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INDUSTRIAL BUILDING CONVERSION – THE POACHING OF AN ALREADY POACHED REALITY

BY

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Abstract. The Industrial Revolution represented one of the most significant changes in the history of mankind. Its effects, both positive and negative, are an inseparable part of the modern-day world. Industrial architecture is a machine-age heritage that is being re-evaluated and re-used. The present paper explores contemporary views on the social, phenomenological and architectural value of industrial spaces, analysing both conceptual and pragmatic methods of architecture conversion. Society is happy to "poach" an already "poached" reality, to reclaim and re-interpret the industrial architectural heritage, and architects take on the challenge of reconfiguring industrial space into new architecture, with new values and new spatial potential.

Key words: industrial architecture; re-use; architectural conversion; "poaching".

1. Introduction

The Industrial Revolution represents one of the most significant changes in the history of mankind.It marks the beginning of a modern era, a time of progress and innovation that would allow man to explore and exploit the world from its *nano* levels to outer-space scale. It was a necessary change, and it seemed the right direction to follow. But industrial revolution and technical

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progress, centered on the idea of efficiently manipulating natural powers, also brought about a form of hollow optimism and an unsubstantial confidence in the power of modern tools. Progressist theories lying at the core of industrial and technical development marked a rupture with the traditional knowledge based on respect for nature and for human values.

The positivist approach viewed nature as a sum of resources that could be mathematically equated and transformed into energy and industrial products. Mathematically derived work flow charts also determined the shape and size of industrial architecture. This efficiency-oriented conception created the illusion of a perfect world, but ended up abusing natural resources and losing valuable traditional methods. The industrial revolution induced great changes in human mentality as well, causing tension in the relationship man–nature and man–tradition.

2. The Awareness of the Self-Destructive Effects of Nature

In his work *The Question Concerning Technology* published in 1954, Heidegger points out the essential difference between traditional and modern farming methods. While in traditional agriculture seeds are planted and cultures are grown, while the soil provides a natural support, in modern agriculture soil is viewed as a more physical resource conveniently available, ready to be exploited. Similarly, the hydroelectric plant built on the Rhine forces the river water to set the turbines moving and create electric energy. „The hydroelectric plant is not built into the Rhine River as was the old wooden bridge that joined bank with bank for hundreds of years. Rather, the river is dammed up into the power plant" (Heidegger, 1954). It is a rather romantic approach of this issue, as modern life depends on technology, but nevertheless it exposes a clear difference of attitude towards nature and tradition which are now both taken for granted by the modern society.

The „poached" reality that technological progress promoted was built on a very attractive and feasible logic, but this logic only encompassed a limited segment of everyday life, as well as a limited time span, thus failing to put forward a holistic solution. In a larger perspective, this so-called blessing of modern times eventually turned into a complete alienation from the unity between the human and the universal essence of nature, a core traditionalistic principle.

In *L'invention du quotidien*, Michel de Certeau considers from a sociological viewpoint the way people react when forced to take a direction in conflict with their natural inclination. Progressist approaches tend to nail down every little detail of life, to obviously terrifying consequences. And, as Luce Giard argues in his presentation of Michel de Certeau's work, progressism ignores the essential capacity of human society to react and to defend itself from danger.

„Increasingly constrained, yet less and less concerned with these vast frameworks (of technocratic expansion), the individual detaches himself from them without being able to escape them and can henceforth only try to outwit them, to pull tricks on them, to rediscover, within an electronicized and computerized megalopolis, the „art" of the hunters and rural folk of earlier days" (de Certeau, 2002).

In Michel de Certeau's view, the collective social being naturally tends to „poach", to fight against any adverse situation, against forcibly imposed rules.

3. The Conversion of Industrial Architecture

The two antagonistic forces in play are **society**, with its specifics and characteristics defined on limited segments, and the „**rule**" – state, institution – which is applied undiscerningly. In the process of architectural conversion/rehabilitation, the architect finds himself in opposition to the standardized industrial building principles, based on rigid rules and on forcibly space exploitation.

Thus, we can argue that architectural conversion is a reverse „poaching" process: community reclaims the architectural space that was forcibly occupied in the name of technical progress without regard to possible traumatic side-effects, and the building is re-introduced in the cycle of community values.

Industrial architectural space is necessarily a standardized one, built on a recurrent structural module so as to satisfy practical, rational, factors of physical, structural, morpho-spatial and economical nature. The functional conversion process involves the „poaching" spatial morphology and architectural vocabulary, the recovery of the identity of the place through the use of diversity. This diversity is vital in making the space inhabitable.

