



Innovation as discipline based on knowledge

Antonio Gaudí

- **Reus, 1852**

When asked about Antonio Gaudí, everyone talks about his genius, his originality, his mysticism; about his obsession with and love of all forms of nature –animal, plant and geological–, about a return to origins, to atavism... Also about his disdain for or disinterest in passing fashions, for the established. And so we always have the impression that maybe he lived in another world, secluded within his dreams and deliriums.

But Gaudí was not purely an artist; he was not a Dalí for whom the canvas could stand up to everything he expressed, no matter how extravagant, whatever his brain schemed up. Gaudí was an architect and, therefore, his brilliant fantasies had no other alternative but to stand on their own.

Gaudí's technical depth and knowledge about architecture, mechanics and geometry is astounding; as boundless as the use that he makes of his entire body of knowledge, coupled with observation and experimentation. The description given by Jaume Serrallonga –PhD Architect and member of the Holy Family technical office- is very revealing. Regarding the construction of the School on the premises of the Holy Family church, he explains that what led Gaudí to achieve the incredible undulating roof design was the lack of financial resources. (See <http://www.gaudiallgaudi.com/EA002%20G%20Tecnica%20arq.htm>).

The same article also explains the technical arguments on which Gaudí based the great innovations we find in the Holy Family church. The magnificent forest of trees (columns) with branches (ramifications) and foliage (vault) that envelops and transports the visitor to an atavistic magnetism, is the result of an effort to overcome the fragility he observed in Gothic temples.

Gaudí was a great innovator and, above all, practiced **innovation as discipline based on knowledge**. And what made him a genius was his connection between the use of knowledge and his complete freedom when it came to applying it. He expressed it like this: "To do things right, first we need to love what we do and then technique."