

# ***Genius Loci* – Examples of Changes of the Image of Post-industrial Areas in Poland in the Region of the Upper Silesian Conurbation**

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**Abstract.** The objective of these deliberations is to broaden the discourse relating to the effect of revitalisation measures undertaken in post-industrial areas and their references to issues connected with preserving the identity and heritage of a place. Upon the example of the Upper Silesian conurbation, the Authors shall present research reflecting how post-industrial areas can become creative urban spaces. The first to be presented will be the case of the city of Gliwice, where the territory of a former coal mine assembles the most innovative IT and R&D companies. The second case will focus on the city of Katowice, where the territory of the former coal mine have been included in structures of a zone assembling cultural facilities. In both cases, a phenomenon that seems to be extremely valuable is the attempt to change the negative image of post-industrial areas into an attractive urban space, preserving the industrial heritage.

**Keywords:** Human factors · Genius Loci · Identity of the place · Post-industrial areas · Revitalisation

## **1 Introduction**

In Poland, industrial cities and agglomerations which came into being along with the intense industrialisation process in the 19th and 20th century, are still affected by the crisis connected with the need to restructure traditional industry. Cities search for development potential in abandoned and degraded areas and in historic post-industrial buildings, and while waiting for new investors, they open up new paths for innovative measures (economic and social ones) which will help them become more competitive. Nevertheless, there is also a different side of the ongoing changes – municipal authorities and investors, aware of the value of their history, wish to create a new image basing on heritage preservation, simultaneously building the sense of identity and commitment of local communities.

Nowadays in Poland abandoned and neglected post-industrial areas, following in the footsteps of Western European states, more and more often become a subject matter of activities aiming to include them in the urban structure of cities, transforming them into innovative commercial or cultural investment grounds. This tendency reflects the urban

policy consistent with guidelines of the European Union in this respect. It leads to the creation of new places, valuable in aesthetic terms, which combine the old with the new. Nevertheless, when analysing this topic, the Authors posed a question whether the very fact of respect for the history of a place, protection of its identity and heritage, is the guarantee of certainty that its *Genius Loci* will be preserved. And the other way round, does the preservation of tradition of a place guarantee the success of the project? How much depends on allocating new functions to a place, and how much on the implemented architectural and urban project? Analyses relating to this subject matter, conducted on the basis of literature research, in situ research, and observations carried out over the span of several years, do not provide a clear answer. They do, however, allow to continue the discourse devoted to the directions of sustainable development of cities with respect for their heritage.

## 2 *Genius Loci* – A Good Spirit of the Place

Identity of any place is one of the most crucial notions that link the human factor with the built environment. Christian Norberg-Schulz believes that even the identity of man has its source in the identity of the place [1]. Krzysztof Lenartowicz defines identity of the place as a deep relationship between elements which exist despite the external lack of any similarity [2]. With reference to the subject of identity comprehended this way, Zbigniew Myczkowski characterises the notion of identity of the place as “the deepest relationship between landscape perceived by man along with its historically accumulated elements: its contents (culture, tradition of the place) and its form (canon of the place)” [3]. Therefore, it is justified to state that identity is an established representation that identifies a person with a specific place – a representation based on the recorded cultural patterns, traditions, and history, as well as the physical form of this place. It consists of the spatial form (the natural land relief as well as elements of architecture) on one hand and the cultural, social, and historical dimension of a specific area on the other. An inseparable attribute of strong identity is *genius loci* – according to the definition of Norberg-Schulz an imperishable quality which makes a place or landscape assume its unique character [1]. Thanks to it, if we discard the initial meaning of *Genius Loci*, which derives from the ancient Rome and stands for a protective spirit of a place (a good or bad one) and for the sake of our discussion we accept the 18th-century concept of this notion meaning uniqueness, we will notice that industrial heritage can be a valuable element of urban landscape, which needs to be protected. Naturally, on the other pole of these deliberations there is still a question concerning the future of the region which so far has been developing on the basis of heavy industry, and which as a result of transformation of the local economy, as well as of global economic phenomena, must find a new path for its development.

