



Viollet Le Duc's Concept on Historic Preservation. The Egyptian Society of Political Science, Statistics and Legislation

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Abstract

For architects who pioneered and developed the modern movement, the architectural theory of Viollet Le Duc was useful, precisely because it helped them to break free the historical past and the theoretical tradition of earlier architecture. In our own time, when preservation has assumed as great an urgency as the continued development of modernity, Viollet Le Duc's ideas about preservation of old structures have acquired a new import and offered valuable insights to patrons and builder alike. Perhaps, it may be as well to endeavor at the outset to gain an exact notion of what we understand by restoration. I shall simply try to present in my argument, based on the concept of a model as realized by Viollet le Duc's Gothic example, an apt instrument for different restoration projects of an edifice. This principle, with its adaptable phenomenological description, would provide a special significance in the case study chosen to be presented at the paper : (The Egyptian Society of Political Science, Statistics and Legislation).

" There are two ways of expressing truth in architecture: we must be true according to the program of requirements, and true according to the method and means of construction."

Eugene Emmanuel Viollet Le Duc.

It was only since the first quarter of the present century that the idea of restoring buildings of another age had come into focus. Perhaps, it is appropriate to endeavor at the beginning to gain an exact notion of what we understand about restoration. The Romans replaced, but did not restore, a proof for this, is that there is no Latin word corresponding with our term "restoration". *Instaurare*, *reficere*, *renovare*, do not mean to restore, but to reinstate or to make new. Our age has

adopted an attitude toward the past in which it stands quite alone among historical ages. I had undertaken to analyze the past to compare and classify its phenomena and to construct its veritable history. (Le Duc [1]).

Viollet Le Duc, is generally acknowledged to be the premier theorist of modern architecture. Because he approached the theory of architecture in terms of principles rather than rules. The application of those principles required the formulation of a method, an explanation of which would be presented. On March 11, 1844 both Le Duc and Jean Baptiste Antoine Lassus were awarded the commission to restore the Gothic Cathedral of Notre-Dame de Paris. This commission, marked the moment when Le Duc became Merimee's protégé and was put on the track to a central position in the Parisian cultural establishment. Henceforth, his thought and work in the field of architectural restoration, were to be grounded in the Gothic tradition, as opposed to the classical orientation of prevailing taste and practice. The Notre Dame project, lead Le Duc to view the field of architecture and to prophesy its future in terms of what he had learned from Gothic Architecture. Viollet Le Duc, developed his architectural theory based on the rationalized interpretation of architecture in general, and of Gothic architecture in particular, interpreting it as a logical structural system. The Notre-Dame project involved a church much altered since its creation in the late 12th. Century and much neglected since the revolution. Both Viollet Le Duc and Lassus, had to decide which aspects of the fabric design to retain and which to alter. Le Duc, changed the form of the flying buttresses along the nave, the earliest universally acknowledged buttresses in Gothic Architecture. We can still see at the end of the west side of the south transept arm, a trace of the original design. Observing in the same area a series of virtually identical scars in the masonry of the clerestory, he deduced that the traceried windows of the 13th. Century had replaced a shorter, plain window. Accordingly, he decided to "restore" the original wall configuration in the bays adjacent to the crossing. He was, in my opinion, removing genuine 13th. Century work in order to make manifest the elevation he thought had been there at the outset.

His decision, involved lowering the roof line, as a result the roof would no longer cover the roundels, which originally opened into the dark area over the gallery vaults. He filled the roundels with stained glass, thereby treating them in a manner in which they had never been seen in the Middle ages. More was to come: all statues of Biblical Kings had stood on the west facade, he ordered replacements for those vandalized in the anti royal of the Revolution of 1790. Ironically, other features he created have become among the most cherished aspects of the cathedral. The grotesques on the tower balustrades had weathered to an unrecognizable nubbin. He replaced them with original figures that are perhaps the most memorable on the entire cathedral. Similarly, the crossing had been accented by a spire, that was replaced by a new one. Finally, he overwhelmed the



final design by adding new figures for the apostles and archangels at the angles and corners of the roof.

