
LÓPEZ ULLOA Fabián

ETSA - Universidad Politécnica de Madrid - Spain
flu.upm@gmail.com

Introduction

The Romantic vision of ancient architecture, together with the evaluation of the said architecture as historical legacy, have contributed to the extensive path followed by the discipline of architectural restoration towards its consolidation as a scientific method along the 19th and the 20th century. During the Renaissance, when attention was turned to Classic Architecture, the study of the construction methods became the first germ for recognising the value of ancient architecture, in its many styles, as historical heritage. The scientific analysis that then took place in the 19th century, framed in the philosophical trend of Positivism, was also be reflected in architectural restoration: an appropriate intervention had to begin with learning about of the history of the construction. This can easily be understood considering that the term restoration includes many medieval constructions being completed or reconstructed introducing large additions or extensions, which were done taking as reference the use of traditional construction materials with their corresponding traditional technology and the study of agreements and manuscripts. These documents were unveiled by research, in parallel to the development of the formulation of a theoretical structural model, bearing in mind that, initially, masonry, timber and cast iron were the main construction materials, and their properties dictated the nature of structural forms (Charlton 1982).

The debate about architectural restoration begun in the 19th century has gone on to history mainly thanks to names like Viollet-le-Duc, Ruskin, Morris or Pugin. However, behind these names, a series of prominent figures can be recognized. The group was comprised of individuals of all filiations who were developing and bringing together the theory and the scientific practice originated in the twilights of the 18th century in the newly established French Republic. The innumerable positions, schools, trends and declarations that have developed since then, have today a point in common: the valuation and the respect for ancient architectural monuments, a living testimony for learning about the societies who constructed them.

The present work focuses on the figure of the Englishman George Edmund Street (1824-81), whose work is not as well known as that of some of his contemporaries named above, but is not less important for that reason. Street contributed to the restoration of many architectural monuments; his experience allowed him to devise certain approaches to this discipline that yielded numerous restoration interventions, both inside and outside England. His work has not received as much attention as that of Butterfield, and his name is certainly not as well known as Scott's. Yet he has hardly been altogether forgotten (Hitchcock 1960).

Keywords: Restoration, George E. Street, England

Restoration in England in the Second half of the 19th Century

In order to give a general vision of the events that surrounded Street in the discipline of architectural restoration in 19th-century England, it is key to remember that, under the reign of Queen Victoria, the power of the nation had become strong. A world leading industrial nation, England witnessed transcendental developments in all fields; the appellative of Victorian was given not only to the era itself, but also to the art, the economy, the literature and, certainly, to the architecture. Victorian Gothic, High Victorian Gothic, or Late Victorian Gothic, in sum, trends of Gothic Revival, were in fact tools for a kingdom that, with this monumental, but, above all, religious architecture, wanted to demonstrate its prevalence. This pursue was materialized also in
projects outside England. In this respect, Pugin will be one of its more arduous defenders, and, it must be said, the most purist, promulgating its diffusion as the nation’s ideal. High Victorian Gothic is an imprecise term. Much of the Gothic-inspired architecture of the mid-Victorian decades was colourful, exuberant, and richly sculptural. It was characterized by an emphasis on unbroken wall and roof planes and on simple geometric volumes, manifested delightedly in saddleback towers or pyramidal spires, as well as in continuous wall planes running perhaps around a curved apsidal end (Stamp 2003).

But in Victorian times, England was going through a great change after the industrial revolution and this trend was also to be followed in the fields of architecture and urbanism, planning numerous renovations of its constructions. Most of the important historic buildings were at serious risk of disappearing. New urban projects caught public attention as symbols of development, not only in newly developed areas, but also in historic centres at the expense of the demolition of certain sections of monuments, or, worse, entire buildings.

The debate concerning the protection of architectural heritage, in particular of the heritage related to the ideological bases of a nation at the summit of its power, begins to attract public attention. In the middle of this debate a moderate protagonist will be identified in the person of John Ruskin, who was against all practical restoration, but proposed a fundamental theoretical model in the history of architectural restoration. This model was based on the absence of restoration, with the only exception of the interventions aimed for the maintenance of buildings until their dignified death.

