

# The Shift of Le Corbusier

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By the autumn of 1929, the Villa Savoye was under construction. The final exemplar of Le Corbusier's classic villas, the work is a point by point demonstration of the principles espoused in *Vers une Architecture* of 1923. Concurrently at the studio on 35 rue de Sèvres, a series of other projects under design were pointing a new direction for Le Corbusier's work. In the Errazuriz House, De Mandrot House, and the Pavillon Suisse at the University of Paris, a new palette of material (rough hewn stone, exposed shuttered concrete, timbers, wood panels) appeared in addition to the precision of smooth stucco walls and the "dry built" components of the classic villas. While the addition of vernacular materials by Le Corbusier might be connected to a number of factors, and a formal analysis of where and how vernacular or "primitive" elements were used in his work may yield a different perspective on the change in Le Corbusier's work in 1930's. This chapter will look at a number of Le Corbusier's works from the 1930's to the 1950's to explore this question.

## LE CORBUSIER, PRIMITIVISM & SURREALISM

Le Corbusier's interest in the vernacular was a preoccupation of many artists of his time. For modernist artists of the early twentieth century, the work of "primitive" Western and non-Western cultures were ultimately appropriated to solve the problem of bringing these cultures under the dominion of Western thought, but more importantly as part of the project of scientific rationalism to undermine historical models as the basis of artistic production. Concurrently, with greater exposure to other cultures such as China, Western Europe realized that different but equally sophisticated artistic traditions existed as alternative systems. Although these cultures were subjugated through the eye of the "Orientalist" genre of Western art, this exposure shook faith in the singularity of Western vision. With the recognition of

alternate rules of production and connoisseurship, a search for an objective, universal truth in art began which relied less on authority but more in the condensation by each artist of what were thought to be universal human truths. "Primitive" cultures represented a utopian state for modernists, where experience with the world is unmediated and therefore closer to the "truths" of experience.

While artists such as Matisse, Gauguin and Picasso were directly influenced by the art of these "other" cultures, the Surrealists used the work of primitives as a guidepost to a cognitive state preceding the rational framework of modern experience. Primitive art became an aid in guiding the Surrealists in the exploration of their own unconscious. In their readings of Freud and Jung, the surrealists saw the myths of cultures as a representation of a collective unconscious. The charge of the artist, in Max Ernst's words, was to "find the myth of his time." (*Beyond Painting*, 1948.) Primitive art was not appropriated directly by the Surrealists; they instead saw art as representative of a psychological state they themselves were attempting to attain. To this effect, the Surrealists not only studied the art of "primitives", but of children and the mentally ill as well.

Kenneth Frampton has used the word "surrealism" to describe some of Le Corbusier's work during this period and sees surrealism as a latent tendency in all of Le Corbusier's postwar production.<sup>1</sup> However, just the use of "primitive" or other materials does not paint Le Corbusier's work as surrealist. Surrealism is a term that has many connotations, from the vernacular meaning of simply "strange" to the very particular meaning given by the Comte de Lautremont, a writer rediscovered by the Surrealists. Lautremont predated the Surrealists, but his description of poetry was seized on by the Surrealists. Lautremont said:

"The association of two, or more, apparently alien elements on a plane alien to both is the most potent ignition of poetry."<sup>2</sup> The artist Max Ernst elaborated on Lautermont's saying by stating: "I am tempted to see in collage the exploitation of the chance meeting of two distant realities on an unfamiliar plane or to use a shorter term, the culture of systematic displacements and its effects, ... the coupling of two realities, irreconcilable in appearance, on a plane which apparently does not suit them."<sup>3</sup>

By this definition, surrealism in architecture might be achieved by bringing the architecture of another culture or time to a place foreign to it. One might then argue that this "rencontre" to use a term of Jacques Brunius, the actor and surrealist, was present in colonialist architecture. However, what separates the surrealist project from Orientalism or some sort of simple appropriation is a desire to combine dream and reality and thus to supersede reality with one's art. "I believe in the future resolution of these two states, dream and reality, which are seemingly so contradictory, into a kind of absolute reality, a *surreality*, if one may so speak" as explained by Andre Breton in the Surrealist's Manifesto. James Clifford makes the distinction between colonialist appropriation and surrealism by stating: "Unlike the exoticism of the nineteenth century, which departed from a more-or-less confident cultural order in search of a temporary *frisson*, a circumscribed experience of the bizarre, modern surrealism and ethnography began with a reality deeply in question."<sup>4</sup>

