THE ESTABLISHMENT OF THE ARCHITECTURE

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The construction of the horizontal plane

Man has always had a special fascination for the horizon line. Where heaven and earth meet, or separate. With Semper and Frampton we would say that the horizon is the mysterious line that separates the stereotomic world linked to the heavy earth from the tectonic world linked to the sky, to light.

But the horizon line is only the visible image of the horizontal plane of the earth, which, although spherical, is horizontal because of its enormous dimensions in relation to man.

Man has always sought a horizontal plane on which to establish himself. From children's games on the ground, to monuments such as Stonehenge, which are an exaltation and sacralisation of this establishment on the horizontal plane.

In our childhood, without knowing who had taught it to us, as if it were a primitive game imprinted by natural law, we boys played pincho and the girls played house. And in both cases there was a clear definition of the limits of the land on the ground. First the chosen land was flattened and then the lines were drawn to delimit that territory.

In the case of children, a rectangle was drawn, which was then divided according to where the metal spike was stuck. A straight line was then drawn in such a way as to give us as much surface area as possible.

In the case of the girls, the layout was that of a house, a real floor plan. I remember how they wouldn't let us children enter those innocently dominated enclosures.

I suppose that in all countries and civilisations there will be similar games.

I would like to propose here a reflection on man's most primitive architectural operation that takes place when he leaves the cave, the stony maternal enclosure. It is an action that is still linked to the earth in which, in the most elementary way, the simple artifice of the horizontal plane is established. And it is this question, that of the horizontal plane, that we are going to analyse. Why, how, where and when.

ANCIENT HISTORY

When primitive man erected the trilithons of the sacred enclosure of Stonehenge, he had first found, or created, a place with a horizontal plane on which to form that well-defined space.

The Acropolis of Athens, before the immense beauty of its temples, is a proposal for an elevated horizontal plane, at the top of that mountain of the gods, as the masters understood it well when they visited it. The drawings of Le Corbusier, Kahn or Schinkel

are very expressive. Rather than drawing the details or the temples, they drew a general view, subscribing to that fundamental operation of creating the horizontal plane up there.

Villa Rotonda, over and above its brilliant composition, speaks to us of the establishment of a horizontal plane, what the Italians significantly call "piano nobile", where the powerful access stairs only underline the idea of the podium we are talking about.

THE WORDS SPEAK

When we talk about this horizontal plane on which man stands, many words come to mind that relate to this very architectural question.

Establecerse, table (French), table (English), tabla (Spanish), tavola (Italian).

To settle, sit, sit down, settle, rest.

Podium, platform, plinth, base, baseplate, base, bench, terrace, roof.

With architecture, man settles down in a place to rest. The word "table", both in English and in French, means a table, a plane for various functions such as reading, eating, working; it is like a tablecloth on the floor, or a rug or a carpet.

Manet's painting "le dejeneur sur l'herbe", with the figures around or on the tablecloth, establishes a clear situation of spatial dominance over nature. What we have all done when we have gone to the countryside or the beach: put a tablecloth or a towel on the ground creating this horizontal plane of instant spatial dominance.

In Castilian there is a very expansive word "tablao" to define a wooden construction of a high plane on which one dances and sings. The "tablaos flamencos" are well known to everyone.

And after establishing ourselves by creating a simple, defined and limited ground we have to do something else. We need to protect ourselves from the rain with a roof. And as this roof is material and heavy we have to support it. And then, for reasons of climate and security, we will have to protect our surroundings, deciding the limits of this controlled horizontal plane.

Covering and protecting us. Two basic operations of architecture: deciding the limits of vertical and horizontal space. The limits of the sky and the earth. And isn't the horizon precisely the limit between them?

RAFT, BOAT, DOCK.

What is the Farnsworth House if not a defined space between two horizontal planes that floats? Mies van der Rohe floats the horizontal plane of his floor. At the precise height of our eyes, so high that it needs another intermediate platform to allow us to access it in a slower, more palpable way. And already on the main platform we find ourselves on a raft, like on a flying carpet. With the calm and serenity conferred not so much by the

classicism of its composition as by the decision of the height at which it places this horizontal plane, so horizontal that a special mechanism had to be invented to make the floor perfectly flat. And so under the travertine slabs there are inverted pyramids of gravel for drainage. The master, so jealous of horizontality, did not allow even the slightest slope under his feet.

And what is the Savoie villa if not a space on a horizontal plane that sails? In the Savoie villa, Le Corbusier places the main plan at such a height above the landscape that it looks like the deck of a ship. Much higher than Mies's, one storey above the ground. And if the Miesian raft did not need railings (I have never seen any raft, including Gericault's, with a railing), Le Corbusier's boat does need protection. Thus we could read the sill of this "fenêtre en longeur" as a railing protecting the high courtyard, open to the sky, on which the Savoie villa spatially tilts. The ramp, as a slower access mechanism, acts as a functional rather than a spatial connection, and is faster than Mies's previous plan. Both masters, convinced of their results, repeated these access mechanisms, each one his own, on numerous occasions.

And what is Utzon's house in Porto Petro in Mallorca if not a space on a cliff carved horizontally facing the sea? If I have dared to see the Farnsworth as a raft and the Villa Savoie as a boat, I cannot but, following the marine similes, speak of the horizontal plane of Utzon's house as if it were a dock. The Danish master wrote an interesting text on platforms, explaining the origin of much of his architecture: the basic consideration of the horizontal plane we are trying to write about. It would seem that here he was looking for "the remoteness and calm" of which he speaks in that text by placing himself on that dock facing the sea. If Mies raises the plane as if to tiptoe and Le Corbusier takes off more as if to build his palafitte, Utzon builds his platform, his base, with a perhaps more primitive sense. And once he has defined this podium with stone, stone on stone, he builds his temples on it, also in the Greek manner.

