



Fig. 1. Roman tower of Hercules, La Coruña, Spain



## THE TRANSFORMATION PROCESSES OF ARCHITECTURE THROUGH TIME. METHODOLOGICAL AND THEORETICAL CONSEQUENCES IN THE PROJECT AND IN THE RESTORATION WORKS<sup>1</sup>

**Pablo Latorre**

Architect of Fundación Caja Madrid, SPAIN  
platorregonz@gmail.com

*Architecture suffers a continuous process in time of elimination (-), conservation (=) and overlapping (+) of construction materials, that are removed or kept in its original position according to the successive modifications the vitruvian variables (shape, function and construction) acquire to adapt to the environment (natural and human) in which they are located. This continuous process of transformation of architecture through time causes the stratification of the construction materials setting it as the most complex object of the material culture of a society. The restoration project will equip the monument with its last constructive stratum thereby constituting the last phase of this process.*

### **Keywords:**

archaeology – heritage – history – transformation – project

### **1. Fahrenheit 451**

*“- How many of you are there?*

*-Thousands on the roads, the abandoned rail-tracks, tonight, bums on the outside, libraries inside. It wasn't planned, at first. Each man had a book he wanted to remember, and he did. Then, over a period of twenty years or so, we met each other travelling, and got the loose network together and set out a plan. The most important single thing we had to pound into ourselves is that we were not important, we mustn't be pedants; we were not to feel superior to anyone else in the world. We're nothing more than dust jackets for books, of no significance otherwise.” (BRADBURY, 1953: 153)*

I would like you to remember Ray Bradbury's novel “Fahrenheit 451”, from which this text has been extracted or the movie by F. Truffaut based on it. In both of them a future world dominated by mass media is depicted, where writing and lecture are prohibited. To enforce that law, there existed a force of fire-fighters whose task was burning all the books that were requisitioned and arresting their owners.

To remedy this cultural catastrophe, a small group of outlaws had decided that in order to conserve and preserve into the future the literature from the past, each member should memorize his favourite book and adopt as his clandestine name the title of the book they

had chosen. This book should be transmitted orally, from father to son, so that each family guaranteed its conservation through time.

### **2. Memory and the evolution of the book-keepers society**

Let's imagine for a moment this small, un-submissive society, after a lot of generations have passed on. We must deduce that finally no printed book would exist and that the majority of books would have disappeared forever, as only the ones chosen by the book-keepers would remain, conserved in their memory. From that moment on, some texts would also disappear. On the other hand the impossibility for the book-keepers to make a contrast between their memory and the original written text would establish a relation of dependence between the transmitted text and the person in charge of its preservation, as each of the book-keepers would not have any other reference but his own memory.

At some point in this process it would be inevitable that some of these book-keepers forgot a portion of the text. We can imagine this person reconstituting the forgotten portion for not disrupting the recitation and giving some unity to the global comprehension of its narration. It is also possible that some of these people

<sup>1</sup> Revised and published in 2002, *Quaderns Científics i Tècnics de Restauració Monumental 13, I Bienal de la Restauración*, Barcelona: 161-177. Translated by Nicolás Latorre Gende.



Fig. 2. Poster of the film 'Fahrenheit 451' directed by François Truffaut

would consciously modify some paragraphs that were not of his liking, thus impoverishing or enriching the original text. We can safely say that, over time and parallel to the evolution of the book-keepers society, the original text would suffer a slow transformation process.

Generation after generation each of these people relying on their memory, on their capacities and imagination, in a natural and unconscious way, and without premeditation, would change words, transforming and updating the memorised text. The transformation would adequate to the evolution the language that the book-keepers would have, to the personal way each of them would have to express himself, to the likes its society had in each moment of his evolution, etc. If there had existed two branches

of book-keepers that had memorized the same text, surely there would be two versions of it (as each one would have evolved differently) more extended or, with more characters in some than in others.

After a long time, in a ferocious fight against oblivion, some texts would have been modified substantially and others, in return, would be conserved largely intact. At that moment, probably no one would know which were the original words, how many of that written book –that had been burned- were conserved and how many had changed.

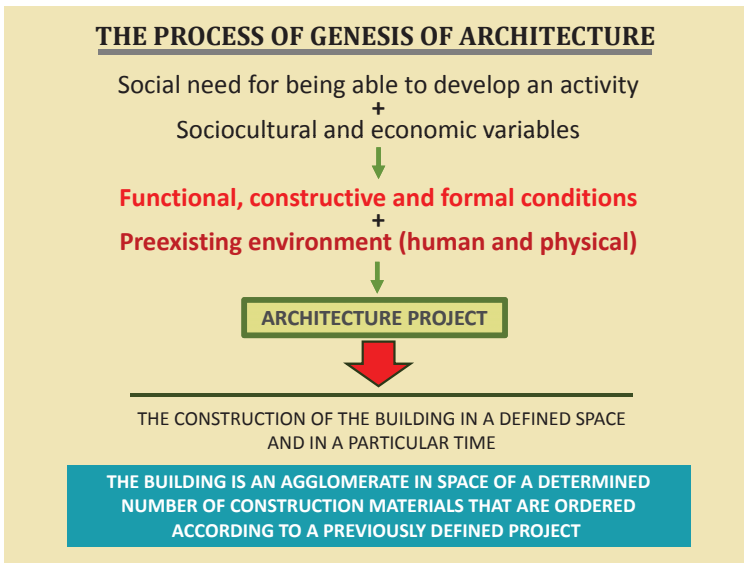
If the most outstanding quality of that text was the way the language was used, he would probably keep intact the rich and suggestive paragraphs. On the contrary, if its value was in the description of some important facts, it would have been transformed, exaggerating these facts, ennobling the heroes and debasing the wicked. Little by little, the text would have been enriched with new characters and situations until reaching the form the last book-keeper would had versioned. Despite these changes, the text would keep –with absolute certainty- its original plot and a narrative cohesion, with a coherent beginning, middle and end.

