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THE ROLE OF CULTURE IN RE-USING THE POSTINDUSTRIAL HERITAGE OF EUROPEAN CITIES

Abstract

The increase in the global population – observed since the end of eighteenth century and connected to industrialization – has had a great impact on the urban structure of many European towns and cities. Today, most of the industrial production has moved overseas, especially to Asia. Some of the industrial districts – many of them cities which were developed during the last two centuries on the basis of industrial growth – have been left abandoned, unwanted, and without any prospects for growth. The unused post-industrial structure usually presents no artistic or historic value, but some of the old factories and other constructions can be recognized as valuable heritage; this creates the local identity and can help rebuild the cities' "brands". Numerous revitalization programs for such areas have been introduced throughout Europe over the last several decades. Within this paper, the author will present good examples of post-industrial buildings and complexes converted into cultural functions in western European cities, which could be used as reference points for similar projects and introduced into Polish towns.

Keywords: industrial heritage, revitalization, city fabric, hybrid spaces of culture

1. Introduction

The increase in the global population – observed since the end of eighteenth century and connected to industrialization – has had a great impact on the urban structure of many European towns and cities. Industrial heritage is undoubtedly one of the key factors in the analysis of their cultural, urban, and economic development. From the mid-19th century, factories, usually located on the outskirts of the existing urban fabric, formed entirely new districts alongside new houses for workers (which were sometimes larger than the historic city cores). Over the decades, natural growth of the cities and towns, together with modernist concepts of functional segregation (which appeared in the first half of the twentieth century) caused them to become part of the inner-city structures, surrounded by newer, mono-functional districts. Today most of the industrial production has relocated from Europe and other rich countries to different parts of the world (especially Asia). Some of the industrial districts – many of them cities which were developed during the last two centuries on the basis of industrial growth – have been left abandoned, unwanted, and without any prospects for growth. The unused post-industrial structure usually presents no artistic or historic value, but some of the old factories and other constructions are being recognized as valuable heritage sites, which helps create the local identity and rebuild the "brand of the cities". Numerous revitalization programs of such areas have been introduced throughout Europe over the last several decades, and a number of scientific studies have been written about them.

New functions are given to these abandoned zones; they are mostly residential and office settings, ones that, along with new road infrastructures and various types of public space, were organized like numerous post-industrial towns and cities.[1] Some less valuable parts of the industrial structures have to be demolished to make space for the new urban creations, which replace the nineteenth-century noise and steam of factories. More often, objects and complexes devoted to the functions of culture are being introduced, sometimes as "flagship projects", which helps to improve the image of unwanted industrial zones. Many of them use the most valuable historic industrial objects to create new, "added" value onto the basis of the existing, local heritage of a city. Some of the buildings remain as single, mono-functional objects (museums, theaters, concert halls, etc.), significant in the urban composition and social reception of the given part of urban fabric. Others create hybrid spaces of culture,[2] which are very characteristic of our times. The attractiveness of hybrid culture spaces means more to contemporary residents than the appeal of centuries-old, and somehow devalued, mono-functional culture objects; these can be perceived as "boring". Diverse activities and individual relations between cubature objects accommodate different functions related to culture[3] and urban tissue. They influence each other and jointly produce new values, guaranteeing success in various economic, social, and spatial dimensions. The multitude of impressions they give – supported by contemporary marketing techniques, information, and brand construction – often make them the binding spatial model willingly adopted by cultural

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[1] London Docklands, which have been revitalized since the early 80, ties the previous century; it seems to be the obvious case-study example.

[2] *Hybrid spaces of culture* were defined by the Author in his book (M. Gyurkovich, 2013). We can distinguish three basic types of *hybrid spaces of culture* which include several subtypes: 1. *Hybrid urban areas of culture*; 2. *Hybrid complexes of culture*; 3. *Hybrid spaces of culture formed by individual objects*.

