

## THE ARCHITECTURAL RECONSTRUCTION OR THE RESURGENCE OF THE RUINS

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### Abstract

Museums have become cultured places to exhibit art and to survive that context or social milestone within society. On numerous occasions, the great museums have been commissioned to collect architecture by plundering the original sites and taking away part of their soul, and in many cases, the originality of the work loses its meaning without its original location and vice versa. In the field of restoration, different are the theories and concepts that should be taken into account for optimal interpretation, always depending on the criteria and sensitivity of each author. For that same reason, the discussion between the suitability of the reconstructions or their interpretation is obligatory, using a wide terminology to describe each of the processes.

Keywords: **Heuristic; Elginism; Anastilosis; Remontage; Pillage.**

### 1. INTRODUCTION, ORIGINS AND MAIN EXAMPLES OF RECONSTRUCTIONS

The International Charter for the Conservation and Restoration of Monuments and Sites (the Venice Charter 1964) defines different concepts like conservation or restoration which one of main purposes is to preserve the art work, even as a historical witness, needing a review for the 21<sup>st</sup> century.

Within the discipline of architectural restoration would be the meaning of reconstruction, with all the breadth of meanings such as disassembly, reassembly, anastylosis, etc. all together and associated with them, others such as pillage, elginism or heuristics [1], perhaps, hence the difficulty with which the issue is addressed. A reconstruction would be defined from a simple volumetric or compositional execution of a building or part of it to anastylosis [2]. To these mean-

ings it would be necessary to introduce the architectural transfers, where all the most relevant archaeological museums worldwide would be proof of this: British Museum of London, Louvre of Paris, Pergamon Museum in Berlin, Metropolitan of New York, etc.

Regardless of the complexity in matters of conservation and suitability of relocating a monument to another geographical location and with a different climate, the originality of the work, the moment, the architects and the technology available for adaptation as a cultural phenomenon should be taken into account. Thus, we would say that in the field of reconstruction, as in Architecture, the result depends on sensitivity, taste, professionalism, ingenuity, etc. of the architect, like the surgeon in the operating room.

