# Architecture in a Book Le Corbusier's Le Poème d'Angle Droit

Daniel Naegele February 2018

Literate man, once having accepted an analytic technology of fragmentation, is not nearly so accessible to cosmic patterns as tribal man. He prefers separateness and compartmented spaces, rather than the open cosmos. He becomes less inclined to accept his body as a model of the universe, or to see his house [...] as a ritual extension of his body.

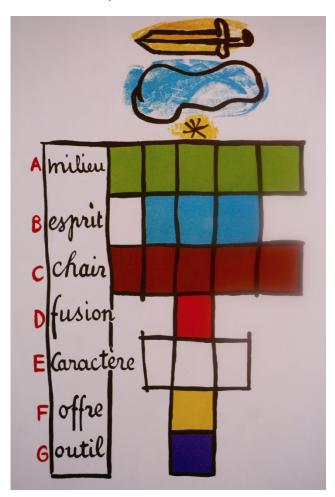
-Marshall McLuhan, Understanding Media, 1964

In 1955, the year in which his renowned chapel at Ronchamp was completed, the Swiss-French architect, Le Corbusier—perhaps the most influential architect in the world at the time—drew a book for the Livres d'Artiste series produced by the famous publisher, Tériade. The series was begun in 1943 and featured books by Rouault, Bonnard, Laurens, Matisse, Picasso, Chagall, Léger, and Gris. Le Corbusier's Le Poème de l'angle droit [1] was comprised of a poetic text written in a broad, cursive script and twenty full-page lithographs (32cm x 42cm). The lithographs were to be removed from the book and then assembled, according to Le Corbusier's instructions, as a mural in the shape of a 3-meter high tree.



I the cover of the 1955 Le Poème de l'angle droit

Le Corbusier had published over thirty books by 1955, but *Le Poème de l'angle droit* was very different than all that had come before. A visual book, it offered a new theory of architecture: less rational, more mystical than that which he had put forth in the influential 1923 *Ver une architecture*. It preferred the carnal and sensuous to the remote and intellectual. But how to communicate in book format this preference when by its very nature the book was a mass- produced conceptual medium? *Le Poème de l'angle droit* is a Homerian tale in which man is understood in the context of a *natural* world. It required the reader to take the book apart physically, to remove from its pages 20 full-page colored lithographs and to assemble these as a mural in the form of a tree. [2] The 3-meter high tree visually presented Le Corbusier's theory: anti-theory theory that asks the reader to be a constructor of art. The mural that results is intimately related to the wall and thus to architecture, itself.



2 Le Corbusier's diagram for Le Poème's lithograph 'tree'

Le Poème de l'angle droit is the logical result of thirty-five years of Le Corbusier's artistic efforts, endeavors that combined painting and color with architectural form and writing. This paper gives a brief history of Le Corbusier's architecture and art achievements from that point of view, achievements that move him away from earlier theories expressed best in the 1923 Vers une architecture, achievements summarized theoretically in Le Poème de l'angle droit. In a sense, it traces the path of Le Corbusier 'drawing over'. Le Corbusier drew over objects already in existence. He drew over walls and over the art of others. He 'drew over' with pencil and with color, with pasted-up photographs, with paint, and on film with light. He 'drew over' sometimes for public viewing, but often for private consumption only. Drawing-over made manifest new space. It evoked not the object itself, but the sensation of the object. It's this new space—no longer related to the specific time of the 20th Century—that is probed and put forth in Le Poème de l'angle droit.

### I Lightness, Color, and Lyrical Space

The earliest buildings that Le Corbusier buil—in Le Chaux des Fonds, Switzerland from 1905 to 1917 when he was still known as Charles Eduourd Jeanneret—were heavy, substantial, and in the ground.

In 1918, as the First World War came to an end, the thirty-year-old Charles-Edouard Jeanneret moved from this provincial, mountain town in neutral Switzerland to Paris, the culture capital of the world. There he met the painter, Amédée Ozenfant and together they formed a two-person painting movement they called Purism. Enthused about artistic modernity in the postwar era, with the Dada poet Paul Dermée they created the international journal, *L'Esprit Nouveau*.

