

# INDUSTRIAL HERITAGE REGENERATION. WAY OF OLD INDUSTRY IDENTITY

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## Summary

Industry, since its origin, has reflected civilization development of society, it is a mirror of progress of science, technology and that is why it has always had an exceptional mission. It gradually acquired typical characteristic in economics, location, identity of architecture and places of industrial activity (of a city, region etc.). From the view of location of old industrial, integrated industrial territories were left at the suburbs or the industrial objects at spreading of towns territories got closer to their centres, what nowadays causes a considerable problem – an architectural and urban one. Industrial takes gainful places of a city, but it has architectural values only for relatively close circle of professional public. However, industrial has got a new dimension from nowadays point of view – dimension of equality with architectural sights of modern. It is a document of dynamic period, which starts its history with steam engine.

Transformation, conversion, transposition and identity are expressions which have found their real picture in many typological kinds of architecture. Examples of changes of industrial as stone-pits, mines and manufacturing which are presented in the article, are exceptional, they create unconventional museums of production, places of social contacts and universal spaces.

**Keywords:** old industry, identity, architecture, conversion, transposition

## 1 Traces of old industry

Old industrial grounds create a reserve building fund, they are a statement about the past times and place of its origin. They are valuable heritage as a whole, object, item, document...<sup>1)</sup> They left traces that can be valuable and inspirational for us and other generations too. From the perspective of architecture we can divide them into two basic groups:

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<sup>1)</sup> Industrial architecture from 19th century is qualified with the term industrial which includes in itself values of nowadays explored phenomenon of then waking industry, necessary to be kept for next generations. Identity of architecture of heavy industry is characterised by gigantism of special purpose objects with dominant technology and free equipment. From the view of architectural expression these objects are original, inconvertible, definitely „speaking about production“. Contact, first-plan item of identity of object of secondary industries is facade. The expression of facade and engineering solution of young items of industry (18.–19. Century) comes out of exercising period technological, technical experience from building and from material solution. Since the end of 19<sup>th</sup> century constructions of bigger range could origin thanks to spreading usage of reinforced concrete.

1. physical traces, direct – they are directly related to architecture
  - an architectural document of a period in the given typological kind,
  - experiment in constructions, materials,
  - Aesthetic singularity of a constructional-technological unit
2. indirect traces – connected with „advanced“ figural values and so they develop a wide „value“ area
  - a historical document about the way of production, presentation of industrial culture, (history of production culture),
  - a historical document about architectural art,
  - keeping genia loci.

It is necessary to say that presented groups are interconnected and most of the time they can neither be understood on their own nor executed independently in the process of objects transformation. Keeping values as well as identity is simply in shifting the information from past to future. Their transposition increases success of activating process.

## 2 Keeping identity – relations and ways

Architecture is conditioned by spirit of period which comes from the depth of history, from the knowledge of presence and foreseeing of future (Le Corbusier). Identity of architecture is a part of its „life“ and its own history. Respecting of identity of old industry is crucial and irreparable phenomenon at conversion. The ways of identity are determined by:

- choice of renewal method (revitalization),
- location and value of original architecture,
- typological kind,
- uniqueness of architectural or constructional items.

Perception of original identity of object is accentuated by emphasizing the direct or indirect traces kept in the process of conversion.

### 2.1 Problems

Nowadays the original production is mostly in controversial situations. Because of spreading the borders of habitation the production areas are implanted into habitable or administration centre of the city. It is a consequence of its natural development and that is why we are meeting nowadays with two possibilities. The first one includes old production premises, where there is no production, they are localised in habitation, in its wider centre, premises are not used or they are used inadequately regarding the surroundings where they are located. The second possibility regards production areas where production can still be performed and they are localized out of the city centre. The problems can arise from malfunction of areas and activity of deserted objects which degrade surroundings of cities. Problems can be expected also at integrating of old-new structure into the life of habitation. We can ask ourselves the following questions: Where will the ways of keeping the **identity** lead (of old industry)? When will the identity be suppressed? The answers to these questions will not be clear. It is also conditioned by the parameter of time. And the only certainty is the value of identity, based on what can be identified whether the object will be kept, commemorated and vivacious. It is necessary to reassess new usage of production areas through the optics of determinants as input information for justification of conversion and keeping identity. Form of financial standing of objects can make our

decision-making easier and also it can help us to find reasons for keeping the traces – fragments of industrial architecture according to the key which defines priorities of transformation easier and also the place of original identity:

- a) **The kind of industry and suitability for change:**
  - heavy industry,
  - secondary industry.
- b) **Focal points (levels) of production and presumption of their good functional connection:**
  - focal points of change outside the city centres – a structure with a new function, vernacular and city architecture is created,
  - focal points of change wider city centre – the function of living, services, culture.
- c) **Traditions factor:**
  - keeping the local traditions (production, technical-technological),
  - keeping the documentation value of architectural and technical meaning.