This positing of a new reality based on the juxtaposition of irreconcilable parts was a strategy of sculptors before, and even more so, after World War II. The sculptor Constantin Brancusi began in the 1920's an investigation of forms where the experience of the piece is not in the forms themselves, but in the phenomena created by the interaction of the forms. In pieces such as *Bird in Space* or *Fish*, Brancusi would juxtapose highly polished forms of the most essential representation of the subject with a complex base of many varied materials such as rough timber or smooth stone that had almost an equal presence of form and material with the "sculpture" itself. The reflections of the highly polished bronze with the "base" elements of the sculpture, and the room it was placed in, became as much the

subject of the sculpture as the narrative of "bird" or "fish".<sup>5</sup>

Similarly, one can look at the sculpture of David Smith from the 1950's onward and see a similar preoccupation with the assemblage of juxtaposed forms. In these pieces, a coherent, formal whole or center would not exist; rather the sculpture would change emphasis, and different parts would come into play in the composition as the viewer moved around the sculpture. Much of this came from Smith's interest in Freud and the idea of totemism, a sacred object that identified a tribe and their taboos.<sup>6</sup> This interest in the practices of "primitive" cultures is very much in line with the concerns of the surrealists with finding alternate identities and realities.

The way that Smith has deployed these "totems" in his sculpture has similarities with how Brancusi assembled his sculptures. All of the pieces of Brancusi's and Smith's sculptures are complete and have a narrative content; all of the pieces have the sense of being representational. The pieces in each of the sculptors' work are juxtaposed; either in the way that Brancusi rests one piece on top of the other or how Smith hangs the pieces in space. These assemblages by both Brancusi and Smith can be distinguished from other forms of assemblage such as Constructivism. For a constructivist sculptor such as Moholy Nagy, the technological perfection of his metal and glass forms can only be imperfectly seen by us. As noted by Rosalind Krauss:

Their (the constructivists') strategy is, time and again, to build the object out from what appears to be a generative core ... Itself an analytic object, the sculpture is understood as modeling, by reflection, the analytic intelligence of both viewer and maker. And the production of the model is understood as being the proper goal of the making of sculpture.<sup>7</sup>

Le Corbusier seems to share with the surrealists a belief in the ability of "tangible objects serve as starting points of poetry.." as put by Stanislaus von Moos.<sup>8</sup> Von Moos also notes that Le Corbusier "was highly responsive to the surrealist technique of unexpected confrontations of functionality and organically unrelated objects."<sup>9</sup> In Le Corbusier's work after 1930, there is the sense of surrealist

assemblage that his 1920's work does not have. Le Corbusier begins to combine materials and forms with iconographic content that overturn the conventional codes of Modernism that Le Corbusier himself helped create with his houses of the 1920's. This direction taken by Le Corbusier would prove to be highly influential to post World War II architects. This new direction by Le Corbusier was started with the design and construction of several houses in the 1930's.

### ERRAZURIZ HOUSE

The Errazuriz House was commissioned in 1929 by a wealthy Chilean landowner, Matias Errazuriz. In many ways this house is an adaptation of house types proposed by Le Corbusier over the previous decade before the Errazuriz House. Collins views the Errazuriz House as beginning with the Maison Citrohan type, a rectangular volume with a gallery containing private spaces. The concerns of the *promenade architecturale* distort the basic volume of the house much as in the classic villas of Le Corbusier. It is when the materials proposed for the house are examined that a break with the work of the previous decade is seen. The house has a base, flooring and ramp of irregular stone which Le Corbusier thought could be collected on the site. The walls of the house are the familiar whitewashed plaster, but the roof is of clay tiles. Inside, the structure of roof and supporting columns are of timber logs painted white and the ceiling between the beams plastered smooth. The clearly industrial products for the house are the large plate glass windows and the iron railings and bridge.

