

### Aesthetical component assesment of industrial architecture in the rehabilitation process

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#### SUMMARY:

*The role of esthetics in society is a vital one, closely related with the good and harmonious development of human civilization. The genuine esthetical works represent sensitive means in searching the truth, without which the existence purpose has no finality. Thus, it is very important to be able to correctly estimate the value of objects the human civilization created in time because they could represent a unexpectedly powerful economical and cultural resource.*

*The present paper work is meant to debate on the esthetical qualities of industrial buildings in the process of the continuity of their existence through rehabilitation and refunctioning.*

Key words: aesthetics, industrial architecture, form, nature.

#### 1. INTRODUCTION

The objects surround us are on one hand illusory, but conveying a more or less profound message depending on the values of "emergent entities" and on our capacity to perceive these entities that lead to an aesthetical experience.

However, history reveals us perception errors of objects when, for example, in the 16<sup>th</sup> century, there were many cases in which the Gothic churches were razed from the ground and the surviving ones are highly appreciated today as inestimable monuments.

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## 2. AESTHETICAL COMPONENT ASSESMENT OF INDUSTRIAL ARCHITECTURE IN THE REHABILITATION PROCESS

A century ago since industrialization began, the technology evolved extremely fast, leaving behind morally used plants and factories that are gradually decaying in time. Although they are frequently present on the territory of this country, namely those of the hyper-industrialization époque without an artistic value, these relics of the progress hide a real aesthetical potential. Along with the factories of the first period (real architectural artworks) they represent a living document regarding the society evolution with its ideals and failures.

Romania has an industrial patrimony remarkable for South-East Europe dating mainly from the 17th-20th century period. Besides the valuable single objects, coherent samples of development are present illustrating all the known stages of industrial evolution (pre-industrial, manufacturing, industrial, fin-de-siecle and hyper-industrialized). This diversity has a positive informational role in the society perception by the chronological continuity of the phenomenon and also by the exemplified understanding of its history.

The industrial phenomenon marked the society from its emergence introducing a different system of values that gradually replaced the traditional one. Even the speed of running of the events increased at the same time with the industrial evolution by the introduction of powered transport. The society values have migrated to the pragmatic, materialistic side of life towards consumption and comfort.

Also from the point of view of civil architecture, the values migrated towards a diminishing of the ornament aesthetics in favor of simplicity aesthetics. These new values of architecture originated from the architecture of factories that, by their strict functional logics, economically responded to a society in full development. The industrial architecture had, as well as the art of the time, a gradual evolution to abstractization, however starting from classical models, profoundly mastered by their creators.

In order to better understand the essence of the aesthetical aspect of industrial architecture, it is interesting to survey the evolution directions and the influences between civil architecture and the industrial one.

Therefore, the first factories from the beginning of the Industrial Revolution in England were arranged in larger houses (the so-called cottages) that offered the space and conditions necessary for the technological process. The ornaments were automatically taken over from the civil building architecture, on a smaller scale, but still keeping the look of "cultivated" architecture.



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If we compare the industrial building architecture between the first and second wave of industrialization we should notice the positive influence of civil architecture through the “familiar” atmosphere of spaces of the first period.

At the same time with the second wave of industrialization, the factories and production spaces more and more depart from the traditional civil architecture. They detach by carrying to the extreme the economical and rational part without a special concern for the esthetical part. With the exception of the creations of great architects that managed to confer artistic value to some nonconventional spaces, such as the ones destined for production.



Saline royale at Chaux – Arc-et-Senans, France; architect: Claude Nicholas Ledoux, 1775-1779



Horia Creangă – Bucharest – Entrance gate of 23 August (Malaxa) works 1930



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But if the “emergent elements” of industrial architecture of the first wave could be easily identified and accepted by the public perception, in the second period the evolution is towards an industrialization of the space production architecture by the introduction of prefabricated modular elements.

Could the industrial architecture reach the level of “aesthetical object” during its functioning?

First of all, the industrial architecture was and still is, by itself, a product of industry and, as Hans George Gadamer [1] says, “A product of the craftsman or of the industry finds its accomplishment and is consumed by using”, and the work of art is something special. Actually, if the artwork is unique, can be considered an art object a product of industry manufactured in mass production?