*Genius Loci* – ‘the spirit of the place’, is identified with everything we perceive as its intangible value. It may come into being as an effect of intentional actions, or it may emerge gradually as a result of appropriate treatment of the place and – in consequence – concentration of emotions it is filled with. *Genius Loci* can appear in a building, in between buildings, in urban districts, in the entire city, and even in the whole region or

country. The richer the history of a place, the richer its complex nature. Not only does the past connected with the place address our reason, but it also stirs our emotions. Landscape, a result of combination of e.g. specific natural forms with diversified development systems and forms, can appear as distinct, native, evoking positive associations, building identity. Physical properties of form and substance of such landscape evoke the ‘spirit of the place’ also when they are perceived as unique, intriguing, or exceptionally beautiful. Genius Loci resides in pleasant places, where it is nice to be and where we return frequently. Although it is a very valuable phenomenon, regrettably, it is perishable, and thus it sometimes disappears. It needs to be recognised and understood in order to be preserved [4].

Places endowed with ‘the spirit’ function as landmarks according to which people claim the space around them. The condition for the occurrence of such places is their uniqueness, distinctness, easy identification, ability to evoke multitude of experiences, permeation with contents reaching to the essence of human needs and feelings. History and contemporary times provide us with a lot of evidence confirming the fact that appropriate decoding of the essence of Genius Loci and being inspired by it results in solutions which are not only pretty, but captivating [4].

At this stage, it is truly difficult not to touch upon the subject of aesthetics, which among Europeans is often mistakenly perceived exclusively in the visual category. And the etymology of the word ‘aesthetics’ - *aisthetikos*, suggests the meaning ‘aesthetic, sensitive, sentient, pertaining to the sense of perception’.<sup>1</sup> Manifestations of glorification of the visual order in urban planning are divisions allowing for visual accessibility of space and physical communication in time followed with one’s eyes (moving around), or the rules of zoning of space functions. Despite the fact that architects can easily deal with such challenges as maintaining ‘spatial order’, designing ‘in the context of the surrounding environment’ and in accord with the principles of ‘universal (accessible) architecture’, or modelling ‘the image of the place’, they still have a problem with understanding. Both Petr Zumthor and Juhani Pallasma observe at the same time, that concentration at the stage of conceptualising the idea of a design that dominates the designing process contributes to pushing aside – and consequently eliminating - the reflection referring to other than visual sensual ways of perceiving architecture and the built environment, which leads to dehumanisation of space and architecture, which due to the disappearance of *Genius Loci* get deprived of the character of *the place* [5, 6]. Pallasma categorically claims that “(...) the inhuman character of contemporary architecture and contemporary cities can be perceived as a consequence of neglecting our bodies and senses and of lack of balance in our sensory system” [6].<sup>2</sup>

<sup>1</sup> Perception (from the Latin *perceptio, percipio*) is the organization, identification, and interpretation of sensory information in order to represent and understand the environment. All perception involves signals in the nervous system, which in turn result from physical or chemical stimulation of the sense organs. For example, vision involves light striking the retina of the eye, smell is mediated by odor molecules, and hearing involves pressure waves. Perception is not the passive receipt of these signals, but is shaped by learning, memory, expectation, and attention [Wikipedia.org].

<sup>2</sup> Pallasma, J.: *Oczy skóry* (oryg. *The Eyes of the skin: Architecture and the Senses*), p. 26.

What, therefore, should we do to preserve ‘the spirit of the place’ and/or to create it, and what should we do to enable its identity to survive? It should be expected that a person or a team of designers which have the privilege of transforming landscape know not only the principles of spatial composition, high culture, sensitivity, humility or knowledge in the field of aesthetics. Most of all, it should be expected that they understand the history and tradition of the place. As Norberg-Schulz observed, “To protect and conserve the ‘genius loci’ in fact means to concretise its essence in ever new historical contexts” [1].

In Poland, industrial cities and agglomerations which came into being along with the intense industrialisation process in the 19th and 20th century, are still affected by the crisis connected with the need to restructure traditional industry. Cities search for development potential in abandoned and degraded areas and in historic post-industrial buildings, and while waiting for new investors, they open up new paths for innovative measures (economic and social ones) which will help them become more competitive. Nevertheless, there is also a different side of the ongoing changes – municipal authorities and investors, aware of the value of their history, wish to create a new image basing on heritage preservation, simultaneously building the sense of identity and commitment of local communities.

