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Industrial heritage and art. Contemporary adaptations of post-industrial architecture in the selected areas of Upper Silesia and Dąbrowa Coal Basin

Introduction

The primary scope of this study is concerned with architectural achievements related to the adaptation and redevelopment design of post-industrial heritage in the Upper Silesian Coal Basin. In an era of concern for natural resources, shrinking land reserves in the urban structure and increasing social awareness, decisions are being taken more and more often to adapt buildings for the benefit of preserving cultural heritage. This encourages the rescue of single elements perpetuating cultural identity at the local level such as places associated with tradition and the history of material culture, "witnesses to history", nomenclature, etc. There is an apparent drive to preserve historic buildings, complexes of buildings or landscape elements, especially post-industrial ones. This is the result of a consensus between the managers of the historic fabric and the heritage conservation community. Understood as a cultural asset, post-industrial sites can be preserved for future generations when they are safeguarded, adapted and their functional programmes and links to their surroundings reintegrate them into the life of the city.

The arts are integrated into the museum and temporary art activities. The universal language of the message is a tool to focus public interest, encourage visits to the

Territorial range of the research

For the definition of the research area, the links between the territories of the present-day central and south-western parts of the Silesian Voivodeship and the northern part of the Moravian-Silesian Region in the Czech Republic are not coincidental. Speeches and studies by many scholars, e.g. Mojmír Kyselka [2], emphasise the links between the northern part of the Karniovsko-Opava Silesia and the

revitalised buildings and create a brand and prestige for the place. These efforts require a personalised approach, without compromising the authenticity and perception of the historic fabric. Since the preparation of the exhibition by the Capitoline Museums in the Centrale Montemartini (the first public power station) in via Ostiense in Rome (1997 – the first Machine and Gods exhibition, since 2005) a permanent exhibition [1]), the marriage of art and industry has contributed to a new exhibition canon. The contrasting juxtaposition of so-called high art and the aesthetics of technical equipment within a single exhibition broadened the audience. Since then, the heritage of the industrial era has increasingly become the backdrop for artistic and exhibition activities, creating a synergy of art, especially contemporary art and industrial legacy. These processes can be seen in the case of the adaptation of post-industrial heritage in the Upper Silesian Coal Basin. The aim of this article is to show, using selected examples, the ways in which adaptations of post-industrial buildings for exhibition purposes are carried out. The summary also highlights similarities and differences in the approach to the revitalisation of such facilities on post-mining sites in today's southern Poland and eastern Czech Republic.

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band of industrial districts that form part of the Silesian Voivodeship. The Dąbrowa Coal Basin, the Upper Silesian Industrial District (erroneously identified with the Upper Silesian Conurbation), the Rybnik Industrial District (Poland) and the northern part of the Moravian-Silesian Region (Czech Republic) are areas shaped by the dominance of mining and heavy industry in the 19th and 20th centuries. Despite their different political histories in many respects, these areas share a common historical fate and transformation following the decline of the industry after 1989.

In determining the territorial extent of the research carried out, the question of the historical boundary of Upper Silesia is crucial¹. The Dąbrowa Coal Basin was formed in the 19th century, until the 15th century most of its territory was part of Silesia. After the Third Partition of Poland, it belonged to Prussia and then was part of the Kingdom of Poland.

The northern part of Karniov-Opava Silesia with Ostrava historically belonged to or was connected with Upper Silesia. Ostrava is an example of this. Right-bank Ostrava was called Vendian (Slavic) Ostrava or Polish Ostrava in the 14th and 15th centuries, as opposed to the part on the left bank of the Ostravica River, referred to as German or Moravian Ostrava and constituting the conventional southern border of Upper Silesia. From 1714, Polish Ostrava was owned by the Wilczek family, whose estates extended, among others, to the Gliwice area.

An important element connecting these territories was the railway network. In 1856, the "Emperor Ferdinand's Northern Railway" company built a railway line leading from Vienna via Ostrava to Mysłowice, Sosnowiec and Dąbrowa Górnicza, and then connected to the Warsaw–Vienna Railway. A transport route was thus created across the borders of the Habsburg Monarchy, Prussia and the Russian Partition, connecting the areas discussed in the article on a north-south axis. Until the end of World War I, the Zagłębie region was part of the Russian Partition, and Upper Silesia was under the German Empire, with the exception of its southern part known as Karniów-Opava Silesia (with its centre in Ostrava), which belonged to Austria-Hungary.

As a result of the political arrangement after World War II, the Zagłębie and Upper Silesia found themselves within common administrative boundaries. Part of Cieszyn Silesia has belonged to the Czech Republic since the Treaty of Versailles and is now part of the Moravian-Silesian Region.

Research methods

The identification of examples of adaptation of industrial buildings was possible by obtaining data on selected facilities. Databases and the Directory of Museums in Poland [3] were used for this purpose. Sources of information included architectural designs, adaptations, interviews

with authors, press publications and study visits. The collected data were grouped and analysed (location, manner and extent of development, location of the exhibition, scale of the exhibition and nature of the exhibition space).

