

INDUSTRIAL HERITAGE IN THE LANDSCAPE OF THE UPPER SILESIAN AGGLOMERATION

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Summary

The Upper Silesia Agglomeration (Poland) arose as the result of dynamic industrial development in the coal basin at the turn of the 20th century. The area of the Agglomeration covers ca. 1200 km² and its population is 2,5 million. It constitutes a polycentric conurbation consisting of several towns. The characteristic mixture of industry, brownfields and housing is dominated by coal-mines and heavy industry. In this disordered structure, there are places that stand out from the surroundings. These are historical industrial developments and old industrial settlements – workers' estates – which at the time of the downfall of the Silesian traditional industry became evidence of its regional identity and its close connections with the European industrial culture.

Nowadays, during the restructuring of traditional Silesian industry and the renewal of urban structure of the Agglomeration, the beauty and the value of this industrial heritage have been appreciated. In their identity architects, in accordance with the Leipzig Charter on Sustainable European Cities, can see an opportunity to renew the image of the region and to realise new creative city spaces.

Paper describes the changes that became in the urban landscape of Upper Silesian Agglomeration after the renewal of some postindustrial areas and historical industrial buildings and their significant influence on the sustainable development and quality of the built environment.

Keywords: architecture, urban landscape renewal, industrial heritage

1 The origins of the problem

The Upper Silesian Agglomeration is situated in the eastern part of the Upper Silesia, in the south – west of Poland. Today the region is the largest and most densely populated urban agglomeration in Poland. The area of the Agglomeration covers ca. 1200 km² with a population of 2.5 million. The industry still employs about 50 % of the working population. Similarly to other European industrial agglomerations, the Upper Silesian Agglomeration was formed in the 19th and 20th centuries as a result of an intensive industrial development in the coal basin. The cultural landscape of the Upper Silesian agglomeration was formed by the developing cities, large industrial complexes, and workers' estates. The industrial settlements that surrounded the arising coal mines and steelworks and the sparse cities of a historical origin were getting connected by a dense network of roads and railways (Fig. 1). The consequence is the present-day, polycentric urban structure of the agglomeration, which is characterised by a mixture of housing estates, industrial areas, and industrial waste sites. The principal lack of hierarchy of this

complex and the origin of the majority of the cities in the agglomeration is a reflection of a plan-less process of formation of the agglomeration (Fig. 2).

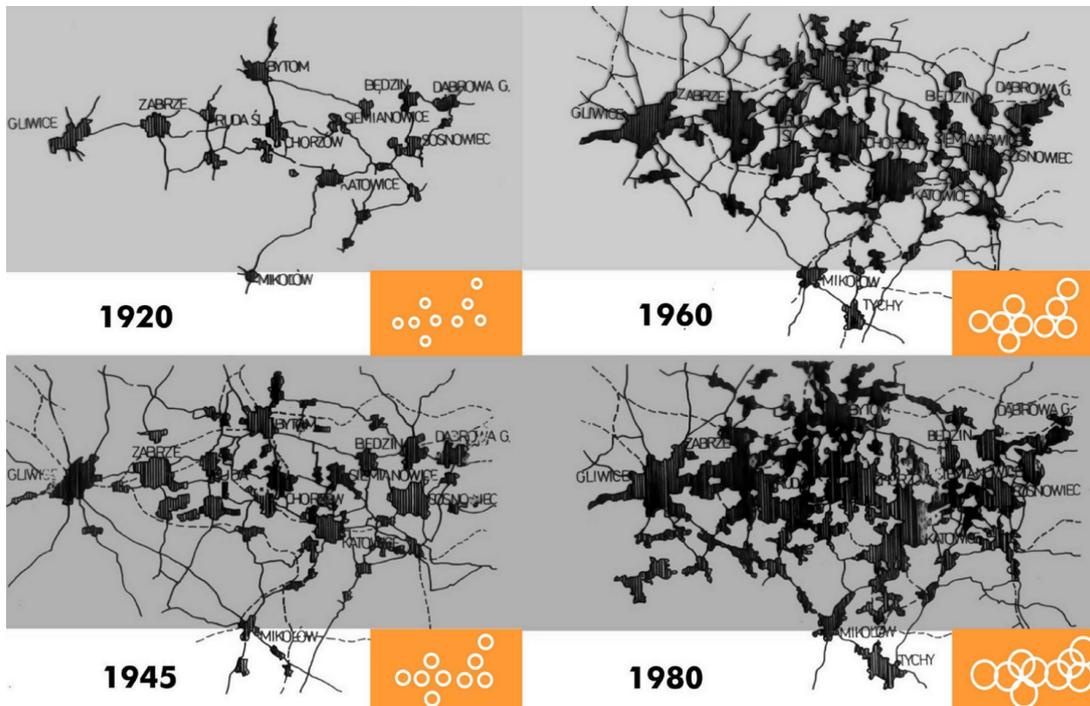


Fig. 1 Development of the Upper Silesian Agglomeration [4]



old workers' estates urbanised areas industry areas

Fig. 2 Spatial relation in the urbanised structure of the Upper Silesian Agglomeration