In fact, moving away from the utopian image transmitted in Fahrenheit 451, I am simply describing the usual methods that the oral transmission of epic poems had in antiquity. In the prologue that R. Graves writes in his youth version of the Trojan War, he describes this transmission mechanism in an easy way: *"Homer's poems are by no means the only source of the legend, in fact, about two thirds of this book are*



Fig. 3. Beethoven walking as a book-keeper.

Graphic 1. The process of genesis of Architecture



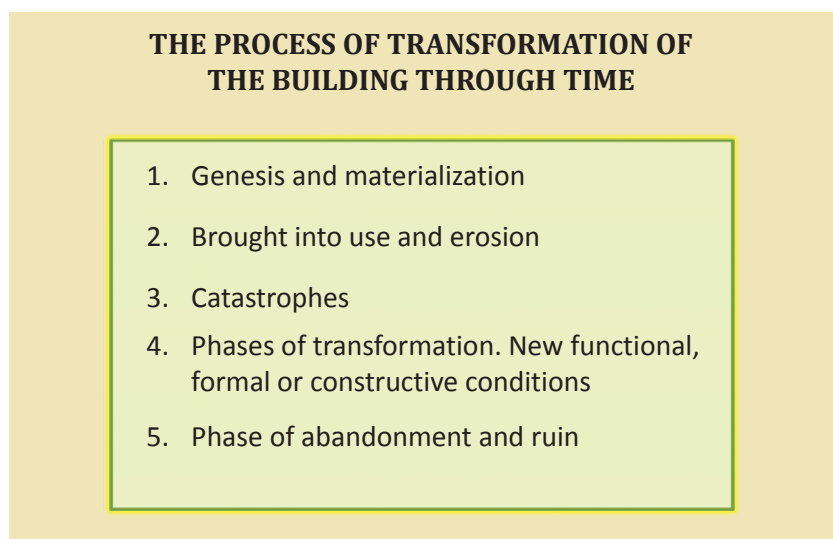
based on other Greek and Latin authors. Yet, by linking the different stories, I am surprised to discover how well they match. Much of the story has historical significance, even though Homer borrowed the escape of Paris and Helen from another epic poem, and even though the famous wooden horse was, according to some writers, only a siege engine” (GRAVES, 1999: 11).

### 3. The transformation processes of architecture through time

This metaphor, about the processes of transformation of texts memorized by the society of book-keepers –as Ray Bradbury had imagined- allows us to draw a parallel between these and the processes that cause the transformation of architecture through time.

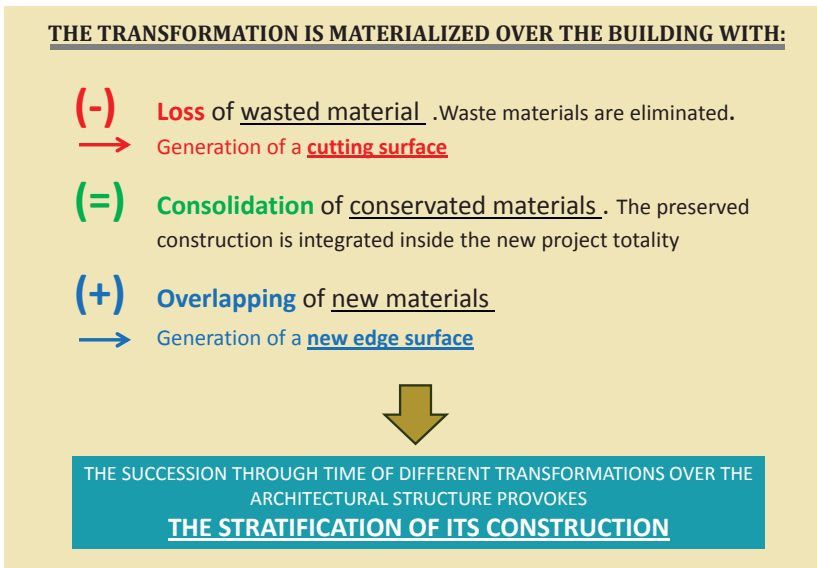
In this parallelism, the words forming the sentences would be the stones that raised the walls, the stone pillars, the arches; the phrases that make up the paragraphs would be the constructive elements composing each and every part of the building, and the different chapters would be the head, the transept, the dome, the nave or the facade of our historic construction.

The text remembered by the book-keeper -transmitted orally generation after generation- would have a similar structure to the one that could show the historical building, as both of them would have suffered through time continuous transformations from their original shape; from the most simple ones, like a word or an ashlar, to the most complex like the emergence of a new character or a new chapel, the



Graphic 2. The process of transformation of the building through time





change of the end of the story or the transformation of the project that allowed to finish a cathedral tower or the palace that had been initiated around a project that had already expired. But, despite the changes, as important as they may be, the conserved historical building and the remembered text maintain an unity, as an architectural object and as a literary narration, precisely that one that society, the last book-keeper or the last restoration architect entrusted with its conservation would have imposed on it.

In order to structure the mechanisms and the transformation processes of a building through time, we can begin imagining a recently constructed building by a social group to satisfy a specific demand. The building, obviously, will be formed by an agglomeration of a determined number of construction materials in a particular manner. As we know, the characteristics, the shape and the positioning of the materials in the building will not be random and will respond to a previously established program that is the architectural project. This project has its origin in a series of necessities and socio-cultural and economic variables that can be resumed in the well-known conditions of: **function, construction and shape** attributed to Vitruvius (Lib.I, Cap.2) that had been so important in the definition of architecture.