Evaluation of the key will show what the focus has to be when solving the concrete locality. From the view of significance of objects the orientation on regional terms of reference, accentuation of specifics and difference of the concrete place is logical and suitable.

### **3 Conversion – transposition – re-animation – way of keeping identity**

*Conversion* into non-productive functions as the most frequent possibility of another development offers a wide range of activities from business, office work, exhibition and advertisement, museums to housing which can alter a production function also with economic effect. A new function of the object is the object of search in the area concept of functional structure of an urban settlement, where the limits of development and organisation of area is set. This position is considered to be radical because of a principal functional change. It evokes also a difficult transformational process which will bring a meeting of identity of past with presence, technique and art, which is undoubtedly inspiring for a creator and attractive for a receiver of architecture.

In the architectural understanding the process of *transposition* is an occasion for implantation of old (functioning and expressive) elements into a new structure, which will be enriched expressively by it and it also contributes to unconventional identity of surroundings.

*Reanimation* will reconstruct the original production or production with innovative programme, of course in places where the surroundings enables it. It will mostly be topical outside the centre of habitation and with the character of production that does not have a negative impact on environment. Recovery of original identity has got a positive effect also on social dimension. The realization of recovery by adding different activities will be influenced by the status of surroundings, space limits of the concrete object and economic possibilities which are connected with abilities of keeping the new function „alive“.

Whatever change of industrial object because of production conversion requires also specific methodology in preparation and change performance. The stress has to be put except on good business programme also on gaining knowledge on complex status and value of industrial objects in a form of mentioned financial standing. Sufficiency of analysis in connection with determinants of conversion and identity of industrial architecture is the first assumption of optimal evaluation of a building and a fundament of good architectural solution, with assumption of functional architectural „recycling“.

**Tab. 1 Bonitation of condition and value of architecture with application of the coefficients**

Mine BANKOV	ESTATE			VALUE			
	poor /0*	good /2*	very good /3*	above the regional/3	regional /2*	local /1*	none /0*
ARCHITECTURE	■			■			
STRUCTURES	■				■		
TECHNOLOGY					■		
MATERIAL	■					■	
growth profitability and substantiation	unprofitable		profitable		substantial		unsubstantial
WAY of IDENTITY	* 7 /12	CONVERSION, REANIMATION, TRANSPOSITION				* 8 /12	

Factory 29. August	ESTATE			VALUE			
	poor /0*	good /2*	very good /3*	above the regional/3	regional /2*	local /1*	none /0*
ARCHITECTURE	■				■		
STRUCTURES			■			■	
TECHNOLOGY							■
MATERIAL	■					■	
growth profitability and substantiation	unprofitable		profitable		substantial		unsubstantial
WAY of IDENTITY	* 7 /12	CONVERSION, REANIMATION, TRANSPOSITION				* 4 /12	

\*The number represents the coefficient, which reflects the quality (value). More than 50 percent of the total sum express the relevance of preserving identity. Evaluation is necessary for the basic bonitation architecture.

#### 4 Bonitation of buildings – assessing the value of identity

Solution of architectural concept at conversion of industry reflects physical side of object and imaginary theoretical traces and values of industrial. From the view of methodology it is necessary to set the level and adaptability of construction, technology which creates assumption for rational solution, objectivity of the new function of the object and level of innovation of architectural expressive means. The society has been only slowly realising that these objects are carriers of history, technical and architectural values. However, it is easier to persuade about the value and keeping the identity of industrial from 19th century comparing to the industrial and warehouses from the beginning and the middle of 20th century although in the last 15–20 years the popularity and interest in keeping the „excessive“ younger buildings suitable for a repeated usage has been increased. Despite malfunctioning these objects are „healthy“ – built in good faith, traditionally and with traditional materials and they are safe also from the view of statics. It Works in their favour regarding the repeated usage and it offers an ideal ground for renovation. Success of research in this area is multiplied also when we can classify the buildings to the interesting objects from the period of functionalism, (Tab. 1).

## 5 The results of research

It is interesting to compare the concrete evaluation of area oriented on secondary industries with the area of heavy industry. We have chosen the production area – previous Závody 29. Augusta (Factory of 29th August) in Partizánske and Baňa Bankov (Mine Bankov) in Čáhanovce.