In 1920, Jeanneret changed his name to Le Corbusier. In 1922, while still identifying himself as a painter, he began to dabble in Modern architecture, designing first the little Villa Besnus and then a studio for Amédée Ozenfant in Paris. Both were painted mostly white: stucco-on-concrete-frame, factory-aesthetic-lite. In 1923, he and Ozenfant collected together a few of the essays they had written for *L'Esprit Nouveau*. To close the collection, Le Corbusier wrote a 2400-word chapter, "Architecture or Revolution", and the

essays were published in that same year as a pamphlet-like book titled, *Vers une architecture*. Subsequent editions dropped Ozenfant as co-author and four years later the book was translated to English and given the title *Towards a New Architecture*. Ultimately, it became, for some at least, the most influential book on architecture published in the twentieth century.

The buildings Le Corbusier built between 1922 to 1933, though made of concrete, *appear* to be light. This lightness gives architectural expression to beliefs stated in *Vers une architecture*. Lightness was an affront to the context in which these new buildings were placed. It distinguished them as Modern while simultaneously indicting traditional buildings heavy with ornament, Mansard roofs, and Neo-Classical trappings. Highly stylized, the new architecture assumed the aesthetic of the machine, often taking the form of Cartesian constructs elevated in the air on columns which Le Corbusier called "pilotis." These buildings had no visible roof, but instead had a *toit jardin* complete with an assemblage of geometric shapes. Their main walls were cleverly composed facades seemingly independent of function, eschewing all suggestion of contributing support to the construct. Sidewalls were nearly blank. All was finished in high gloss paint. In the long-exposure photographs that popularized them, the buildings appear delicate, airy, and glowing.

Color was important to Le Corbusier. As note, he had begun his new life in Paris not as an architect but as a painter and a producer and editor of an art journal. Le Corbusier's paintings were calculated, precise, & neat. His work was the antithesis of spontaneity and 'letting go'. In 1923, at the Rosenberg Gallery in Paris, Le Corbusier saw an exhibition of the DeStijl painter Theo van Doesburg's polychromed architectural projects. The goal of monumental art, Van Doesburg claimed, was "To place man within painting instead of in front of it and thereby enable him to participate in it." Though he questioned van Doesburg's primary-colors schemata, Le Corbusier appreciated that it was "based upon a few brutally simple principles." He found it interesting, he said, "because it demonstrates the power of systems, whatever form they take." He decided to paint the interior of the house he was designing at the time, the Villa La Roche-Jeanneret, not white but multiple colors chosen from his own Purist palette. This color altered the "apparent space" of the house.

The next year, Le Corbusier combined colored architecture with 'architecture writing', enlarging letters—an 'E' and an 'N', the initials of 'Esprit Nouveau'—to the size of architecture. This elaboration was not decoration to him. He adamantly opposed and regularly railed against the decorative arts. For him, both color and writing were integral to building form. Word became image and image was habitable. It could be walked through encouraging what he called "promenade architecturale". This was so in his 1925 Esprit Nouveau Pavilion and with his demountable Nestlé Pavilion of 1928. And though it featured neither letters nor words, his 1925 Cité Frugès housing complex at Pessac near Bordeaux was a calculated-color village. <sup>3</sup>

In the 1920s and 1930s, in Le Corbusier's artistic circles, painting 'architecture-space' was not unusual.

"Art does not reproduce the visible, but makes visible," the Bauhaus master Paul Klee wrote, "The object is surely dead. The sensation of the object is of first importance." In Berlin and Weimar, in and in Paris, avantgarde artists investigated phenomenal art and the new space it created. El Lissitzky, Kurt Schwitters, Piet Mondrian—artists whose work was room-sized— dissolved the walls of their rooms with paint and shape, crossing boundaries that separated architecture from painting and sculpture. One suspects that Le Corbusier wanted to be a sensualist, but only some of the time. Through the mid-1920s, Le Corbusier was a Purist painter. Famously, he was 'correct'. He controlled himself and exercised restraint. Only gradually, as we shall see, did he employ color and painting and ultimately sound to catalyze not object but architectural space.