Once the construction of the building is concluded, its success or failure will depend on its capacity to respond to the expectations created by the society that fostered it, ergo, to satisfy the functional, constructive and formal constraints that boosted its

construction. A badly projected or badly constructed building will suffer immediately the transformations needed to correct deficiencies and to accomplish the program imposed for its execution. It is possible that its pathologies will not appear immediately and that

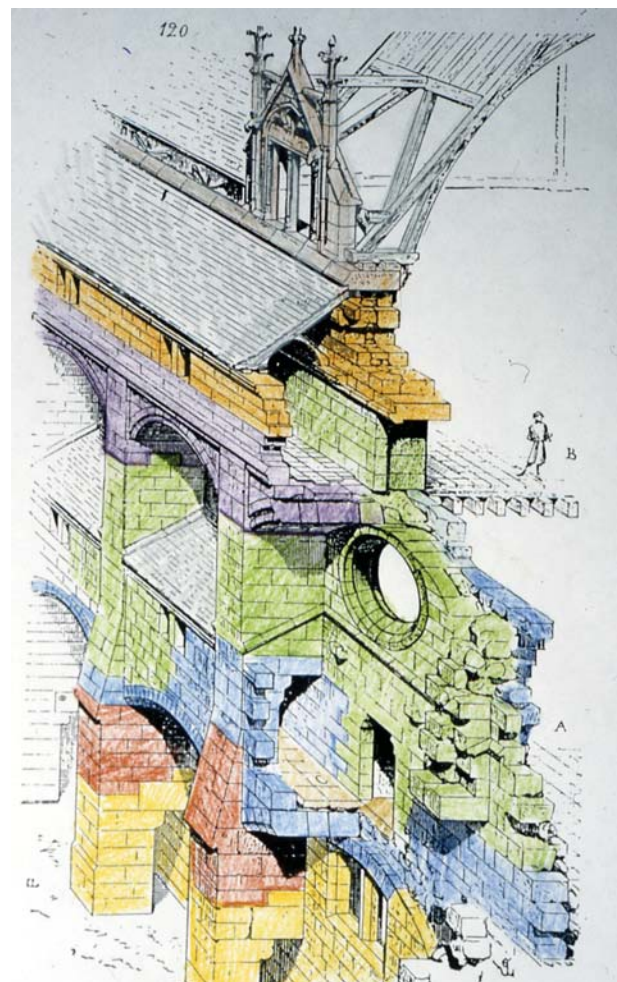


Fig. 4. Different historical stages of the building colored on a Viollet-le-Duc's drawing (VIOLLET, Book IV: Plate 120)

the project or construction deficiencies will appear afterwards. If the building does not receive the required maintenance, the interaction with its environment will finally provoke its degradation. Deterioration can also occur suddenly, through any type of disaster, such as wars, fires or floods. The passing of time will inevitably end up transforming the social group that uses the building, its numbers, its necessities and its manners, which will force the building to transform with them.

The need to transform an architectural structure appears at the moment it is proven unable to adequately satisfy the functional, constructive and formal conditions that society imposes on it, in a particular moment. In the history of a building, many small or medium transformations, like the aperture of a hole for different uses, the repair or replacement of deteriorated constructive elements; the implantation of new technical installations, etc. will happen constantly. These small modifications will be framed between changes of greater importance, such as building a new chapel, the extension of a wing cell, the construction of a new floor, and so on. Usually, the most important transformations a building suffers will match the most significant historical moments of the social group that uses it and the smaller

transformations will match the usual functioning of the building over time.

Finally, when the last social group that uses the building disappears, when there is no more use for it or when its state of degradation makes economically unviable its rehabilitation, the building will be abandoned or it will be demolished and replaced by a new one. Given the limited destructive capacity, the availability of resources and the survival over time of ancient constructive systems, it was fairly common that the materials of the abandoned building were reused in the new building and even most walls were kept in the same location if their layout matched the one of the new building. An abandoned building becomes an archaeological remain when the society loses the memory about it and of the social group which promoted it.

#### 4. Stratification constructive mechanisms of architecture: its archaeological condition

Any transformation that is undertaken in an architectural structure, regardless of its importance, must necessarily occur with the removal of waste



Fig. 5. Wall with traces from different historic stages. Monastery of Santa María de Carracedo, León, Spain. Restoration project by Susana Mora and Salvador Pérez Arroyo.

### PRINCIPLE OF MATERIALS IMMOBILITY

#### The movement of the materials

from the position they were once rigged provokes:

- A. The loss of the documental values associated to the set of eliminated materials
- B. The disappearance of the stratigraphic relations that maintained between them and with the materials preserved in the building

THE MOVEMENT OF MATERIAL, PROVOKES THE IMPOVERISHMENT OF THE STRATIGRAPHIC RELATIONS AND, THEREFORE, OF THE EVOCATIVE EFFECT OF THE PASSAGE OF TIME IN THE BUILDING

materials, the treatment of the materials that will remain in position and the overlap of new materials over the conserved ones. This process of constructive **elimination (-), conservation (=) and overlapping (+)** of materials is three-dimensional and will happen from the surface of the object to its core. Each action will act over the preceding one. Logically, the material remains of the oldest transformations will have less presence over time as they are the ones that suffer more transformations and therefore a more intense selection process. But it happens also that with each new transformation, the oldest materials will have proven their worth and importance in the composition and will also be more likely to be hidden and protected by materials of subsequent actions; as a result their removal will be increasingly unlikely. Over time, the historic building materials shall be placed successively one on top of another, stratified from the oldest to the most modern following the order established by the succession of transformations throughout its history.

The historic architecture is the result of an ongoing process of elimination, conservation and overlapping of new construction materials over the ones that composed the original building. The combined effect of these three constructive actions (elimination, conservation and overlapping) will provoke the stratification over time of the materials used in its construction, which gives the building its archaeological condition.