[3] And many others, since: *Previously opposite functions and activities, specific to the various types and levels of culture, as well as events and functional elements not connected with them directly, coexist on equal terms within hybrid spaces of culture. Ibidem*, p. 211.

institutions in a number of cities around the world. Many of them use post-industrial heritage as one of the means of artistic-architectural expression, which helps to build the hybrid image of the contemporary institution of culture. At the same time, this heritage benefits from the rank of the cultural functions, which have given it a new life.

2. Flagship projects

Some industrial structures (especially the large ones erected in big European cities in the 19th and 20th centuries) once attested to the progress and high level development of civilisation. Then structures of former factories, warehouses, power stations – abandoned by their users[4] and saved from demolitions – became a special testimony to their times. They were adapted to fulfil office, commercial, educational and often even residential purposes. Only a minor part of post-industrial structures in Europe has been adapted to serve the needs of institutions engaged in the promotion of culture. Nevertheless, they are best known and used for marketing purposes[5] as flagship projects. It so happened that the execution of two structures of this type were entrusted – via international architectural competitions – to Swiss architects, Herzog & de Meuron. These facilities were the Tate Modern in London and Elbephilharmonie in Hamburg. The designs of these facilities are a decade away, which makes it possible to observe the change of investment strategies and requirements of the cultural institutions which ordered them; it's also possible to see the evolution of the architectural stylistics (and the mode of approaching the historic industrial substance in the achievements of one of the best known star-architects).[6]

Fig. 1. London, Tate Modern, interior of main space of the museum. Photo by author

Tate Modern, located at the former Bankside Power Station,[7] is believed to be one of the most interesting adaptations of a historic industrial building for museum purposes over the last several decades. It emphasises and displays the simplicity and elegance of the existing structure. Sparse new elements maintained in its minimalistic style create a harmonious unity with it. The central element of the facility composition is a six-storey main hall, illuminated with upper and side lights, arranged in a 150-metre-long turbine hall. This covered public space is accessible from a small square, located at the western side of the building. On the first floor level, it is linked to revitalised river boulevards and the Millennium Bridge, which makes it a significant element of urban public spaces. A tall chimney from the former power station, now decorated with milk glass blocks, constitutes an important icon of South London, visible from many viewpoints in the city. A glazed cafeteria located on the last storey, on the other hand, provides its patrons with a unique panorama of the city, with the Thames and St. Paul's Cathedral in the foreground. Over time, a complex of buildings devoted to culture emerged around the museum;[8] open to the public at the turn of the century, it constitutes the eastern part of the *specialist cultural quarter,* located on the southern bank of the Thames.[9] Equipped with carefully designed public spaces and linked into a system with Westminster and the City, the structure is important to London's identity. Tate Modern is accompanied by the reconstructed Shakespearean Globe Theatre, and a rather small Bankside Gallery. For several years now, expansion plans have been considered. Designed for approximately 1.8 million visitors a year, Tate Modern is actually visited by over 5 million people a year.[10]

The programme of transforming a vast area of a former port (in the city centre of Hamburg) into an attractive multifunctional urban quarter – *Hafen City,* located predominantly on the right bank of the Elbe – was implemented in 2000. The design plans and competitions concerning this area started in the late 1980s.[11] Due to new technol-

[4] As a result of development and technological changes, and the pressure of the capital relating to the execution of large commercial investment projects, and due to the fact that the areas where they were erected are most often located in central parts of the today's metropolises.

[5] The notion of *urban marketing* was introduced in the Polish science and broadly discussed primarily by Prof. Z.K. Zuziak – cf. e.g. (Z.K. Zuziak, 1998).

[6] Soon after the completion of Tate Modern, Jacques Herzog and Pierre de Meuron received the *Pritzker Prize,* and the facility itself was granted with numerous trade awards (cf. Tate Modern, (online) homepage: www.tate.org.uk (date of access: 2014-5-15); The Hyatt Foundation, (online) homepage: www.pritzkerprize.com (date of access: 2014-5-15). The Swiss architects had been selected in an international competition held in 1994. Cf. (M. Gyurkovich, 2007, 2013; A. Eislinger, J. Seifert (Eds.), 2012).