In western European countries, the economic transformation leading to recession and the downfall of traditional branches of the industry started in the 1960s. Cities and whole regions were faced with the problem of utilising areas and historic industrial buildings degraded by industrial activities. Many architecturally and culturally precious buildings were destroyed before they acquired a historic value. Often it turned out that such radical decisions were incorrect and the continuous modernisation and financial support of the collapsing industry was not bringing the desired effects. In the 1980s, together with the change of the way of thinking and perception of historic industrial architecture, the idea about the restoration methods of degraded areas underwent a change.

In Poland, the process of economic transformation and restructuring of the traditional industry started 40 years later, in the 1990s. The need for sustainable development within the Silesian Agglomeration is particularly important because of its development so far has based on exploitative management of natural resources. The effects of such actions are clearly visible in the landscape of the cities of the Agglomeration. The largest problem are the vast areas of degraded industrial and post-industrial waste sites, which need intensive restoration. Often located in the downtown areas they are an obstacle in the harmonious development of the urban structure of the cities.

The region is also highly diverse in terms of economic and social development. Still, there are enclaves of high unemployment rate. These are workers' estates which after the owning industrial plants lost a rational basis for their existence. Nevertheless, along the post-industrial historic buildings, they are precious elements of the cultural heritage. At the time of the downfall of the Silesian traditional industry they became evidence of its regional identity and its close connections with the European industrial culture.

Nowadays, during the restructuring of traditional Silesian industry and the renewal of urban structure of the Agglomeration, the beauty and the value of this industrial heritage have been appreciated. In their identity, architects, in accordance with the Leipzig Charter on Sustainable European Cities, see an opportunity to renew the image of the region and to realise new creative city spaces. The need for regeneration of urban space degraded by industrial activities is also indicated in important planning documents defining the development strategy of the region. Such activities became easier after the accession of Poland to the European Union in 2004.

2 Examples – how do we tackle the problems

First attempts, and largest to date, connected with the renewal of the degraded urban space took place about fifty years ago, at the height of the most intensive, post-war industrial development in Silesia. The creation of the Regional Park of Culture and Recreation in Chorzów in the 1950s was an unprecedented action. Six hundred hectares of hillocks, toxic post-industrial waste, mine shafts and sinkholes located in the very centre of the agglomeration were converted into one of the largest inner-city parks in Europe. The park includes recreational, sport and cultural areas, among other the Silesian Stadium, a zoo, an observatory, an ethnographic park as well as exhibition areas. Perfectly designed by Prof. Niemirski until this day it fulfils the changing needs of its users and its offer is widened. The scale of the undertaking is impressive even for the current possibilities, more so that it was not a commercial action, to a large degree completed by social engagement (Fig. 3).



Fig. 3 Regional Park of Culture and Recreation in Chorzów, aerial view



*Fig. 4 Silesia City Center in Katowice – the shopping gallery (in the middle),
Huta Baildon – the steel work (in the front), housing estate (behind)*

Currently it is impossible to count on such huge social engagement and most undertakings focus on economic success. In 2005, a few hundred meters from the park, on the grounds of the former coal mine Gottwald in Katowice, the Silesia City Center was built – one of the largest shopping centres in Poland. Although the investors wanted to connect modernity with tradition, the building of this shopping mall does not differ significantly from other, typical large-area shopping centres. Despite the lack of historic function it has

to be noted that this undertaking had a positive influence on the image of the place and its immediate surroundings. This devastated and empty area became an important spot of the city and an attractive location for new investments (Fig. 4).

A different approach is being taken on a similar post-industrial area remaining after the coal mine Katowice located in the very city center. Currently, the new Silesian Museum is being built. It will be one of the most modern museums in Poland. The individual sections of the museum are planned in the historic industrial buildings and on underground levels, referring to the history of the place. Such architectural solution allows to expos the remaining buildings which, due to their original function, were located deeply in the industrial area (Fig. 5).



