-like trans-regional structures are created, in which the boundaries between periphery and center are blurred. That way, SCM Jawiszowice would be transformed into the centre of the creative industries and could become the centre of a region, a kind of keystone, "safety-pin" that connects the Małopolska and Silesia provinces.

5. Summary

Due to multiple values SCM Jawiszowice is worthy of preservation. As a result of the revitalisation along with exploiting the potential of creative industries, the mine has a chance to become a creative and innovative centre, where culture, business, education and tourism will flourish. Mine buildings converted for new functions will become a bridge between the past and the future. The history and mining identity can help former employees get through the difficult and painful process of mine closure, allowing them to be proud of their past. SCM Jawiszowice can become a driving force for regional development and an important point on the cultural, recreational and tourist map, not only of Brzeszcze, but also for the entire Małopolska Region.

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