Although the Romans made transfers of obelisk and

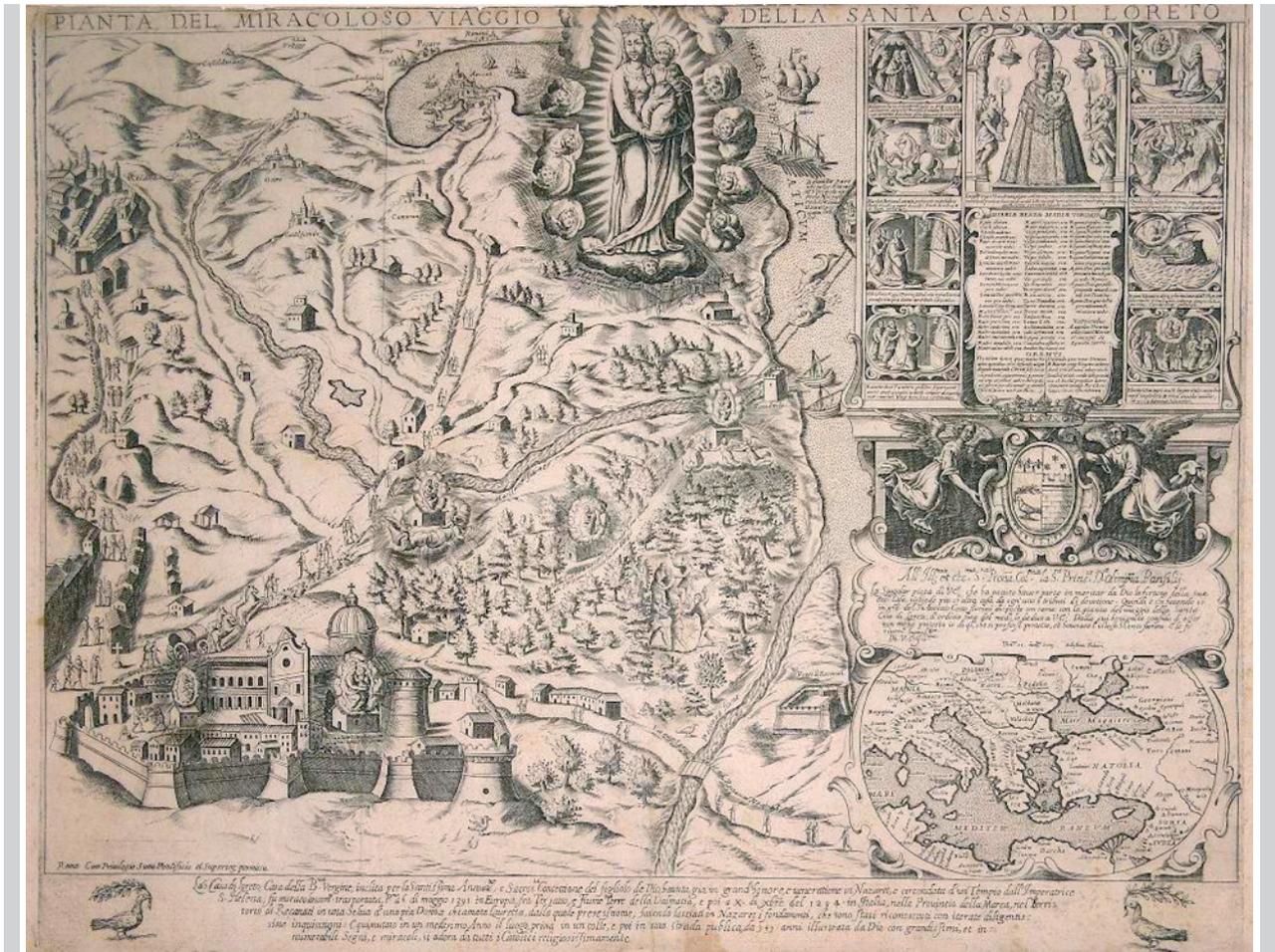


Figure 1. Transfer of the house of the Virgin Mary of Nazareth. Source: National Theasurus Archive

others, as for buildings themselves, we may find the origins of the monumental transfers at the end of the 13<sup>th</sup> century, when in 1291 the transfer of the house of the Virgin Mary of Nazareth to Iliria was made (Croatia) and then to Loreto (Italy), in 1294. According to tradition, when the Crusaders were expelled from Palestine, they took the masonry walls of the house of the Mother of God of Nazareth [3].

Nor should we forget that at the end of the 18<sup>th</sup> century in the military campaign of Napoleon Bonaparte to conquer Egypt, 167 scholars and 500 civilians accompanied the 35,000 soldiers and after the battles won against the Mamluks, these specialists were dedicated to carrying out plans and notes of his constructions, in addition to its pillage (Description de l'Égypte was a serie of publications between 1809 and 1829 which catalog all aspects of Egypt during the french army expedition). This term in the architectural field, has elginism (understood as pillage, plunder) as a synonym, term coined by the poet Lord

Byron (George Gordon Byron (1788–1824) was an English poet and politician, and is considered as one of the figures of Romantic Movement. He traveled through Europe, live in Italy and joined the Greek War of Independance and died leading a campaign) for the conduct of Count Elgin for the sacking of the main monuments of Athens, moving them to England. Do not forget the private collector William Randolph Hearst, portrayed in the film Citizen Kane, compulsive collector of medieval art in the twentieth century [4].

There is a lot of heritage pillaged in the history of architecture and that can be observed in prestigious museums, opening a mandatory debate on the possibility of return or reproduction to compensate for the emptiness and ruinous state with which the original monument or site remains. However, to be able to judge fairly if it is an adequate plunder, it would be necessary to weigh between the relevance of those objects pillaged in the current location and the null



Figure 2.  
Belchite is presented as a museum ruin. Source: Luis Cortés, 2013

prominence or ruinous state with which they were prior to the pillage, in addition, of the logical value architectural and aesthetic in the monument as a whole.

