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DAGLIO**FRAMPTON'S TECTONICS. A CASE STUDY**

Kenneth Frampton, Studies in Tectonic Culture

His book was published in 1969, it's an important contribution in architecture. It introduced a specific view in architecture. He summarized the approach about these approaches and simplified the approach from the architect to the twenty centuries. This book is considered an important step in the history of architecture because it analyzes in a different way the history of architecture. The history of architecture was analyzed and was accounted for based on the articulation and on the perceptions of space so as a combination of different rooms and spaces as the way of inhabitants perceived the interior space and outdoor space. But somehow neglected those physical elements and constructional components which defined and articulated the space. For example wood and material created a different way to combine different spaces.

This is a main contribution by Frampton on constructions, it's an innovative approach. He really focused on construction, and different architects are analyzed by these principles: architecture are not based principles in the ideas of space and the articulation of space but it's the results of assembly by different components. All different architects can offer our personal interpretation of construction in the way he combined material, different joints in way to design different architecture. Frampton the bricks and mortar are the essence of architecture. It's extremely important because in the history of architecture the stress was on the space, in dimension and geometry of the space. This type of approach is based on the concept of tectonics, this concept is not introduced in novelty, Frampton tries to recreate the history of tectonics in order to support his theory and the analysis of works of architects. Tectonic refers to different elements and parts assembled in different ways to create a structure. If we compared architecture to language tectonics is the syntax of architecture, the rules of combination and different choice of assembly. The difference with the previous historians is based on the fact that somehow the construction is not only the symbol and about space but it's about the concrete material.

The two main scholars Frampton talks about are Viollet le Duc and Gottfried Semper. In fact Frampton analyzed some different concepts from Le Duc but specially by Semper described in his books. By Semper, Frampton analyzed the definition of primitive architecture.

In primitive architecture Semper wants to define some common roots of architecture, which are common to construction on all the world. Semper analysis isn't based on space but he based his analysis on the common primitive elements of architecture on the basic elements. The basic elements are 4:

- earthwork, referred to as the base of construction based on the soil. The element between the natural element and the artificial elements of architecture.
- hearth is the fireplace, it's at the base of what are primitive concepts. Permit to control the indoor comfort.
- framework/roof, it's usually based on the structure supported by pillars.
- a light-weight enclosing membrane: elements that create a separation from indoor and outdoor.

Semper identified 2 different constructional approaches and these are:

- the tectonics is referred to the assembly of the different elements, combination and composition of elements. (Maybe this technique is based on the technique used to create the primitive caved)

- the stereotomics is referred to the earthwork, it's an additive work to create an element adding different elements. (Maybe these technique is based on the different way to providing shelter adopted of primitive population for create a hats)

These 2 approaches are the archetypes of which all constructional tipologies and techniques are based. (immagine con tanti disegni fatti a mano) on the left tectonic and the right stereotomic. Stereotomic and tectonic approaches are completely different:

- stereotomic: solid construction, made from vertical walls, directly enclosed interior space, separation between interior and exterior. For door and windows there are fregil point
- tectonic: filigree construction, made from linear members, not separation between interior and exterior.

In today's architecture we don't think about the 2 constructional approaches referred to nature in different ways. Frampton discusses the consequences of the difference between these 2 types of architecture and stereotomic tends towards the aerial, dematerialization and light, tectonic tend to dark and it's more mass.

Atectonic is an architecture somehow permitted to contradict the concept of constructs. To better explain the concepts of tectonics which is not a way of also convey architecture but convey it as a constructional product, an approach that is near to analytical or neutral archi has been conceived as an assembly of different elements.

Hoffmann, Casa Stoclet, in this living room the 2nd floor appears clearly thanks to a balcony supported by columns which is einlight with marble. It's atectonic building because some of the columns are fake, some are for defining a separation of the space, creating geometry and creating vertical lines it's not actually showing just the structure elements.