### 3 Examples of Urban Realisations in Upper Silesia Region

The Upper Silesian Conurbation is located in the south-western part of Poland. Today, it is the largest and most densely populated region of Poland, comprising 17 cities and municipalities. Its surface area is ca. 1300 km<sup>2</sup> and it is inhabited by ca. 2.5 m people<sup>3</sup>. Similarly to other European industrial agglomerations, it came into being as a result of intensive development of mining and metallurgy in the 19th and 20th century. Industry, started here by the State of Prussia at the end of the 18th century, was developing here until the World War II basing on the then most advanced technologies. After the World War II Upper Silesia found itself within the Polish territory and its further development was based on centrally controlled socialist economy and overexploitation of natural resources. The political and economic transformation of the 1990s brought about a fall of numerous obsolete and underinvested industrial plants and the need to restructure the traditional Silesian heavy industry.

The rapid industrialisation process, launched here in the early 19th century, within just 100 years transformed an area with a very low urbanisation factor into one of Europe’s largest industrial agglomerations. The mushrooming mines, steelworks, industrial settlements, and very few historic towns were gradually linked with a network of roads and railways, giving rise to an urban structure deprived of any hierarchisation. The price that needs to be paid for such an unplanned urbanisation process, subordinate exclusively to narrowly comprehended economicalness of industry, is the current amorphous urban structure of the Upper Silesian Conurbation, the most characteristic feature of which is intermingling of industrial and residential areas with post-industrial waste [7].

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<sup>3</sup> According to the Central Statistical Office for the year 2013.

Consequently, in the period of economic transformation and restructuring of industry there appeared vast and completely ecologically degraded post-industrial areas, which are often adjacent to city centres and constitute barriers for further development of cities. At the same time, the most valuable examples of industrial architecture were disappearing, although they had constituted important landmarks that identified the cultural landscape of the region – the landscape which due to the origins of Silesian towns and cities is often deprived of such elements that we traditionally consider to be indicators for the identity of the place. Their loss is even more painful when we realise that they were/are very few elements in the landscape of towns and cities of exclusively industrial origins that created very strong identity, allowing for identification of local communities with the tradition and culture of the place.

In western European countries, the economic transformation leading to recession and the downfall of traditional branches of the industry started about 30 years earlier. 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. Beauty and cultural values started to be perceived in historic industrial sites and they were included in the field of the broadly understood cultural heritage. Today such an attitude is not surprising at all; nevertheless, years of experience were necessary to recognise the industrial culture as part of the European cultural heritage and to acknowledge that it needs similar protection. Experiences of rich countries of Western Europe demonstrate that the potential residing in the industrial heritage offers an opportunity to create a new, positive image of degraded spaces and brings measurable economic profits. We can find examples of such measures in historic industrial regions of Europe: the territory of a former hard coal mine in Lens, Nord-Pas-de-Calais, France transformed into a branch of the Paris-based Louvre Museum, or the IBA Emscher-Park Programme in the Ruhr District, Germany, within the scheme of which numerous valuable industrial facilities have been preserved and transformed into new functions, including the industrial complex Zeche Zollverein in Essen. A facility that deserves our attention, as well, is a plant located ca. 50 km away from the Upper Silesian Conurbation – the Steelworks in Ostrava Vitkovice, where a part of historic post-industrial installations was transformed into a museum and a magnificent concert hall.

This attitude is consistent with the concept of the creative class of Richard Florida. In his opinion “the creative class is composed of people who increase the economic value (of a company) thanks to their creativity” [8]. Representatives of the creative class, however, aware of their own value, get involved with places which on one hand can provide them with the appropriate workplace quality and which can benefit from their full potential, and on the other which offer them appropriate residential opportunities, with an interesting recreational and cultural offer, which will secure their further development. They expect something more from a place than an air-conditioned office, which actually may look the same in any other location in the world. In the era of dissemination

of patterns, what becomes a superior value is uniqueness and authenticity, the source of which is local history and tradition, rich cultural heritage, and *Genius Loci*, which endows a place with a unique character.

### 3.1 ‘Silicon Valley’ in Gliwice City

A model of city development based on the creation of innovative workplaces has been adopted in Gliwice – one of 3 cities of the conurbation with historical background. Innovativeness has a long tradition in this city – it was here that in 1796 Europe’s first coke-fired blast furnace was launched, and specialists necessary to build and operate it had been brought here from Scotland and Western Europe [9]. Thanks to this development stimulus, Gliwice was always one of the best developed cities of the emerging conurbation. In the period of economic transformations, in Gliwice, similarly to other towns and cities in the region, there appeared vast degraded post-industrial areas. In search of a concept of a path of development in the new economic reality, the municipal authorities got interested in the degraded territories of the hard coal mine and the coking plant.