Comparing the Errazuriz house to its Maison Citrohan prototype, the adaptation seems a straightforward substitution of material. Concrete piers and beams are replaced with timber; a conventional stone foundation replaces the pilotis. However, it is the addition of different materials and how they are assembled which is the difference. The Citrohan house is conceived of as made from a homogeneous material. The Errazuriz House, on the other hand, has an independence and juxtaposition of materials and systems. The horizontal wall facing the ocean is articulated with a series of piers suggesting a skeletal system with regions of infill rather than a wall system, but the piers do not meet the timber beams for the roof; the beams actually occur at points between the piers. This disconnection

articulates the independence of the front wall from the roof as does exposing of the timber structure and columns for the roof. In addition, a beam is placed at the top of the posts parallel to the longitudinal axis of the house. The posts and this longitudinal beam because they also outline the inversion of the roof visually appear to be the important elements holding up the roof which serve to tie the roof and timber structure together as one element. The irregular stonework creates another system which includes not only the base but the fireplace and the ramp. The stone becomes a portion of the landscape that is brought to the inside of the house. The Errazuriz house can be seen as a "natural" stone platform onto which a screen wall against the sea and a timber framework supporting the gallery level and roof are placed.

The juxtaposition of elements is not a new device for Le Corbusier. In the villas of the 1920's colors and curves signaled walls as non-loadbearing partitions and were spatially juxtaposed with the independent grid of columns. However, the Errazuriz House shows these elements taking on a multiplicity of meaning. Is the front wall a screen as suggested by the piers or a load bearing wall? The wall acts as both, but this shows a shift in thinking from the Villa Savoye where the five points were pursued with ever increasing clarity. In Errazuriz there is a free load bearing facade, a structurally unnecessary columnar system and the suggestion of the natural environment inhabiting a "machine a habiter"<sup>10</sup>. Spatially, the concerns and the Corbusian type-forms from the 20's are familiar, but the vocabulary of vernacular materials and the fusion of the natural environment with the made-made architecture is a new direction for Le Corbusier.

### DE MANDROT HOUSE

The De Mandrot House of 1931 showed that Le Corbusier's use of traditional building material was not limited to geography. The De Mandrot House located in Le Pradet, France, about 15 kilometers east of Toulon, was built for Madame De Mandrot, a wealthy art collector and patron of the CIAM.

For William Jordy,

The influence of the De Mandrot prototype on other modern architects during the thirties and forties was

immense, probably because Le Corbusier managed to retain the primal volumetric shape of his *prisme pur*, while infusing this hallmark of the International Style of the twenties with constructivist tendencies. What was familiar in the movement opened to new possibilities.<sup>11</sup>

I believe that Jordy's assessment of the De Mandrot house as "constructivist" is a very casual reading of this house. As we have seen in constructivist sculpture, the constructivist project depends on a consistent language of material and forms that represent a conceptual idea.

In the case of the De Mandrot House, nothing is so clear cut. The masonry walls are perforated with small and large openings. A large floor to ceiling window looks out from the kitchen, cut into the edge of a large fieldstone wall. Next to this is an almost solid stucco wall given equal visual weight with the fieldstone wall due to the few small penetrations in it and built flush with the stone. Another large plate glass window from the library is also placed in a fieldstone wall. If the De Mandrot house was truly Constructivist as Jordy claims, these contradictions would not exist. The fieldstone sections of the house would not have large voids while the area between the fieldstone would be glass or void. In the De Mandrot House, there is not the sense that every element is supporting the reading of an organizing concept, like the central outdoor courtyard at the back of the house. Moments within the house, such as sitting in the library and looking out a large window take precedence over continuing the stone wall to promote a reading of solidity in the bedroom wing to contrast with the central plan void. The incidental moment takes precedence over the formal diagram. Something else is going on with the De Mandrot House.

If we think about the materials used in the De Mandrot house, a different interpretation of Le Corbusier's intentions and direction in his architecture is possible. The way that fieldstone is used in the De Mandrot House in some places implies that the wall is load bearing, in others that the fieldstone is like wallpaper. As observed above, Le Corbusier contradicts the formal diagram of solid and void of the house by placing large openings in the fieldstone and making the areas of the

lighter material, the stucco, more solid. These contradictions make the fieldstone feel as lightweight as the stucco wall or the stucco as heavy as the fieldstone. However, the fieldstone itself is laid with thick mortar joints and the corners of the fieldstone walls are quoined, signaling that the stone is load-bearing. This traditional masonry detail furthers confuses the issue of whether the walls are load-bearing, which they in fact are, or whether the walls are just non-bearing screen walls as Le Corbusier concludes is a key to modern architecture in his Five Points.