# 2 Concrete Irrationality

By the late 1920s, Le Corbusier—the painter of seemingly lightweight, ultramodern buildings—began making the occasional heavy building. His return to a rustic palette was slow but definite. In the early 1930s, he completed several of his so-called *gran projects*, one of which was the Pavillon Suisse,<sup>5</sup> a dormitory conceived as a taut, planar, mostly lightweight-looking construct. Though it was a smooth box,

framed in steel, and clad in a smoothly sanded stone, rustication was a *part* of its palette—largely incidental; and so in a sense, decorative. Fat legs held the box up in the air. Beneath this 'box in the air', Le Corbusier slid a low horizontal building made of rough stone, a building that contained the main entry, an administrator's office, and a library-lounge. Approaching the building by car, one saw the building's long, curved wall constructed of rustic stone with raised-bead mortar joints. This rustic wall re-appeared when one entered the building, the terminus of the *promenade architecturale* entry sequence. When Le Corbusier was denied permission to leave it rustic, he covered it with a photomural. Perhaps unintentional, the photo mural space questioned the real space of the building as the mating of representation and reality created an illusory space, space novel to Le Corbusier's repertoire. [3]



3 photograph of the photomural & photo-column in the Pavillon Suisse, from Le Corbusier's 1934 OC-2, p85.

In 1935, the Surrealist artist Andre Breton described the wall as "concrete irrationality". The photomural indicated, he said, that architecture was again—as it had been earlier in the work of Antonio Gaudî and the Postman Cheval—attempting "to break through all its limits." Architecture's "desire for ideal things" could no longer be suppressed. The photomural, Le Corbusier's "irrationally wavy" wall, made that

obvious. It was, according to Breton, an "object in crisis"; and he found it very appealing for exactly that reason.

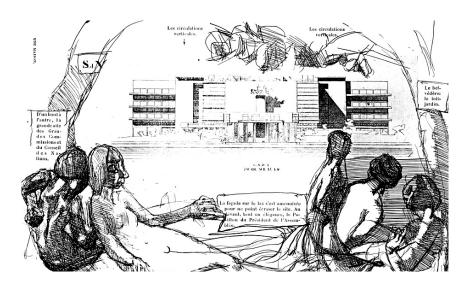
As I have written elsewhere, "The mural was representational overlay. Over the rational order of architecture, it placed another order. The two together formed a third. It is this third manifestation that, to Breton, appeared irrational and placed the object in crisis. Objective architecture was camouflaged by the infrathin layer of photographs, by their multiple perspectives, and by their visual fusion with the real objects of the real library."

#### 3 The depths of a dream

Murals grew in popularity throughout the 1930s. Though Le Corbusier had painted and lettered-up the exterior of several of his more important works in the 1920s, it was the curious interior "representational space" of the Pavillon Suisse photomural which threw the object into crisis. One imagines that it was not Le Corbusier's intention to create new space, that the 'object in crisis' condition was entirely accidental. As late as 1935, he had never painted a mural on a wall. At a colloquium that year, however, he offered several reasons for painting architecture. "Tumults can be disciplined by color, lyrical space can be created, classification realized, dimensions enlarged and the feeling for architecture made to burst forth in joy," he said, noting that this "is not yet painting; it is architectural polychromy." He then added that when "walls overwhelm [...] by their presence," the architect can "dynamite them with an appropriate color," and, "if the place is suitable," he might ask a painter "to inscribe his plastic thoughts in the spot, and with one stroke open all the doors to the depths of a dream, just there where actual depths did not exist."

The year after the colloquium, 1936, Le Corbusier painted his first mural—that is, he "inscribed his plastic thoughts"—on the wall of Jean Badovici's E1027 vacation house at Cap Martin on the French Riviera, a house designed and built in 1929 by Badovici and his lover, Eileen Gray, though Gray had left Badovici three years later never to return.8

Also in 1936, Le Corbusier wrote a brief article for the Surrealist journal *Minotaure* about his older cousin, Louis Soutter (1871-1942). *Minotaure* was the best known of the many Surrealist publications. It reveled in confessional material and in visual manifestations of the unconscious mind. Soutter was a violinist confined to an asylum in Switzerland. In the late 1920's and early 1930's, Le Corbusier visited him often, giving him paperback editions of his own books as gifts. Soutter drew and painted in a spontaneous, almost erratic way, drawing over the illustrations in the books that Le Corbusier gave him. In the *Minotaure* article, Le Corbusier showed some of Soutter's drawings, tacitly likening them to automatic writing. He described Soutter's drawings as "decantations," the "spilling-out" of emotions on paper. His 'drawing over' Le Corbusier's books sets his gentle personality beside the more aggressive personality of his famous cousin, lovingly satirizing the architect's precision with the flowing, child-like innocence of his drawings that enriches the illustrations even as it humorously indicts them. Representation is made inescapably present in Soutter's drawings, adding depth and wit to the illustrative text while at the same time interrogating the values of Modernism [4].9



**4** late-1920s sketch by Louis Soutter over a page of Le Corbusier's 1928 *Une Maison—un palais* showing L-C's drawing of the façade of his entry for the League of Nations competition.