The history of the Gliwice Mine (as this is the mine referred to above) reaches back to 1901, when a decision concerning its establishment was made. Over subsequent years buildings of the elevator shaft were erected, and in the period 1912–1914 the most characteristic buildings were added (the pithead building and the engine room) according to a design by Emil and Georg Zillmann from Berlin. In the interwar period, due to the perfect quality of coal extracted here, the mine was extended and a coking plant was added, which operated until the 1990s. Eventually, in 2000 it was decided to close the mine, and this decision resulted in over 15 ha of incredibly degraded land, covered with waste heaps, trackways, shafts, and coke oven batteries. On one hand, this territory posed an ecological threat, but on the other hand, owing to its location, it was a perfect spot for new investments. Therefore, it was decided to undertake revitalisation measures, and already 5 years after the shutdown of the mine and taking over of the land by the city, they were successfully launched. The concept of revitalisation of this area consisted in the creation of a new, dynamic educational centre and business incubator, and in providing innovative R&D and IT companies with development opportunities. The concept developed by MEXEM, Gliwice, consisted in preserving the majestic buildings of the pithead and the engine room and in adapting them to the purposes connected with new functions, as well as in recultivation of the degraded area around them and in creating recreational premises and plots of land for new facilities of the future industry and science park (Fig. 1).<sup>4</sup>

The unique buildings of the pithead and the engine room, which with their form resemble palaces rather than industrial plants, preserved their original façades. Wherever possible, during the works investors tried to preserve the original structure of the massive roof, the historic floors, the internal linings made of glazed brick, and the cast iron balustrades (Fig. 2).

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<sup>4</sup> The works lasted 3 years and were completed in 2008. The cost of this project reached over EUR13m, and the financial support from the Phare fund amounted to EUR9.5m.



**Fig. 1.** Aerial view of a former Gliwice Coal-Mine, transformed into a Centre of Business and Education (source: google maps).



**Fig. 2.** The pithead building and the engine-room building converted into an education center and an office building (photo: A. Sulimowska-Ociepka)

The building of the pithead, with an integrated water tower, was transformed into a higher education facility. On both sides of the centrally located hall independent structures of lecture halls and workshops were arranged, with the total floor area of over 9000 m<sup>2</sup>. The main lecture hall was located in the space of the tall roof, revealing the original wooden roof framework and the vault. The neighbouring building of the engine room was transformed into an office buildings. The initially huge one-space interior was filled with an independent structure offering 9000 m<sup>2</sup> of office space for rent, and a bracing structure of the external walls. The top floor is occupied by lecture halls and the Artistic Casting Museum, the history of which is also bound with industry in Gliwice – the Royal Iron Foundry from 1796. The Museum presents a fully interactive collection of the 19th- and 20th-century art of casting.

The area around the historic buildings was organised and divided into plots, where today there are headquarters of innovative companies combining science and technology with industry, and new ones are being erected. 15 ha of recultivated post-industrial land has been transformed into the local ‘Silicon Valley’. A place of dirty and hard work of thousands of miners has changed into a creative work space consistent with top ergonomics standards (physical, cognitive and organizational ones) and it constitutes an architectural test site.

### 3.2 Culture Zone in Katowice City

The city of Katowice received its municipal rights in the second half of the 19th century. Its dynamic development was inseparably connected with the extraction of hard coal deposits. 50 mines used to operate in Katowice. Today there are only three [10]. When in the 1990s the mining industry collapsed as a result of the economic transformation, there appeared post-industrial wasteland, neglected and degraded areas in the very centre of Katowice. One of such areas was the territory of the former Katowice Hard Coal Mine, which operated in the period 1823–1999. Thanks to considerable support from the European Union funds, an urban project was implemented, entitled the Katowice Culture Zone. Next to the Spodek Arena, which was built in 1971 (authors: M. Gintowt, M. Krasiński, J. Hryniewiecki, and constructor A. Żórawski, Poland) – new facilities of a supraregional character were erected, stimulating the entire region, and along with their surroundings give this place a new quality in functional and aesthetic, as well as in social and cultural terms.