[7] The edifice of the power station in the Art Deco style was designed by G.G. Scott and was erected in the period 1947–1963 (cf. M. Pabich, 2007); the power station operated until 1981 (Tate Modern, *op. cit.*).

[8] The museum has ca. 12,000 m^2 of the exhibition space (A. Eislinger, J. Seifert, *op. cit.*).

[9] And defined by the Author in (M. Gyurkovich, 2013, *op. cit.*).

[10] The creators of the museum presented a controversial extension project – *Transforming Tate,* the implementation of which (planned for the period 2008–2012) was slowed down due to the financial crisis – cf. (E. Węcławowicz-Gyurkovich, 2013).

[11] In 1996, Prof. Volkwin Marg presented his *Study on the Development of the Central Port – Hafen City*, [after:] (Z. Paszkowski, 2003, pp. 118-119).

Fig. 2. Hamburg, Elbephilharmonie, overview (2011). Photo by J. Gyurkovich

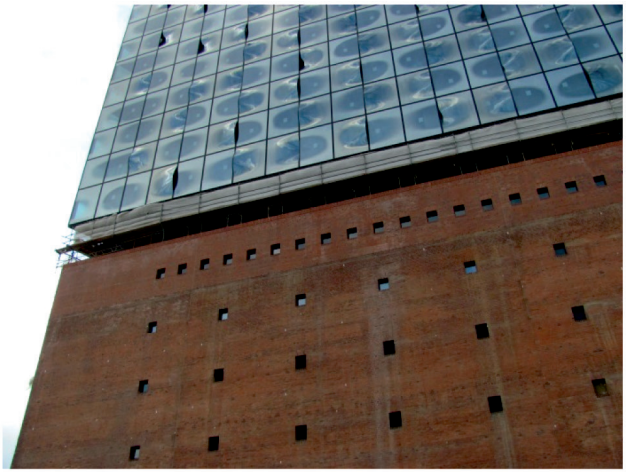

Fig. 3. Hamburg, Elbephilharmonie, detail showing connections between old and new structures. Photo by J. Gyurkovich

ogies and the increased load-carrying capacity of vessels in the period 1970–1990, the once modern port (the second largest in this part of Europe after Rotterdam[12]) had to be transferred down the river, closer to the North Sea. The area referred to henceforth is located to the south of the historic city centre in the vicinity of Speicherstadt. The quarter was planned to combine educational, administrative, residential, entertainment, cultural, recreational, and commercial functions. The broad revitalisation programme includes leaving some of the historic warehouses (which are being adapted to their new functions and completed using modern structures), so that by 2020, 12,000 people could live here, and another 45,000 could work here.[13]

In terms of cultural functions, *Hafen City* will hold the Maritime Museum, the Centre of Science, and the most representative facility, a new home for the philharmonic. *Elbephilharmonie* was executed as a result of an international architectural competition from 2003; a *flagship project,* it is the second of the two adaptations of post-industrial structures by Herzog & de Meuron.[14] The selected location on a protruding triangular cape will make the facility well visible from the highways surrounding the area of the former port and from the other bank of the river. Located at the closure of one of the main streets of the new quarter, it can be also perceived as an important symbol from the side of the city. The still incomplete edifice seems to exceed all standards of height of the architecture in *Hafen City*; these standards were introduced for the protection of the historic panorama of the city centre of Hamburg located nearby.