However, in practice, restoration adopted the model of stylistic restoration raised in France by Viollet-le-Duc, also followed by George Gilbert Scott or William Burges. This practice was later subject to strong criticism. The advance of the century and the new generations of architects - which included the Pre-Raphaelites, who took an active part, - will promote the development of modern restoration based on interventions using technologies that allowed the differentiation between the original construction and the new additions, and whose most representative figure will be William Morris. This concept revolutionized the discipline of restoration and nowadays remains a key aspect of contemporary restoration, recognized as originated by the English school.

Arthur Street mentions how the Pre-Raphaelites’ movement influenced G. E. Street: The pre-Raphaelites’ movement found in him a hearty and earnest adherent, and one who, on many occasions, by writing and speaking, impressed on his brethren the importance and propriety of giving them all the moral support in his power. He truly felt that the aim of the young enthusiasts, who were striving for truth before everything, was in their particular field identical to the aim of the leaders of the Gothic Revival movement in the field of architecture (Street 1888).

G. G. Scott, W. Butterfield, W. Burges and G. E. Street, appear among the most recognized and prominent architects of Gothic Revival, although with differences between them according to the different trends existing within this movement. Morris had at first been a follower of Ruskin and had worked for Street; in 1877 he became a charter member of the Society for the Protection of Ancient Buildings (SPAB) with the promulgation of the Manifest, which later gave place to the Anti-Restoration Movement. G. E. Street was also a member of SPAB, and developed a friendship with Ruskin.

G. E. Street will stand out as a traditional keen conservationist of medieval architecture with a proposal of intervention that respected the original building. This initiative will lead him, in addition, to researching, not only the value of shapes, but also their constructive principles both in English and Continental Gothic, saying: the elements of Gothic architecture in the Middle Ages are the adoption of the best principles of construction, and a natural and proper treatment of ornamentation without concealment of construction. The accidents are, as it appears to me, the particular character which individual minds may have given to their work; the savagery or grotesqueness, as it has been called, which is mainly to be seen in the elaboration of some particular feature by some particular sculptor or architect, of which, in the noblest work, one sees no trace (Street 1888). Nothing could be gained by obstinately ignoring the existence of all Gothic other than English, and that much might be lost (Street 1888). This firm belief will lead him to travelling to several European countries and to establish, in the second half of the century, his principles which every artist owes to study, and whenever he can, to go down in historic, Gothic. Street reserves the right to redirect the demand (Ruskin Brownlee 1992) with marble in the Middle Ages as architecture in Spain.

Nevertheless, his style is considered one of the most purists, whose influence he finally concluded that only Ruskin can explain this principle, although his successors, William Morris, and his fellowmen have elaborately incorporated it in their work. Not until the late Victorian and Edwardian style (Aldrich 1995).

Figure 1: gasto.jpg

The Work of George Edmund Street

George Edmund Street was an architect, with numerous publications, and the indefatigable worker of some of his more influential advocates of architectural heritage, not only participated as a writer during the

The

...
several European countries, becoming one of the most remarkable scholars in Medieval architecture in the second half of the 19th century; on this matter he said: I have always felt that part of the duty which every artist owes to his mother art is to study her developments wherever they are to be seen, and whenever he can find the opportunity (Street 1865). His research was reflected on his work going down in history as a remarkable and influential architect and theoretician of High Victorian Gothic. Street reserved a full measure of energy for architectural theory and did not allow this to be redirected to the demands of his practice, as did Scott, or to other artistic and social issues, as did Ruskin (Brownlee 1984). His trips contributed to two of his most significant publications: Brick and marble in the Middle Ages: Notes of Tours in the North of Italy and Some account of Gothic architecture in Spain (Fig. 1, Fig. 2).

Nevertheless, his research on Continental Gothic was subject to several criticisms from some of the most purists, who didn’t consider the work to be pertinent for Gothic Revival. Once Pugin had concluded that only English Gothic would do in England and Irish Gothic in Ireland, he stuck to this principle, although it caused him some difficulty with interior fittings. His High Victorian successors, William Butterfield, William Burges, G. E. Street, and others, on the other hand, blithely incorporated French, German, or Italian ideas in their churches when it suited their turn. Not until the late Victorian period was there a reversion to the purely national ideal of architectural style. (Aldrich 1995).