As Martin Heidegger considers in “Question regarding technology”[2], the relation between the factory and the natural environment is a domination one, based on the maximum efective use of technological flows and obtaining a maximum performance in exploiting the resources. Therefore, the production space constitutes the controlled way by which the man constantly requests resources from the natural environment. Under the illusion induced by progressive stream, the society has destroyed not only the nature by ecological disasters, affecting itself as a part of the natural general ecosystem.

But art’s aim is not to destroy but, as Clive Bell [3] states, has as immediate purpose the good. From this point of view, the reconsideration of industrial spaces for new functions can be considered legitimate as an art form, as a change (improvement) of its physical dimension, at the same time, realizing a moral rehabilitation. In this way, a natural resource consumer transforms into a social, cultural etc. resource producer. The industry is the one that created and enlarged the hiatus between the elements of the same system – man and nature.

In the opinion of Hans Georg Gadamer [1], a successful artwork is always an accomplished trial of reunion of what is presented as dismembered.

The perception of industry is currently in general a negative one, even though, theoretically, makes our life easier. The value system of the society experiences now a new turn, the goal of the existence migrating from the “live well” concept to the “to live healthy” concept.

In order to analyze the aesthetical qualities of industrial space and form, we should take into account the way in which it is perceived, because art is an object of



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perception. If we consider the industrial building in its strict physical and utilitarian dimension, any aspiration towards the art field should be hard to perceive as art.

The moment of artistic revelation, of perception of “emergent elements” [4] characteristic for the art, occurs when the utilitarian reason is extirpated, and the object, now empty of the old meanings, is endowed with a new meaning.

According to the same principle, Marcel Duchamp’s “Fountain” is an art object after which it is conferred a new idea, a new perception angle.

### *2.1. Aesthetics of nature and industry*

Referring to the relation between man and nature, Konrad Lorenz [5] asserts that the “esthetical” and “ethical” senses are apparently close, so that the esthetical quality of the environment directly affects the ethical behavior of man. The beauty of nature and the beauty of cultural environment created by man are apparently simultaneous necessary in order to maintain a physical and psychical health of man. He goes on: “The blindness of the soul regarding all that is beautiful is a mental disease rapidly spreading nowadays and which we have to seriously consider because it makes us insensitive to the disfiguration of ethics”.

### *2.2. The beauty between mass production and uniqueness*

Smith[6] postulated “the second order of esthetics”, suggested by discoveries made by biologists and psychologists. According to it, the beauty can be enforced by the tension between variety and similarity, between complexity and order. Baumgarten said in 1750: “The abundance and the variety should be combined with clearness. The beauty offers a double reward, a well being state coming out both from the perception of the new, the originality and variation and from coherence, simplicity and clarity.”

Leibniz, claimed in 1714 for reaching the perfection, as much variety as it is possible, but with most rigorous order possible.

In architectural rehabilitation by subordinating the building to the environment in which it is inserted, the proportion between repetitive and unique elements should be reconsidered in order to avoid the exhaustion of monotonous rhythm perception. This issue is presented mostly in the industrial period of the second wave, when, after inventing the conveying bands and horizontally organized technological processes, the spatial configuration of industrial buildings was organized mostly on very large surfaces with only one level on height. The rehabilitation of industrial buildings represents the salvation, both physically and essentially of a used and exhausted system.