The way Le Corbusier uses fieldstone, stucco and glass at the De Mandrot house is a *rencontre* of these materials. By making these dissimilar material walls define a cubic volume and giving them equivalence compositionally in relation to the house as a whole, the material qualities of the wall also take on an equivalence. The weightless and abstract quality of the stucco wall changes the perception of the fieldstone wall so that the fieldstone is seen as decorative patterning rather than solid structural system, the meaning that is traditionally prescribed to a stone wall. By juxtaposing these materials, Le Corbusier "unloads" the cultural message of each of these materials. Stone becomes a weightless skin, a very modern way to make a wall and in agreement with Le Corbusier's Five Points i.e. the "free façade." Only by placing the fieldstone within the tight cubic volume of the house itself, by treating the detailing of how the stone meets the stucco as minimal and coplanar can this "unloading" happen, much as with Lautremont's example of surrealism, the umbrella and and sewing machine only have artistic power when placed together on a dissecting table.

#### **LE PAVILION SUISSE**

At about the same time as the Errazariz and De Mandrot houses, Le Corbusier was constructing the Fondation Suisse at the University of Paris. The Fondation Suisse provides housing for 45 students of Swiss nationality at the University. The Fondation was established on July 10, 1931 with this sole mission and is funded by the Swiss government.<sup>12</sup>

The building massing is very much a constructivist affair. Kenneth Frampton describes the massing as "Neo-Cubist" for the way that on the rear of the building, the

fieldstone wall and stair tower layer onto the precast back façade.<sup>13</sup> The building seems to have much in common with Le Corbusier's earlier large buildings and proposals such as the League of Nations competition entry, the Centrosoyus Building in Moscow and the proposal for the Palace of the Soviets in Moscow. All of these buildings use as their defining concept an assemblage of their building program as identifiable pieces. The Pavilion Suisse is very much the little brother to these other larger, more programmatically complex projects. With such a small building as the Pavilion Suisse, Le Corbusier takes pains to make a volume for each piece, the dormitory block, the common rooms and the staircase.

What separates the Pavilion Suisse from these other projects is Le Corbusier's use of vernacular/rawer materials as well as the clearly biomorphic columns. The materials used for the Pavilion Suisse we have seen before at the Errazuriz and De Mandrot houses: fieldstone, large plate glass and then instead of smooth stucco, precast concrete. In addition to this material palette, board formed concrete is used for the columns at the Pavilion Suisse. The comparison between materials is not as equivalent at the Pavilion Suisse as it is at the De Mandrot House. The fieldstone is used where we would expect it, at the base of the building, implying an idea of rusticated base on the north side. The fieldstone wall is visually thin because of the exposure of the edge of the wall and the contrast with glass wall surrounding the rest of the lower block, but there is no sense as with the De Mandrot House that the wall is meant to have any relationship other than a formal one. The fieldstone wall, the curved precast wall of the stair tower and the back of the dormitory block create a contrasting layering of planes, much as in a constructivist or cubist composition as Frampton observes. The three glass walls of the lower block serve to conceptually make the fieldstone wall an independent plane, very much in the constructivist mode.

Where the building does become a little strange is the connection, both physically and conceptually, between the pilotis and the dormitory block. The dormitory block has a taut, linear volumetric expression, particularly with the original curtain wall which was much more coplanar. There is the sense of weightlessness, even with the precast concrete. The pilotis on the other hand are

massive and biomorphic. The pilotis express the weight of the dormitory block that they are lifting, a weight that if one were to only look at the pilotis is substantial and massive. The assemblage of these elements, the massive pilotis with the lightweight block make for a disquieting strangeness to the building.

A look at an earlier scheme for the pilotis shows a major change in thinking by Le Corbusier. In a sketch labeled CU 2561, the dormitory block is shown lifted up by a single row of very thin, rectangular pilotis.<sup>14</sup> The intention of this drawing is very clear; the dormitory block in this scheme would have the appearance of floating weightlessly over the ground. This intention is very consistent with the layering of planes on the north side of the building. The effect would have been of floating planes as viewed from the north which would then reveal the floating volume of the dormitory block as one came around the building.

The scheme as presented in the design sketch would be impossible to build. The columns are much too slim, possibly for the gravity loads, but most certainly for the lateral loads on the building. The final shape for the columns must have come after a consultation with a structural engineer. The columns are not only much thicker, but have been divided into two parallel rows to aid in providing more support of the dormitory block from toppling in the north-south direction.

