

RELATIONSHIP BETWEEN STRUCTURE AND SPACE IN ARCHITECTURE

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How could I say no to write a text about the relationship between structure and space in architecture?

Every day becomes clearer to me the central role of the structure in the architectural fact. I have repeated many times that the structure builds space likewise light builds time. That the structure establishes the order of the space and that this is the main task of architecture: to organise the space.

The structure is such essential in architecture as the skeleton in the human being. The human skeleton is a beautiful structure provided with an astonishing perfection. I have described many times, in a way that my students could understand, that if Halle Berry is so gorgeous is because, among everything else, she has a perfect skeleton. Of course, over time I had to change the reference by Scarlett Johansson because my students also changed. How much of the beauty of Ms. Johansson comes from her skeleton, from a perfect bone structure.

And the same thing happens with the skeleton of animals. Their structure is perfectly suited to their size and their function. Therefore, the elephant will have big and dense bones and birds, having to fly, will have small and hollow bones, light ones. Thus, I wrote this in a text for my Principia Architectonica that I significantly entitled: "Of elephants and birds".

Alejandro de la Sota, my master, teaching us already on the first year's degree, spoke to us about the relevance of the structure. And he suggested us to imagine a woman that would give birth to a baby and she would realize that was born without skeleton. And that the doctor would be called to open the baby and introduce a skeleton. Well, this way some architects, wrongly, behave. They invent forms and, afterwards, they call the doctor, the engineer, to insert a skeleton, a structure. The structure, the skeleton, in the human being and in the architectural space, must be present from the first moment of conception.

The History of Architecture is a History of structures. Stunning structures that have sprinkled the world with beauty. From the Pantheon in Rome that is a prodigious structure, to the Crown Hall in Chicago by Mies Van der Rohe, passing through so many gothic cathedrals. Structures.

And if I talk about Spain, about its modern architecture, I have to mention the Maravillas Gimnasium by Alejandro de la Sota or the BBVA tower by Oíza, or any work of Fisac, all of them in Madrid. structures.

And if I talk about Switzerland, I will never forget a visit in Zurich to the School in Leutschenbach by Christian Kerez with Joseph Schwartz and Juan José Castellón. A pure and wonderful structure, different but beautiful. From this visit I wrote the text "The apple and the leaf" defending the possibility of different options, within the logic, for structures in architecture.

A young Spanish architect, Alejandro Cervilla, in his PhD Thesis The language of the structure wrote:

"A building under construction with the structure standing up, clean, tidy, without enclosure, is a wonderful skeleton. In fact, this is one of the most beautiful moments

in the life of a building. When its skeleton is exposed, without anything else. When structure and gravity are the protagonists.”

And if the structure is fine, is logical, it will only use the essential number of elements to solve the problem and, at the same time, to reach the beauty. As if it would be Poetry. As the American linguists E.B. White and William Strunk repeated “omit needless words”. Or as proclaimed by our Mies Van der Rohe, even better: “Less is more”.