Due to the range of the issue, which is the adaptation of post-industrial architecture, several limitations were adopted. Firstly, cubic structures associated with the functioning of the industry, including the above-ground infrastructure of former mines as the most complex and characteristic structures related to the identity of the region, were included in the research and discussed. Secondly, a key element of the research was to present the structures related to the broadly perceived presentation and promotion of art, dissemination of culture and, through it, the original historic architectural fabric and post-industrial infrastructure. In the Silesian Voivodeship alone, the industrial heritage presented as part of the Industriada festival and linked to the Industrial Monuments Route includes several dozen sites and complexes with a diverse primary function. Apart from mines, these include breweries, housing estates, printing houses, steel mills and factories, textile factories, slaughterhouses, fire stations. Hence the need to identify sites linked not only to the genius loci of the locality, but of the entire region. In sum, seven examples of revitalisation were selected for analysis. They are discussed later in the article in the following order: The Artistic Casting Branch of the Museum in Gliwice (Oddział Odlewnictwa Artystycznego Muzeum w Gliwicach), the Silesian Museum (Muzeum Śląskie) in Katowice, the Elektrownia Contemporary Art Gallery (Galeria Sztuki Współczesnej Elektrownia) in Czeladź, the Tichauer Art Gallery in Tychy, Dolní Oblast Vítkovice and the Plato Contemporary Art Gallery in Ostrava, as well as the Tradition Park (Park Tradycji) in Siemianowice Śląskie.

Genesis of the post-industrial heritage of studied areas

The eastern part of Upper Silesia, the Dabrowa Coal Basin and Kaniów-Opawa Silesia became significant centres of the mining industry in the 19th century. The development of metallurgy and coal mining contributed to the cultural specificity of all areas. This was facilitated by the influx of people associated with the increase in employment in the new workplaces. The mining industry (silver and lead ores) and the nucleus of metallurgy had been developing in the area since the Middle Ages. It was not until the end of the 18th century that coal deposits were discovered, which enabled the development of the metallurgical industry, coking and industrial mining. The first of the mines in Upper Silesia was the Queen Louise Mine in Zabrze, founded in 1791, and in the Zagłębie area, the Reden Mine, named after Friedrich Wilhelm Graf von Reden, was established five years later in Dabrowa Górnicza [4]. The Opole Region (Regierungsbezirk Oppeln), established in 1815 within Prussia and encompassing the historic area of Upper Silesia, began to grow thanks to the development of the Upper Silesian Industrial District (Oberschlesische Industriebezirk) on its eastern border. At the same time, on the Russian side of the border, in

¹ The term Upper Silesia (Horní Slezsko in Czech), first used in the 15th century, a historically much larger area, as it also included the estates of the Piast domain of Opole.

the territory of the Congress Kingdom, the Central Mining Directorate was active. In 1848, the railway line connecting Warsaw with Sosnowiec (Warsaw-Vienna Railway) was completed. Between 1859 and 1862 [5] it was connected to the Prussian railway network, and in 1856 Ostrava was incorporated into the transport system. In the 19th and early 20th centuries, the mining industry developed continuously, and in the interwar period and after World War II, the Upper Silesian Industrial District became one of the most important industrial centres in Poland. In the People's Republic of Poland, it was associated with the state's industrial policy and was the centre of heavy industry. With the political breakthrough of 1989, a difficult restructuring of industry began, some factories went bankrupt and the architectural industrial heritage, which was one of the distinctive features of the region, met a different fate. As a result of the processes, the ability to maintain the technological infrastructure, which also included industrial architecture, was lost. It was only the presence of Poland and the Czech Republic in the European Union that created the unique opportunity to save the industrial heritage for future generations

Selected facilities – discussion of examples

Artistic Casting Department of the Museum in Gliwice

One of the first examples of the revitalisation of postindustrial facilities in Poland was the adaptation of the Gliwice Coal Mine (KWK). The project involved a group of several facilities. The Gliwice and Öhringen-Sośnica mines were established relatively late, in 1910 and 1913. Due to the exhaustion of deposits, the eastern field of the Sośnica mine was decommissioned in 1997 and the Gliwice mine two years later [6]. In 1999, the Gliwice curia commissioned the Mexem design office to create a concept for the adaptation of the buildings for the needs of the College of Humanities and the Catholic High School. The adaptation assumed the use of the original historic substance and the adaptation of the mine management building to the aesthetics of the rest of the complex. The project included the conversion of the engine room into a museum with a display of the original machinery. For financial reasons, the first project was not realised². In 2003 the Municipal Office of Gliwice prepared an action plan for the revitalisation of the area called "Nowe Gliwice", which assumed economic and social revitalisation, including increasing the tourist potential of the post-mining areas. The project received a grant from the PHARE fund [7].