Elbephilharmonie is a hybrid structure, in every possible meaning of the word.[15] In spatial terms, it gives the impression that one building has been put on top of another. The new white and bluish glass body of the building has been placed on a brick port warehouse located here. The facility, dating back to the 1960s, called Kaispeicher A,[16] was finished (similar to the London-based power station) with clinker brick, and was used to store colonial goods for years. The form of the philharmonic is very dynamic, and despite the fact that – similar to the 10-year-older example from London – architects respected the existing building, here it has been totally subordinated to the new structure in formal and functional terms. The facade of the higher part, added to the historic warehouse, and begins at the height of 37m, consists of 1089 glass plates, many of which are curved and bent. When taking a closer look, we get the impression that some panels have been deformed, perhaps by the elements of wind and water. For the sake of protection against overheating, each module shape has been equipped with a mat overprint. This creates a trembling, heterogeneous structure, cut out in some sections, but consequently building up into massive, unique body. The facility resembles a majestic ghost ship, one that stopped by the old port; the upper section was transformed to depict sails. An open terrace located along the entire width of the building (and accessible to the public) is planned between the existing post-industrial form and the new steel and glass body. Therefore, a small crack, visible from the outside, separates these two parts – the existing brownish brick and the new one, glazed and glittering in the sun.

The hybrid building *Elbephilharmonie,* which belongs to a group of the most complicated cultural facilities executed in Europe at the moment, will hold three ultra-modern

[12] The area of the former port is 157 ha, with 126 ha of the land and 34 ha of the body of water.

[13] J. Bruns-Berentelg (Ed.), 2011.

[14] Cf. (M. Gyurkovich, 2013, *op. cit*.).

[15] There have been appearing more and more definitions of *a hybrid* in architecture (special attention should be paid to the works of Spanish researchers, e.g. A. Fernandez-Per et al., 2011; M. Gausa et al., 2003). The Author presented one of them here in the work several times (M. Gyurkovich, 2013). It emphasises the hybrid properties of a facility or a complex in its functional system, aesthetics, and links with the system of urban public spaces. Less attention is devoted to the hybrid quality of the very structure, finishing materials, methods of providing buildings with energy, or even the management of the investment process during the construction phase, which conditions – according to the Author – are neither necessary nor sufficient to claim that a building or a complex of buildings is a hybrid.

[16] Designed by W. Kallmorgen, erected in the years 1963–1966, a warehouse with the floor area of 635,00 m^2 and height of 37 m. *Ibidem*.

concert halls (each with 2,150, 550 and 170 seats respectively). Furthermore, there are plans to locate a musical museum for children there, *Klingendes Museum*. However, despite the name of the project suggesting that the dominant function of the facility is cultural, only 50% of the floor surface will be allocated for this purpose.[17] The facility is to hold a five-star hotel with 247 rooms; 45 residential apartments with various floor surfaces – from 120 to 380 m^2 – conference halls; office spaces; rooms for the North German Radio orchestra; a nightclub; and, on the lower stories, parking spaces for 510 cars, necessary for such a complicated functional program. The planned hybrid was to be a new showpiece for Hamburg. Nevertheless, during the crisis, its completion is uncertain. Due to financial reasons, the construction was suspended in November 2011 at a very advanced stage.

3. Case of Barcelona

Numerous examples of post-industrial structures adapted to meet contemporary needs can be observed in Barcelona. Since the early 19th century, the city has been developing dynamically thanks to the textile industry. Barcelona saw its "golden age" between 1850 and the 1930s. During the Franco regime (now referred to as *grey Barcelona*[18]) the city and industry development was progressing harmoniously (although a bit more slowly than before), despite the administrative and political domination of Madrid and the centralisation of finances. The city-planning processes which took place in Barcelona (often referred to as the *Mediterranean Manchester*) perhaps also could have occurred in Łódź, Poland, whose development stimulus in the 19th century was also the textile industry; this may have been possible had the city not experienced two world wars and half a century of centrally planned communist economics. Similar to Łódź, in the much larger capital city of Catalonia,[19] there remained numerous valuable architectural and urban structures, which attest to the post-industrial heritage of the city. Diversified strategies connected with the protection and revitalisation of this legacy were carried out in the city. Barcelona is a city of big events on the global scale; it organized two World Expositions (in 1888 and 1929) and, after the failure of Franco's regime, hosted the Summer Olympic Games in 1992 and the International Forum of Cultures in 2004. All these enterprises were preceded by comprehensive plans of redeveloping or revitalizing large fragments of the city. They became the driving force behind Barcelona's spatial and economic development for years. Luckily for the city and its public spaces, diverse programs of revitalization have been implemented since the end of the 1970s.[20]