#### 5. The principle of immobility in the materials of a historic building

The history of the buildings is the history of their transformations and the causes that provoked them,

the history of the societies that created them, their culture, their economic and social status, and there is an **unique** and **certain** relationship between its history and the “**order**” of the materials in its construction. The historical value deriving from an architecture of the past lies precisely in the links that can be established: first between the conserved materials and the order these have in the construction, based on the succession of constructive actions within the building; and, second the one that can be established between this succession of constructive actions, and the reasons and the economic, social and cultural conditions of the society which, in each historical moment, promoted those changes.

However, it will not be always possible to infer the succession of facts and events from the study of the walls and the location of the materials. Correlation between materiality, placement of the object and the succession of historical events it is not immediate. It is often full of blackouts, empty spaces and falsifications, and its interpretation requires carrying out a meticulous investigation with all the historical techniques at our disposal. Historical study of the building must contribute with a rational explanation of the succession of constructive facts which, from the placement of the foundation stone on virgin ground, have been modelling the first configuration of our building until reaching the one it has nowadays.

It is precisely at this point where the recognition of the stratified character of historical architecture opens a very important parenthesis in the methodology and research techniques. Following an archaeological methodology, the stratigraphic study allows us to obtain a chronological sequence of the construction of a historical building. The most important consequence



of this fact is that any movement or elimination of construction materials that is produced –something inevitable during a restoration process- will provoke not only the disappearance of the stratigraphic values intrinsic to those materials, but also the disappearance of the stratigraphic relations established between these materials and the ones conserved in the building. In fact, there is always a loss of time value and documental information in restored monuments, when we move the construction materials from their original placement.

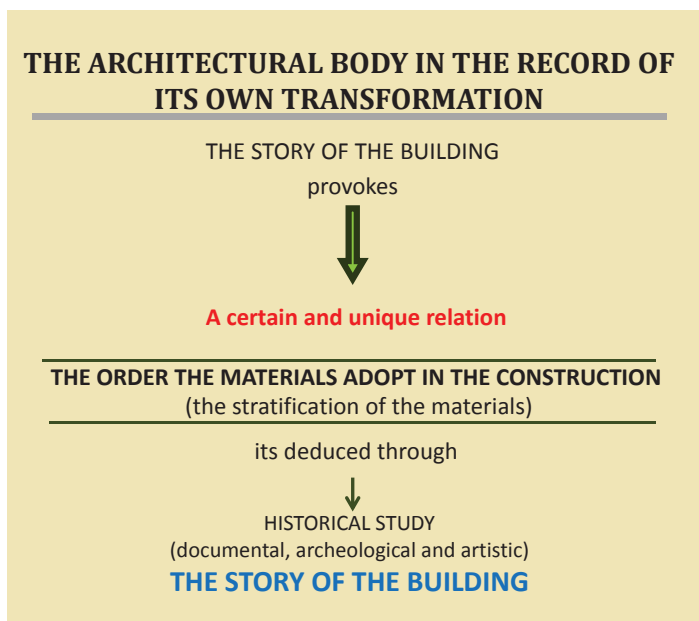
Methodologically, we can compare the destructive effects that digging a site has over the archaeological information, with the ones that a restoration process has over a historical building. With this in mind, and, from the stratigraphic point of view, in restoration we would be using the same techniques applied to the first nineteenth-century excavations, whose unique goal was to recover archaeological artefacts, and where the stratigraphic relations were essentially unknown. In this context, we have to frame the postulates of the most conservative and “Ruskinian” positions of architectural restoration which, without knowing the stratified character of architectural restoration, had recognized that the loss of documental, temporal and historical values of the monuments was related with the movement of materials and the transformation caused by restoration works.

Once we discover and accept the stratigraphic character of the constructive process of a building over time, we should establish a specific methodology that could allow us to address its “archaeological

excavation” which could allow us to work on the restoration process with all the “destructive” liberty we theoretically have when we work on a dig, as long as the eliminations which are carried out are documented and stratigraphically analyzed. The application of the stratigraphic analysis of historical construction method –systematized by the Chair of Medieval Archaeology at the University of Siena (PARENTI, 1985: 55-68; 1988: 249-279; 1995: 19-29; 1996: 13-23), and in Spain by L. Caballero (C.S.I.C.), A. Azkarate (U.P.V.) and A. L. Mullor (S.P.A.L.) (CABALLERO, 1995: 37-46; CABALLERO, 1996; AZKARATE, 1999)- is an indispensable tool to understand and study all the complexity of constructive situations that appear on a historical building; but above all, to establish a valid archaeological methodology to perform the movement, transfer and elimination phases of construction materials during restoration works.