Several buildings remain from the Gliwice coal mine, which are important elements of the city's skyline. The buildings of the management board, the "villa" and the station have been preserved, as well as the machine- and the guildhall – a building designed on the plan of a rectangle measuring 82×36 m with a tower 45 m high. The symmetrical body of the building, covered with a steep roof, was divided, both structurally and functionally, into three parts: the central one with a two-storey hall and tower, and the two side wings that once housed the bathhouse with a high chain cloakroom and, on the opposite side, a huge production hall. Teaching and lecture rooms, a library, auditoriums and a buffet were designed in the former guildhall, and the ground floor was given a 30-metre-long open space (Fig. 1). The lobby surrounding the hall provided a neutral backdrop for temporary art exhibitions. In the side wings, in order to preserve the suggestion of the original space, a decision was made to separate the structure of the newly designed lecture theatres from the old walls of the two halls. Located at a considerable height above the floor, arcade windows illuminated the rooms around the auditoriums, and open communication galleries were also designed [8]. The hall was adapted for the purposes of a museum exhibition entitled "From the Old Steelworks to the Gliwice Technical Equipment Works", designed by Tadeusz Pfützner of the Faculty of Architecture at the Silesian University of Technology.

The Artistic Casting Division was relocated in 2010 to the former machine hall, the largest of the surviving buildings of the former Gliwice coal mine. The structure of the machine hall consisted of a three-storey office part with a usable attic and three halls connected in an amphilade. A void was left along the south wall from the ground floor to the attic, which made it possible to expose the original ceramics and leave a "trace" of the original height (Fig. 2). The new exhibition entitled "Rightly famous today Gliwice..." was prepared by Studio Nizio Design International from Warsaw. The main part of the exhibition arrangement consists of museum showcases alluding in shape to the smelter furnaces [9].

Silesian Museum in Katowice

The Silesian Museum was established by a resolution of the Silesian Parliament of 23 January 1929 [10] and operated – despite the lack of permanent headquarters – until the outbreak of World War II. The museum building was completed in 1939, but it was not officially opened, and after the German army entered Katowice, it was demolished to its foundations [11].

Despite attempts and efforts to acquire new housing, the breakthrough came only at the beginning of the 2000s, when the Committee for the Construction of a New Building for the Silesian Museum in Katowice began its activities. The transfer of the former Katowice mine site for the investment accelerated the execution of the design documentation. The competition for the design of the new Silesian Museum building was won by Riegler Riewe Architekten in Graz.

The proposal of the Austrian studio referred to the industrial history of Silesia and the original function of

² Design concept: Adaptation of post-industrial buildings of the Gliwice coalmine for the needs of the Faculty of Theology and a Catholic secondary school – B.P. Mexem, Gliwice 1999, Nowe Gliwice – Transformation of post-industrial areas into an enterprise zone – B.P. Mexem (A. Nagulewicz, R. Żabińska, D. Fedelińska-Kowalska, I. Stelmach, T. Wagner, K. Zieńć, G. Ziębik), Gliwice 2004.

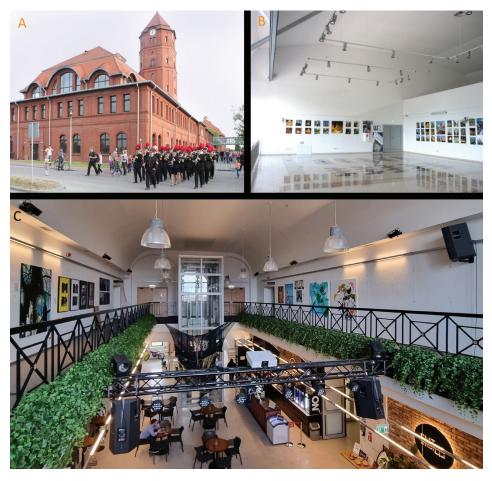


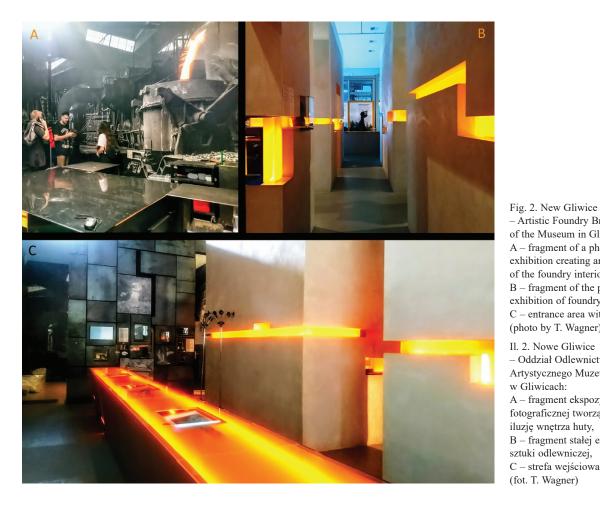
Fig. 1. Nowe Gliwice - enterprise development zone of the Gliwice coal mine: A – view of the former guild-and machine hall building, B – temporary exhibition in the attic of the machine hall building, C - temporary exposition in the hall of the first floor of the guildhall building (designed by BP Mexem 2003-2004, photo by T. Wagner) Il. 1. Nowe Gliwice strefa rozwoju przedsiębiorczości KWK Gliwice: A - widok budynku dawnej cechowni i maszynowni, B – czasowa ekspozycja na poddaszu budynku maszynowni,