Fig. 4. Barcelona, Caixaforum. Photo by author

Historic post-industrial facilities in Barcelona pepper the entire metropolitan district, beyond the historic walls of Ciutat Vella. The origins of some of them reach back even to the first 19th-century manufacturers, which were surrounded by colonies; these little towns were founded especially for workers and their families.[21] Within the territory of the orthogonal arrangement of the new city – Eixample, designed in 1859 by Ildefonso Cerdà – a number of large and small factories were situated. Over time their concentration occurred in the eastern part of the quarter, in the area referred to El Poblenou. But facilities and industrial complexes older than Eixample, erected on the outskirts of Barcelona, or beyond its borders, were absorbed by the sprawling city over time.

The space around Plaça d'Espanya (one of the main communicational and compositional junctions in the Barcelonian urban layout, and situated on the western edge of Eixample grid) was transformed every several decades.

[17] *Ibidem*.

[18] Cf. E.g. (M. de Solá-Morales, 2011; K. Hofert, 2014).

[19] And much older. The history of the urban development of Barcelona reaches back to the times of the Phoenicians and was not always connected with industrial production. At present, the metropolitan region is inhabited by 4.5 m people (M. de Solà-Morales, *op. cit*.). Nevertheless, the comparison with Łódź comes to mind due to a similar model of the urban development in the second half of the 19th century, which resulted in similar city planning problems after a century. In Barcelona, they are solved with perfection – in Łódź (and in other Polish cities with similar industrial origins), we still await decisions and changes which would be more than just individual investments.

[20] Cf. (J. Busquets, M. Corominas (Eds.), 2009; O. Clos et al. (Eds.), 2008; M. de Solà-Morales, *op. cit.*).

[21] Cf. E.g.: (M. de Solà-Morales, *op. cit.*; M. Gyurkovich, *22@Barcelona...*, 2012).

Fig. 5. Barcelona, one of the factories at El Poblenou converted into new functions. Photo by author

Fig. 6. Barcelona, university campus (UPF) in former factory. Photo by author

It was related to global events[22] organized in the district. But the changeable manner of using the surrounding areas (as a result of evolution, and an exchange of the functional and spatial structure) was also one of the reasons for transformations within that part of the city. The area of the former World Exhibition, located at the foot of Montju – hill (which was also used during the 1992 Olympics), is currently occupied by multi-functional halls in which various fairs, concerts, and sports events are being organised. Behind them, one can find more ancient urban fabric, where the most outstanding are the former industrial buildings of the Textile Factory of Casimir Casaramona.[23] Puig i Cadafalch, the author of the complex was – next to Antonio Gaudi – one of the leading architects at the turn of the 19th and 20th century in Barcelona; he left an enormous legacy in the form of structures peppering the city. The complex occupying the whole urban quarter, surrounded by walls, consists of three buildings, separated by two internal streets. The layout resembles some dream palace, maintained in the style of the Barcelonean Art Nouveau – *modernista* – whose dominant features are two decorative towers (a former water tower and a clock tower). Brick details, sometimes enriched with elements made of forged iron, emphasise the structure of the buildings. Colourful enamelled ceramic tiles, used mostly to decorate one of the towers (as well as the main entrances) complete the architectural image of the Casaramona complex, placing it within the local Catalan tradition, and reflecting the spirit of the epoch. This beautiful factory, out of operation for decades now, is one of the best examples of the industrial heritage from the city's golden age?period; it survived thanks to the support of Fundaci?La Caixa.[24] At present, it holds a Culture Centre Caixaforum. The contemporary architectural intervention, whose authors are Arata Isozaki and Roberto Luna,[25] included the necessary adaptation of post-factory interiors to the needs of a large hybrid culture centre. The manifestation of this process was the creation of a new monumental entrance to the complex at Level 1, and at the entrance zone around it, which corresponds to the present function of the facility. The new structure – based on geometrical forms and removed from the historic elevation of the factory by several metres – was located in the square in front of the buildings. An open atrium in the form of a prolonged rectangle, one that reaches down from the top to the basement level, is even with the level of the balustrade over the pavement. Thanks to this, the historic elevations still can be perceived in a nearly unchanged form, and the dominant characteristics of the complex have not lost their significance. The only slightly taller element

[22] The abovementioned World Exposition in 1929, and Summer Olympic Games in 1992.

