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Daniel J. Naegele

Iowa State University, naegele@iastate.edu

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Abstract

The cover of the first edition of *Vers une architecture* featured what at the time must have been a curious image: a photograph of the promenade of the ocean liner *Aquitania*, a perspectival view that draws the eye deep into the space of the picture. More than its content, it is the image's form that is exceptional.

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Le Corbusier's Seeing Things: *La Vision de l'Objectif* and *l'Espace Indicible*

DANIEL J. NAEGELE
Iowa State University

Il faut toujours dire ce que l'on voit, surtout il faut toujours, ce qui est plus difficile, voir ce que l'on voit.

-Le Corbusier

The cover of the first edition of *Vers une architecture* featured what at the time must have been a curious image: a photograph of the promenade of the ocean liner *Aquitania*, a perspectival view that draws the eye deep into the space of the picture. More than its content, it is the image's form that is exceptional.

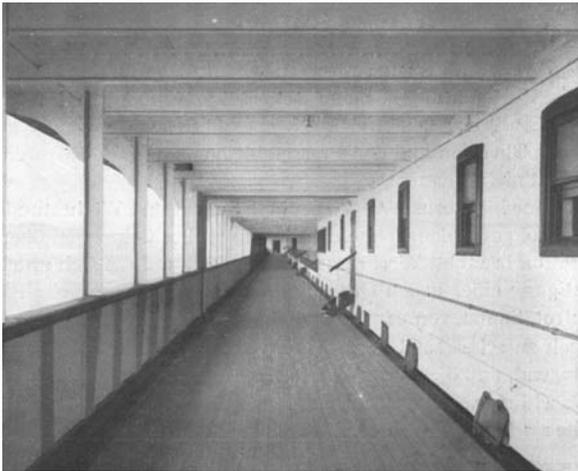


Figure 1. Promenade of the *Aquitania*, from *Vers une architecture*

The photograph is carefully configured and with sustained viewing, its 'content' begins to oscillate. The depicted space reverses itself. What was initially seen as deep recession now seems to project. The long promenade extending *into* the picture plane now appears

as a truncated pyramid projecting *out* towards us. Ultimately the pictorial image collapses to a two-dimensional design, its deep perspectival space flattened to a rectangle composed of four triangles, and further to merely two lines--'X-ed' diagonals running from corner to corner.

One imagines this visual paradox intentional on the part of Le Corbusier, the book's author. The 'truncated pyramid' configuration was well known to perceptual psychologists at the time, its illusion extensively investigated by 1920's avant-garde painters. The same configuration appears time and again in Le Corbusier's and Amédée Ozenfant's Purist paintings, in the advertisements of *L'Esprit Nouveau*, as icon in the concrete of Le Corbusier's Unité d'Habitation, and finally, in photographs of Le Corbusier's own architecture that assume a truncated pyramid *parti*.

Indeed, photography—"the new vision"—proved an ideal collaborator for Le Corbusier. By carefully construing photographs of his architecture, Le Corbusier re-presented architecture as a Purist sign. Photography presented his architecture as precise, calculated and rational. The calculated photograph--like no other medium--rendered the essence of this new architecture visible. Like that of the *Aquitania*, the images oscillated; and in their oscillation, the ordered images conveyed the fleeting, phenomenal, evanescent sensation that Le Corbusier's "skillful, accurate and magnificent play of masses seen in light" was intended to exact.

Le Corbusier believed in visualization. He thought it essential to teach what he termed "the *notion* of vision"¹ For him such vision

meant first "to *conceive* and then to *see*." He promoted ocular experience as a means of discovery and of discerning a sense of truth, insisting in his many books that we 'look again', that we view the world 'with fresh eyes.' By provoking thoughtful, experiential, engaged perception, images that oscillate accommodate all of this. But it was not until after World War –II, with the publication of "L'espace indicible" and its reiteration in the English-only *New World of Space*, with the completion of Ronchamp and of the mythopoeic *Poem to a Right Angle*, that Le Corbusier declared space—especially illusory space—the new *venustus* of Modern Architecture.

This paper investigates Le Corbusier's notion of 'seeing' in the development of a modern movement architecture of illusory space. It traces the 'truncated pyramid configuration' described above from the two-dimensional image through a four-dimensional manifestation of the work in architecture.