C – czasowa ekspozycja w holu pierwszego piętra budynku

(proj. BP Mexem, 2003-2004,

cechowni

fot. T. Wagner)



- Artistic Foundry Branch of the Museum in Gliwice: A – fragment of a photographic exhibition creating an illusion of the foundry interior, $B-fragment\ of\ the\ permanent$ exhibition of foundry art, C - entrance area with a counter (photo by T. Wagner) Il. 2. Nowe Gliwice - Oddział Odlewnictwa Artystycznego Muzeum w Gliwicach: A – fragment ekspozycji fotograficznej tworzącej iluzję wnętrza huty, B – fragment stałej ekspozycji sztuki odlewniczej, C - strefa wejściowa z ladą (fot. T. Wagner)

the post-mining area. It assumed minimal interference in the post-industrial landscape, and the designed complex was mostly located underground. On the outside, the "glass" masses of the buildings and cuboidal skylights, which illuminate the underground exhibitions and create a dialogue with the historic volumes, are visible. This solution has made the Silesian Museum one of the most original museum buildings in Europe. It is an interdisciplinary space consisting of an auditorium, library, educational and conference rooms, car parks and a 12.5 m high exhibition space (central hall). The building complex includes the former machine hall building of the "Warsaw" shaft. The mining past of the Silesian Museum site is evidenced by the hoist tower of the mine shaft. The idea was to preserve the cultural heritage of Upper Silesia by adapting two historic buildings together with the conservation of historic industrial machinery (Fig. 3).

The adapted post-industrial space at the Silesian Museum creates a synergy of post-industrial architecture with painting, photography, sculpture, graphics and installations by artists. The spaces in the new underground part of the museum provide an austere, minimalist backdrop for the permanent and temporary exhibitions (Fig. 4).

The permanent exhibitions in the museum's new building feature 1,400 exhibits in six thematic galleries, covering Polish art from 1800–1945 and from 1945 to the present, Polish theatrical and film scenography, Silesian non-professional art and Silesian sacred art, as well as an exhibition on the history of Upper Silesia.

Elektrownia Contemporary Art Gallery – Czeladź

The Contemporary Art Gallery Elektrownia in Czeladź is one of the best adaptations of a post-industrial building in the Dąbrowa Coal Basin. At present, the complex of the former power station supplying the Saturn mine is part of a museum established in Czeladź in 2009 that includes the buildings of the former mine [12].

Several buildings related to the activities of the mine have been preserved on the site. The building of the power station serving the mine was constructed between 1902 and 1908, designed by Polish architect Jozef Pius Dziekoński (1844–1927). In 2005, the Association of Cultural Initiatives initiated the establishment of the Elektrownia Gallery of Contemporary Art. In 2010 the building was entered on the list of the Silesian Voivodeship's Industrial Monuments Route.

After adaptation work, the power station retained its original shape, consisting of a main hall set on a rectangular plan, with an additional nave and a risalitically protruding side wing added to the east. The effect of the picturesqueness of the mass was emphasised by Dziekoński's high tower with blanks and shooting holes, dressed in a "castellated style". The hall has original equipment, namely a generator constructed by Maschinenfabrik Oerlikon Schweiz in 1903 [12], a compressor, inverters, a control panel and a crane. As part of the restoration work, the original detail elements were retained. The brick façades were cleaned



Fig. 3. Silesian Museum in Katowice:

A – panorama of the city with inactive buildings of the Katowice coal mine (state in 2009),

B – view of the park above the underground part of the Silesian Museum (photo by T. Wagner)

II. 3. Muzeum Śląskie

w Katowicach:
A – panorama Katowic
z nieczynnymi obiektami KWK
Katowice – stan w roku 2009,
B – park nad podziemną częścią
Muzeum Śląskiego
(fot. T. Wagner)



Fig. 4. Silesian Museum in Katowice: A - part of the building interiors with Deni Karavan's exhibition, B – part of the building interiors with a temporary exposition, C – part of the interiors in the KWK Katowice with the temporary exhibition "Masculine Thing" in 2018 (photo by T. Wagner) Il. 4. Muzeum Śląskie w Katowicach: A - fragment wnętrz części budynku z ekspozycją Deni Karavana. B - fragment wnętrz budynku z czasowa ekspozycja, C – fragment wnętrz KWK

and the green woodwork, typical of the 19th century, was restored. A new element of the volume is a contemporary, simple block housing a staircase and a lift. The building accommodates exhibition areas on the mezzanine, ground floor and basement levels. Thanks to the glazing, the building is illuminated. On the one hand, this is an advantageous element for the display of certain forms of contemporary art, but on the other hand, it can be an obstacle in the case of historic buildings or art directed by light.

The preserved machines, which are part of the equipment, dictate the scenario of the exhibitions and limit the possibility of introducing an audience for temporary events, readings and lectures [13]. The in situ preservation of the machinery and control panel in such excellent condition has allowed for an effect similar to that achieved at Centrale Montemartini – a contrast between technology and art presented in the vicinity of technical equipment. In the basement and mezzanine floors, the layout of the walls allows for a traditional exhibition scheme (Fig. 5).