[23] Cf. J. Puig i Cadafalch 1909–1911 (M. Gyurkovich, *Współczesne adaptacje barcelońskich zabytków…*, 2012).

[24] It is a foundation established by one of Spain's largest financial institutions, whose task is to present and promote – often free of charge – the contemporary and old arts. Buildings of this foundation, which most often are contemporary adaptations of historic facilities, are designed by famous contemporary architects. CaixaForum in Madrid was designed by Herzog & de Meuron. Similar to their other larger projects located in London and Hamburg and discussed above, as well as in the present structure in Barcelona (by other authors), a historic industrial facility was adapted to cultural functions. (Caixabank, (online) homepage: www.lacaixa.es (date of access: 2014-5-15); Herzog & De Meuron Basel, (online) homepage: www.herzogdemeuron.com (date of access: 2014-5-15)); (E. Węcławowicz-Gyurkovich, 2013, *op. cit*.).

[25] Executed in the years 1998–2002 (M. Plà, 2008).

Fig. 7. Barcelona, Museum Can Framis. Photo by author

is an open work covering of the escalator and lifts, which leads to the lower level and resembles a reconstructed steel tree whose crown is a transparent glass pane, its proportions corresponding to other trees growing on the opposite side of the street. It's a delicate, extremely elegant adaptation of the former factory's complex, one that respects the legacy of the place[26] and does not disturb the existing architectural structure; it exposes its greatest values, while at the same time enriching them with contemporary ones.

As pointed out above, the concentration of functions connected with industrial production within Barcelona's metropolitan territory occurred (in the early 19th century) mostly in the quarter of El Poblenou; it was, in fact, one of the economic poles driving the city's and region's economy. This area practically encompasses the whole south-eastern quarter of the spatial structure of Eixample, which absorbed the previous settlement of Sant Marto, also referred to as El Poblenou (hence the name of the whole area).[27] Despite the layout, identical to the central, representative parts of the city, Cerdà's orthogonal grid has been somewhat modified from the places of earlier investments (as is the case all around Barcelona). In this area, it has been filled with a completely different spatial structure.[28] It was dominated by large factory halls and warehouses, and separated by a rather low residential architecture – houses intended for newly-arrived workers. Due to the sizes of the industrial plants (which sometimes occupied several quarters) it was not always possible to strictly comply with the rule of introducing all the divisions that resulted from the design of Eixample. Due to the relocation of part of the local industry outside the city borders, and the collapse of many plants, already at the end of the 20th century, the first revitalisation projects started to be implemented in this area. The oldest of them were connected with the 1992 Olympic Games, when an Olympic Village and an Olympic Port were established on the southern edge of the quarter. The city's contact with the sea was restored during the implementation of the project Forum 2004.[29]

In 2000, the Municipal Council of Barcelona approved a new city planning strategy, one pertaining to the transformation of over 200 ha (the total of 115 blocks of architecture in Eixample) of the El Poblenou[30] quarter. The project *22@Barcelona* is the creation of a new, compact city, where the main emphasis is put on the hybrid quality of the urban structure; it is deeply rooted in the Mediterranean city planning tradition.[31] New functions (besides the traditional ones) connected with the development of new innovative technologies, multimedia means of communications, and education are to serve the purpose of building this structure. Some researchers and commentators refer to this project as a metaphor of the transformation of the city from the times of the industrial revolution, into a cyber city from the times of the digital revolution.[32] Implemented in the period 2000–2012, it was the most important city planning project in Barcelona in recent years, and one of the most ambitious in Europe; it has already caused certain transformations in the adjacent areas. The executed *model city* coexists with the historic architectural and infrastructural heritage of the quarter,[33] which together with ultra-modern structures, builds the identity of the place. One of the goals of the project is to encourage land owners to use post-industrial historic buildings and give them a new value by incorporating them in newly-erected facilities, or adapting them and equipping them with new functions. A system of promoting new investments using the plot ratio has been also introduced.[34]