Over the last three years the next three buildings were erected:

- The main seat of the Polish National Radio Symphony Orchestra, 2014 (author: Konior Studio, Poland) - the strength and the spirit of this place is not only the reference made by the form and the elevation of the building to historic construction materials or the beautifully clear surroundings; most of all it is the interiors of the



**Fig. 3.** View of NOSPR (the Polish National Radio Symphony Orchestra) building (source: Wikipedia)



philharmonic, where the main concert hall, endowed with fabulous acoustic parameters, can bring associations with a pearl locked in a shell, or with rose petals in a rough palm. The designer's sensitivity gave rise to a multifaceted, sensual space, expressed in its structure, materials, textures, light, and sound, which steadily builds up emotions, creating a unique atmosphere for meetings of musicians and music lovers. The implementation of this investment consumed an amount higher than USD66m (Fig. 3).

- The main seat of the Silesian Museum 2015 (author: Riegler Riewe Architekten, Austria) – the designers' intention was to respect the existing characteristic although strongly damaged architecture of buildings of a former mine, standing for the tradition and identity of this place. The concept of this bold urban and architectural solution consisted in making maximum use of the space located under the ground surface for the purposes of the museum and the accompanying functions, and therefore it assumed only slight intervention in the post-industrial landscape. There are – as if to say – three types of development on the surface: glass cubicles, which allow to enjoy the exhibitions in daylight, although they are located at the depth of over 14 m below the ground surface, a headframe of the mining shaft, which was extended with a panoramic lift, and other revitalised facilities of the former mine (the former building of the engine room turned into a coffee shop – restaurant, and a warehouse of clothes, which today is the seat of the Centre for Polish Scenography). The cost of the investment implementation reached over USD 65m (Fig. 4).



**Fig. 4.** The main seat of New Silesian Museum (photo: A. Sulimowska-Ociepka)

- The third investment is the International Congress Centre (MCK), completed in 2015 (author: JEMS Architects, Poland). It is a multifunctional building, the largest section of which is addressed to guests of events held here (congresses, conferences, exhibitions, fairs, or shows). It does, however, have a zone that is fully accessible to the public: a green diagonal passage intersecting the roof, in this place assuming the form of a pass, as well as the main foyer, linking the entrance from the side of Honorowy

square in front of the aforementioned Spodek Arena with the entrance from the side of the newly designed Olimpijska street. Designating these spaces as public ones constituted an important citygenic element for this post-industrial area developed anew. Moreover, the building designed this way satisfied the expectations relating to its intended use and prestige as well as to the need to inscribe it in the landscape of the surroundings of the Spodek Arena, which will always be a significant and dominating element in the space of this part of the city. The construction of this facility cost nearly USD 95m.

Currently, the fourth, commercial building is in the progress of construction; it is called 'the KTW Towers'. Consequently, culture is completed with a business centre, which could be a signal that combining two so different spheres of human activities should be, and perhaps will be in the future, a natural method of supporting such places in economic terms on one hand, and on the other of preserving their *Genius Loci*.

## 4 Summary

The examples presented above, in the past were a stimulus for development of cities the economy of which was based on heavy industry. In the period of political and economic transformation in the 1990s, in both cases discussed after the fall of mines there were vast degraded post-industrial areas left behind. These territories, located in city centres, constituted serious barriers for harmonious development of Gliwice and Katowice. In both cases decision makers noticed development potential in them, although the objects set by both cities were different. Gliwice, which had always been a strong centre of science and technology, decided to develop innovative workplaces and to connect science with industry. The capital of the region – Katowice focused on the quality of urban space and on permeating it with cultural contents of the regional and supraregional character. The common denominator of these measures was the wish to change the appearance of the degraded grounds, preserving valuable industrial heritage sites. In both cases the objective set by the cities was reached, although with different effects. The Gliwice 'Silicon Valley' is still in the process of transformations. However, even now it is clear that it will function differently than the Katowice Culture Zone, because its goal is different. Private investors do not make any references to the past in their new headquarters. Instead, they look into the future in search of innovative architectural solutions, which will reflect their innovative technological solutions. The Katowice Culture Zone, on the other hand, thanks to its rich offer and accessibility, attracts many users every day, and is permanently inscribed in the landscape of the city. Its relationship with history and tradition of the place has been perpetuated in new glamorous buildings, which make subtle references to the tradition of the region, and is clearly legible for a skilled observer. In this case *Genius Loci* resides rather in the continuation of functions of the place, and its history is reminded only by monumental edifices of the historic mine. Nevertheless, as Norberg-Schulz claims, "To respect the '*Genius Loci*' does not mean to copy old models. It means to determine the identity of the place and to interpret it in ever new ways" [1].

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