**6. The double condition, historical and architectural, of both materials and the historical building**

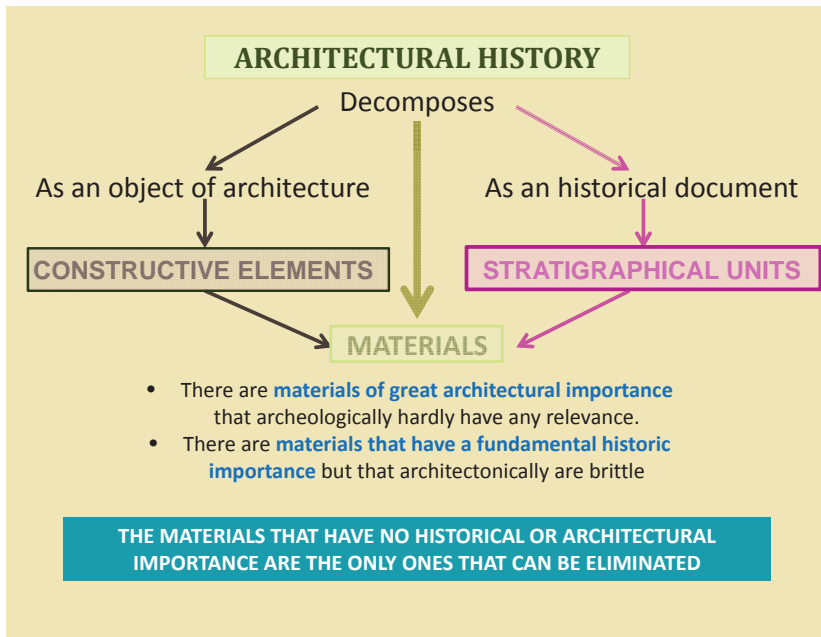
Parallel to this stratigraphic assessment of historical architecture, we must have in mind the condition of historical buildings, as architectural objects. Each transformation of a building involves the appearance of a new architecture, where the preserved materials from former transformations, together with the new materials, compose a new architectural unit that, regardless of its constructive process, will respond to the functional, constructive or formal conditions which have been imposed during the transformation. A pillar, a wall, or a dome may be formed with materials of



Graphic 5. The architectural body in the record of its own transformation



Graphic 6. Architectural history and materials



different historical periods but they fulfil a determined architectural role that has become established in the last transformation of the building.

Thus, the materials that form a historical building have two conditions: the architectural (the ashlar is a part of the pillar) and the historical (the ashlar was placed in a particular historic moment). This double condition may provoke that some materials, with no architectural relevance at all, may own a fundamental historical importance, since they represent the last testimony of a particular transformation of the building which, inevitably, will disappear as the material vanishes from its placement. In a parallel manner, there are some materials with a key architectural importance that however have hardly any historical value.

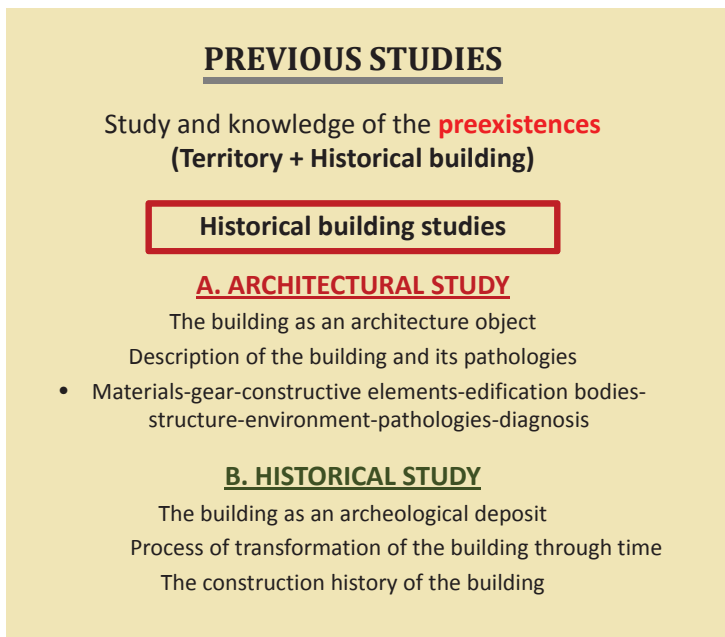
This duality of materials and the architectural object itself that, simultaneously make it an object of architecture and an archaeological excavation, has caused many of the conflicts and controversies that have marked the history of architectural restoration. The building as a historical document and as an archaeological excavation, cannot and should not be altered or modified; however, in its condition of architectural object, it must necessarily be renewed and transformed in a continuous way, to respond to the physical and human environment in which it is framed. As discussed in the previous part, the recognition of the layered character of historical architecture opens a methodological approach with which we can resolve this dilemma –with no apparent solution- as it allows us to use archaeological techniques with the loose

construction material that is produced during the restoration process.

However, in order to “project” these losses and tackle them during the work phase of the “archaeological excavation” of the monument, it is essential that, in the phases of study, analysis and diagnosis prior to writing the restoration project, we carry out both the architectural study (functional, constructive and formal) of the historical building and its historic and stratigraphic study; unifying them into a unique model of “behaviour”. Methodologically, the analysis and previous study phases of the building must be dealt with the recognition of this double condition of historic buildings: the “**synchronous**” approach corresponding to the building in its current configuration –just as we receive it from the past- understood as a functional architectural body with specific functional, constructive and formal characteristics and with particular pathologies; and the “**diachronic**” approach which will study it as an object resulting from a complex process of transformation over time.

To establish comprehensive models of analysis, I would like to focus your attention first on the structured way Viollet-le-Duc raised the analysis and study of architecture, starting from the individualized analysis of materials and their union in constructive elements. Viollet-le-Duc, understood that architecture is an organism built from the union of a determined number of materials and that, from this union derives its fundamental aspects, shape, architectural style,

Graphic 7. Previous studies for restoration



composition, spaces, light, typology, structure balance, etc. This manner of studying and understanding historical architecture, based on the individualization of materials, is newly claimed in the proposals of Paolo Marconi in the “*Manuali del recupero italiani*” and the ARCO magazine. In our work at the Cathedral of Vitoria, we have superimposed this way of understanding the architectural analysis of a building, starting from the identification of the material and the stratigraphic analysis of its construction.

## 7. The restoration project

The restoration work which we will undertake within the historic building represents the last step of this process of transformation of the building in time, and it will happen repeating the already described mechanisms. The project will be promoted if the society believes that the building breaks with the necessary functional, constructive or formal terms. In order to adapt to the new conditions, the building must be transformed, following the elimination, conservation and overlapping of materials steps that we have already described. Necessarily, any transformation of an architectural structure involves an alteration of the constructive “order” of the building that has reached us, and, therefore, involves the transformation of its historical reading and while providing of a new “constructive stratum”. Simultaneously, the materialization of this project will involve the construction of a new architecture, which will have to satisfy the conditions and demands that

drove its implementation and that will necessarily change the reading and understanding of the transformed architectural object.