During the process of the quarter transformation, the functions of culture and education proved to be extremely important. In compliance with the aforementioned plans and documents (guidelines for the *22@Barcelona* project), the task also assumed coexistence of the contemporary architecture with the historical legacy, with reference to buildings and architectural structures, as well as infrastructural engineering structures. The majority of structures

[26] Similar to the case of Tate Modern discussed above.

[27] Cf. e.g.: (M. de Solà-Morales, *op. cit.*; M. Gyurkovich, 22@..., 2012, *op. cit.*).

[28] Cf. e.g.: K. Hofert, 2014.

[29] These problems have been broadly discussed in the literature on the subject of Poland and abroad, as well as in previous publications by the Author – cf. references.

[30] 115 typical blocks of architecture of Eixample is on average (1 block = 113 m x 113 m = 12,769 m^2) ca. 1,500,000 m^2 of the surface area of the quarters themselves, excluding the streets and avenues accompanying them, the total of 200 ha. Barcelona.com, (online) homepage: www.barcelona.com (date of access: 2014-5-15).

[31] *Ibidem*.

[32] (G. Tyrała, 2010).

[33] One of the detailed plans which influenced the final spatial form of the revitalised part of El Poblenou is the Detailed Plan of the Industrial Heritage Protection (Plan Especial del Patrimonio Industrial, as modified), which protects ca. 170 buildings relating to the history of the quarter (O. Clos et al., 2008, *op. cit.*; M. Gyurkovich, 22@..., 2012, *op. cit.*; et al.).

[34] "Solutions which increase the covered area of a given plot are promoted, provided, however, that an "added value" is created. This is to be understood as the integration of a new building with the existing structures, maintaining the post-industrial character of the quarter, applying energy efficient design solutions, as well as the hybrid quality – combining more than three functions in the new project" (G. Tyrała, *op. cit.*).

recognised as valuable and covered by legal protection date back to the turn of the 19th and 20th centuries. Particularly interesting among them are partially preserved groups of factories (*cans*) of various sizes, ones peppering the entire area. On the landscape of El Poblenou, factory chimneys have always been the dominant heights, which have constituted the main difference between the western (residential) and eastern (industrial) part of the city.[35] The ones covered by legal protection constitute characteristic traditional strong forms, or landmarks, still informing the existence of this important function in the structure of the city. In the north-western section of the zone *22@,* near Plaça de les Glories Catalanes, three factories have been adapted to new functions connected with culture and education. The best known of these adaptations is the Can Framis museum. It is one of five institutions belonging to a private foundation, Vila Casas,[36] whose main goal is to promote contemporary Catalan arts. The design of the museum was developed in a Barcelona-based studio BAAS.[37] Minimalistic in its expression, concrete architecture of the new section of the building is intertwined with relics of two buildings of the former factory. Their elevations have been covered with calcareous mortar, and some of the existing windows have been walled up, leaving the outline of

Fig. 8–10. Kraków, MOCAK. Photo by author

[35] Vide K. Hofert, *op. cit*.

[36] Established in 1986 by a pharmaceutical entrepreneur, Antonio Vila Casas, this foundation is engaged – besides activities pertaining to pharmaceutical research – in collecting paintings – (G. Tyrała, *op. cit.*).

[37] Author: J. Badìa, cooperation: J. Framis 2007–2008 (*Ibidem*, and: M. Gyurkovich, *22@...,* 2012, *op. cit.*).

the old openings. The spatial dominant of the entire group of buildings is still the former factory chimney, hidden in a small northern courtyard, accessible to the public.