Soutter's drawing-over was not unlike the work that more pedigreed Parisian artists did at the time or would do in the near future: Picasso's 1923 modification of the front page photographs he found in the newspaper, L'Excelsior; 10 his covering of the manuscript of Apollinaire's Bestiaires "with drawings of animals

of all kinds";<sup>11</sup> his mid-1930s fusing together of original engravings with original photographs; Picabia's paintings over paintings done in the late 1920s;<sup>12</sup> Yves Tanguy's modified encyclopedia illustrations from the late 1930s.

In 1937, for the World Exhibition in Paris, Le Corbusier designed two pavilions in which the interior and exterior surfaces were construed of color, writing, and illustrations. The magnificent Bat'a Pavilion which collaged color, colossal figures, projected film, a wall of animal hides, a planisphere ceiling, battered walls, and unusually tall rooms was never built. But his inexpensive and temporary tent pavilion, the *Pavillon des temps nouveau*, was. With its sagging roof of colored canvas, the pavilion was supported by open-web steel joists uprights anchored by steel cables. Inside, unattached to this superstructure, was a wood-frame structure that held panels of didactic writings complemented by large murals [5]. The pavilion was 'book architecture'. One went inside the tent, inside the book, to wonder through its pages.



5 interior of Le Corbusier's 1937 Pavillon des temps nouveaux.

Before the exhibition was taken down, each panel and each mural were photographed. These photographs became the pages of a 1938 book titled *Des Canons, des munitions? merci! des logis...SVP*. Thus the book repeats, but in a different medium, statements made in the Pavillon. Its words are photographs of written walls and represent at the same time both the reality of the pavilion and the ideas expressed verbally in it—word and image at one and the same time. In this way, *Des Canons* brings forth the *visual* component of writing, insisting on writing's one-time presence in the ephemeral of a real world.

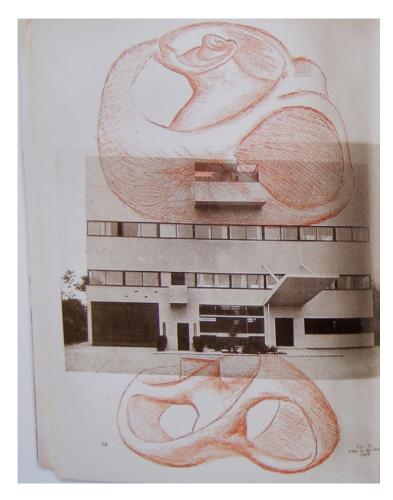
## 4 L'espace indicible

From the middle of the Great Depression until the end of the Second World War, Le Corbusier did almost no architectural work. After the war, in 1946, he began to build large buildings in France of board-formed reinforced concrete, béton brut. He painted select parts of the concrete in bright, vivid hues, a palette that differed tremendously from the palette of his 1920s buildings. At this same time, he published a new theory of architecture, "Espace indicible" in a special issue of a professional architectural journal dedicated to the synthesis of the arts. "Espace indicible" opens with the author recognizing nature's "harmonious orchestration of space" as entirely phenomenal, as "the reflection of light." Ineffable space is, Le Corbusier writes, a "vibration" between the "action of the work (architecture, statue, or painting)" and the "reaction of the setting: the walls of the room, the public squares...the landscape." It is a "phenomenon of accordance [...] as exact as mathematics, a true manifestation of plastic acoustics."

Le Corbusier elaborates, suggesting that the work of art creates psycho-sensorial sensations that result from much more than just correct proportions, noting that in the work of art, there are "hidden masses of implications," a "veritable world which reveals itself to those whom it may concern." Writing specifically of architecture, "Then a boundless depth opens up, effaces the walls, drives away contingent presences, accomplishes the miracle of ineffable space." He regards the experience of ineffable space as a transcendent event. "[...] the consummation of plastic emotion." He closes this short but tremendously significant treatise by citing authority in both science and extensive experience. "Here I have been allowed to speak as a man of the laboratory, dealing with his personal experiments carried out in the major arts which have been so unfortunately dissociated or separated for a century."