Solution suggestion of conversion in Partizánske (previously Šimovany – Baťovany) is not oriented only on objects of architectonically interesting with highly evaluated identity from the period of functionalism. In the area there are newer objects, from the 70s, which were the objects of research. They are on a good level from the view of construction, they dispose with great building capacity but without any significant architectural value. It is right and ideal to do the justice on the analysed object and stress the essence of the 70s. In this case it means: material solution (copilit), expression where horizontal line dominates and high-frequency carrier system of the object – brick skeleton (module 6 x 6 m), steel roof. From the view of object location it is a locality with good transport net (also railways), there are connecting areas of habitation which has got a promising potential of development providing of other functions input. The outstanding assets of the object is its position – in contact with „Baťa's objects“. Conversion of area with unchanged and accentuated Baťa's genio loci documents the way of production identity, (Fig. 1 – Fig. 3).



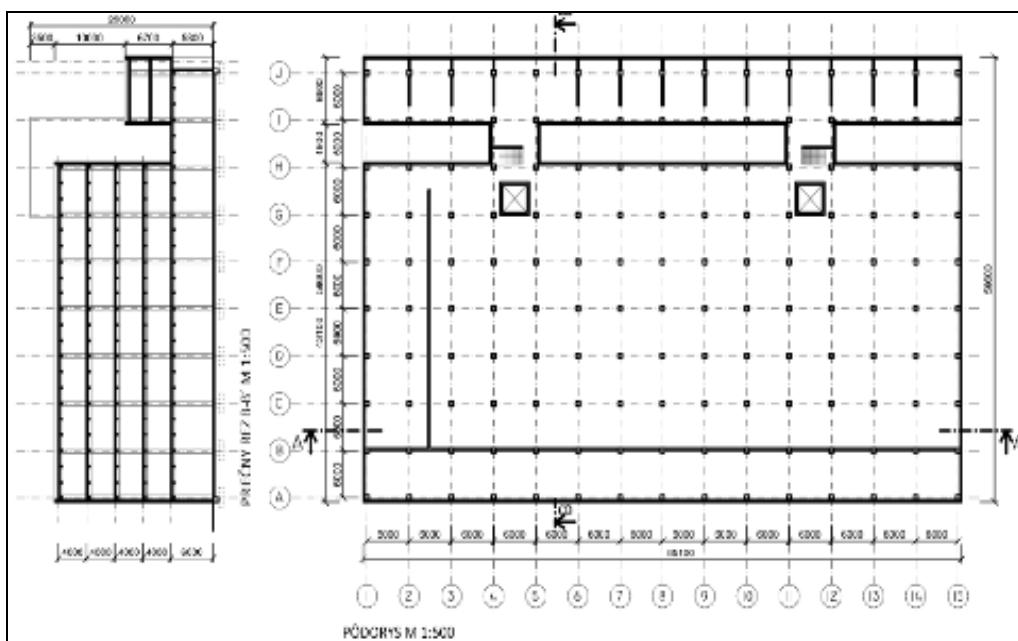
**Fig. 1 Functionalistic buildings from Voženilek adjacent to storage add value to the locality**  
(photo M. Pršo)

Conversion of Baňa Bankov (Mine Bankov) locality – Čáhanovce at Košice has got a different character. The vast area offers spectacular solutions also connected with its incorporation into Carpathian Euro-region although at first sight it may seem we are getting into paradox because we do not know what to do with such a potential. The main idea is developed on the background of connecting the area into megalomaniac structure of euro-region, (Fig. 4). Keeping the identity is logical here in a way of re-animation of the area, conversion of objects and transposition of items with usage of suggestion of reconstruction. Identity of area is accentuated by keeping the original objects and items of the mine which will go through transposition, they will create mostly sceneries and museum space or cultural-educational space. Similar to Emscher Park at Essen, which is

proud to hold the attribute of the most beautiful mine in the world, Bankov can gain such an attribute too. The next part of area is dedicated for free time and relaxing activities with traditional and less traditional forms of relax which are presented also by non-traditional forms of architecture determined by transformed elements of production. The original way of keeping the identity in the middle of nature with offer of different activities coming from the qualities of locality, its traditions is the most suitable possibility for a long-term existence of the area, (Fig. 5 – Fig. 7).