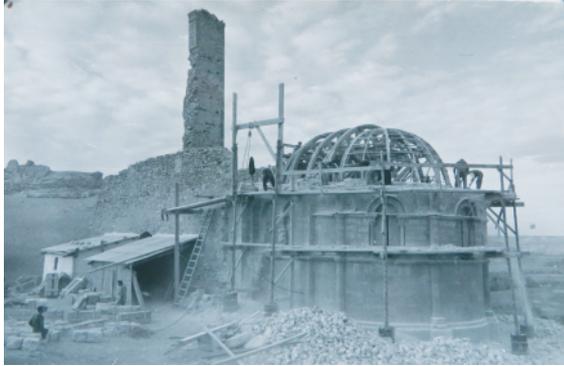
## 2. THE SUITABILITY TO REBUILD

There are two issues that are totally opposite and that would need to be clarified regarding the concept of reconstruction. The first would deal with the process of disassembly, transfer, reassembly of the monument or architectural element to its new place and the state of ruin with which the original site where the monumental element was located after the pillage [5]. An example of this aspect would be the altar of Pergamum, now located in the museum that receives the same name in Berlin. The second would be related to the functional need for the recovery of a space or symbol after a sudden event, examples of this aspect being reconstructions of neighborhoods (Warsaw or Munich after World War II) or monuments after earthquakes, wars or other causes, like fire in Notre Dame, Paris.

Analyzing both aspects, the first is due to the vagaries

of fate and elitist promoters and is open to criticism and jealousy of those who feel cultural owners of the pillaged. The second is due to catastrophic situations and has a greater impact and is posed as a common problem of social interest. However, although both have a similar effect on the original site and leaving it as a ruin, the approach and suitability of the restorative intervention, reconstruction in this case, would be totally different.

In the first case, criticism and debate are the only actors while the pillage is carried out and consolidated. In the second, it seems that the reconstruction intervention is practically obligatory because there is a community need to use or recover an image, appealing to the patriotic feeling as a promoter of the theoretical ideal, leaving the intervention criteria in the background. In this second aspect, it would be necessary to alert with the time factor, since if a long time elapses without the recovery of a ruined space, the coming generations will not see it as necessity and the total loss of it will occur or it will come to be presented as a museum ruin or archaeological site, such as the Acropolis of Athens or the town of Belchite in Spain, bombed in the Spanish Civil War. In this case,



**Figure 3.**  
The apse of Fuentidueña was traced to the New York museum of The Cloisters in the middle of the 20<sup>th</sup> century. Source: Alejandro Ferrant, 1953



**Figure 4.**  
Reconstruction of the church of Vilar de Donas, in Palas de Rei (Lugo). Source: Alejandro Ferrant, circa 1934

the danger of heuristics must be alerted as collection and discovery of sources of knowledge, or the art of inventing, an aspect that should never be allowed in architectural restoration.

Together with these two basic questions, there would be the intellectual discourse with the consequent opposing opinions between the right and the most rabid and profound criticism of the suitability of the intervention, and leaving open a debate in which economic and political interests are above the legislation, allowing the bureaucracy all the possibilities to undertake the desired act. Finally, the factors inherent in this issue would be the approach and suitability of rebuilding the pillaged element, since current technology and available materials allow it. A necessary debate must be opened to address heritage conservation.

### 3. EXAMPLES OF REASSEMBLY AND RECONSTRUCTIONS

As we have been referring to the discourse of the terms of reconstruction, we should also establish the differentiation between reassembly and reconstruction, since a reassembly would also be within the reconstruction variety but this meaning would be determined to those works that have been previously disassembled, reserved only for historical materials such as stonework or wood. As examples of reassembly we would have that of the stony apse of Saint Martin of Fuentidueña (Segovia) [6] in The Cloisters museum in New York or the Lazarus wooden church in Kizhi (Russia).

In the case of the reassembly, the materiality of the work is fundamental, leaving in this case only wood and stone blocks; In this second case, once the binder and the filler have been removed, the ashlar can be reused for relocation. In the rest of materials such as the earthwall, it would lose all sense its disassembly and it would be more logical to perform the reconstruction of the same but applying the same method and constructive technique to preserve, at least, its technique. This would be the case of Japan with the wooden heritage, that when a certain scheduled time elapses, a replica is made next to it and the previous one is dismantled, thus preserving the technique and volumetry but not the matter. In the second case, disassembly and reassembly of stonework, its practice would be advisable when the only way to guarantee its structural stability or its durability is to disassemble part of its walls and vaults for reconstruction, as in the case of the church of Vilar de Donas in Spain or the church of Ambrières in France, where the architects dismantled part of the building and rebuilt it again with the same stones. Another similar case, but with greater historical impact would be that of Abu Simbel (Abu Simbel is an UNESCO World Heritage Site which was dismantled and transferred into an artificial hill in 1968 to prevent its submerge due to the creation of Lake Nasser, an artificial water reservoir), in which the stone was cut, dismantled, a large concrete vault was built to simulate the mountain on which it was located and the temple was raised to an upper bound to rescue it from the waters of the Nile.