These modifications on the cathedral, were presented in order to emphasize that Viollet Le Duc's theory on restoration was neither to bring a building back to the end of its evolution - in this case, its state at the end of the Middle Ages - nor to restore it to a pristine version of its twelfth Century design. Rather it was, to rebuild it in a condition of completeness that could never have existed at any given time. (Le Duc [2]).

For Viollet Le Duc, restoring ruined structures to full order was not simply a case of a bright completion. Rather, he had a remarkably detailed knowledge of history, and a wonderfully intuitive imagination with which he peopled the monument and envisioned it in use. Viollet Le Duc, is chiefly remembered as a restorer, based on his own systematic interpretation of the intentions behind medieval architecture. For him the beauty of Gothic Architecture, was the result of a systematically rational approach to building rather than of aesthetic or iconographical considerations. He proposed that a restoration, must take changes into account and usually retain them. While neutral components in the structural elements, such as ashlar blocks, might require renewal or outright replacement, decorative features should generally not be recarved because it is impossible to reproduce their authentic character. (Le Duc [3]) In other words, an old building should not be made like a new one, but should retain signs of wear and damage. One of Viollet's cardinal rules, was to respect the historical integrity of the building as it has come down to us. In this we can see the reverence for the contextual guidance, that has become one of the principle tenets of present day restoration. His argument, in my opinion, is based on redefining the structure in a better condition, stronger and more perfect way. As a result, the restored edifice would have a renewed sense of existence, capable for withstanding the ravages of the time.

Viollet le Duc's method of inductive analysis and interpretive reconstruction; based on comprehensive knowledge, would be the corner stone for the case presented. His name is associated with certain views on the art of restoration, which, despite its close links with the picturesque inventions of the Romantic imagination, has not been entirely discredited in the obsessively objective Twentieth Century. If Gothic-architecture, had any didactic value for Viollet le Duc, it lies not only in the echoes that it had raised in the imagination of the time, nor in its role as a model to be imitated, but also in its function as something to be explained and analyzed. No other architectural style lent itself more readily to this intellectual exercise than the rigorously logical structures of the 12th. & 13th. Century. His seminal article "On Restoration" in the Dictionnaire Raisonne De L'Architecture is a straight forward appeal towards integrity, founding a new system on the hierarchy of historic preservation of an edifice. His thematic