**Fig. 2** Factory of 29th August – current state and analysis of architectural expression



**Fig. 3** The structural system is based on the identity of typical Bata buildings

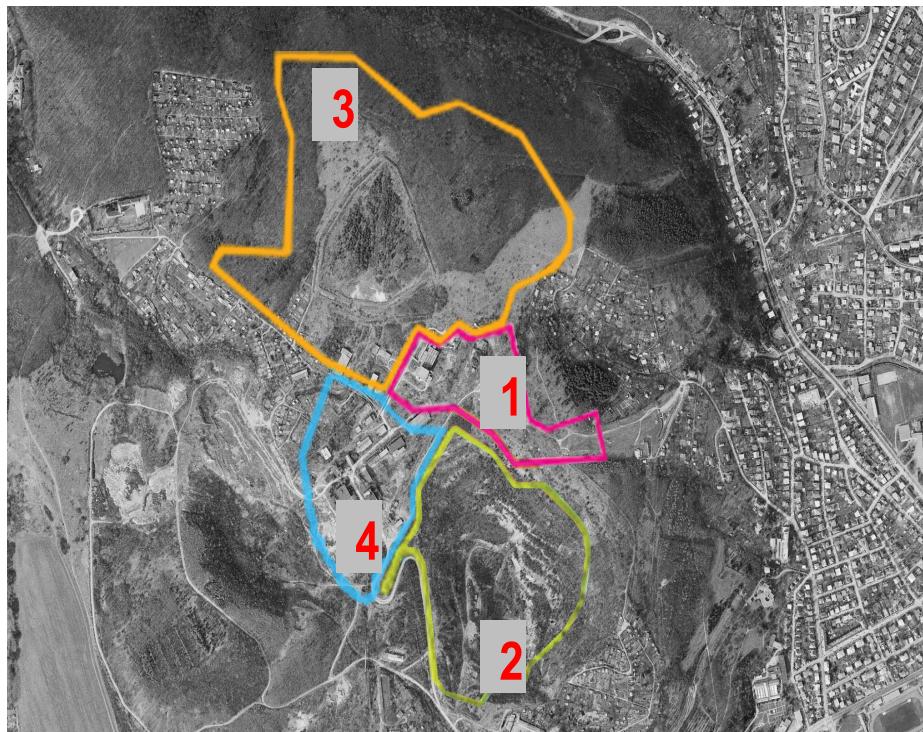
## 6 Discussion

Conversion is magical in its own way – it enables to return to old places and give them the seal of a new face. Experiences of Renzo Piano (2004) say that usage of existing building funds is an exceptional occasion. The conversion is globally more demanding than creation of new objects because it modifies the existing structures. But we cannot talk about conversion without identifying of old industry in new or just innovated way. The architect should be honoured when working in original and in some way valuable surroundings. The modern, surprising, sometimes shocking J. Herzod and P. de Meuron claim that it is exciting for us to create in existing structures. It requires a completely different creative attitude. It is not always possible to start afresh. And this is the essence of keeping the identity.

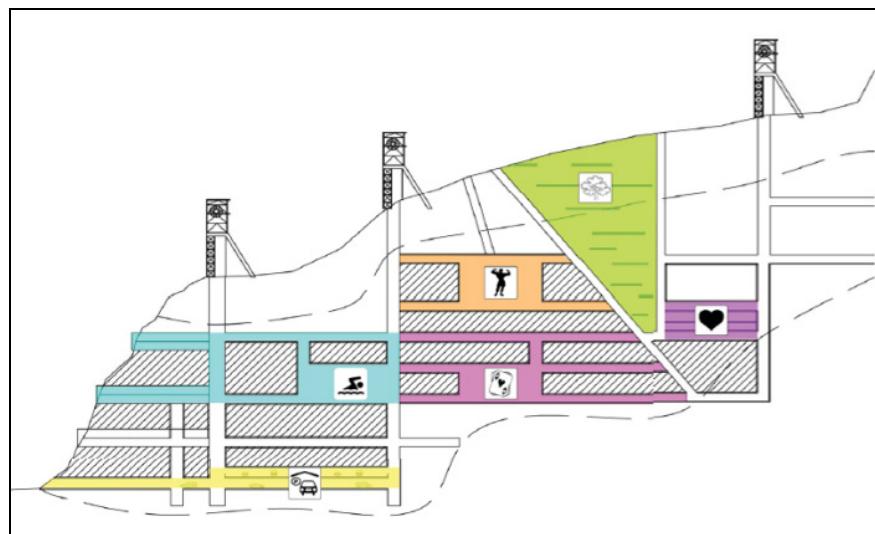
The interest in topics of keeping the identity is alive and huge because it is connected with history and memory of humanity. The importance of these facts confirm many documents, for example in bulletin of TICCIH Unesco, Leipzig (1993) is presented that the sake of each nation is that cultural values included in industrial heritage cannot be wasted and limited only on paper documentation...

Area liquidation of industrial areas is bad, present Š. Kubíček (2010) and continues that the city should not expand too much behind the borders of its urban areas and it should use the huge potential of historical industrial locations.