Behrens, AEG Turbine Factory, very famous building, it's a combination of tectonic and atectonic. He analyses the building looking at the construction, in conceiving the construction one of the main elements is the framework. Frampton says that in this building both tectonic and atectonic element are present for example on the longitudinal elevation the presence of the structure is quite clear, there are the pillar that supporting the beams and transferring the load to the soil, these vertical elements are very clear and organised to tell their function - also the curtain wall are separating the indoor from the outdoor environment

whereas on the transversal elevation the main one that is somehow referring to classical greek temple as a archetype in its presence with the 2 main side corner element and the top 'triangle' is a atectonic because the 2 stone / stereotomic element which apparently support the roof instead they do not perform that function. It's the steel structure that has that purpose.

Frampton for better explain his analysis at the end of his book talks about Carlo Scarpa and the adoration of the joint. In the work of Scarpa the concept of joints is clearly present and it's the main element of his specific architecture (we speak about his work when speaking about analytical architecture, negative joints). Frampton defines the work of Scarpa as a sort of watershed in the history of architecture in the twenty century because his idea of assembly of joints is extremely modern. The task and the challenge of nowadays architecture is much relied on the activity of combining different elements that are available on the market. The contribution and work of Scarpa is really related to the artisan and in these concepts of the joint as a combination of different elements from the point of view of the material and production relies on the modernity of the work by Scarpa. The joints which Frampton develops are the joints of tectonic condensation, the joints are independent from the architecture. It's related to the architecture but you have to read the architecture in the single details. Joint as tectonic condensation, as an intersection to absorb the whole in a single part.

This idea of architecture is present in his first famous work, Fondazione Querini Stampalia (Scarpa). He designed this work at the beginning in 1963. He designed the courtyard and also the bridge which allows for the direct axes to the fondazione from the small campiello in front of the building. It's the first modern architectural bridge in Venice. Analyzing Scarpa work Frampton analysis specifically elements referred to tectonic and stereotomic, analyzed the way he used material.

The bridge connects the main entrance, there are 2 different entries, the first is the main and the second is by the canal using a boat, the concrete plinth continuous have also a functional purpose which is solving the problems of clads, when the sea level rises it does not flat the floors over the fondazione because they are protected by this concrete basement.

The walls are clad with stone. Frampton recognises a metonymic use of the stone, a way of using an element in a different way but alluding to the concept of the world, in this way he wants to say that he uses the stone as if it was a wood. The cladding of this main gallery is a sort of a cabinet, something that recalls wood panelling present in some buildings. He used these brass metal elements, the horizontal line is a groove which is inserted in the wall to suspend the drawings. To the brass groove there are also suspended some paintings, this complex articulation of panels and strips is also a present in the floor that is made with concrete where you recognise the same strips of the wall. The reference to the geometry of the panes is related to Le Corbusier and Van Doesburg.

The door is made of stone with a sophisticated geometry, in the rhythm of the strips of ground glass that are curved to the glass doors, the columns are the same but rotations of 90° contribute to give a dynamic sense of the space.

On the bridge there are stone steps, then a structure made with steel, the railing in wood and again brass elements on the handrail. One of the main characteristics of the bridge is that it is asymmetrical. The use of the stone became a sort of an intermediate element between the bridge and the soil and the building, the real structure of the bridge that is steel and wood is detached but linked and supported by this stone element and there is a transition between structural element and the supports. This articulation of the path creates the asymmetrical structural he expands and enlarges the span between the vertical elements. He creates a double railing one made in steel that is the structural one and gives higher stability and the second one in wood where people can lean on.

The courtyard is structured the same as inside, the use of water is present in a sort of canal where water flows. The detail of use of mosaic glass tiles that create a line in the plane concrete wall contrast between the rug surface of concrete and the gold use of mosaic.

2 essential aspects of Scarpa's method:

- The detail of drawing is very complex, the work is behind the progetation of detail. "The gestural impulse passes almost without a break from the act of drafting to the act of making."
- In drawing he not only represents the detail but represents who they work together, how to combine, the drawing simulating the works of handicrafts.