"L'espace indicible" expresses concisely Le Corbusier's new notion of beauty as a phenomenon, an effect, underscoring his recognition of dissolution of the object in favor of space in the conception of the work of art in the Twentieth Century.

A small but significant visual manifestation of this little treatise is found two years late in the 1948 special issue of L'Architecture d'Aujourd'hui for which Le Corbusier construed several 'drawing over' illustrations. The most potent of these composite images shows a carefully sketched shell floating in front of a photograph of his iconic, right-angled, all-white, 1927 Villa Stein at Garches. [6]



**6** Le Corbusier's drawing of a shell superimposed over a photograph of his Villa Stein. From a special issue of *L'Architecture d'Aujord'hui*, 1948.

In 1955, Le Corbusier, presumably untouched by the pedestrian, utterly descriptive, black-and-white line drawings of John Flaxman that illustrated a contemporary French translation of Homer's *Illiad*, drew over each with colored pencils. His drawing did not obliterate Flaxman's drawings, but rather, enlarged Flaxman's scenes, adding color, a new scale, and a space that seemed to make the illustration project from the page. Where Flaxman's scenes were delicate, drawn small and without emotion, Le Corbusier's were vibrantly colored, colossal by comparison, fantastic in their demeanor and position on the page, and always engaged with the Flaxman drawing, commenting on them with bravado. [7] They brought both space and a psychological dimension to the illustrations, adding a personal interpretation to Homer's classic tale. Le Corbusier drew them, one assumes, compulsively, as a reaction.<sup>15</sup>



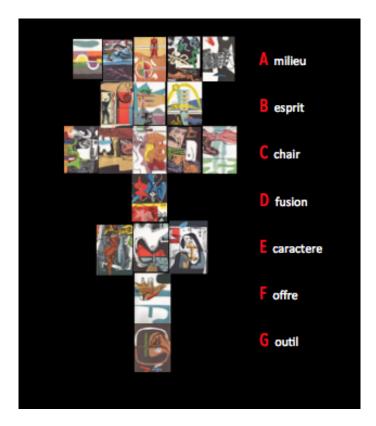
7 dated 15 February 1955, Le Corbusier's colored-pencil drawing over a print by John Flaxman illustrating a popular press French edition of Homer's *lliad*. The face of Homer's hero drawn by Flaxman is reflected in the eye of the Le Corbusier-drawn enormous levitating head.

### **5** Le Poème de l'angle droit

This mixed media activity—coloring buildings, writing on buildings, painting large pictures on buildings, making books of building's writings, and drawing over—led Le Corbusier to find new space in the world, a

space which in many ways seemed to question the Cartesian. It led to an architecture quite different than that which he created in the 1920s and for which, even into the 1950s, he was duly renowned around the world. His best known work from this time is undoubtedly his 1955 masterpiece, the little chapel at Ronchamp. The Maisons Jaoul, a double house in Paris is an extraordinary residential manifestation of this new, un-precise, rusticated Modern style. Of rough brick and board-formed concrete, with bermed roofs, and a barely vaulted structure, and color as a distinctly articulated part of its palette. The house does not absorb color as was the case in the 1920s and in the painted walls of the Unité at Marseilles. Rather the high-gloss color seems to sit in front of the heavy reality of the building, a phenomenal contrast to the rough-material parts of the palette. Like cylinders and planes and grids, color was a distinct element in a palette that seemed to float in space.

It was at this time that Le Corbusier 'wrote' the *Le Poème de l'angle droit*, a visual book, an artist's book, but also I believe the essence of a new theory of architecture that might be seen as taking the place of *Vers une architecture*. The I5<sup>th</sup> in a series of 29 'Livres des Artistes' books produced by the Greek-born Parisian editor Tériade, *Le Poème d l'Angle Droit* was, quite literally, a work of art. Published by Les éditions Verve in a limited edition of 250 in September 1955, it was a large book, 32 x 42 cm., comprised of 155 pages of which 20 were full-page, original color lithographs printed by Mourlot Frères. Unlike most of the other books in this series, *Le Poème* was a take-apart book. Its written and illustrative poem told a story. The mural that resulted from re-assembling the book's lithographs re-told the story entirely in pictures, pictures that now assumed a tree-like disposition symmetrically disposed with a central trunk and eight branches, four to the left, four to the right.