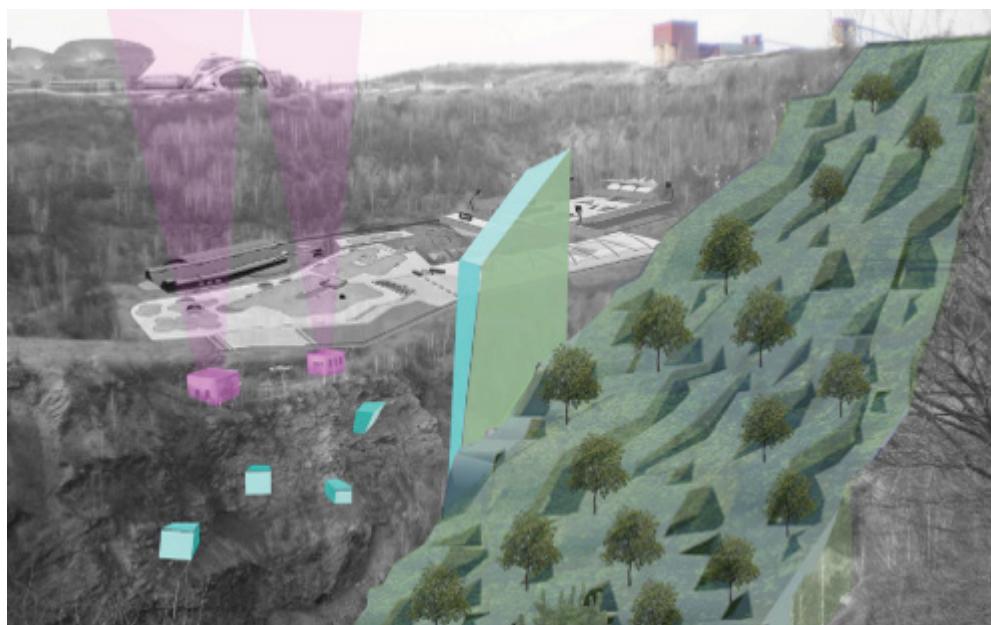
In the paper with accentuate the reality, wish and effort to find the lost – to find the ways for lost identity. The essential thing for an architect is modification and identification of the value of that identity which is essential to keep for future generations.



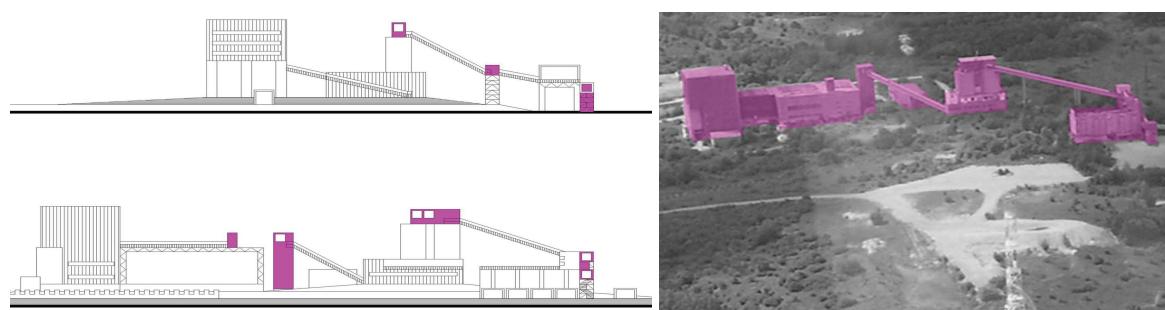
**Fig. 4** Locality of Mine Bankov with marked solved sectors, as a part of way to conserve of identity: 1. sector with mine building Bankov, 2. Hybrid park, 3. sector for golf, 4. sector for accommodation, (author: Ilkovic, J. – Mustakov, M.)



**Fig. 5** Stratification of the new features respects the structures of mine tunnels



**Fig. 6** The solution of sector 2 (Hybrid park) with the location of various sports and relaxation activities (skate park, skiing, water world) using the features of the terrain



**Fig. 7** Elevation on mine with accent of identity Mining Technology

## 7 Conclusion

The problems connected with the previous industrial which comes not only from the period of 18.–19. Century but even to 70s of the last century are very topical because of the influence of structural changes and logical development of society in the countries of middle and Eastern Europe. Interesting space can origin when pointing at the traces of industrial and a suitable way of keeping the identity. They could document regional spirit of the place and respect development aspects. The value of old industrial architecture is in the strange grace and cooperation of technique, technology and architecture in the original surroundings. Whatever way to keep the identity of industrial in the changed urban structure valorises the values of surroundings.

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