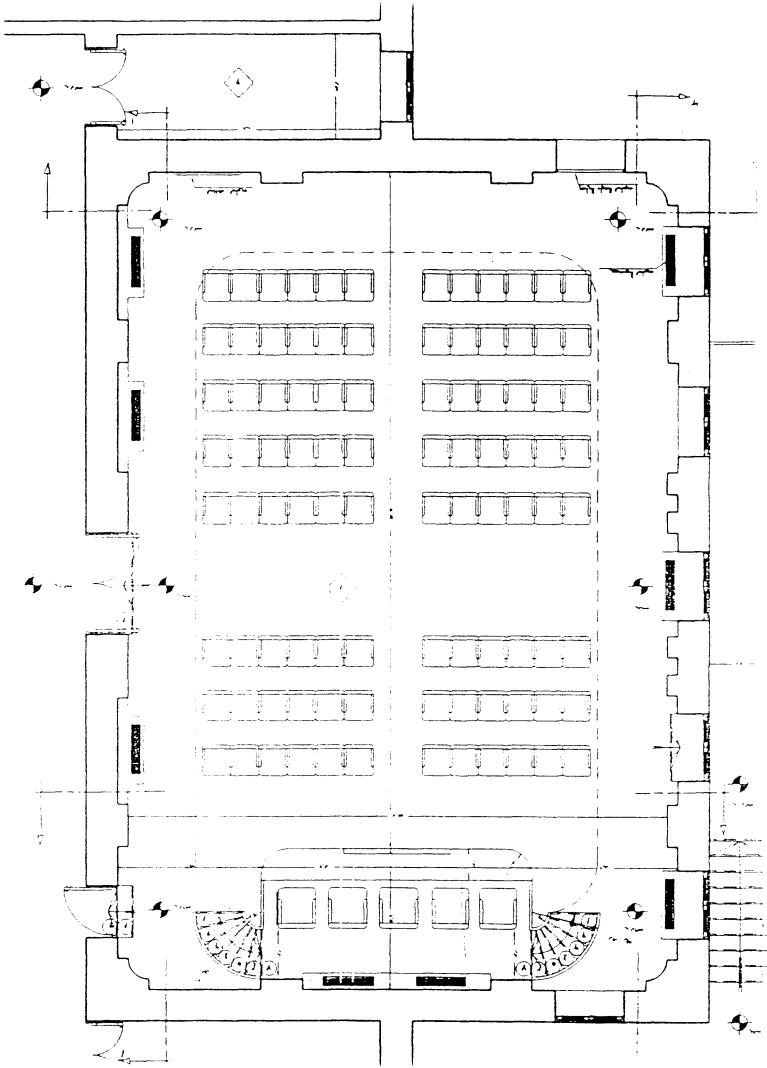


Figure 1: Main Conference Room



model for a Gothic Cathedral, is an example for completeness expressing his intention towards an inductive analysis for historic preservation. The logical spirit that pervades this model endows it with a sense of finality and reality.

In the Egyptian Society of Political Science, Statistics and Legislation, one cannot operate with too much prudence and discretion. To state it plainly, a restoration can be more disastrous for a monument than the ravages of the centuries. In this case, one truly does not know what is to be feared more. Negligence, that truly allows what is threatened with ruin to fall to the ground or ignorant zeal that adds, suppresses, completes and ends by transforming an old monument into a new one, devoid of any historical interest. We should also understand perfectly in this project, that the architect made every effort, to "restore to the building through prudent repairs the richness and brightness of which has been robbed. (Le Duc [4]). It was not a matter of making art but only of submitting to the art of an epoch that no longer exists.

In restoring this project, it was necessary to decipher texts and consult all existing documents on the construction of this building; descriptive as well as graphic. To give back to our beautiful building all its splendor and richness; this was the task imposed upon us. Eight major points, as revealed by Viollet Le Duc's theory on historic preservation,(Le Duc [5]) governed the preservation and remodeling of the case presented.

- 1) The courageous use of new materials and their method of application.
- 2) The application of new structural elements for the overall stability.
- 3) Structural integrity (new and old).
- 4) The study of the architectural style based on the relationship among material, structure and space.
- 5) The final utility of the edifice.
- 6) The emphasis on novel features and new requirements.
- 7) Sincerity and exactitude of the final work, based on respecting ancient architectural vestiges.
- 8) The final completion of the edifice, leading to a model to be imitated.

Every portion that was removed, was replaced with better materials, in a stronger and more perfect way. As a result, the restored edifice should have a renewed sense of existence, and longer than that has already elapsed. It cannot be denied that a process of restoration, was a severe trial to the structure. The scaffolding and the partial removal of masonry; shackled the whole work from its base to its top. This diminution of solidity was counteracted by increasing the strength of the renewed parts. By introducing improvements on the structural system; the introduction of different sizes of structural steel I-beams, well contrived tie rods to support the floor of the structure and by providing better appliances for structural resistance. Based on its structure, its anatomy and its temperament, every detail of the building was mastered. Similarly, it was our task



Figure 2: Main Facade and Entry Porch



to be acquainted with the forms and architectural styles belonging to the edifice, and to the school to which it owed its origin.

Since all edifices whose restoration is undertaken, have a particular use. The role of the restorer, cannot be assumed to change the actual utility of the building. "The edifice might not be less convenient when it leaves the architect's hands than it was before restoration, moreover the best means of preserving a building is to find a use for it, to satisfy its requirements so completely that there shall be no occasion to make any changes."(Le Duc [6]) Based on this concept, the case presented was restored for a final utility (as a major conference hall and meeting rooms). We must admit that we were on slippery grounds as soon as we deviate from literal reproduction. We proceeded, as a Master of the Middle ages would have done, not to hide novel features; since the ancient masters, so far from dissembling a necessity, sought on the contrary to invest it with a becoming form, even making decorative features of these new requirements. The case of the central heating system, air-conditioning and air handling units were emphasized and treated with special care. Not to hide these new additions, but on the contrary, to reveal their usage as a new work of art on the boundaries of the main conference room.