Fig. 5 New Silesian Museum, Katowice – under construction.

Modern metropolises base their development on science and technology, and in searching for creative spaces they often locate new investments in historic industrial buildings. An example of such activities can be found in Gliwice where the former mine and coke plant the Centre for Education and Business has been established. The two most beautiful post-industrial buildings (the guildhall and engine hall) built between 1912 and 1914 according to the project Zillmann brothers have been adapted to the needs of higher education – laboratories and offices. The vast area around has been restored and is now being filled by new objects, e.g. seats of innovative research and development companies that have been seeking attractive locations (Fig. 6).



Fig. 6 Centre for Education and Business, Gliwice – post-industrial buildings.

3 Old workers estates – the element of cultural landscape of the Upper Silesian Agglomeration

The structure of the Upper Silesian Agglomeration is a result of the fusion of spatial arrangements that were formed in the course of development of the industry. In this disordered structure, there are places that stand out from the surroundings. Next to the historical industrial developments, these are old industrial settlements – workers' estates – which at the time of the downfall of the Silesian traditional industry became evidence of the industrial culture of this region.

Generally speaking, the idea of building workers' colonies was connected with the dynamic process of industrialisation in the 18th and 19th centuries. It was first conceived in England, where the industry developed most rapidly and where the negative effects of excessive industrialisation and concentration of population were felt first. Later, this idea appeared on the continent, mainly in France, Belgium, and Germany.

The massive influx of rural population into the industrial centres in the search for work resulted in the overpopulation of the cities, deterioration of living conditions, the danger of an epidemic, and workers' strikes. The worsening social problems, the new bills concerning housing and improvement of sanitary conditions, and most importantly the need to tie and subordinate the workers, forced the factory owners to build flats, and later whole housing estates for the workers.

A similar situation was in Upper Silesia that became a part of the Prussian State in the middle of 18th century. Upper Silesia was at the peripheries of the Prussian state but it was a centre of the industrial development based on the most modern technologies. The most intensive development of workers' estates in Upper Silesia took place in the second half of the 19th century. At that time, the economical prosperity and modern technologies needed an increasing number of disciplined workers, which in turn forced the factory owners to build new, well organised, and autonomous settlements for workers.

The most characteristic of the Silesian workers' houses of the second half of the 19th century was the block type, in the Silesian dialect called "familoki" (meaning houses where families live). Simple houses imitated barracks developments. The houses were built from red facing brick. The window and door openings are closed with a brick head-rail in the form of a segmental arch, what is most characteristic for this type of houses (Fig. 7). The reference to the traditional rural industry and the rural origin of the workers resulted in that rural patterns were also frequently used in the workers' estates. The rural type of developments was drawing on two sources: Upper Silesian peasant architecture and German or English rural building style. Buildings of residential style appeared at the beginning of the 20th century and followed the example of suburban architecture of so-called national romanticism.



Fig. 7 Borsig workers' estate in Zabrze – Biskupice – one of the oldest estate in the Upper Silesian Agglomeration.

Nowadays, there are about 250 old workers' estates in the Upper Silesian Agglomeration. The majority of them are in a terrible technical shape. No more than 18 are in the register of historical buildings and the plans have been made to protect 65 of them in future. Some of the settlements are large, autonomous complexes that create whole districts. Others are not very large units consisting of a few houses, and integrated in the urban structure of the district. Those estates are along with the old industrial buildings, one of the most typical features of the Upper Silesian cultural landscape. Special as they are for the structure of the Upper Silesian Agglomeration, they should be submitted to the processes of revitalisation.

For many years, the old workers' estates were inseparably – spatially and economically – connected with the industry. Currently, according to the OECD classification and the EU definition, they are included to the category of postindustrial areas. At the time of economical and structural transformations, the estates experience economical, spatial, and social problems similar to those of the industry. The location of

the settlements in deteriorated industrial areas results in the need for comprehensive revitalisation activities that involve the areas directly affected by production activities and areas of industrial waste deposition, as well as the workers' estates adjoining the industrial works. The deterioration of the estates has been progressing along with the downfall of the surrounding industry. This poses fundamental questions concerning the point and possibility of their restoration.