4. Summary

The industrial heritage of the last two centuries, in terms of architecture and city planning (as well as of infrastructure), contributes to the urban tissue of many cities today. Frequently, it is as important for maintaining the identity and historic continuity of urban structures as the former historic buildings – ones also in European cities – whose origins reach back many centuries ago. These concepts are illustrated in the example of Barcelona, London and Hamburg. For numerous cities on our continent, the period of industrialisation constituted merely a stage in their development, which left its permanent trace in the urban composition; it's often an unwelcome trace, because it destroyed old spatial arrangements. For other cities, this epoch marked their coming into being and development, and sometimes even their birth. Therefore, for such cities, industrialisation is extremely important. This was also the case in our country – considering the example of Łódź, and numerous other cities and towns in Silesia. They were founded thanks to the need to extract and process natural resources. Industrialisation was often a political decision, like in case of the cities of the Central Industrial Region in Poland, founded and developed on the basis of the then valid country development strategies (and after World War II, in the case of Nowa Huta). Similar to all of Europe, in Poland, as a result of globalisation, numerous industrial plants were deserted, both due to the transfer of production beyond the borders of our country and the introduction of new technologies (as well as the execution of more advanced factories and processing plants in other places of the same urban centres). Entire cities and quarters lost their original (or long-lasting) raison d'être; a valuable, but unmaintained heritage, sunk in an ocean of sloppiness, very often falls to decay.

After a quarter of a century, as a result of political and economic breakdown, the problem of post-industrial architectural and urban heritage starts to play a big role in Poland. The unused, unwanted areas, often situated within the central districts of many towns, are devastated both by time and the cruel reality of the real estate market.

Positive examples of the revitalisation of post-industrial individual buildings and complexes (still scarce in our country) do not always go hand in hand with cities' and regions' broader development strategies[38] – unlike in Western Europe, where numerous programs of revitalization of such areas have been introduced within the last decades – some of them briefly presented above. This partly results from the imperfection of our law and the fact that many large cities in Poland do not have an approved long-term development strategy, enforced by any administrative instruments. Also, the protection of the post-industrial heritage of the last two centuries is not implemented in a sufficiently coordinated and effective way. Fortunately, despite the obstacles mentioned above, there emerge more and more good projects making use of historic buildings and post-industrial complexes. Some of these structures are connected to the introduction of cultural functions in these areas.[39] Western examples provided herein show that it is possible to build new values on the basis of the post-industrial heritage of previous centuries. The introduction of public functions – the functions of culture included in buildings and complexes which are most valuable in architectural terms – may contribute to preserving them for future generations, as well as to improving the prestige of the entire revitalised section of the city.[40]

[38] An example that immediately comes to mind here is Łódź, where the revitalisation of Izrael Poznański's Plants transformed them into a multi-function shopping/leisure/cultural centre *Manufaktura*, as well as the recently completed adaptation of the first Łódź-based power plant dating back to 1907 to broadly understood cultural functions. While maintained at a reasonably high level and revitalised with respect for the post-industrial heritage, it sucks life out of the city centre, which slowly transforms it into a deserted, dangerous and unpleasant space – cf. (M. Nadejska, 2014).

[39] Among Kraków-based examples one should mention positive projects located on the southern bank of the Vistula: MOCAK in Oskar Schindler's former factory in Zabłocie (design by C. Nardi and L.M. Proli; execution 2009-2010) and the recently completed Crickoteka in Podgórze (design by S. Deńko, nsMoon Studio 2006–2014), executed on the basis of a building of a historic Podgórze Power Station. Thanks to the execution of Kotlarski bridge and a footbridge linking Kazimierz and Podgórze, these facilities and small public spaces connected with them have a chance to be combined with the system of important public spaces of Kraków, and to appear in the collective awareness of the city residents and tourists – cf. e.g. (S. Deńsko, 2013; G. Stiasny, V. Nardi, 2011).

[40] Which has been proved many times – cf. e.g.: (M. Gyurkovich, 2013, *op. cit.*).

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