As for reconstructions, some of Europe presents examples after World War II, where neighborhoods or entire cities were reduced to rubble, as would be the case in Munich or Warsaw. It is logical that after these misfortunes of history, a reconstruction is proposed, a completely correct decision from the politi-



**Figure 5.**  
The ruins prior to the reconstruction of the Campanile of Venice. Source: Galleria dell'Accademia, 1902

cal point of view and as a meaningful symbol of the resurgence of the city, but questioning whether the idealization of the previous neighborhood is correct as to repeat it with the same avatars and urban problems. Other famous reconstructions of heritage buildings would be the Dresden Frauenkirche or the Mies pavilion in Barcelona; the first, recently rebuilt after being bombed in World War II, the second for the impulse to recover an emblematic work of an emblematic architect. This is where the concept of Brandi (Cesare Brandi (1906–1988) was a historian and specialist in restoration theory, and became the first director of the Istituto Centrale per il Restauro in Rome) would be well applied, “only the subject of the work of art is restored”, the historical cultural concept being questioned, but preserving the image and use [7].

One of the first issues that are inherent to the term of reconstruction is the one of ruin and that the suitability of the reconstruction of the monument or heritage building should be considered, taking into account many aspects such as technical and material, mainly, but the case study should be understood individually and in detail, not being able or limiting much a generalized methodology and resorting to homologous cases at all times. It is not the same to treat the reconstruction of an earthrammed wall tower than and of a stone apse, since any element made with earthrammed could be considered as monolithic and a stone factory as non-monolithic, discontinuous and anisotropic, in case of demolition of which the ashlar can be recovered. In the first case, it would be a question of volumetric recovery through reproduction or reinterpretation, such as the Campanile of Venice and/or reconstructions of the walls or castles. In the second case, the reconstruction with the recovery of ashlar, if there is an archaeological methodology to

relocate each of the pieces and/or parts that compose it, would be called anastylosis.

#### 4. REPRODUCTION AS AN ALTERNATIVE TO THE ORIGINAL

Another controversial case would be the restoration of decorative concrete elements in churches or heritage residential buildings made at the end of the 19th century or in the 20<sup>th</sup> century. In these cases, the facades or some elements are made of concrete and have a little metal reinforcement inside, but that has undergone the oxidation and corrosion process because the concrete has carbonated and the piece has cracked and / or even part of it has fallen. In these cases, the most logical and coherent thing is to reproduce the piece, being the reproduction of another the valid concepts for the term of reconstruction. And we would not only be talking about the modern facades of a century, but also those stone ones that due to the erosion the stone has degraded or follows a degradation process so it is necessary to intervene for the preservation of the monument.

It is in these cases where the originality of the work could be debated, but it should not be questioned that interest in the preservation of the monument would prevail, asking what is more important, the message of the work within the phenomenon of the monument or the materiality of the same [8]. For these cases, there is enough technology to reproduce the original support in a mimetic way and they faithfully imitate the ruined element. As a more famous example we would have the reproduction of the Caryatids of Athens, whose originals are in the British Museum in London, and that of the Erechtheon which would lose architectural meaning and value without the image of humanized columns.

However, this discourse should not focus only on the subject of the intervention, but also the suitability of reproduction, since there is currently a wide possibility of means to make copies with stone or other materials. Architecture has to meet three basic requirements, which, as Vitruvius cited, are utility, beauty and firmness (Vitruvio, I BC), so if any of these three conditions is reduced, it would be necessary to restore it for the architectural purpose.