Tichauer Art Gallery – Tychy

When considering the degree of preservation of the original interior architectural relics, the Tichauer Art Gallery is one of the more interesting developments. The gallery is part of the former brewhouse of the Civic Brewery in Tychy. The complex of buildings was built in 1895 [14], although some of the surviving buildings, such as the keg wash [15] and the hammer house [16], date from a later period. The buildings were adapted to modern needs in two phases. Between 2007 and 2013, the brewery facility – a malt house with drying room – was adapted into a technology park, and between 2014 and 2020 [17], thanks to the foundation established in 2012, Tyska Foundation for the Promotion of Culture and Tourism "Civic Brewery", the former brewhouse building was adapted for rooms related to the exhibition of artworks. The revitalisation measures covered the entire complex. A number of solutions related to the exhibition of technological relics and machinery in the park were planned. In the case of the Tychy brewhouse building, analogies to the Czeladź power plant can be seen. The annexes were rebuilt, and office and conference rooms were introduced. In the main exhibition hall, the original structural elements were retained. The finishing elements - terracotta tiles, glazed bricks and other elements - were retained without restorations, with damage and deterioration exposed [17] (Fig. 6). The aesthetic effect of the architectural palimpsest creates a competing element with the art on display, so it must be shown against a more subdued background in the form of temporary panels (previous temporary exhibitions have used monochrome panels and pedestals, primarily black - Beksiński and white - Ołbiński/Sętowski). In the other rooms intended for exhibition purposes, the new solutions of the adapted interiors, as in Czeladź, represent the "classical" model. Grey industrial concrete floors and walls covered with white paint coatings create a neutral background allowing a "mobile" exhibition with artificial lighting.

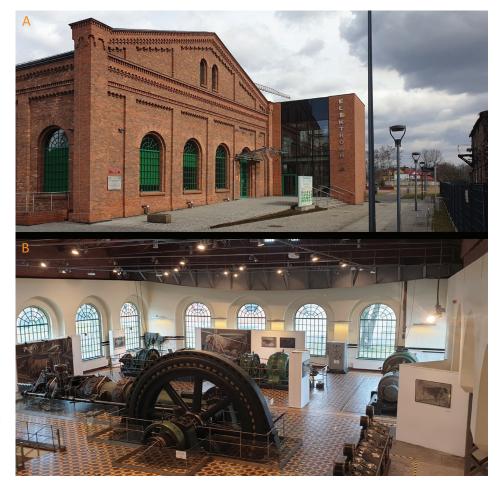


Fig. 5. Gallery of contemporary art Elektrownia – Czeladź:

A – view of the revitalised building with the added staircase,
B – interior of the former turbine hall with temporary exhibition (photo by S. Wróblewski, 2022)

Il. 5. Galeria Sztuki
Współczesnej Elektrownia
w Czeladzi:
A – zrewitalizowany obiekt
z dobudowaną klatką schodową,
B – wnętrze dawnej hali turbin
z ekspozycją czasową
(fot. S. Wróblewski, 2022)



Fig. 6. Tichauer Art Gallery
in Tychy, adaptation of
the buildings of the
"Civic Brewery":
A – exhibition against
the background of the restored
walls of the brewery interior,
B – Tichauer Art Gallery,
view from outside,
C – complex of adapted buildings
(photo by S. Wróblewski, 2022).

Il. 6. Galeria sztuki Tichauer Art
Gallery w Tychach,
adaptacja obiektów
"Browaru Obywatelskiego":
A – ekspozycja na tle poddanych
konserwacji ścian
wnętrza browaru,
B – Tichauer Art Gallery
– widok z zewnątrz,
C – kompleks adaptowanych
obiektów
(fot. S. Wróblewski, 2022)

Dolní Oblast Vítkovice – Ostrava

The Dolní Vítkovice complex (located within the administrative borders of Ostrava) is the largest group of post-industrial architecture in the Czech Republic, metaphorically known as the Iron City or Ostrava's Hradčany. It includes a former steelwork, a coking plant and a mine. Since 2008, the area has been listed as a European cultural heritage site – Dolní Oblast Vítkovice (DOV).

The origins of Dolní Vítkovice are linked to the founding of the ironworks by Archbishop Rudolf Habsburg in the late 1820s [18]. The development of the works is linked to the figure of Salomon Mayer Rothschild (1774–1855) [19]. They created a self-sufficient metallurgical complex. Conveyor belts, loading facilities and transport platforms provided the link between the various parts of production, and their silhouette with shafts and blast furnace (now called Bolt Tower) is still a "post-industrial sculpture" and an important part of the landscape of Ostrava.

Coal mining ceased here in 1991, the blast furnace was extinguished in 1998 and the area was restructured in the following years. The owner of the works, Jan Svetlik, began efforts to raise funds to revitalise the complex. Today, it is a multi-purpose complex of facilities combining museum, entertainment and educational functions. One of the most important facilities is the former wet gas tank known as the "Gong". It was built between 1922 and 1924 as a riveted

structure of armoured steel plates in the form of a cylinder with a volume of 50,000 m³. As part of the 2011–2012 reconstruction, the cylinder was raised, stabilised and the structure reinforced. It consists of two concrete stair towers, between which an art gallery has been placed on each floor. Light into the building is provided by four punched openings. The building offers the possibility to organise exhibitions in the gallery area on the ground floor, in the great hall or in the gallery on the first floor (Fig. 7).

