

## UNA VISIÓN DE LA METODOLOGÍA DEL DISEÑO ARQUITECTÓNICO EN EL PATRIMONIO

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### **Resumen:**

En Holanda existen millones de metros cuadrados de edificaciones vacías. Muchos de ellos pertenecen a edificios patrimoniales que debido a su naturaleza han permanecido intactos en el tiempo y no han sido adaptados a los nuevos usos que requiere el mundo contemporáneo.

Este hecho abre una discusión sobre patrimonio y conservación. Durante el último siglo diversas metodologías han sido planteadas, carteles y escritos que pretenden ser una receta para determinar que merece ser conservado y como se lo debe preservar. Sin embargo el patrimonio muchas veces no es físico si no, el mismo es simbólico e intangible. Este ensayo explora el tema de la conservación patrimonial a través de varios ejemplos y propone una metodología para identificar y preservar el verdadero valor patrimonial de un edificio.

### **Palabras Claves:**

Patrimonio, Conservación. Reciclaje, Adaptación a Nuevos Usos.

### **A Vision on Methodology in Design with Heritage**

In the Netherlands there are millions of square meters in vacancy due to the out-dated buildings that are not able to hold contemporary programs and necessities (Job Roos, 2014). Furthermore, monuments compose a big portion of this vacancy rate. This gives a big opportunity for restoration architects to renovate, adapt and bring back the old glory of ancient structures.

However, restoring a building is a task that leads to a discussion about the correct design attitude to preserve the past and enhance the future. During history, experts in conservation had tried to reach to a consensus, to find a recipe that standardizes historical interventions. Nevertheless, the values of a monument are innumerable and sometimes, they are not materialized on the building physical components, neither in the design itself. They are present on the culture, in the memory of the people and in the atmosphere of the place (Paul Meurs, 2014). This diversity of features makes impossible to have a conservation formula that fits the requirements of every monument (Fig 1). As a result, each conservation project requires a unique approach to preserve and enhance its own soul, its authenticity.

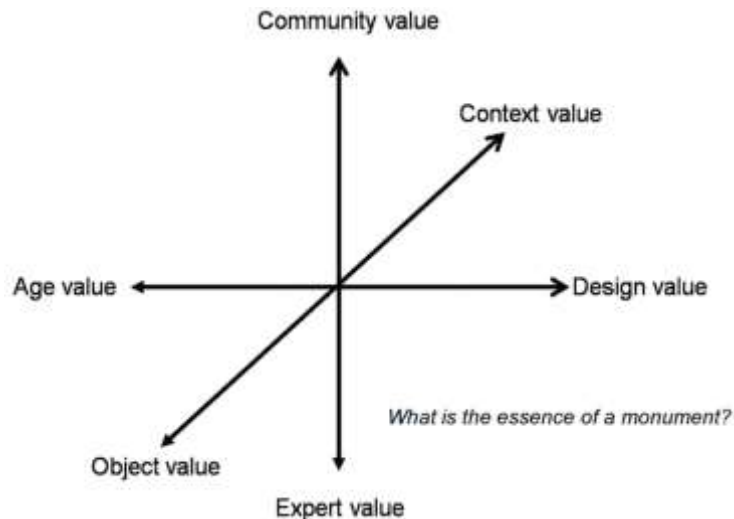


Figure 1: Values of Heritage buildings

Source: Paul Meurs, 2014

On the past century a number of charters were elaborated to establish principles and methods to achieve successful historical interventions. The first main document was done in Athens on 1936. It focused on the preservation of the material and artistic value of iconic monuments. It appeared as an answer to preserve iconic buildings from the modernity.

Later in the century, on 1964, a second document was subscribed (ICONOS, 2014). The Venice Charter, which differs from the previous one mainly because it was focused not in a single iconic monument. With the objective of keeping the historical atmosphere, the document tried to preserve the monuments within their surroundings (Paul Meurs, 2014). The Venice Charter values the conservation rather than the restoration and the restoration rather than the reconstruction (Hees, 2014). As a result it tried to limit the amount of intervention to the minimum and preserve the monuments as original as possible.

A third text emerged, the NARA document was subscribed on 1994. This document had a broader perspective towards the authenticity values. It differed from previous charters because it looked not only for material values present on monuments, but also for intangible features. Such as the architectural design intentions, the tradition, the spirit and feelings behind the building to preserve. By including intangible values, the NARA document lead to a different conservation approach (Hees, 2014).

The principles stated in the different charters are valid and useful. Nevertheless, they do not necessarily lead to successful historical interventions. The main problem of the charters is that, despite their evolution through time, they are standard documents that try to freeze monuments and contexts in time. However, neither the buildings nor the cities are a part of a museum; they are organic and changing environments. Furthermore, its essence to survive lies on its ability to adapt to the new realities given by time. They are alive not because of their beauty but for its

function. As a result, it is not only necessary to keep the past and the authenticity of a building. It is necessary to bring the monument's glory to the present, keep their values, transform its weaknesses and potentiate its soul to have a contemporary use and even a future life on our monuments (Zijlstra, 2011).