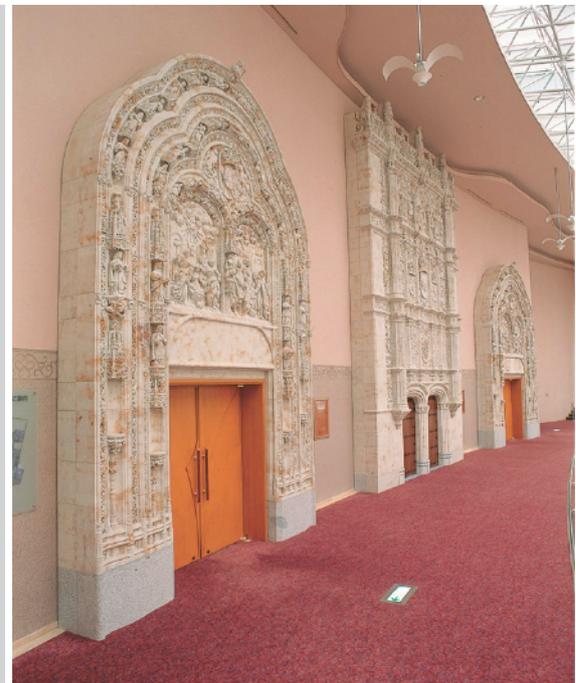
A theme derived from reproduction would be that of scale replicas [9], and can be understood as a superfluous whim and / or a tourist attraction. Although there are replicas of different monuments in various locations such as the facade of the University of Salamanca and the portico of the Glory of the



**Figure 6.**  
The Caryatids in their original place. Source: Manolo Cortés, 2004

Cathedral of Salamanca in Gifu (Japan), the Eiffel Tower in different locations, the portico of the Glory of the Cathedral of Santiago at the Victoria & Albert Museum in London, the Puerta del Sol in Shima, the Giralda of Sevilla in Kansas City or the Holy Family of Nikko, for example, these lack the originality with which they were projected and executed, that is, the soul with which the masters created them is missing, as well as other no less important concepts, such as having in mind that in their days they were prodigious and pioneering works.

It is not always advisable to copy the old element, nor recover the mimetic image of it. It has already been said that the controversy and criticism in the restoration depends on the impact and repercussion. Sometimes and in case of certain details, its volumetry can be recovered with a capable solid, habitual practice in the reconstruction of capitals and recovery of elevations of ruined temples, as in the case of the Medina Azahara (Córdoba). In other cases, we have seen how the designer has preferred to introduce contemporary images that blend into the context of the monument, as has been given in the Calahorra cathedral or the best known example, that of the