In the east-west direction, a necessary structural design change was made as well. The pilotis as built have an oblong shape in plan, where the greater dimension is oriented in an east-west direction. This longitudinal shaping creates a greater moment of inertia in the east-west direction to prevent the building from moving in that direction.

While the structural explanation of shaping has much to do with the general proportion of the pilotis, the shapes and casting methods of the concrete may have had more to do with Le Corbusier's investigations in his painting of the time. Stanislaus von Moos says of Le Corbusier's painting of the period:

"Later under the influence of surrealism and the works of Braque, Picasso, and Leger, the analogies between Le Corbusier's pictorial

patterns and architectural forms became even more striking. The impulses proceeded from painting into architecture and back again, and so there was a constant 'displacement of concepts' "<sup>15</sup>

As we have seen, the biomorphic forms used for the pilotis were easy to find in art contemporary with the Pavillon Suisse. More interesting is the juxtaposition of the dormitory block and pilotis. The disjuncture as noted above between the heavy and light, between the rough board formed concrete and smooth precast and glass is a juxtaposition that Le Corbusier does not pursue to the same degree later on. By the time of the Unite d'Habitation of 1952, all of the surfaces of the building are in crudely cast concrete and the entire building takes on a weight and monumentality not present in the Pavillon Suisse. Even though his work after the Pavillon Suisse might show contrast more in the forms chosen, Le Corbusier would say this about contrast:

"I will create beauty by contrast, I will find the opposite element, I will establish a dialogue between the rough and the finished, between precision and accident, between the lifeless and the intense and in this way I will encourage people to observe and reflect. The detailing of the building would thus be used to create an opportunity for a lesson on the meaning and resolution of oppositions in people's own lives."

The brief window of Le Corbusier's work in the 1930's where his buildings would be as in Lautremont's words "beautiful as the chance meeting on a dissecting-table of a sewing-machine and an umbrella" would be subsumed by a new monumentality. This early work, however, would continue to inform other architect's work well into the post-war era.

<sup>1</sup> Frampton, Kenneth. Modern Architecture, A Critical History. (Oxford University Press: New York). 1980. p. 224-230.

<sup>2</sup> The Painter's Keys, Internet:  
[http://quote.robertgenn.com/auth\\_search.php?authid=4242](http://quote.robertgenn.com/auth_search.php?authid=4242). 10/4/2009.

<sup>3</sup> J.H. Matthews, The Imagery of Surrealism. (Syracuse: Syracuse University Press, 1977). P. 71.

<sup>4</sup> Clifford, James. The Predicament of Culture. (Cambridge: Harvard University Press). 1988. P. 120

<sup>5</sup> Krauss, Rosalind E. Passages in Modern Sculpture. (New York: The Viking Press). 1977. P. 69-105.

<sup>6</sup> Krauss, Rosalind E. Passages in Modern Sculpture. (New York: The Viking Press). 1977. P. 154.

<sup>7</sup> Krauss, Rosalind E. Passages in Modern Sculpture. (New York: The Viking Press). 1977. P. 67.

<sup>8</sup> Moos, Stanislaus von. Le Corbusier: Elements of a Synthesis. (Cambridge: MIT Press). 1979. P. 307.

<sup>9</sup> Moos, Stanislaus von. Le Corbusier: Elements of a Synthesis. (Cambridge: MIT Press). 1979. P. 307.

<sup>10</sup> The Pavillon d'Esprit Nouveau featured a tree growing through its terrace as well as the transplanted garden of the Immeubles Villas, but Le Corbusier always seemed careful to separate the machine from the garden.

<sup>11</sup> William H. Jordy. American Buildings and their Architects: The Impact of European modernism in the Mid-Twentieth Century. (Garden City: Anchor Press) 1976. P. 208.

<sup>12</sup> "Statut et administration" Fondation Suisse, Internet::  
<http://www.fondationsuisse.fr/FR/organisation.html>, Oct. 27, 2009.

<sup>13</sup> Frampton, Kenneth, Le Corbusier: Architect of the Twentieth Century. (New York: Abrams) 2002. P. 7.74

<sup>14</sup> Frampton, Kenneth, Le Corbusier: Architect of the Twentieth Century. (New York: Abrams) 2002. P. 7.74

<sup>15</sup> Von Moos, Stanislaus. Le Corbusier: Elements of a Synthesis. (Cambridge: MIT Press) 1979. P.284.