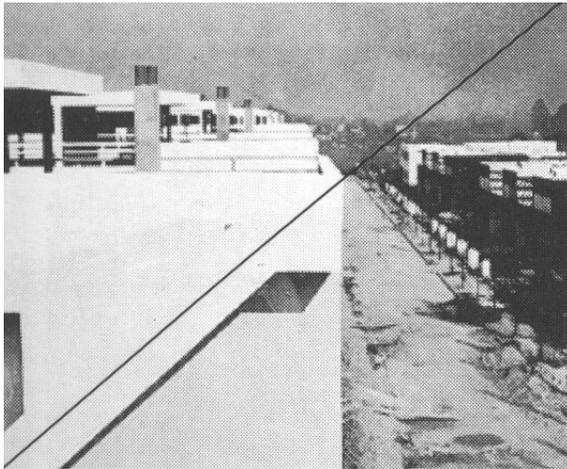


Figure 2. Photograph of Pessac with imposed diagonal proportioning

Although Le Corbusier employed many strategies to highlight the illusion of representation, the 'truncated pyramid' is of particular interest for three reasons: photography sees in perspective; perspective is the 'medium' of architectural space; and Parisian avant-garde art since Cezanne (including Purism) sought to undermine perspective. Photography construed as a truncated pyramid captures the conflict in a concise, singular statement. This manifestation leads directly to '*l'espace indicible*', the new *venustus* of Le Corbusier's

Post-War theory of architecture, a space made evident at Ronchamp, Brussels, and most clearly in La Tourette.

Purism

In the 1921 essay, "Le Purisme," Le Corbusier and Ozenfant explained that the Purist painting attempts to "satisfy the senses and the mind at the same time."² It employs a method whose elements are "like the words of a language" in order "to create a symphony of sensations in the spectator." The painter decides which emotion to evoke and selects means "capable of transmitting this emotion."³ As described, the process is mechanical, the viewer's response Pavlovian. Art need not concern itself with the judgment of the spectator, the authors declared, only with moving him. Four years later, in *La Peinture Moderne*, they assured us that "the masterpieces of the past are works which provoke an emotion such that they arrest us," noting that "generally these are not works which delight."⁴

Le Corbusier and Ozenfant believed their contemporary world an "essentially geometric *spectacle*," a world that had undergone and was still undergoing the "*formation de l'optique moderne*." They insisted that due largely to mechanization, geometry was ubiquitous in the modern world and modern man's knowledge of the world and his appreciation of nature must therefore always be in reference to a *système géométrique*, which is a pure creation of the mind. "All 'plastic' pleasure is under the jurisdiction of this geometric system." Modern man seeks certainty and precision. "The goal of art," they concluded, "is to give us moving spectacles from which chance is excluded."⁵

To this end Le Corbusier and Ozenfant devised "a system of plastic means of universal value." Purism, they said, was, "above all, a technique, that is to say, a general grammar of *sensibilité*, a syntax of associations of forms and colors."⁶ To the Purist painter, perception of order was considered the "highest delectation of the human mind" and the Purist canvas was rigorously regulated by a geometric "application of the laws which control pictorial space"⁷. Largely self-referential, Purism considered the painting "not as surface but as space." The space of representation was both its content and its form. Le Corbusier and Ozenfant wished to

extend the Purist aesthetic beyond the confines of the canvas. Initially in *Vers une architecture* and later with images of Le Corbusier's architecture, laws that governed Purist paintings were applied to photographs. But unlike the fictive medium of painting, photography maintained a privileged relationship with reality. The camera never lied. Consequently, at least in the hands of Le Corbusier, the photograph both re-presented 'real' space and as a two-dimensional object was itself a manifestation of space.