Plato Gallery of Contemporary Art - Ostrava

The Ostrava City Slaughterhouse building dates from 1881 [20]. The slaughterhouse was repeatedly modernised and extended until the 1960s, when the plant was moved to a new location. The buildings were used as warehouses and garages and were modified in a haphazard manner. Although the abattoir was listed as a historic monument in 1987 [21], the establishment had been in decline since the 1990s and some of the buildings were demolished. In 2016, the city bought back the site and began saving the remains of the historic slaughterhouse [22]. The Ostrava authorities held a competition for a project to revitalise the surviving main building. The winner of the competition was a design by KWK Promes by Robert Konieczny.

The Polish architects adopted the strategy of emphasising the transformations to which the "shell" of the building



Fig. 7. Dolní Oblast Vítkovice, Ostrava (DOV): A – panorama of DOV. Lump of the furnace gas reservoir, B – part of the entrance hall "Gong" with temporary exhibition, C - modern art gallery (photo by T. Wagner, 2017) Il. 7. Dolní Oblast Vítkovice w Ostrawie (DOV): A – panorama DOV, bryła zbiornika gazów piecowych, B - fragment holu wejściowego "Gong" z ekspozycją czasową, C – galeria sztuki nowoczesnei (fot. T. Wagner, 2017)



Fig. 8. Plato Contemporary Art
Gallery in Ostrava
(designed by KWK Promes):
A – Plato building,
B – open façade panels,
C – a fragment of
the gallery interior
(photo by T. Wagner, 2023)
Il. 8. Galeria Sztuki
Współczesnej Plato w Ostrawie,
KWK Promes:
A – budynek Plato,
B – otwieralne panele elewacji,
C – fragment wnętrza galerii
(fot. T. Wagner, 2023)

had been subjected. The clinker walls have been restored, cavities have been filled in with brick, and new elements in the place of large punctures have been designed from new material.

As Robert Konieczny explains: [...] large openings were once punched in the massive brick walls. Instead of filling them with brick and recreating the old details, we decided to preserve these holes and open the exhibition halls to the city [22]. The result was a building façade that combined contrasting materials, such as brick and concrete fragments that resemble seals in clinker, and act as large-scale revolving doors [23]. The PLATO Gallery has five exhibition halls, each of which can function independently. The gallery space serves as a backdrop for a variety of cultural events. The entire space is based on an unambiguous circulation system. The designed footbridge at floor level ensures free communication within the building. The old elements complement the new without competing with them. Those added in the interior give the impression of exhibits (Fig. 8).

Tradition Park – Siemianowice Śląskie

The former Michal mine in Siemianowice Śląskie is now a centre of cultural life. The history of the mine dates back to the 1880s. The first plant was established in 1881 and was named Max [4]. In the following decades, the mine developed dynamically: the two existing shafts were deep-

ened and modernised, and in 1902 the third shaft "Christian Kraft" was opened. In 1989 the decision was taken to decommission the mine, and in 2000 an urban-architectural competition was announced for the development of the former mine site, with the aim of preserving the existing facilities as much as possible.

One of the buildings to be preserved was the engine hall, which originally housed a hoisting steam engine inside. The building is a single-aisle hall building, built of brick. Its façades were ornamented with brick decorations such as lisens, arcade friezes and arched windows and doors, which represent a simplified interpretation of the mainly Romanesque architecture known as the arcade style (Rundbogenstil).

The renovated building, together with the 36-metre tower of the disused mine shaft, is now a multifunctional cultural centre called the Park of Traditions. It houses an auditorium, an exhibition space with a permanent exhibition on the history of mining and metallurgy. The engine room hall has been divided into floors and new communication risers have been introduced, and the adjacent green space has been equipped with an outdoor gym, an "action and reaction" park and a street workout park. The exhibition space is the venue for permanent events such as Industria, the Industrial Photography Festival, KARBIDKA—the All-Polish Festival of Small Theatre Forms, Michalkowice Bluesowanie, Chill Time under the Krystyn Shaft, Historic Vehicle Rallies and fairs (Fig. 9).