The architect's mission is to understand and anticipate the needs of the new building users and to take the industrial space, often an overscaled piece of artificial landscape designed to shelter machines, and bring it down to human scale and reason. Even though nobody knows all the answers and the ever-changing paradigms of society and human mentality are hard to forecast, the architect must envision future situations and needs, and mold the raw, basic space into a personalized, human one.

Certeau defines "strategy" as the calculation and manipulation of forces by a subject of will and power (a company, an army, a research institute). Industrial space is, by definition, designed as an isolated self-sufficient entity, both spatially and functionally. It fulfills all the conditions Michel de Certeau mentioned: it is appropriate, and its interior and exterior are well-defined, clearly separated. Indeed, the physical space of such a building has clear limits, formerly required for the well-functioning of the machine, but which turn

aggressivelly in terms of human built space, and the architect needs to solve the tension created by such rigid boundaries.

4. Two „Poaching" Weapons for Industrial Space

4.1. Dematerialization of Boundaries

Philosopher Jan Patočka claims that the system of primary relationships between man and the outer world precedes the geometrical dimension of space. Industrial space is closed towards the outside world and ignores the natural environment and the potential of the place. Nevertheless, the philosopher goes on to argue that the individual and the world are not separate or independent, but stay in close connection. Their relationship is subjective, active and dynamic.

The rigid boundaries between interior and exterior space must be broken in order to allow spatial communication – a necessary condition for space realization according to Patočka. The ego, the individuality of the industrial space must be dissolved.

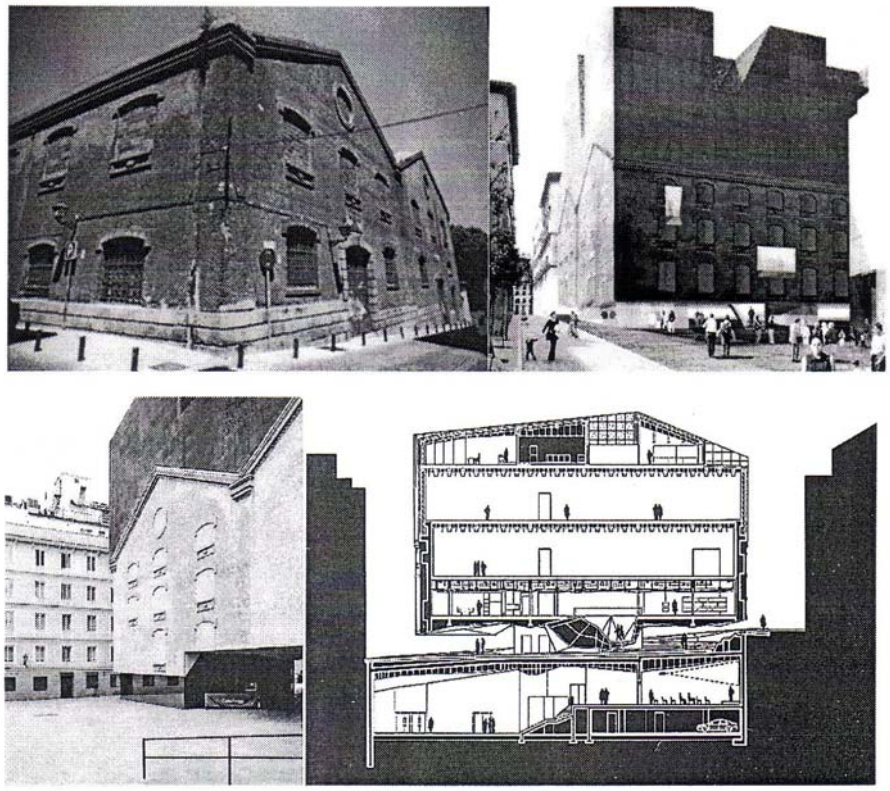

Fig. 1 – Conversion of an electrical plant (1899) - Madrid (arch. Herzog & de Meuron).

The claustrophobic machine space can be opened up by reconnecting it to the universal reference points of *earth* and *sky*, identified by Jan Patočka (1991) as symbols of archetypal horizontality and verticality.

Beyond providing the physical support for horizontal movement, for Patočka the earth also has a sacred meaning, essential for the sense of identity and the natural development of the individual.

In the conversion of an electrical plant in Madrid, dating from 1899,the ground floor was completely cleared out, and the square before the building practically expands under the massive volume of the former power plant, achieving a sense of spatial continuity between the public street space and interior space (Fig. 1).