La vision de l'objectif

Unlike most authors, Le Corbusier very carefully controlled and ordered the images featured in his books. *Vers une architecture* is exemplary in this respect; its many drawings and photographs--often as ambiguous and curious as its cover photograph--combine to form an 'illustrative text,' a constructed system of references which when set beside the verbal text form a compelling dialectical argument. Le Corbusier understood well the implications of such a construction. In a publicity brochure for the book he explained, "This book derives its eloquence from the new means; its magnificent illustrations hold next to the text a parallel discourse, and one of great power [...] facts exploding under the eyes of the reader by force of the images."⁸

In *Vers une architecture*, photographs of architecture, like the book's cover photograph, are construed to simultaneously project and recede. An almost diagrammatic illustration of this phenomenon is found in a photograph of a Parthenon moulding.⁹ We read the square coffers as receding, largely because we assume a light source from above. Viewing the image upside-down reverses this, transforming the coffer into stepped pyramids. This and other photographs of the Parthenon illustrate the chapter "*Architecture, pure création de l'esprit*" in which Le Corbusier describes how emotions are aroused "solely by means of shapes which stand in a certain relationship to one another." He notes that all is "fixed and determined: we are riveted by our senses; we are ravished in our minds; we touch the axis of harmony[...] no symbolic description, no naturalistic representation; there is nothing but pure forms in precise relationships."¹⁰ These relationships, he writes, "have not necessarily any reference to what is practical or descriptive. [...] They are the mathematical

creation of your mind [...] This is architecture."¹¹

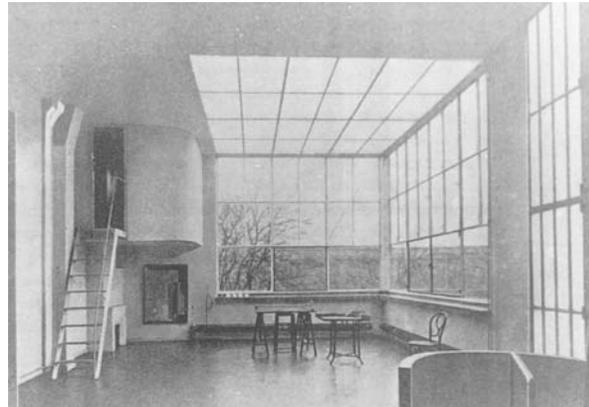


Figure 3. Photograph of interior of Ozenfant studio from *Vers une architecture*

These configured images prepare the reader for Le Corbusier's presentation of his own architecture in an image which has become an icon of the modern movement: the interior of the Ozenfant studio.¹² As with the Aquitania photo, value contrast and careful framing conspire to promote simultaneous recession and projection. Its 'regulating lines' are imaginary diagonals drawn from corner to corner. The nine square window at the end wall of the studio appears nearly centered in the image. A flat plane parallel to the picture plane, its proportions echo those of the image itself. Its upper left hand corner falls on the imaginary diagonal. Its upper right hand corner falls on the 'real' diagonal. A balanced tension is maintained between the image content and its frame. Conflicting cues encourage a double reading. Planar and linear elements reinforce flatness; while curved, voluminous elements imply depth. The gridded nine-square window, the horizon line of the landscape, and the single vertical line of the rooflight grid present perfectly horizontal or vertical lines which 'identify' with the image's orthogonal frame and so insist on the photograph's flatness, while the many diagonals focused on a single vanishing point insist on its spatial depth. A condition of 'permanent argument' is presented; and the illusion of a real space collapses. Captioned "An Artist's Studio", the photograph is about its own space.

In their duplicity, the images of *Vers une architecture* would seem to call into question the photograph's reputation for truthfulness.

An index of the real, the photograph, it was believed, "never lied." Its power and authority are derived from this presumption of veracity; and far from wishing to question this, Le Corbusier actively promoted as truthful *la vision de l'objectif*. The lens, he wrote, is "nerveless, soulless,...a prodigious voyeur, a discoverer, a revealer, a proclaimer." He believed the lens enabled one "to discover life, in what there is that's true."¹³

But the truth that the lens revealed to Le Corbusier was not wholly a rational, objective truth. The lens makes accessible to us not only "the spectacle of the world," but also "the truth of our consciousness." It can record "perceptible signs: the nuance, the infinite nuances of the game of life," Le Corbusier wrote. "I want the lens now to disclose the intensity of human consciousness to us through the intermediary of visual phenomenon which are so subtle and so rapid in nature that [...] we are unable to observe them, we simply feel their radiance."¹⁴

It is in these terms that we might understand the photographs of *Vers une architecture*: photographs that call for interpretive, subjective reading—a *Befindlichkeit* appropriate to 'seeing things'.¹⁵ For Le Corbusier, 'seeing' was an experience; one that could be felt. He made this obvious by making problematic the picture. By presenting us with the illusion of representation in exaggerated form, he exacted a visceral response to visual perception. 'Seeing' affects us physically; we feel the impact of the image. Truth resides in sententious illusion. Le Corbusier's visual book reveals a new phenomenal world.

