POLITECNICO DI TORINO SECOND SCHOOL OF ARCHITECTURE

Master of Science in Architecture (Rehabilitation and Revaluation) *Honors theses*

Antoni Gaudí, mechanics sculptor. The Crypt of Colonia Güell

by Anna Rucci

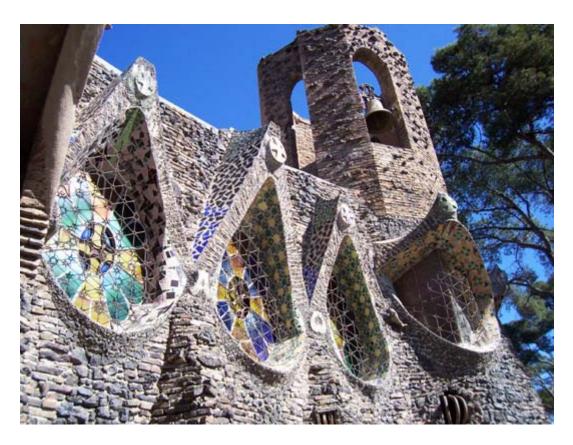
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"It's not up to the stone to fix its place, but up to the Work Master who picked it". (Paul Claudel)

"In Modern Architecture Gothic must constitute the starting point, but must never be the final one". The thesis has started from this very statement of Antoni Gaudí, famous Catalan architect who operated from the end of the '800 to the beginning of '900; what is the meaning of Gaudí's declaration? In what way has he tried to explicit this purpose in his works? And what does it mean, for a contemporary architect, to look upon past works in a cultural context different from his without nevertheless forgetting himself and its own historical and cultural context? Gaudí lived in a period in which the "Gothic revival" was spreading out, a time that started mostly thanks to the theories of the French architect Viollet-le-Duc. It's known that this return to the origins was often acritical, that is to say without a concrete tie with the past and with the medieval architectonical production, and therefore incapable to introduce a real novelty in contemporary production.

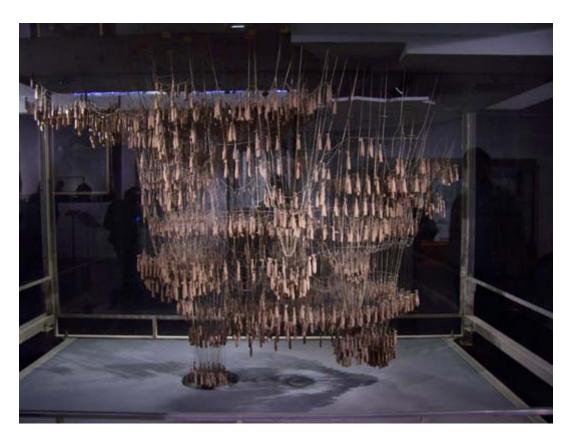
Many architects and art historians, writing about Gaudí, had talked – and talk – of the "overcoming of Gothic". This "overcoming", that is particularly just about the structural aspect of Architecture, finds in the Colonia Güell Crypt construction the maximum experimentation aimed at eliminating of the gothic structural element that Gaudí dearly defined "crutches", that is to say flying buttresses.

¹ A. Cuito, C. Montes, Antoni Gaudí: gesamte werke/opera completa, 2004, p. 242



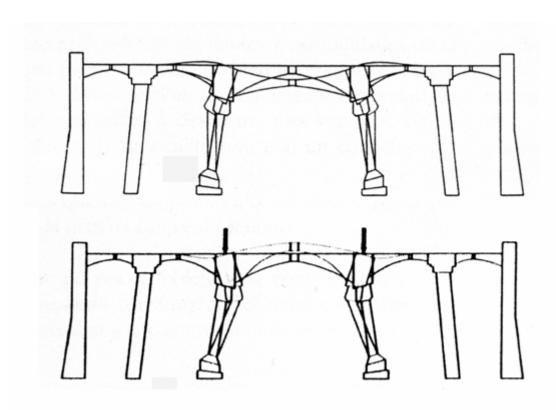
The Colonia Güell Crypt. Oriental view (Anna Rucci photos, 2008)

The Catalan architect in fact deemed that the gothic builders had reached the peak of construction and structural innovation in all Architecture History, but that they stopped before coming to use mechanical solutions that were really optimal. The Colonia Güell Crypt is located in St. Coloma de Cervelló 30 km from Barcelona, a place certainly peripheral in respect to the epicentre of Gaudí's production. In many architecture texts the space dedicated to this work is often very limited and only mentions little about the funicular model used by Gaudí for his planning. However, where we have more news about this, it often happens that we find information restricted to the formal, geometric and symbolical aspect of the work, with little attention to the structural one. This is mainly due to the fact that the knowledge of the Crypt is limited due to the shortage of the original material about the design. Everything that Gaudí had designed or created for the edification of this work was destroyed in 1936 during the Spanish Civil War.



Reconstruction of Gaudí's Funicular Model. Sagrada Familia Museum (Anna Rucci photos, 2008)

Recently, thanks to the input given by the reconstruction of the funicular model, the static structure of the Crypt has been analyzed in a more detailed way.



Studies about the basaltic columns of the Crypt [in A. CASALS BALAGUÉ, J. LUIS GONZÁLEZ MORENO-NAVARRO, P. ROCA FABREGAT, *La necessaria comprensión previa de la realidad constructiva del monumento: el caso singular de la cripta de la Colonia Güell*, in "Informes de la construcción", vol. 45, n. 427, September- October 1993, p. 28]

Such analysis has been possible thanks to the fact that the Crypt can be considered nevertheless a finished work, although some doubts on its eventual stability, once completed, haven't been solved because of its incompleteness compared to the original plan.

It's therefore evident that Gaudí's attempt to overcome Gothic was aimed at bettering the mechanical structure; this aspect is the one that we want to describe in this elaborate with a careful and critical work of research.

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