**Figure 7.**  
Replica of the facade of the Salamanca Cathedral for Gifu (Japan). Source: Jason Jenkins, 2014



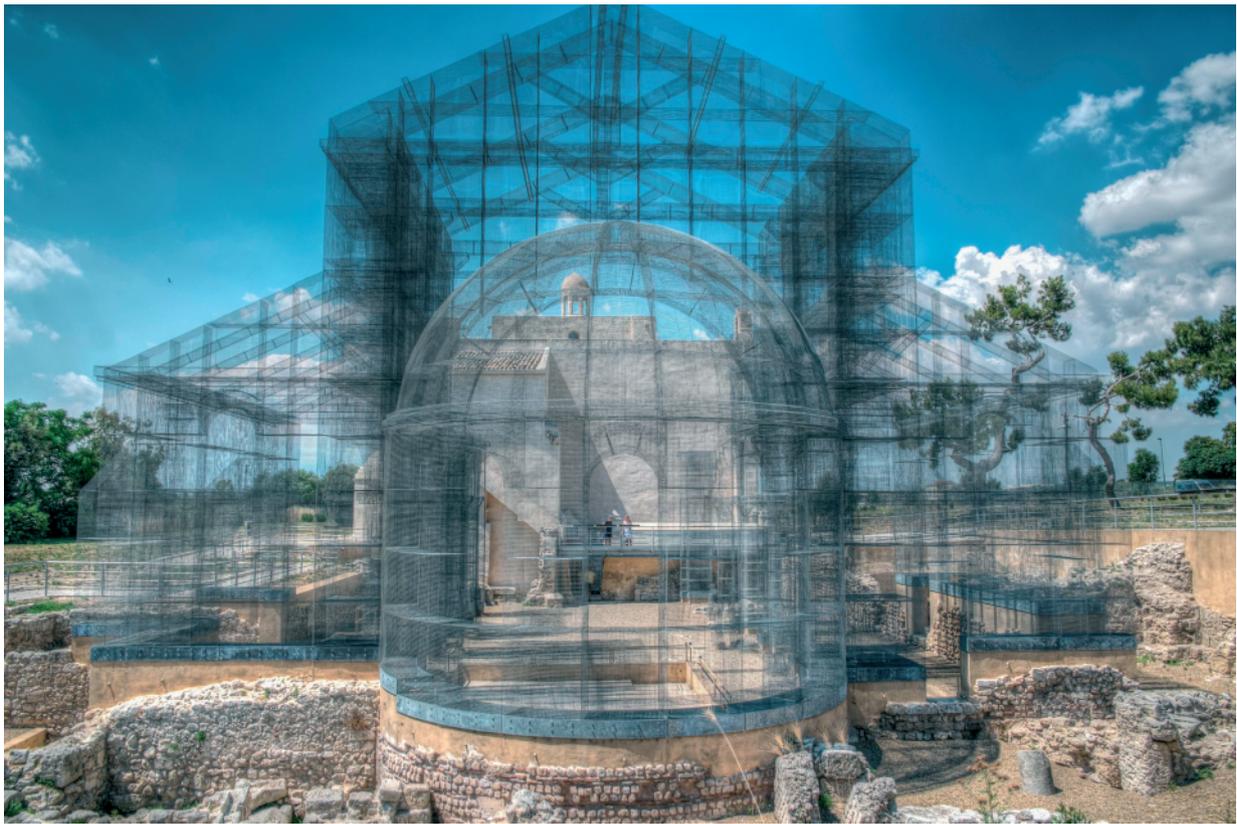
**Figure 8.**  
Sculptural reinterpretation for the recovery of an image in  
the cathedral of Salamanca. Source: Luis Cortés, 2017

Salamanca cathedral with astronaut sculptures or the demon with a cone of two balls sculpted in the maines of its cover and complementing the decorative void. However, in other cases it would be necessary to resort to a reproduction to preserve the original heritage element of a devastating action by a continuous use or action, being able to offer the viewer a repro-

duced image for contemplation. Such is the case of the caves of Altamira (Cantabria), having reproduced the caves with the Neolithic paintings and having carried out the ideal musealization of a World Heritage Site and preserving the original, since special conditions of humidity and temperature must be given.

## 5. DIVERSITY OF MATERIALS FOR AN IMAGE

One of the requirements of the architecture is “image”. Vitruvius called it “Venustas”, alerting the current theory of restoration not to commit a false history (A restoration principle and translated to Architecture field as “architectural fake” by Antoni González Moreno-Navarro ) [10]. Once the reproduction, reconstruction or replication is accepted, the material of this should be questioned, whether it would be successful or not to use the same material – with the same treatment or not – or a different one. This approach, according to international restoration criteria, would be more focused on reconstructions where it is important to differentiate the new work or addition with respect to the original.



**Figure 9.**  
Basilica of Siponto (Italy). Source: Jorge García, 2017

It is clear that virtual reconstruction is, at present, a fundamental task at the theoretical level to address the issue of monuments in ruins and reconstructions. This method is valid to obtain the digital model but never the physical one, so it would remain in an experimental plane. However, the aforementioned model would also serve as a graphic document when addressing physical reconstruction, both for anastylosis and for a reassembly.

What every designer should consider when it is built is the suitability of the material for the environment and the climatic conditions of the work, the term of durability having to be considered first and in the case of architectural restoration, reversibility in the second place. Although there may be as many possible materials as the designer would consider, from the stone or resin to the glass, the material will define the impact on it, since a rather permeable and visually porous material will blur the volumetric effect on the immediate environment, as the vitreous dome of the Reichstag in Berlin or metal mesh in the church of Siponto (Italy) and will have an ephemeral character, but being a volumetric reconstruction. On the contrary, if we use an opaque material, the result will have a greater presence and will be an example of built architecture.

As a concise conclusion, the purpose of the architectural reconstruction would be to give utility (*Utilitas*) to the monument (*Venustas-beauty*) with the necessary firmness (*Firmitas*) (the three principles of architecture defined by roman architect Marco Vitruvio Polion on its treaty *De Architectura* and considered the first treaty of classical architecture and construction) [11].

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