The restoration project must define which materials are removed, which materials are conserved, in which conditions these must be conserved and how will be the input of new materials over the historic structure, with the goal of adjusting it to the functional, constructive and formal conditions. However, we find that the conserved structure, due to its architectural value and its status as historical document will impose limits to the proposed transformation. We cannot ask a historic structure to be compatible with certain uses or an image or a constructive or structural work that involve the destruction of its historical or architectural values. To preserve those values, the transformation must be undertaken following a strict and specific methodology in each of the phases (elimination, conservation and overlapping) that we have already defined.

**The elimination phase (-).** The first condition of this phase is its irreversibility. The historical and architectural damages which may be caused by the realization of this phase require us to act with extreme caution. By removing materials from the structure, not only are we destroying the historical associated value of the eliminated materials, but we also destroy the stratigraphic relationships that these materials have with those which are to be kept. The elimination phase of the historic building materials will always occur with the impoverishment of historical and documentary



## **THE RESTORATION PROJECT**

The restoration is the last phase in the process of transformation of a building through time

**(-)** Which materials do we eliminate?

**(=)** Which materials do we conserve and which treatment do we apply for guaranteeing its conservation?

**(+)** Which materials do we add?

- Which characteristics and qualities will they have?
- How will they overlap the conserved ones?

value of the building and, consequently, it will be the architectural and historical assessments of the building that will establish the specific limits to it. In order to be able to project the elimination, it will be necessary to have previously defined the transformation process of the building. Each building material must be included in a specific Stratigraphic Unit (SU) and this SU must have a concrete temporal ascription assigned. To establish this process, at this stage it might be wise to plan for an archaeological “excavation” of the building, in order to discover hidden materials and elements which would allow us to establish the stratigraphic sequence correctly. Methodologically, the “excavation” of the building should be carried out following an archaeological methodology, following stratigraphic levels, and dismantling each SU. However, the built and architectonic nature of the historic building will require, in most cases, that the removal takes place following the constructive elements rather than the stratigraphic ones. To allow the archaeological development of restoration works, removal of debris, demolition, dismantling, pits, and earth movement units must be assigned an archaeological status and be developed with the methodology imposed by this science.

**The conservation phase (=).** After the removal of materials, the restoration works should be carried out on the remaining materials, which will have to be integrated into the projected action. These materials will have suffered from the environmental conditions and the passing of time, and may have altered their original qualities and condition. In this phase it will be necessary to study the recovery treatment that will allow us to recover as much as possible the conditions

and the original qualities of the materials and to articulate the protection measures to eliminate the alteration causes or indirectly, the actions that the environment exerts over these.

The conserved materials will be somehow the pillar were the materials provided by the restoration should be “situated”. In the same way that in a new floor project an exhaustive knowledge of the pre-existing conditions (ground, geography, access, urban facilities, etc.) where the new building will be placed is required, in restoration we must know the materiality of the object (the historic building) where this will be executed. In this phase we must measure and establish the monument’s geometry; study the materials characteristics and their physical and chemical characteristics; define how they make up to form the different constructive elements and how these compose the architectural structure, finally establishing its global behaviour as an architectural mechanism. In this phase of the intervention, we should act over the materiality of what exists, measuring, rehearsing, knowing and finally consolidating and protecting it.

**The superposition phase (+).** In this phase new materials will be incorporated over the existing ones until the completion of the projected transformation of the historic building. Through this transformation process, the newly introduced materials will be situated in the most external levels of the new structure, superposed to the historic materials that may remain hidden. In addition, by being situated in the most external and visible levels of the building, they will necessarily have an important presence in the historic building, therefore the complete functional,



Fig. 6. New grille in the church of Santa María de Melque. The metal rods indicate all the previous holes from preceding grilles.

formal and constructive compatibility between the historic object and the additions we made will be essential.

At the functional level, the functions for which the building was erected must be conserved, unless the development of this function makes it incompatible with the former structure. . In the case the original function of the building has disappeared or has no sense in at the present moment, we should look for alternatives that are compatible with the dimensions and the typology of the preserved building. The search for the functional rehabilitation of historic constructions must not be imposed as a restoration priority, since the implantation of incompatible uses will necessarily have to be performed sacrificing historical or architectural values of the building. In addition to the regular use of the building, we should allow a social and cultural use, essential for its heritage condition. In our times, in which cultural tourism uses are having an undisputed social importance and an important incidence in the economic development,