"A state without the means of some change is without the means of its conservation" (Burke,1990).

With this in mind, in order to do a successful conservation intervention it is necessary to first understand the monument. There are diverse procedures to assess values of a building, Analysing Buildings from Context to Detail in Time (ABCD) research method is one of them (Zijlstra, 2011). This particular investigation starts in a macro level by understanding the current context and even the past, when the building was built; gradually it goes to a micro level to its architecture and ends with detailed examinations (Zijlstra, 2011). Furthermore, the analysis is done from different perspectives: architectural, historical, social and economical. As a result 'ABCD' analysis can give a framework with a broad perspective about the features of the building to restore, which leads to a better understanding of the real values of the monument. Rather than search for pre-established values by charters, a design based on an analysis method leads to an intervention that recognizes the real and unique values of each monument and allows preserving its real authenticity.

Albert Einstein said: "If we knew what it was we were doing, it would not be called 'research', would it?"



Figure 2: Dejenne City

Source: Cotter, 2012

There are several monuments which real value do not lies on standard features and require an extensive analysis to determine it. One example of this is the Dejenne city located in Mali (Fig. 2). The monument main feature is that it was constructed with mud and as a result, yearly it is partially dissolved after the rain season. The community repairs and restore the building every year as part of a millenary religious festival. This feature leads to a monument that does not have a fixed form, since yearly it is repaired, yearly it changes its shape. As a matter of fact, the real value of Dejenne city is not the form of the building, it is the damage process of its material that leads to the repairing tradition (Paul Meurs, 2014). As a result, the architecture of the monument evolves with time, which is the essence of the building. A lack of understanding of this feature, or applying standardize charters values in a restoration process can destroy the repairing tradition, the real authenticity of the monument; which is the main feature that a restorer should look to preserve.



Figure 3: The Justus van Effen Residential Complex 1920

Source: Molenaar, 2014

The understanding of a building is transcendental to achieve a successful intervention. The Justus van Effen residential complex located in Rotterdam Spangen in The Netherlands was design by Michael Brinkman and built on 1920s. (Fig. 3) The project design was focused on the 'street life'. The plot distributed standardized departments units around a big gallery that emulates the street on the higher level of the complex. Additionally the project was designed around a central patio with share showers facilities on its core. These share spaces enhanced the social interactions between neighbours and created a community in the original housing project.



Figure 4: The Justus van Effen Residential Complex 2010 before Intervention

Source: Adams, 2010

Due to the modern life requirements, the project experimented a major renovation on the 80s (Fig.4). The apartments became bigger; the complex went from the 264 original units to 164. Insulation as well as new finishes were incorporated in the building. Additionally each department was upgraded with private shower facilities. Finally the appearance changed; the building complex went from being characterized from its brick texture to a white neutral painting. Even when the functional features of the building were upgraded the intervention was totally unsuccessful, because the renovation did not understand the building. The intervention destroyed the social interaction between the residents and the identity of the complex. As a result, with the functional upgrades, the project went from being a successful high-dense residential project into a slum (Molenaar, 2014).



Figure 5: The Justus van Effen Residential Complex after 2010 intervention.

Source: Molenaar, 2014

A new intervention took place on 2010 (Fig. 5). Differently from the 80's intervention this one started with a research to understand the values of the original project, what made it successful. As a matter of fact, the re-design tried to bring the original concept back, 'the street life', by redistributing the apartment modules and trying to generate again the community life towards the gallery. This intervention as well as the one of the 80's functionally upgraded the complex to adapt it to contemporary standards. However, the last one was successful because it

understood the building and its values. Despite of that, there are still problems with the cohesion of the neighbourhood, the security and that some elements like the shared showers (nowadays communal room) facility do not have the vitality of previous years; nevertheless the project was successful (Molenaar, 2014).

Both redesigns took similar approaches. They enhanced the functional features of the project and did an aggressive intervention to the original building. Nevertheless, what made the difference between them was that rather than applying a standard solution, the late intervention understood the complex; its approach was more scientifically, it looked for rescuing the values and tried to improve the weaknesses of the project. As a result, it saved the historical soul of the complex and gave the project a present life with the restoration.



Figure 6: The Soda Fabrik 2014.

Source: Cazorla, 2014

The uniqueness of a building can be discovered only when it is understood. The Soda Fabrik (Fig. 6), located in Schiedam in the Netherlands, was selected to be the focus of a renovation project at TU Delft on late 2014. This building was approached with an ABCD analysis method. After the research, the analysis concluded that the values on which the project was founded were diverse. The urban values were transcendental to define the program and the design intervention. Some of them were the connections to the city and the uniqueness of the neighbourhood, while the development plan of the city of Schiedam defined the new program (Fig 7.).