Zandka, one of the most beautiful workers' estate in the Upper Silesian Agglomeration, is situated in the city centre of Zabrze (Fig. 8). It was built in the years: 1848–1922 in the immediate neighbourhood of steel work – Donesmarck Hutte. After the downfall of the steel work in the 90's of 20th century, the huge degraded postindustrial area became a spatial barrier in the city centre. This fact deteriorated the quality of life in the historical settlement. In 2003 a new shopping centre was opened on the recultivated area of the former steel work. The proper scale of the new development and the relationship between the new and existing buildings helped the new commercial investment in finding its place in the landscape of the city centre. It resulted in a positive impact on the space and image of the historical settlement, which can be an attractive place for new investors now.



Fig. 8 Historical worker' estate „Zandka” in Zabrze.

Being so special and important for the regional identity, as well as being evidence of a strong relationship with the European industrial culture, the workers' estates should be put under protection. Such requirements can be found in documents that define the main directions of the regional politics. Unfortunately, no actions have been taken to complete these aims so far. The process of revitalisation is a long-term and costly task; therefore, it is important to specify the conditions that determine the success of such planning undertakings. The analysis of successful, foreign programs of revitalisation proves that their success is determined by:

- the co-operation of the public and private sectors, as well as local organisations,
- the intellectual supervisor of the undertaking,

- stable financing,
- stable package of bills,
- completeness of the revitalisation program.

In the case of revitalisation of old workers' estates, it is important to concentrate on those estates that due to their cultural and architectural values, as well as advantageous localisation in relation to the urban structures, present an appropriate development potential.

An important condition of the success of a revitalisation process is the comprehensiveness of the programs and actions. Solely technical renovation of the estates is insufficient and in the future, it will not bring any positive, longterm effects for the activation in the given area. The spatial relationship of the estates with industrial areas is the reason why along the renovation of the estates also the surroundings, degraded by the industrial activities, should be revitalised. It is necessary to get rid of barriers in the form of areas of collapsing industry, railway areas, and large areas of industrial waste, which all impede the inclusion of the estates into the urban structure of the region. This will enable the inclusion of the frequently isolated areas into the sphere of urban activities; it will also ensure the possibility of further existence and development of the revitalised estates [5].

4 Conclusions

These examples show the scale of the activities relating to the conservation of the cultural heritage in Upper Silesia, resulting from the scale of post-industrial areas and the degree of their degradation. The problem affects the huge areas excluded from the cities, which are often very destructive to their surroundings. The taken actions, regardless of the degree of their commercial interest improve the quality of the urban space and form an impulse for further development. Places degraded by a long-term industrial activity, which for years constituted barriers in the urban space, become generators of a new quality and positive thinking and activity. They have a significant impact on the surroundings – they change the perception of the place and the quality of the built environment. Such actions are therefore conducive to creating an innovative urban space. It is the answer to the theory of the creative class, which is considered one of the most important factors in the development of modern cities and regions [2].

Sustainable development accompanied by maintenance of industrial heritage can be considered in terms of a search for new spaces for innovative functions, to ensure economic and spatial development. Its role in seeking a balance between tradition and modernity, which gives local communities a sense of identity and ensures cultural continuity, has also to be noted.

Modern metropolises on which today's global economy is based, cannot function without progress. Achieving economic success is dependent on a continuous quest for modernity with all its advantages and disadvantages. This sometimes results in an irreversible loss of their own identity. However, as Friedman noted, "... *Any society that wants to thrive economically today must constantly be trying to build a better Lexus and driving it out into the world. But no one should have any illusions that merely participating in the global economy will make a society healthy.... Therefore the survival of globalization as a system will depend, in part, on how well all of us strike this balance...*" between tradition and modernity [3]. The idea resulting from the need to balance between the world of modernity and tradition perfectly fits into the concept of the protection of industrial heritage and its inclusion in the mainstream of sustainable urban development.

References

- [1] *Architektura i urbanistyka współczesnego przemysłu*, ed. JUZWA N. Wydział, Architektury, Politechnika Śląska, Gliwice 2010.
- [2] FLORIDA R. *Narodziny klasy kreatywnej*, NCK, Warszawa 2010.
- [3] FRIEDMAN T.L. *Lexus i drzewo oliwne. Zrozumieć globalizację*, Rebis, Poznań 2007, p. 66.
- [4] JUZWA N., *Kształtowanie przestrzenne przemysłu na obszarach intensywnie zurbanizowanych*, Politechnika Śląska, Gliwice 1988.
- [5] SULIMOWSKA-OCIEPKA A., *Osiedla patronackie Górnego Śląska. Studium miejsca oraz znaczenie kultury przemysłowej w przestrzeni zurbanizowanej*, PhD dissertation, Politechnika Śląska, Gliwice 2004.