A very important principle to be observed is "to pay regard to every vestige indicating on architectural arrangement."(Le Duc [6]) The architect should not be thoroughly satisfied, until he has discovered all the combinations that accords with the vestiges of the ancient work. Based on this, and on the vestiges of the previous existing chairs and their special method of fixation on the ground, we were able to decide on their arrangements, their number and the inclination of the floor, in relation to the sight lines of the audience. This furnished a guarantee for the sincerity and exactitude of the work to be done.

Based on the idea of, "Completing the structure," (Le Duc [7]), to give back to our beautiful building all its splendor and to restore to it all the richness of which it has been robbed. This was the task imposed upon us. Externally the building is surely beautiful enough, that it would be pointless to add anything to it. Internally, this was not the case. The two major stained glass windows, that over the main conference hall and by main stair case, required a complete restoration and redesigning. The restoration of these windows, required a scrupulous examination of their construction, for which it was necessary to devise some architectural modifications. Perhaps without changing their interior and exterior profiles, we gave them a much greater strength by thickening their tracery. These two windows were completely ruined. It was required to renew them almost entirely. We believed that the execution of painted windows would be one of the most splendid means of interior decoration. Nothing equals the richness of these transparent pictures, which are an indispensable complement of monuments of this epoch. The engravings and the precious drawings on the

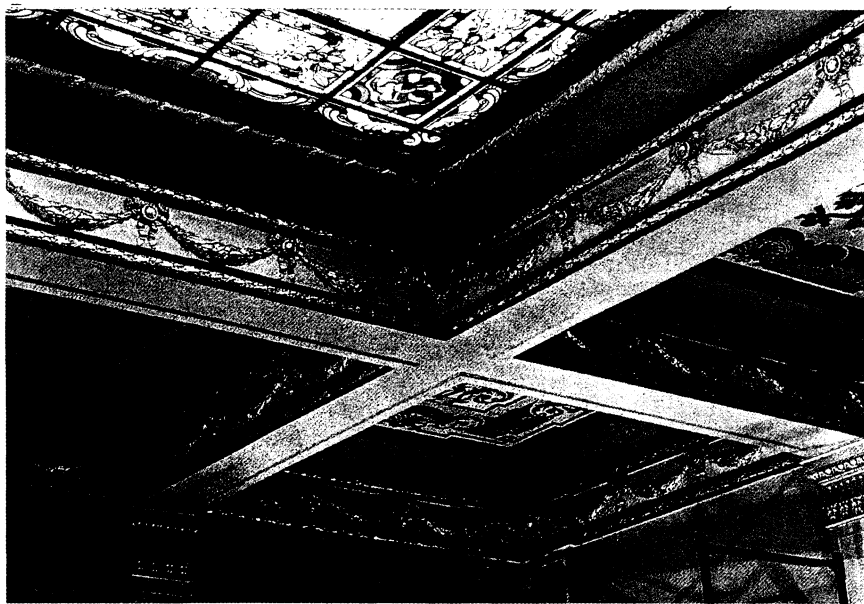


Figure 3: Gold Engravings and Ceiling Drawings.



ceiling also required a complete restoration. A minute swabbing appeared to be the first operation to be utilized, in order to know the state of these engravings and to recover the traces of these paintings. It was evident in this case, that this cleaning gave us some positive proofs of the general system formerly adopted. Up till now we have admitted painting only as decoration of the ceilings. In a restoration project like the one presented, it was impossible not to try to harmonize all the accessory objects with the final design of the edifice, above all when they are really important. Nothing was removed or replaced unless to the benefit of the final design of the whole project.

Finally, the principles that we have set forth, based on Viollet Le Duc's concept of restoration and historic preservation, should not be forgotten when it is a question of a monument as important as the one presented. In my opinion, we have to remain constantly faithful to the principles that we have set. There, it is necessary not to hesitate and make excuses but to proceed with confidence, take no risks, and to be sure to succeed. We think that each part, added in whatever epoch, ought in principle to be preserved, strengthened, and restored in the architectural style appropriate to it. This has to be done with a reverent discretion.

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