An architecture of image

Le Corbusier believed that architecture was "in everything, sublime or modest, which contains sufficient geometry to establish a mathematical relationship."¹⁶ In this sense, the construed photograph--which made manifest the space absent in architecture--was itself architecture. In the years following World War II, when space relieved technology as the essence of modernity and when Le Corbusier increasingly relied on representation as the source for new creations, the resonant space of his photographs and paintings informed his architectural creations, anticipating an architecture of 'ineffable space'.

Were it not for its heritage, perspective would seem ideally suited to satisfying Le Corbusier's seemingly contradictory need for both spatial illusion and the 'perception of order'. Despite its apparent naturalness, perspective is an art of illusion. It fixes exact dimensions in space, relentlessly ordering all that falls in its view. But perspective was the old order, the order Purism avoided and sometimes subverted in an effort to arrive at new spatial realizations. How, then, to reconcile the a-perspectival drive of Modernism with the overwhelmingly perspectival prejudice of architecture and photography?¹⁷

The issue was not Le Corbusier's alone. In Holland, Germany and France, avant-garde artists actively investigated the phenomenal effects of illusory art and the relative space it created. "Art does not reproduce the visible, but makes visible," Paul Klee insisted. "The object is surely dead. The *sensation* of the object is of first importance."¹⁸

Like painting, photography, too, could make manifest 'the *sensation* of the object,' and in the first volume of his *Œuvre complete* Le Corbusier employs time and again the lessons of Purism to represent his architecture as a duplicitous sensation, more an apparition than an artifact. By the late 1920's, technology had made possible photographs the size of architecture. In 1933, pressed by his client to render more habitable the communal living space of his recently completed Pavillon Suisse, Le Corbusier—who had adamantly opposed applied decorative arts—covered its brutal rubble wall with a photo mural extending floor to ceiling, wall to wall.

Photographic space became architectural space. Surrealists as anti-Corbu as André Breton applauded. Le Corbusier continued with photomurals for both his Pavillon des Temps Nouveaux and the unrealized Bat'a Pavilion. It is not surprising that at this time, when photography literally became architecture, Le Corbusier recognized the possibility of creating a new illusionist space. "I can," he said in reference to the mural, "when walls overwhelm me by their presence, dynamite them...But I can also, if the place is suitable...with one stroke open all the doors to the depths of a dream, just where there actual depths did not exist."¹⁹ By 1958, with his Brussels Pavilion, the image was now no longer an artifact but a phenomenal apparition: an experience, configured light in a dark space.

Ineffable space

The space of illusion, though hardly mentioned in Purist doctrine in the early twenties, was later declared the essence of twentieth century art and architecture. By 1939 mechanized technology was no longer a stable platform for modern movement architecture. Its promise of a new and better life had gone unrealized, and with the advent of devastating war in Europe, it was viewed not as salvation but as threat to all humanity. Writing in *Space, Time and Architecture*, Sigfried Giedion adjusted the movement accordingly. Aligning architecture with art, he promoted 'space' (or the more twentieth century notion of 'space-time') as the distinguishing aesthetic phenomenon of modernity, the essential attribute of both modern art and architecture.²⁰

After the war, Le Corbusier, too, adopted 'space' as the new platform for both art and architecture. In writing devoted to the 'synthesis of the arts', he proclaimed the 'miracle of ineffable space' the ultimate aesthetic experience, stating unequivocally that, "The release of aesthetic emotion is a special function of space." This release was provoked, he said, by a "phenomenon of accordance [...] as exact as mathematics, a true manifestation of plastic acoustics." Closely following Giedion's argument, Le Corbusier equated this phenomenon with "the 'magnification' of space that some of the artists of my generation attempted around 1910, during the wonderfully creative flights of Cubism. They spoke of the fourth dimension with intuition and clairvoyance." He defined the fourth dimension as "the moment of limitless escape evoked by an exceptionally just consonance of the plastic means employed."²¹ In stating that space provokes aesthetic emotion, and cubist painting provokes space, in effect Le Corbusier assigns the aesthetic emotion of painting to space; or, more accurately, to the illusion of space.