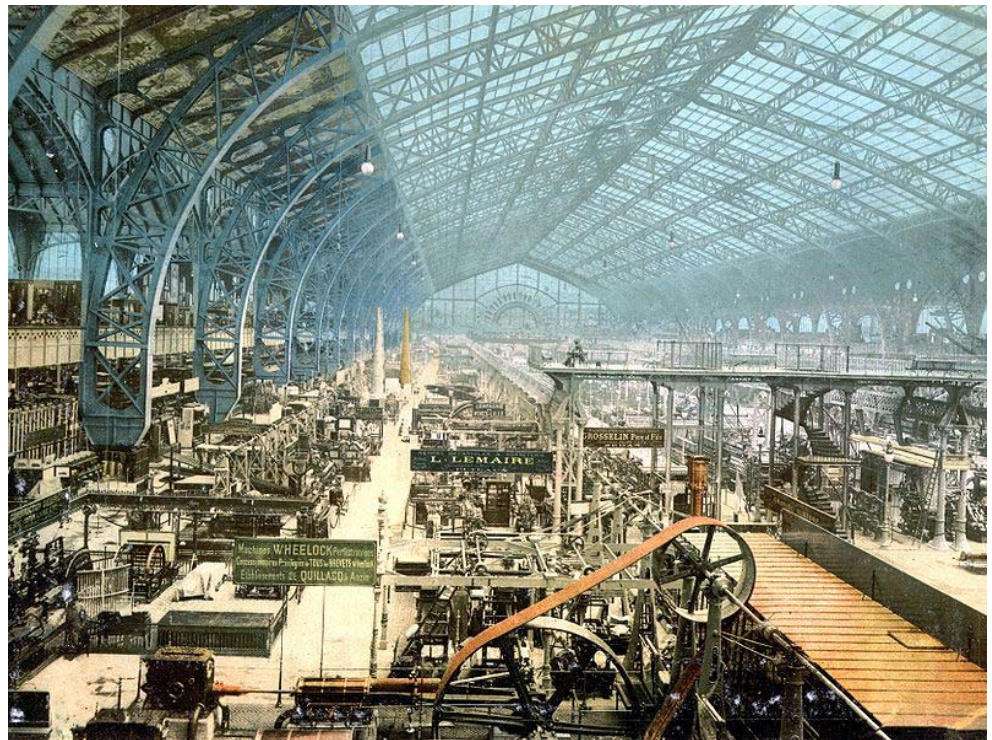
On one hand, the industrial site and the industrial buildings, released from the insistent request of delivery and of their utilitarian function, bring in a non-hiding



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state a new dimension of them. This dimension is also a resources or an “available state”[2] as Heidegger names it, due to the fact that it responds to a command. But this command is superior to the previous one because it is a social, cultural one, not only consuming resources but also taking out from hiding the human essence.

On the other hand, the rehabilitation is carrying out also at the human level, the man being in direct connection with the place, by the common essence he shares with the surrounding environment.



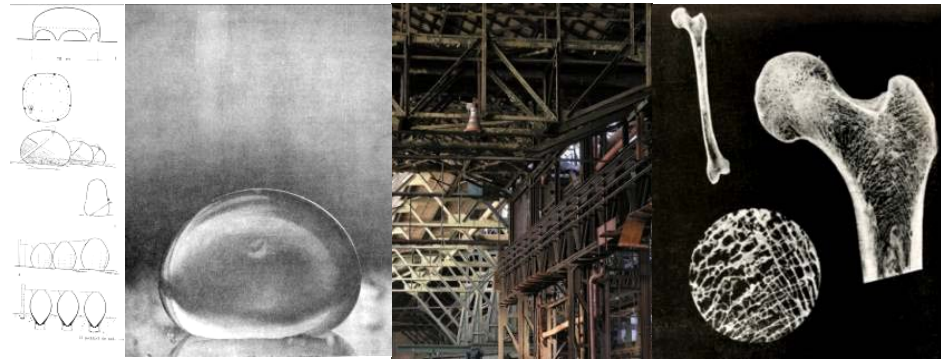
Galerie des Machines 1889, demolished in 1909, Paris; architect Alexandre Gustave Eiffel.

The rehabilitation of industrial buildings is in this way a return to essence, where technology is mistaken with art, becoming again a “revealling what is hidden” of the truth. The available state is transferred from nature to the built frame that is a shell deprived of function, a landscape that waits to be discovered and revealed.

In the physical sphere we could remind the biggest step the architecture made with the support of the great engineers of the 19th century. The structure began from this moment to be a distinct element by itself that is not hidden anymore behind walls and ornaments. We could consider the structure as an aesthetical element.



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Natural forms as source of structural design inspiration

If we regard the structure as an expression of adaption to the external conditions of the environment – in our case the gravity force and climate actions, then we could make an analogy between structure aesthetics and natural aesthetics – that is indisputable. The first engineers and architects got their inspiration very much from nature providing perfect models and solutions of an adaptation balanced to the external environment.

The industrial buildings paradoxically introduced in creative conception a new value of architecture, namely structure – as an artistic element. Regarding the industrial building, we could say that the ornament, which was till then the expression of beauty, metamorphosed.

### 3. CONCLUSIONS:

The aesthetical assessment of past industrial structures is an issue of maximum importance in architectural rehabilitation, which give direction to the actions of the architect. In the same time, the architect has the power to change people's perception and give a sense of aesthetical value to the industrial built environment.

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