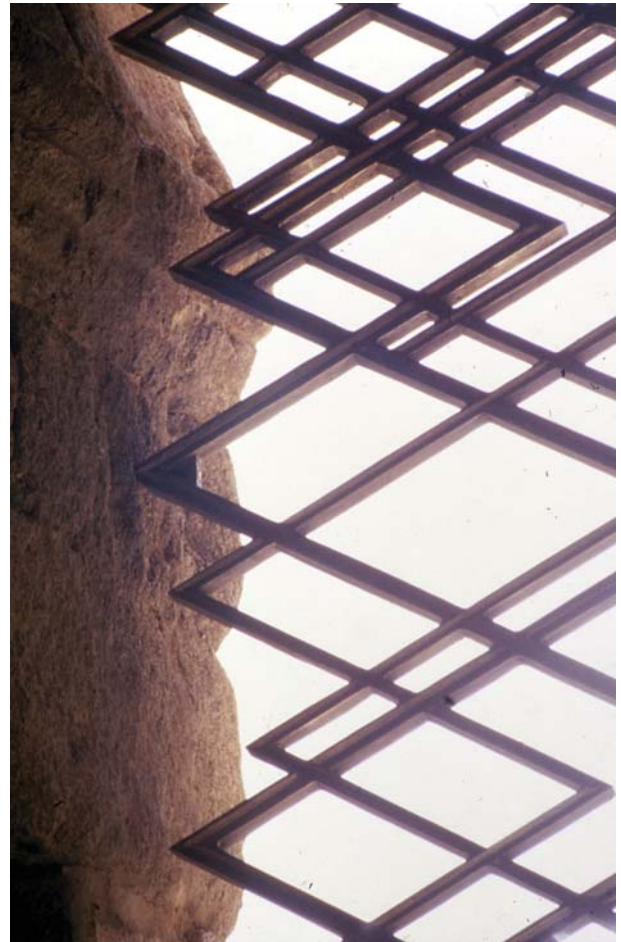


Fig. 7. Jamb with old holes and the new grille. Restoration project by Latorre y Camara, arquitectos.

we believe that adaptation for visitors and a didactic exhibition are sufficient to fill the restoration work with a functional content..

At the constructive level, the projected restoration solutions must not alter the constructive and structural systems inherited from the past and we should always run away from solutions that rigidify, solidify and turn into monolithic structures an architecture characterised by mass and pushing forces, that are far away from rigid joints systems and monolithic structures imposed by modern architecture and its mandatory rules. Therefore, the answer to restoration can only be based on a thorough analysis of the architectural object and of the constructive techniques developed on its structure, to always search for solutions that are constructively compatible with them. We believe that we must search for solutions that reinterpret the constructive solutions of the past allowing simultaneously its compatibility with the ones used on the building and its identification with our historic moment.





Fig. 8. Restoration of the church Santa María de Melque, Toledo, Spain. Restoration project by Latorre y Camara, arquitectos.

In the formal level, the historic buildings are highly symbolic. This is due to the relationship between the shape of the building and its users. This relation between shape and people is directly linked to the memories and personal experiences developed in the building or in its surroundings. We have to assume

that the disappearance of a shape is always linked to the death of a memory, normally intense and related with people who are specially loved. Therefore, there is always a resistance and a social opposition to accept any change or formal transformation that can arise with restoration, and we must find a solution that is



Fig. 9. New stairs to access to the Cathedral of Santa María de Vitoria, Spain. Restoration project by Latorre y Camara, arquitectos.

compatible with the existing shape of the building even if it is inadequate and anachronistic. From this point of view we must understand the social requirements to return in the same place and with the same shape, especially significant buildings that have collapsed. The popular Italian phrase “com’era, dov’era” that extended to require the restitution of the “Campanile di Venezia” must be situated and understood in this particular context, however much Cesare Brandi describes it as “pastiche” -which indeed it is-. We cannot imagine in any other way the restoration that would result of the ruins of the Leaning tower of Pisa that, with absolute certainty, would be recovered with its leaning consolidated in the memory.

Parallel to this, and following the thread of the discourse of this confidence, we do not believe that we must address the restoration of historical architecture with preconceived approaches. It is as useless to pretend to recover the original shape of the ruined structure as freezing, in a particular moment, a shape that is usually in continuous transformation.

In the first case, it is more than doubtful that we can recover a shape or a construction that has disappeared in time and is associated to a disappeared society and culture. As much information we can deduce from the preserved ruins and from the existing documentation, our interpretation of the absences and losses in the historical buildings will always be subject to our capacity to interpret such data. In turn, the objectivity and validity of these data will always be distorted by the image and the knowledge that exist for that moment in history, which inevitably gives our interpretation a strong dose of subjectivity.

In the second case, we know that the conservation of a ruined building is almost impossible as well as pathetic. We cannot prevent the action of time over an architectural structure without isolating it from the environment in which it is situated. The action of the environment over the building is so destructive that this can only respond to the aggression by continuously transforming, replacing and repairing the degraded materials and construction for adapting it to the functional transformations required of him. Without this necessary renovation and transformation of the materials and the structure of the building, the latter would end up becoming a ruin and abandoned until its disappearance. The shape of the elements built during the restoration should be different to the ones already existing in the building but compatible with them. We believe that restoration must provide

the building with a new shape, deduced from the conserved one.

## 8. Conclusions

To sum up, we believe that at the time of approaching the restoration project, we must have always present that this object stratified in time is, simultaneously, an architectural object under a process of degradation and transformation that is unstoppable and before all irreversible. We cannot close our eyes and simply deny the building its right to transform with the society that hosts and uses it; our duty is to give response to the formal, constructive and functional demands of the society that has fostered the intervention, correcting the detected deficiencies and projecting an intervention that allows us to recover its architectural integrity. We must not forget that the transformation that we are going to produce on the building it no other than the last link of the transformation process we have already described and it repeats the mechanisms with which its constructive stratification is produced. Our restoration work will be the last step of the transformation process that will safely continue after our intervention until the building is abandoned and becomes a ruin, or is demolished and its trace disappears.

Sadly, nostalgia is useless and the buildings, like people, not matter how much make up we put on them, or how many liftings we make, will never recover their youth. It is a trivial and a useless effort to pretend to recover a shape, a construction, a use and a society that, inevitably has disappeared. The building may resemble what it was in its youth, but we will never know that and nor should we care. Restoration has to give answers to the formal, constructive and functional demands of the society that has promoted it, providing the monument with a quality and a unity as an architectonic structure that, safely, has never existed, guaranteeing simultaneously the transmission to the future of all its documental and historic value.

## Acknowledgements

The author is indebted to Nicolás Latorre for his support with the translation.