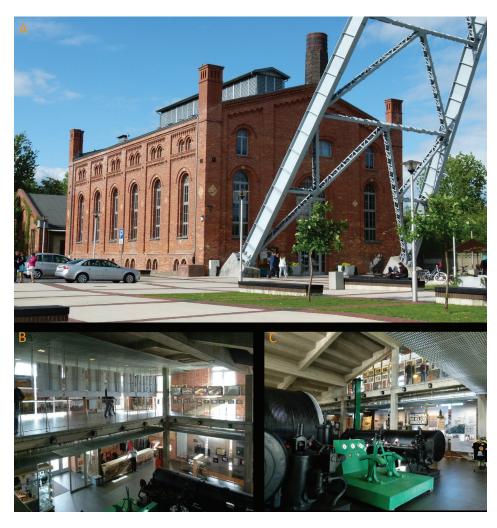


Fig. 9. Park Tradycji in Siemianowice Śląskie: A – machine room building after adaptation, B – interior with temporary exhibition, C – entrance hall (photo by T. Wagner, 2018)

II. 9. Park Tradycji w Siemianowicach Śląskich: A – budynek maszynowni po adaptacji,

po adaptacji,
B – wnętrze z ekspozycją czasową,
C – hol wejściowy

(fot. T. Wagner, 2018)

Conclusions

The research carried out shows that the adaptation of post-industrial buildings for display purposes in connection with the historical values of the "site" can increase the significance of revitalisation. This is because the conversion of the open spaces of former machine halls for exhibition allows not only the forms of the buildings but also their technological installations to be preserved. The infrastructure and interior furnishings, such as former machine parks, technical equipment and various types of installations, cease to have a utilitarian function and become an ornament of the interior – a witness to the past, an artefact or a decoration. They often form the backdrop for permanent and temporary exhibitions of various forms of fine art, creating interpretations of historical heritage in relation to the present.

As a result of the conducted analyses, similarities and differences were perceived between the Czech and Polish approaches to the adaptation of historical buildings on post-mining sites, which concern:

- the restoration of machinery in architectural and building complexes – in Czech realisations more historical elements are preserved (e.g. Dolni Vítkovice), in Poland the mentioned relics are complementary elements of contemporary interventions (Silesian Museum in Katowice, Museum in Chorzów, Tradition Park in Siemianowice Śląskie),

- colours the Ostrava solutions are dominated by monochromatic colours – raw concrete and white, while the Polish concepts introduce a wider spectrum of colours, including black associated with the heritage of the coal and steel industry (Silesian Museum, Tichauer Art Gallery),
- preservation of architectural relics both countries use the method of full restoration of the finest historical elements, as well as preserving them, in accordance with the recommendations of the Venice Charter [24] – in a condition that shows the transformations and damage to date,
- the preservation of full machinery as an element of the main interior narrative (Czeladź) that either dominates or interacts with the new exhibits is unique in both countries,
- exhibition problems the threat of contemporary exhibition design/scenography dominating the displayed as well as the preserved historic structures was noted.

While it is a truism nowadays to emphasise the necessity of protecting post-industrial heritage, the examples of successful revitalisation analysed amply demonstrate the adaptation potential of buildings preserved in post-mining areas. As the process of deindustrialisation has particularly affected cities and regions of industrial origin, the adaptation of post-industrial buildings in these areas has a special social significance, as it contributes to the preservation and protection of the identity not only of the sites, but also of the inhabitants.

References

- [1] Centrale Montemartini, *Storia del museo*, www.centralemontemartini.org/en/il museo/storia del museo [accessed: 3.05.2022].
- [2] Kyselka M., Międzygraniczny Plan Regionalny: Polska-Śląsk Czeski, [in:] J. Witeczek (red.), Nowoczesność w architekturze, Wydział Architektury PŚl, Gliwice 2009, 93–99.
- [3] Ministerstwo Kultury i Dziedzictwa Narodowego, Wykaz muzeów w Polsce, 30.11.2023, https://bip.mkidn.gov.pl/pages/rejestry-ewidencje-archiwa-wykazy/wykaz-muzeow.php [accessed: 12.12.2023].
- [4] Jaros J., Słownik historyczny kopalń węgla na ziemiach polskich, Śląski Instytut Naukowy, Katowice 1984.
- [5] Wilczek-Karczewska M., Rozwój kolei żelaznych na ziemiach polskich w ujęciu historycznoprawnym, "Kwartalnik Antymonopolowy i Regulacyjny" 2015, nr 1(4), 102–105.
- [6] Gabzdyl M., Gliwice wczoraj Gleiwitz gestern, Muzeum Gliwice, Gliwice 1994.
- [7] Wagner T., Nowe Gliwice, "Archiwolta Architektura. Wnętrza. Materiały. Technologie" 2005, nr 4(28), 7–15.
- [8] Wagner T., Architektura, urbanistyka, krajobraz: ochrona i interpretacja dziedzictwa kulturowego Górnego Śląska na wybranych przykladach, Wydawnictwo PŚl, Gliwice 2016.
- [9] Owczarek J., Syska A., Caban E., Szala M., Szymańska J., Woźniakowska A., Wstępne sprawozdanie z inwentaryzacji obiektów przemysłowych w województwie śląskim, Śląskie Centrum Dziedzictwa Kulturowego, Katowice 2012.
- [10] https://muzeumslaskie.pl/ [accessed: 3.03.2023].
- [11] Odorowski W., Architektura Katowic w latach międzywojennych, Muzeum Śląskie w Katowicach, Katowice 1994.
- [12] www.galeria-elektrownia.czeladz.pl/historia [accessed: 7.02.2023].
- [13] galeria-elektrownia.czeladz.pl/przestrzen-wystawiennicza/ [accessed: 1.03.2023].