![Figure 1: (Street 1874)](image1)

![Figure 2: (Street 1865)](image2)

**The Work of George E. Street**

George Edmund Street (1824-1881) was born in Woodford, England (Fig. 3). He became a talented architect, with numerous works including the design of furniture and appliances, several publications, and the development of a number of projects in the field of restoration. An indefatigable worker, it is said that his “rumbustious” personality and bold and blunt style grated on some of his more conservative contemporaries (Joyce 1976). Street became one of the most influential advocates of the value of English medieval architectural heritage, in particular religious heritage, not only for its actual value, but for Street’s deep religious beliefs. He actively participated as a member of the Ecclesiological Society (ES). A deeply religious man who considered during his youth taking Holy Orders, he inherited Pugin’s belief in the connection
Structural Analysis of Historic Constructions

between religion and architecture. To him the Gothic style was the embodiment of the Christian faith in architecture, which could be fully realized only when both patron and architect worked together in Christian intention (Joyce 1976).

In the field of modern architecture, he became one of the main architects of Gothic Revival, with great influence in the new generations of architects. His career was not crowned precisely with a religious building, but with one of the major architectural icons of London, the monumental Royal Courts of Justice. His architectural creation has gone down in history as an example of High Victorian Gothic (Fig. 4). In other words, a combination of elements and colour both of continental Gothic and Romanesque, with clear French and Italian influence. Among his collaborators, he had W. Morris, Philip Webb, Edmund Sedding, J. D. Sedding, R. Norman Shaw, G. H. Fellowes-Prynne, T. E. Colcutt and Leonard Stokes. Street himself collaborated, among others, with J. F. Bodley and W. White in G. G. Scott’s studio.

Figure 3: George Edmund Street, 1877
(Street 1888)

Figure 4: G. E. Street. Design for the bishop's throne in Carlisle cathedral (Richardson 1976)

Street combined his professional activities with an active participation in several groups, including the Society for the Protection of Ancient Buildings (SPAB), and it has been admitted that he had a leading and influential role in the circles that he frequented. He had the skill to enjoy two worlds. He was, on the one hand, the successful, competent, active professional man, and on the other the revered "ecclesiologist", the admired of the apostles of ethical architecture and a philosopher of European reputation (Joyce 1976). His son Arthur wrote in the memoir prepared in honour of Street about his father’s enormous capacity to work, beginning very early every morning and ending very late at night. It was in fact the excessive workload and the constant pressure for finishing the palace of the courts of justice that caused his death.

Street's professional practice in restoration followed the concept of preserving the original materials, with exceptional renovations. This concept was intensified when applied to the overall form of an entire architectural monument. In this respect, he said: The use of Gothic forms may indeed be readily and indefinitely extended, and, if that is so, then no less may the form itself be amended or modified...he strongly held that Gothic as it was and as was taken up had not necessarily reached the limits of its possibilities in the spheres of usefulness or beauty; but that, far from having been fossilised into one unalterable form by the lapse of time, it had really been rather in a state of suspended animation, and offered itself to skilful handling rather as a model in clay than one hewn out of a block of granite (Street 1888). For restoration of a cathedral, Street wrote the following definition: The restoration of a cathedral is at no time a slight work. It generally means that an attempt is made to preserve and exhibit the original state and all its parts.

In view of the restorations, the characteristics which the building has undergone must be registered both in the interventions that, until the height of the building was altered, the materials that was after it had been restored. If the building was being renewed, it was only those who saw the new interest (Street 1888) that dealt with, and there must be owned, much of the post-19th century champions of anti-restoration.

Figure 5: (The new church)

With regard to the evidence of exterior, and the Church also left his mark in the fabric of the Church Cathedral (1840) and the Old Vicar's House (1859), impressing on everyone that the style must work exactly as it was meant to (Street 1888), but saying that the old restorations of churches were necessary, the old practices similar to those in use today.