Therefore, in industrial space conversion projects, the dematerialization of the egocentrical, closed space, could be achieved by keeping the horizontal plane of the earth continuous, unbounded by the original limits of the built volume. Physically, the limit can be erased and replaced with a so-called „engawa"-type of intermediary spaces, inspired from boundaries found in nature - vague and diffused like the boundaries of the sea, as Yoshinobu Ashihara (1994) suggests.

This type of ambiguous space is meant to enhance the dialogue between the "I" and the "you" of the building and its environment, and to facilitate integration and balance in a new "us". Patočka defines the term "us" as the more or less durable coexistence of entities that need and support each other. Architectural conversion space must be in principle a space of communion, of retrieving and of rehabilitation in all senses of the word: regaining good humor, reacquiring lost rights, and even in the medical sense of recovering vital functions after illness.

The perception of the sky as a base for the sense of distance can also contribute to the dismantling of the industrial building's ego, offering proof for the infiniteness of the Universe and, consequently, for the finiteness of the built object. The complex, apparently irrational logic of nature can thus integrate the „rational rule" of the industrial space.

4.1. Re-Ordering Objects, or the Functional Reversal of Space

The re-ordering of objects enhances back-and-forth transitions between spaces and between places. Certeau distinguishes the two notions of place and space based on their degree of dynamic, orientation and temporality. Place is the order (whichever that might be) in which elements are distributed within coexistence relations. For Heidegger (1996) this order is the very principle on which spatial orientation is based. Both thinkers agree on the order of objects as being essential to the idea of place. Certeau views place as static, defined by a clear object positioning which provides its specific dimension. By contrast, space has dynamic and temporality, features gradually defined as space is being

explored. Unlike place, Certeau says, space has no specific dimension or identity, and thus cannot be considered a reference point by itself.

Space is a „practiced" place. It is another point on which Certeau and Heidegger seem to agree – the act of using the space creates its morphology. Through use, space is organized into „near" and „far", it is explored as a changing sequence of progressive proximities.

Conversion of space is based on a change in the way of use, automatically resulting in a change in the perception of the space. The former sequential path through space, determined by production flow, is abandoned, and new directions, horizontal and vertical, are installed; interior space is recomposed. In industrial building conversion, the boundaries between space and place can be shifted in both directions. Through the introduction of a new dynamic, together with new temporal dimensions and new „specific readability", place can be transformed into space. This happens through a process of fragmentation in which new rhythms are absorbed. Conversely, space can be integrated into place through limitation of its dynamic, through – to quote de Certeau – „the putting to death (or putting into a landscape) of heroes who transgress frontiers and who, guilty of an offense against the law of the place, best provide its restoration with their tomb or return into static landscape, of boundary trespassing heroes guilty of violating the law of the place" (2002).

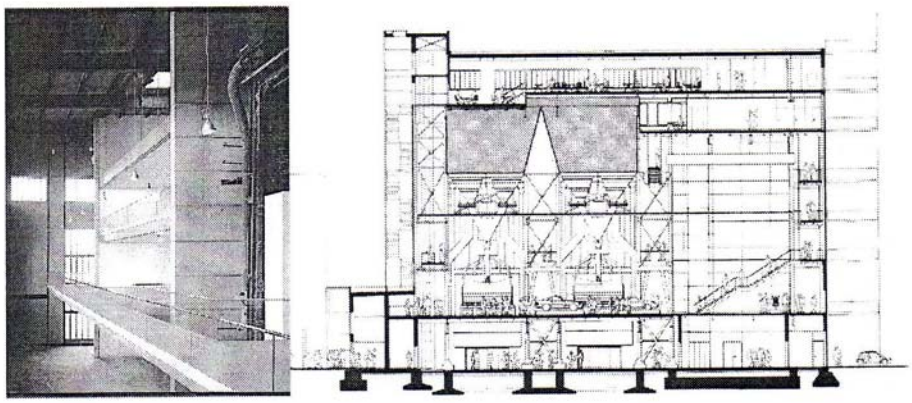

Fig. 2 – German Design Center, Essen (arch. Norman Foster & Associates).

The industrial architecture conversion of Zollvereign Factory designed by British architect Norman Foster (Fig. 2) illustrates the internal space reconfiguration of the full-height factory space. The intervention concept is of a building inside a building, with the new circulation paths drawn outside of the new volume to provide a new, dynamic perception of the old space from different levels.

Space dynamic are also used by Bernard Tschumi in the conversion of an industrial building in Lille in an approach contrastive to Forster's (Fig. 3). The circulation paths wind between and above the old buildings, inside a structure which integrates them under one single roof.