- [14] Architektura przemysłowa i zabytki techniki na Śląsku w dobie restrukturyzacji, G. Bożek (red.), Centrum Dziedzictwa Kulturowego Górnego Śląska, Katowice 2000.
- [15] Karta Ewidencyjna Zabytków Architektury i Budownictwa. Budynek Spalarni, później myjni beczek, oprac. Movi Atelier Wyry, ul. Pszczyńska 1, Wyry 2002, https://zabytek.pl/pl/obiekty/tychybrowar-obywatelski [accessed: 11.03.2023].
- [16] Karta Ewidencyjna Zabytków Architektury i Budownictwa. Zespół zabudowy Browaru Obywatelskiego. Budynek Młotowni, oprac. Movi Atelier Wyry, ul. Pszczyńska 1, Wyry 2002, https://zabytek. pl/pl/obiekty/tychy-browar-obywatelski [accessed: 11.03.2023].
- [17] https://tichauer.pl/browar-obywatelski [accessed: 11.03.2023].
- [18] Matěj M., Klát J., Korbelářová I., Kulturní památky Ostravsko-karvinského revíru, Národní památkový ústav, územní odborné pracoviště, Národní Památkowý Ústav, Ostrava 2009.
- [19] www.kudyznudy.cz/aktivity/dul-hlubina-a-vysoke-pece-a-koksovna-vitkovickych [accessed: 24.02.2023].
- [20] ostravainfo.cz/pl/odkryj-ostrawe/top-10/152-plato-ostrava.html [accessed: 18.01.2023].
- [21] www.designalive.pl/stara-rzeznia-zamieniona-w-galerie-sztu-ki-wspolczesnej [accessed: 27.12.2022].
- [22] Swoszowska J., Šmídek P., Thorpe H., Galeria Sztuki Współczesnej PLATO w Ostrawie, "Architektura-Murator 02/2023, https:// miesiecznik.architektura.muratorplus.pl/wydanie/is-WTrH-coAz -bphH/galeria-plato-w-ostrawie-aa-H6ZN-q6z7-RCv4.html [accessed: 20.12.2023].
- [23] www.siemck.pl/park-tradycji/#informacje [accessed: 18.03.2023].
- [24] Karta Wenecka, Wenecja 1964, [in:] B. Szmygin (red.), Vademecum konserwatora zabytków. Międzynarodowe normy ochrony dziedzictwa kultury, Polski Komitet Narodowy ICOMOS, Warszawa 2015, 41–44.

Abstract

Industrial heritage and art.

Contemporary adaptations of post-industrial architecture in the selected areas of Upper Silesia and Dabrowa Coal Basin

The main aim of the present paper is to present the latest architectural design achievements in the field of the adaptations of the post-industrial heritage in two neighbouring and culturally closely linked regions: Upper Silesia (Śląsk) and Dąbrowa Coal Basin (Zagłębie) for the new functions and to validate the potential of use of the unique combination of industrial architecture and art. The research focuses on the architecture which was designed for the local industry from the period: from the late 19th century to the 1st half of the 20th century modernism and adaptations and renovations of that industrial architecture for new functions associated with art: museums, art centres, art and exhibition galleries. That architectural heritage with its unique spatial, light and detail solutions and even industrial equipment preserved in situ, used both as a background and main exhibition, serve especially as an interesting space for the modern and contemporary art exhibitions and art activities. This paper presents similarities and differences in analyzed architectural adaptations of the post industrial heritage in Czech and Polish regions.

Key words: architecture, industrial, heritage, adaptation, art

Streszczenie

Dziedzictwo przemysłowe i sztuka.

Współczesne adaptacje architektury postindustrialnej w wybranych obszarach Górnego Śląska i Zaglębia Dąbrowskiego

Podstawowym celem autorów artykułu jest prezentacja ostatnich projektów architektonicznych i realizacji w zakresie adaptacji dziedzictwa postindustrialnego do nowych funkcji oraz ocena możliwości wykorzystania unikalnego połączenia architektury przemysłowej i sztuki na terenie sąsiadujących i powiązanych kulturowo ze sobą regionów Górnego Śląska i Zagłębia Dąbrowskiego. Badania komparatystyczne i analizy zostały ograniczone do obiektów i zespołów poprzemysłowych powstałych od końca wieku XIX do 1. połowy XX stulecia, oraz skupiały się wyłącznie na renowacjach i adaptacjach tejże architektury do nowych funkcji związanych ze sztuką: muzeów, galerii i centrów kultury prezentujących sztukę. Poprzemysłowe dziedzictwo architektoniczne z jego unikatowymi rozwiązaniami przestrzennymi, możliwościami oświetlenia, wyjątkowym detalem architektonicznym czy nawet infrastrukturą, na którą składają się maszyny i rozwiązania techniczne służy jako interesująca przestrzeń do prezentacji współczesnej sztuki i działalności kulturowej. W artykulu zaprezentowano podobieństwa i różnice w zakresie analizowanych adaptacji architektonicznych dziedzictwa postindustrialnego w omawianych regionach w Czechach i Polsce.

Słowa kluczowe: architektura, przemysł, dziedzictwo, adaptacja, sztuka