8 my construction of the lithograph 'tree' from Le Corbusier's Le Poème de l'angle droit with labels (A-G) for each row.

It was seven lithographs high and, at the top and third rows, five lithographs wide. [8] The illustrations were located on the tree in sequential order, following their introduction in the written poem they took their place on the mural from the top left across to the top right and then from the second row from the top left across to the right. This occurred through seven iterations until the final lithograph, the one that closed the book, was in place at the very bottom of the tree. From top to bottom, the tree told Le Corbusier's 'creation story', each level abstractly depicting a development of the world and of man in the world. The top row of the tree was dedicated to 'Milieu, the second to 'Esprit'. The third depicted 'Chair'. The fourth row showed 'Fusion'; the fifth, 'Caracters'. The sixth endowed man with a special characteristic that Le Corbusier had detailed carefully in other art and architecture: 'Offre (La Main Ouverte). The last and bottom row, where the vertical tree ended was call 'Outil'. Associated with each lithograph was a stanza of the poem. With 'Characters', for instance, the poem read:

I am a builder of houses and of palaces I live among men amid their tangled web of being.
To make architecture is
to make a creature. To be
full to fill oneself to have filled
oneself to burst exult
icy cold amid the
complexities become a happy
young dog.
Become order.

One has the sense that *Le Poème* tells the reader of Le Corbusier, himself—of how he, at the end of his life, understands his place in the world as instance of the human condition. Each row in the tree is an awakening in Le Corbusier's life. The three lithographs for "Esprit", for instance, depict (1) his Modulor Man; (2) an advanced version of his famed Maison Domino diagram; and (3) a colorful depiction of the movement of the sun through the sky in summer and in winter as related to a Le Corbusier building and to the horizon line. *Le Poème*, however, transcends architecture and offers a grand narrative of creation into which architecture—and Le Corbusier with it—is fitted. It seems to enlarge his concerns by relating them to the workings of the universe, to the creation of the world. Where in his 1923 *Vers une architecture*, Le Corbusier claimed that, "*La maison* est *une machine à habiter*" ("The house is a machine for living in"); in the 1955 *Le Poème de l'angle droit*, he insisted that, "*Faire une architecture*, *c'est faire une creature*" ("To make architecture is to make a creature"). And here one is inclined to set his 1920s masterpiece-on-the-hill, the chest-pounding Villa Savoye, beside his 1950s masterpiece-on-the-hill, the proud-but-humble chapel Notre Dame du Ronchamp.

# 6 New World of Space

After Ronchamp, more celebrated than ever, Le Corbusier continued to make buildings in which color was essential and integral. He built the last and most convincing of his overtly word/image/architecture pavilions for the Philips Electric Company at the 1958 Brussels World Fair, calling it a "Poème électonique" and claiming that "the aim of my initiative [here] is not to add another building to my career, but to create [...] the first 'electronic game'—electronic and synchronic—in which light, drawing, color, volume, movement and ideas add up to something both astonishing and, naturally, available to all." Unlike earlier buildings, but very much like *Le Poème de l'angle droit*, the Philips Pavilion in Brussels spoke in image and color. And to this it added depth and time to become a 'happening' of colored lights and sound; of

projected images appearing mysteriously in Edgard Varèse music accompanied by the voice of Le Corbusier, himself, reading an apocalyptic message cast in poetic form. Just as Des Canons had 'booked' the Pavillon des temps nouveaux in 1938, in 1958, the pavilion at Brussels offered to 500 awe-struck visitors at a time something like Le Poème de l'angle droit in a tent-like pavilion both primitive and technologically sophisticated at one and the same time.

Shortly after Brussels, Le Corbusier conceived of a mural of illusory space for The Museum for Western Art he was building in Tokyo; but the mural was never executed. The next year, his exquisite, rusticated modern La Tourette monastery in the countryside outside Lyon, France was completed. It employed always-moving sunlight filtered through deep, colored architecture to illuminate with colored-light a near-underground crypt and to render its abstract, curvaceous béton brut walls both mysterious and sacred. And in 1962, Le Corbusier's colored concrete walls ensured that the abundant daylight of Harvard's Carpenter Center would fill the studios with light of constantly changing hues of green, yellow and red.