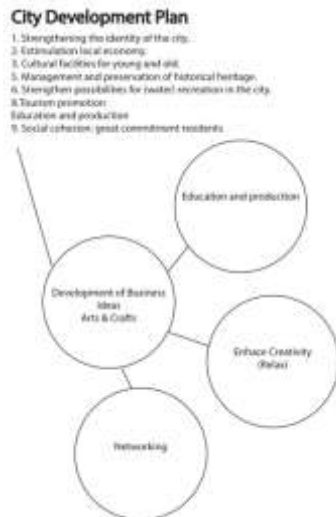


Figure 7: Program

Source: Cazorla, 2015

The building analysis, at an architectural level, highlighted some valuable features to preserve like: the shape, the different types of construction, the warehouse typology, the flexibility of the building and even some of the damage of the complex. Additionally, the design tried to preserve the production feature. The building used to house a soap factory of soap; therefore, the proposal wants to transform the Soda Fabrik into a factory of business ideas.

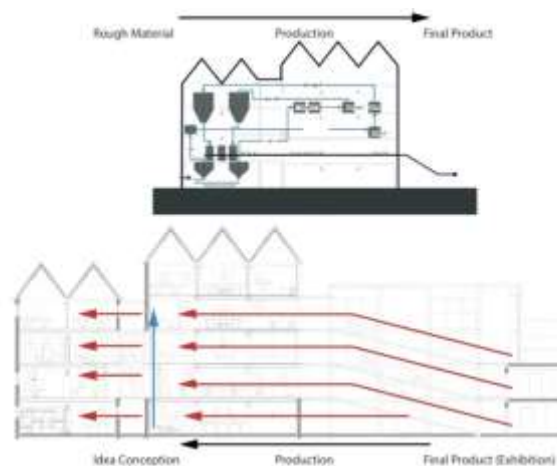


Figure 8: Soda Production / New Circulation

Source: Cazorla, 2015

The intervention was designed as an adaptive reuse. It respected the main buildings and created a few openings in the southeast façade to allow new circulation, which emulates the old soda process (Fig 8) and connects the old building with the new show room. Additionally, the new design tried to merge the not integrated complex of the project, which is partly composed by residential units and partly by industrial warehouses. With this addition, the design pretends to consolidate the project with harmony in a single complex but respecting the diversity of each unit (Fig 8,9).

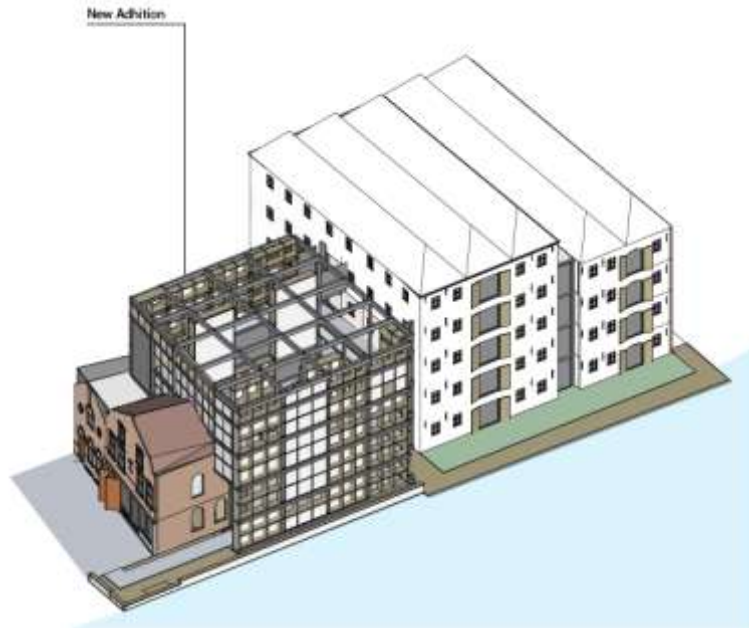


Figure 9: Soda Fabrik Intervention

Source: Cazorla, 2015



Figure 9: Soda Fabrik Intervention Façade

Source: Cazorla, 2015

The design approach to the Soda Fabrik tried to preserve the unique historical values, improved what was not valuable and adapted the building to host a new function. Rather than focusing only in preserving and freezing in time an old monument the design approach tried to bring the lost life and glory of the Soda Fabrik.

This essay as well as the Methodologies of Architectural Design course shows that there is an infinity of possible approaches towards the conservation of a building. However what dictates, which are the correct to apply in an intervention, is the value assessment that results from the analysis of the monument. The task of a restoration architect is to recue the past values of a building and potential them to the future, not to freeze buildings in time. Every project is unique, so it needs a unique approach to be successfully restored.



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