Received: 14 July 2011  
Published: 31 August 2011



## REFERENCES

- ALMAGRO, A., CÁMARA, L., LATORRE, P., 1993: La Restauración de la iglesia visigoda de Santa Lucía de El Trampal, Alcuéscar, Cáceres. *Informes de la Construcción* 427, 45-55.
- AZKARATE GARAI-OLAIN, A. 1995. Aportaciones al debate sobre la arquitectura prerrománica peninsular: la iglesia de San Román de Tobillas (Alava), *Archivo Español de Arqueología*, 68, 189-214.
- AZKARATE GARAI-OLAIN, A. (i.p.). Análisis de la evolución histórico-constructiva de la catedral de Santa María de Vitoria-Gasteiz. (Aplicación de la “Arqueología de la Arquitectura” a un modelo complejo), Ponencia del V Congreso de *Arqueología Medieval Español* (Valladolid, 1999).
- BELLINI, A. 1990. *Tecniche della conservazione*, Franco Angeli, Milano.
- BRADBURY, R. 1953. *Fahrenheit 451*, Random House, United States.
- BROGIOLO, G.P. 1995. Arqueología estratigráfica y restauración, *Informes de la construcción*, 435, 31-36.
- CABALLERO ZOREDA, L. 1995. Método para el análisis estratigráfico de construcciones históricas o “lectura de paramentos”, *Informes de la construcción*, 435, 37-46.
- CABALLERO ZOREDA, L. 1996. El análisis estratigráfico de las construcciones históricas, *Arqueología de la Arquitectura, Serie Actas*, Junta de Castilla y León, Burgos, 55-75.
- CÁMARA MUÑOZ, L. Y LATORRE GONZÁLEZ-MORO, P. 2000. El sistema de infomación de la Catedral de Santa María en Vitoria, *Il Rilievo dei Beni Architettonici per la Conservazione. Atti Convegno Napoli a cura di C. Cundari e L. Carnevalli*, 226-231.
- CARANDINI, A. 1997. *Historias en la tierra. Manual de excavación arqueológica*. Crítica, Barcelona.
- DOGLIONI, F. 1997. *Stratigrafia e restauro. Tra conoscenza e conservazione dell'architettura*, Lint, Trieste.
- FRANCOVICH, R. 1985. Archeologia e restauro: da contiguitá a unitarietá. *Restauro Citta*, 2, 14-20.
- GONZÁLEZ MORENO-NAVARRO, A. 1995. Patrimonio arquitectónico: lo que el viento no se llevó, *Cuadernos VI, Catalogación del Patrimonio Histórico*, Junta de Andalucía, 16-27.
- GONZÁLEZ MORENO-NAVARRO, A. 1995. Investigación histórica y proyecto de restauración, “Historia y Proyecto”, *Astrágalo*, 3, 55-62.
- GONZÁLEZ MORENO-NAVARRO, A. 1998. Falso histórico o falso arquitectónico, cuestión de identidad, *Loggia*, 1 16-23.
- GONZÁLEZ MORENO-NAVARRO, A. 1999. *La restauración objetiva.(Método SCCM de restauración monumental)*, “Memoria SPAL 1993-1998”, Diputació de Barcelona, Barcelona.
- GONZÁLEZ MORENO-NAVARRO, J.L. 1993. *El legado oculto de Vitruvio*, Alianza, Madrid.
- GRAVES, R., 1999. *The Siege and Fall of Troy*, (La guerra de Troya, Muchnik editores, Barcelona).
- HARRIS, E.C., 1991. *Principios de estratigrafía arqueológica*, Barcelona.
- LATORRE GONZÁLEZ-MORO, P. 1996. La arqueología de la arquitectura. Consecuencias metodológicas de su aplicación al proyecto de restauración, *Arqueología de la Arquitectura, Serie Actas*, Junta de Castilla y León, Burgos, 103-122.
- LATORRE GONZÁLEZ-MORO, P. y CABALLERO ZOREDA, L. 1995. La importancia del análisis estratigráfico de las construcciones históricas en el debate sobre la restauración monumental, *Informes de la construcción*, 435, 5-18.
- LATORRE GONZÁLEZ-MORO, P. y CÁMARA, L. 1993. La restauración de la Torre de Hércules de La Coruña (Galicia), *Informes de la Construcción*, 427, 67-80.
- LATORRE GONZÁLEZ-MORO, P. 1997. Il Restauro di S. María di Melque a Toledo. Dossier: Il restauro in Spagna. *Tema, Tempo, Materia, Architettura*, 21-35.
- LÓPEZ MULLOR, L. 1996: Estudio arqueológico del conjunto de castillo de Castelldefels (Barcelona), *Arqueología de la Arquitectura, Serie Actas*, Junta de Castilla y León, Burgos, 153-168.

MARCONI, P. 1993. *Il restauro e l'architetto*, Marsilio, Venezia.

MARCONI, P. 1995. I Manuali del recupero italiani e l'Europa, Quaderni Arco. *Restauro storia e tecnica*, 17-33.

PARENTI, R. 1985. La lettura stratigrafica delle murature in contesti archeologici e di restauro architettonico, *Restauro e Città*, n° 2, 55-68.

PARENTI, R. 1988. Le technique di documentazione per una lettura stratigrafica dell'elevato, *Archeologia e restauro dei monumenti*, Firenze, 249-279.

PARENTI, R. 1995. Historia, importancia y aplicaciones del método de lectura de paramentos, *Informes de la construcción*, 435, 19-29.

PARENTI, R. 1996. Una visión general de la Arqueología de la Arquitectura, *Serie Actas*, Junta de Castilla y León, Burgos, 13-23.

VIOLLET-LE-DUC, E., 1997. *Dictionnaire de l'architecture médiévale*, Bibliothèque de l'Image, Poitiers.

VITRUBIO, M. *De Architectura* (Los diez libros de arquitectura, Alianza, Madrid, 1995).