GRAVITY, THE REASON FOR THE HORIZONTAL PLANE

It is not a question of making pseudo-medical distinctions about the sense of balance and the Eustachian tube of our inner ear, but they must have some relation to this issue of horizontality. To be, which is to rest, which is to stay, to remain, we demand a horizontal floor. Some prisoners are only put on an inclined plane precisely to cause them imbalance. To work and to be able to support the instruments we use, we need the horizontal plane of a table. Less young architects are well aware of how things used to fall off the old sloping table top. We also need a horizontal plane on which to sleep, with greater or lesser ease. I have never seen beds on inclined planes, except in clinical cases in hospitals or those of the worst prisoners in the most clichéd films. To sit, even if it has its ergonomic nuances, we need the horizontal plane, and so we could go on observing how the question of the horizontal plane is, in architecture, something more than a whim.

THE CAVE AND THE HUT

When man still lives in the cave, he looks for, or creates, different horizontal planes on which to place his functions. He looks for a main plane on which to carry out common functions, perhaps where to place the fire, and then a slightly higher plane on which to sit. It then looks for horizontal planes, more secluded, capable of providing shelter for its need to sleep. It is easy to imagine the above, knowing the need for the horizontal plane, which slows down gravity, in the life of the vertical man. Basically, it is the search for a stable plane forever: the permanent home.

When man comes out of the cave and conceives in his head the idea of a possible room all built by him, controlled by him even in the choice of the place, he looks for a flat place. And he tamps it down, and makes it flatter and sweeps it and marks it, perhaps like the animals. But unlike them, he marks it with geometry. Perhaps with the circle or the square. And then he covers it, and then encloses it, as in the Caribbean hut, with which Semper pedagogically sums up his "four elements of architecture". Basically, it is the search for a plan capable of being moved, gaining the freedom to choose the site: the nomadic house.

THE STEREOTOMIC PODIUM

We could imagine the horizontal plane as carved into the rock itself as a foundation on which the architecture will be built. This attitude of continuity leads to the construction of a podium that is one with the earth, as if born of it: the stereotomic podium will always be massive, stony, heavy. The suggestive images of Adolf Apia, which Le Corbusier liked so much, can illustrate this type of operation in a very expressive way. The podiums with which Mies van der Rohe resolved the Tugendhat house in Brno, or the Barcelona pavilion belong to this genre of the stereotomic podium. And his idea is reinforced by the way in which the access steps appear as if excavated, carved out of this powerful base. It is interesting to note that when Mies decides to use the stereotomic podium, he always places the excavated steps laterally. In a very different way, when he uses the floating platform, his steps, also floating, appear in a frontal position. This is how the old master will do it once again in the main entrance of his last work in Berlin. Just as Palladio did in the Villa Rotonda or in the Malcontenta in an obvious manner. Front stairs in the Rotonda and side stairs in the Malcontenta.

THE TECTONIC PODIUM

We no longer speak of a podium but of a platform. The main plane, the "piano nobile", appears as a floating carpet, or as a table, when in architecture this "buoyancy" is intended, as Mies or Le Corbusier do in some of their most paradigmatic works.

The floating platform of the Farnsworth House (we have called it a raft) or the ville Savoie (we have called it a boat deck) are clear examples of the floating elevated horizontal plane. Something that is only possible with steel or reinforced concrete. What primitive man did with wood in the stilt house. The famous Caribbean hut of Semper is a clear example.

We have gone through some questions about the horizontal plane, which we can already see is neither ancient nor modern, neither classical nor avant-garde. It is a mechanism, a situation, which is related to the most basic issues of man as a physical being dependent on the law of gravity, which he cannot avoid. Or better still, that if Architecture cannot but have gravity as a necessary ingredient, the question of the horizontal plane will remain an inescapably basic issue.

MIES UP!

The elevated horizontal plane is a major theme in the plans of Mies van der Rohe, who thus proposes man's dominion over the earth.

All Mies' projects show his determination to create this horizontal plane from which he would never depart. And to do this he uses two highly effective ways, depending on whether he works with this plane as the upper limit of a podium or as an isolated floating plane. In the first case, we could speak of the stereotomic podium, using terminology borrowed from Semper. In the second case of tectonic podium, or better still of platform. In both cases this plane will always place us at eye level, marking from the first moment a very precise position of the near horizon where the horizontal plane becomes a line. One more reason to understand the importance that Mies gives to how this level is accessed, always by steps and never by ramp, in a spatial operation of great interest.

On the one hand, when it comes to a stereotomic and heavy podium, it is accessed from the side. The access steps to the house, in the Tugendhat, or to the Barcelona pavilion, are lateral, and are covered by a parapet, accentuating the fact that they are dug into the rock.

On the other hand, whenever a platform is involved, what we have called a tectonic podium, it is always accessed frontally. The access steps to the Farnsworth or Crown Hall are always frontal, and loose, light, as if floating in the air.

It is interesting to study how Mies, in the steps dug into the side of the podiums, proposes continuous access, without stopping. Or with only the small landing as a rest. The aim is to reach the top, the upper plane, as quickly as possible. On the other hand, in the steps that float in front to access the upper platform, Mies creates an intermediate, wide platform, where he makes us stop and pushes us to contemplate the transparency and continuity of the architectural temple that he offers us above.

The master sets the bar very high, at eye level, where the plane becomes a line, and with a great pedagogical sense, he takes us by the hand into the elevated world of his architecture.