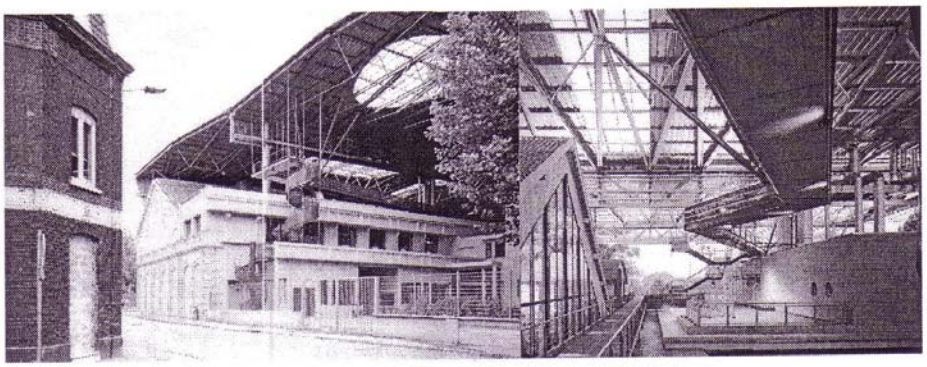

Fig. 3 – National Studio for Contemporary Arts, Lille (arch. Bernard Tschumi).

Both examples interpret pre-existing volumes as artificial landscapes – the first as an interior, cave-like space, the second with a permeable interior – exterior approach. The contrast between the innate static order of the buildings and the new dynamic approach gives architectural composition a new boost of energy.

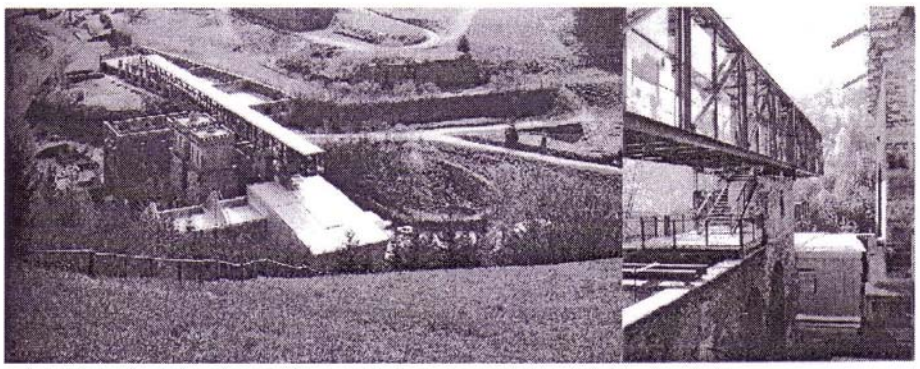

Fig. 4 – Conversion of the Blast Furnaces in Huttenberg (arch. Gunther Domenig).

The example of the Conversion of the Blast Furnaces in Huttenberg designed by Gunter Domenig shows yet another way of breaking the existing "rule". In a spatially variable industrial space following topographical adaptation, the new rule consists in a constant circulation level which crosses the opened, ruined industrial spaces following a slightly different direction than that of the existing stone walls.

5. Conclusions

After more than 200 years of industrialization, 21th century man reclaims rights over the spaces once dominated by machines. It is not just a new trend promoted by architects and designers, but the simple individual feels the need to free himself from former rules and enjoy a new adventure.

For this type of *poaching*, the industrial space is the perfect medium – a simple space dominated by structural order, scale and closure. It may be the extreme nature of this space that makes it so appropriate for change, in a play of vivid contrasts between rational/irrational, old/new, closed/open, massiveness/lightness.We can argue that the architectural conversion process is an illustration of what Jean Baudrillard defined to be the truth of architecture – a continuously changing appropriate use.

Moreover, by mistaking and becoming aware of their mistakes, people rediscover the true values of tradition and nature.

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REABILITAREA CLĂDIRII INDUSTRIALE CA BRACONAJ AL UNEI REALITĂȚI BRACONIERE

(Rezumat)

Revoluția industrială a produs cele mai importante schimbări în istoria umanității. Efectele sale, de natură pozitivă şi negativă, au devenit o componentă inseparabilă de viața modernă. Arhitectura industrială, ca parte a moştenirii epocii maşinii, este re-evaluată şi reutilizată. Prezenta lucrare abordează puncte de vedere contemporane ale valorilor sociale, fenomenologice şi arhitecturale ale spațiilor industriale, analizând diverse metode teoretice şi pragmatice utilizate în conversia acestora. Societatea ”braconează” această realitate ”braconată” reclamându-şi astfel drepturile asupra patrimoniului industrial, iar arhitecții preiau provocarea prin conversia şi reinterpretarea acestuia, generând o arhitectură cu potențial şi valori noi.