Le Corbusier died in 1965. His last building, the magnificently colored Heidi Weber Pavilion in Zürich, was completed in 1968. The architecture he created during the early phase of his career differs drastically from that created in the later phase. The 1923 Vers une architecture governed and explained the early work, buildings and beauty that needed to be in step with the times, architecture reacting against the burden of tradition in building. It assumed a revolutionary position, yet recognized 'beauty'—'delight' in the time-honored Vitruvian triad of 'commodity, firmness, and delight'—as the essence of architecture that distinguished it from an engineered object. The beauty that Vers une architecture described was derived from the object, not from 'space'. In the late 1920s, Modern art declared the object dead. 'Space' was the new venustas. Le Corbusier, an artist who was also an architect, worked with space. To write on architecture, to paint it, to 'book' it, was to suspend it between realms, between homes, to make it present if only momentarily.

Space belonged to the discipline of architecture. It was Le Corbusier's calling to transform the traditional space of architecture with the 'discovered space' of art. Le Poème captured this newly found space in

reverse. It embodied the new sensualist nature of Le Corbusier and of his architecture. A unique manifestation of the un-booked book, *Le Poème* was, in a sense, architecture itself. A self-portrait, perhaps, a 'setting-right' statement at the end of a long life of artistic fight, it was also a step—a minor creation, but one of the utmost importance—in Le Corbusier's realization of what he once called "the new world of space".

#### **NOTES**

for lennifer

<sup>1</sup>As quoted in Allan Doig, *Theo van Doesburg: painting into architecture, theory into practice* (Cambridge: Cambridge University Press, 1986) p157:

...le but de l'art monumental qui est de placer l'homme dans (au lieu de vis à vis) l'art plastique et de l'y faire-par ce fait-prendre part.

Doig offers a thorough account of van Doesburg's early painted architecture in his chapter "Towards an elementary architecture." See, also, Yve-Alain Bois and Bruno Reichlin, eds., De Stijl et L'Architecture en France (Brussels: Mardage, 1985) and Nancy Troy, The De Stijl Environment (Cambridge, Massachusetts: MIT Press, 1983).

<sup>&</sup>lt;sup>2</sup> "Pédagogie," L'Esprit Nouveau 19 (Dec. 1923), unpaged, as translated and quoted in Gillan Naylor, The Bauhaus Reassessed (New York: E. P. Dutton, 1985), p93. This unsigned article, almost certainly by Le Corbusier, is a review of Walter Gropius's Staatliches-bauhaus. Weimar (Weimar-Munchen: Bauhausverlag, 1923), and Le Corbusier's critical evaluation of the Bauhaus-education Gropius described in that publication.

<sup>&</sup>lt;sup>3</sup> Because there was no color photography at the time, Le Corbusier illustrated the color of his architecture by hand-coloring the photographs of his work that appeared the exclusive French journal, *L'Architecture vivante*, published by his friend Jean Badovici in the late 1920s and 1930s. This hand coloring had the effect of joining reality with reproduction. The color is homogenous, un-shadowed, un-weathered. It is <u>layered over</u> the photographic reproduction. It seems to 'jump off' the printed page of Badovici's journal. The effect is not unlike that achieved in the 1950s when Le Corbusier painted elements of his concrete buildings (most obviously, in the interior Maisons Jaoul) with high-gloss color that never becomes a part of the surface, but rather sits in front of it, an independent if not physically separate entity.

<sup>&</sup>lt;sup>4</sup> Paul Klee, The Diaries of Paul Klee, p670; as quoted in Gillan Naylor, The Bauhaus Reassessed (New York: E. P. Dutton, 1985).

<sup>&</sup>lt;sup>5</sup> After 1934, almost always Le Corbusier's architecture would be rusticated Modern, the famous high-tech-but-brutal pavilions--the 1937 *Pavillon des temps nouveaux* in Paris, the 1958 Philips Pavilion in Brussels, and the 1968 Heidi Weber Pavilion in Zürich—being the exceptions. Only the 1948 Maison Curutchet in La Plata, Argentina approaches the glossy, lightweight-looking domestic architecture of Le Corbusier in the 1920s.