The traditional design of a church was the... scientific calculation... and the traditional rules and methods.

From the different groups he belonged to, the Architects (RIBA),
that an attempt is made, after years of waiting or apathy, to remedy some of the defects which time and ill usage have infected (Street 1882).

In view of the restoration of many English temples applying the Destructive Theory, by means of which the buildings were renewed and modernized at the cost of massive destructions or modifications, Street manifested himself early on as opposed to this theory. This opinion was registered both in The Ecclesiologist (Fig. 5) and in his own publications. He openly criticized some interventions that, under the label of restoration, had been carried out in several temples, one of them being San Donate in Venice, about which he wrote: Unfortunately my first visit to this church was after it had been in part restored in the largest and worst sense of the word. The old brickwork was being renewed, plastered, and painted up, till most of its interest had vanished; and now, I fear, only those who saw San Donate some ten years ago can have any idea of its architectural value and interest (Street 1888). On anti-restoration he wrote: restoration is a difficult and tender subject to deal with, and there has been within the last decade or so a great outcry against it. There has been, it must be owned, much exaggeration and high-handedness in the sayings and doings of many of the champions of anti-restoration, but their influence has been none the less salutary (Street 1888).

With regard to the works carried out by the key figures of his time, there is, of course, plenty of evidence of crossed opinions between some and others, and a broad literature remains in which Street also left his print. He received some criticism, for example on his work in Dublin Christ Church Cathedral (Fig. 6) or in the extension of Bristol Cathedral. Some of this criticism came after defending ideas in common with his critics, those who said: inasmuch as each age puts its own impress on everything that it does, and that to pretend in the nineteenth century that we are doing work exactly as it would have been done in the thirteenth, is wholly inaccurate and untrue (Street 1888), but saying that was, after all only a half truth, since for certain cases he considered some practices necessary, giving sufficient arguments in his favour such as preserving construction practices similar to those of the 13th century, both with respect to human and technical resources. The traditional design rules continued being used throughout the whole of the 19th century. In fact... scientific calculation only allowed the analysis of projected structures; for this earlier project, the traditional rules and approach continued being used (Huerta 2004).

From the different organizations that he frequented, be the ES, the Royal Institute of British Architects (RIBA), the Royal Academy (RA) or the SPAB, Street was a severe critic. His criticism
mainly focused on certain practices of restoration of Gothic churches in England and in the continent. For example, he actively participated in the famous campaign against the restoration of the basilica of Saint Mark in Venice, lead by Morris from the SPAB. According to the testimony registered by his son Arthur, Street developed 477 works of restoration and additions, distributed among the largest cities and the most isolated villages. Nothing better than the opinion of his son Arthur to learn more about Street's work: Now I have said that it was a matter of principle with my father that churches, old or new, should before all things serve their true purpose, even at some sacrifice of interest and beauty. It was one which he believed in fully, and when he speaks of the possibility of having to destroy old work, he speaks in all sincerity. Yet, as it happened, he never actually was forced to put this rule into practice, and I take the liberty of doubting whether he ever could have done so (Street 1888).

Conclusion

It can be concluded that, although the discipline of architectural restoration was subject to a broad debate in the 19th century, some prominent figures concentrated in the theory, while others, like Street, had to fight between their theoretical principles and the constraints imposed in practice in a field strongly influenced by political and religious power. The compendium of actions, contradictions, principles or rules with which he developed his professional role, are an important contribution to the scientific origins of the theory and practice of architectural restoration; and his extensive work, supported on his research, constitutes a legacy that today represents a basic source for the intervention on that same patrimony.

References


Abstract

The roof s and the nave's columns of the church, with the widest span of 22.60 m. The roof has undergone many interventions. It was of the tower's roof structure, and the interventions treated the defective maintenance from previous interventions. The intermediary support (19 secondary), the column of the fire destroyed over the nave, and its restoration process, as well as the initial static model.

Keywords: Lutheran

Introduction

The fire of June 11, 1968, which devasted the nave's Gothic roof, caused an intervention aimed at irretrievably altering the nave's way of functioning. Therefore, an intervention aimed at...