<sup>&</sup>lt;sup>6</sup> Daniel Naegele, "Le Corbusier's Seeing Things: Ambiguity and Illusion in the Representation of Modern Architecture" (Philadelphia: University of Pennsylvania, 1996), p223, a dissertation written under the supervision of Joseph Rykwert and the direction of Mary McLeod.

<sup>7</sup>Le Corbusier, "Architecture and the Arts," pp49-50.

<sup>8</sup>Perhaps because it was painted over the finished work of another, or because it was painted without permission (?), the mural is termed 'graffiti' by Le Corbusier, himself, in Le Corbusier, trans. James Palmes, Creation is a Patient Search (New York: Frederick A. Praeger, 1960), p212, where a photograph of his mural at the Jean Badovici house is captioned, "Graffiti at Cap-Martin (fragment), about 13 x 8 ft., 1938."

9 Daniel Naegele, "Drawing-Over: une vie decanté. Le Corbusier y Louis Soutter," Ra 6 (Revista De Arguitectura) June, 2004, pp 43–54, 93-96.

<sup>10</sup>See Kenneth E. Silver, Esprit de Corps: The Art of the Parisian Avant-Garde and the First World War, 1914-1925 (Princeton: Princeton University Press, 1989), pp290-291.

<sup>11</sup>Brassaï, Picasso and Company, trans. Francis Price (New York: Doubleday, 1966), p146.

<sup>12</sup>See Maria Lluisa Borras, *Picabia* (New York: Rizzoli, 1985).

13 Le Corbusier, "L'espace indicible," L'Architecture d'Aujourd'hui, special number (January, 1946): pp9-10. Republished in Le Corbusier, Modulor II. Published in English in Le Corbusier, New World of Space (New York: Reynal & Hitchcock, 1958). Quotations here taken from Joan Ockman, ed., Architecture Culture 1943-1968: A Documentary Anthology (New York: Columbia Books of Architecture/Rizzoli, 1993) p66.

For discussions of "Ineffable Space" in both Danish and English, see Mogens Krustrup, "The Ineffable Space" in Arkitekturtidsskrift B, No. 50, pp52-77; and my "Photographic Illusionism and the 'New World of Space" in Le Corbusier, Painter and Architect (Denmark: Arkitekturtidsskrift B, 1995), pp83-117.

For elaboration on this new theory, see my "Touch My Axis—Vers une architecture before, L'Espace indicible after." in What Moves Us: Le Corbusier and Asger Jøm (Zürich: Scheidegger & Spiess, 2015). 28-37

<sup>14</sup> Again, this layering technique is not original to Le Corbusier. Theo van Doesburg's 1928 cover of the tenth anniversary issue of DeStijl, for instance, is similar. It features a verbal text in light blue lettering superimposed over a photograph of van Doesburg, himself.

<sup>15</sup>The book's illustrations are by John Flaxman, engraved by Schuler. The book was discovered by Mogens Krustrup, in the mid-1980s, in the personal bibliothèque of Le Corbusier at the Fondation Le Corbusier in Paris. See Mogens Krustrup and Monique Christensen, Le Corbusier L'Illiade Dessins (Copenhagen: Borgen, 1986), re-published in Mogens Krustrup, L'Illiade Le Corbusier (Milan: Editrice Abitare Segesta, 2000).

#### Illustrations

- 1. the cover of the 1955 Le Poème de l'angle droit.
- 2. Le Corbusier's diagram for Le Poème's lithograph 'tree'.
- 3. photograph of the photomural & photo-column in the Pavillon Suisse, from Le Corbusier's 1934 OC-2, p85.
  4. late-1920s sketch by Louis Soutter over a page of Le Corbusier's 1928 Une Maison—un
- palais showing L-C's drawing of the façade of his entry for the League of Nations competition.
- 5. interior of Le Corbusier's 1937 Pavillon des temps nouveaux.
- 6. Le Corbusier's drawing of a shell superimposed over a photograph of his Villa Stein. From a special issue of L'Architecture d'Aujord'hui, 1948.
- 7. dated 15 February 1955, Le Corbusier's colored-pencil drawing over a print by John Flaxman illustrating a popular press French edition of Homer's Iliad. The face of Homer's hero drawn by Flaxman is reflected in the eye of the Le Corbusier-drawn enormous levitating head.
- 8. my construction of the lithograph 'tree' from Le Corbusier's Le Poème de l'angle droit with labels (A-G) for each row.