In elaborating on this phenomenon, Le Corbusier arrives at the concept of "ineffable space, the consummation of plastic emotion," a miracle in which "a boundless depth opens up, effaces the walls, drives away contingent presences."²² While there is little indication other than the evocation of 'walls' that here Le Corbusier is describing anything more than an

encounter with two-dimensional constructions, some nine years later, in a similar account of ineffable space, he protracts his description to include his personal experiencing of such space. He tells of a two meter long wall in his house, a wall facing north on which he would occasionally hang his paintings as a 'test bench' while he was working on them. "One day," he relates, "at a very precise moment--I saw ineffable space come into being before my eyes: the wall, with its picture, lost its limits: became boundless. I put friends and visitors through the test. After the picture had been hung, I would suddenly take it away. There remained a little wall, two meters long: a wretched sort of wall. This fact gave food for thought."²³ The description suggests that *l'espace indicible* is a fleeting, phenomenal, subjective manifestation, one largely dependent on the perception of the viewer. It is a sensation provoked by the illusory space of the painting in conjunction with 'real' space and light.

If in 1921 the "state of elevated order" that Le Corbusier and Ozenfant had defined as the goal of Purist painting was not exactly comparable to the fourth dimension, thirty years later when Le Corbusier comes to realize that "my entire intellectual activity has been directed towards the manifestation of space,"²⁴ it seemed otherwise. The 'perception of order' gave way to ineffable space.

But how could this space be evoked in architecture? How could architecture elicit the same 'resonance', the same 'release of aesthetic emotion', the same sensation of phenomenal and illusory space found in the two dimensional image? For despite the sensation one might feel in viewing a configured *image* of architecture, the building itself exacts no such response. Image resonance relies on the frame, on ordered, mathematical relationships, and on the viewer's pre-established habit of 'seeing' three-dimensional space in two-dimensional images. That is to say, resonance relies on translation, on the imposition of a second visual order, one not ordinarily provided by the building itself. Though a building can offer mathematical relationships and certain thresholds as frames, in its three-dimensional form the illusion inherent in translation is lost. In Le Corbusier's experiencing of ineffable space, it was the illusory painting that provided the catalyst for its animation.

In a sense, it was the space of representation that Le Corbusier wished to offer to architecture. In the thirties and more so in the post-war years, representation itself was often Le Corbusier's starting point for new artistic endeavors. His own drawings and paintings served to inspire new creations.²⁵ His paintings represented representation; but could this strategy be exercised in architecture--a medium so 'authentic', so fundamental that it is hardly thought of as a medium at all?

The answer is multi-faceted, but the truncated pyramid configuration offers one example of how representation might effectively be reinvested in architecture to bring about (seemingly spatial) aesthetic sensations. The *Aquitania* promenade itself might serve as a model of this configuration in three dimensions. A continuous corridor often wide enough to be a room, accentuated by 'ribbon windows,' modulated by a repetitive structure, and containing a flowing and punctuated wall: its *parti* was to appear again and again in Le Corbusier's work. This *parti* is evident as early as 1924 in the *petite maison* that Le Corbusier built for his parents at Vevey. It is prevalent in his projects for architecture and almost always evident in his perspective sketches of architectural space so much so that one might be inclined to believe that this 'corridor space' was Le Corbusier's most fundamental, enclosed space--a standard that he constantly varied and modified and combined with other spaces and forms, at least until the late thirties. Clearly these buildings and projects reflect the order of the *Aquitania* promenade itself and not the illusion of space evident in its ordered representation.

Without replicating the corridor in full, its space could be evoked. The rectangular focal point was its essence. This focal point need not result from the recession of space to infinity, but could be built into architecture. At Villa Savoye, for instance, Le Corbusier terminates his ramp with a rectangular 'window'. In so doing, he couples a 'real' rectangular focal point with real diagonals to build a truncated pyramid.²⁶ This built focal point occurs in other projects as well, in the Villa Church *bibliothèque*, for instance, and later at Marseilles and La Tourette where square focal points are built into the side walls of each balcony. The same square focal point at a much larger scale is found in the recessed

organ loft at the end of the 'megaron' chapel at La Tourette, insisting on a focused perspective in this otherwise equivocal rectangular vault.

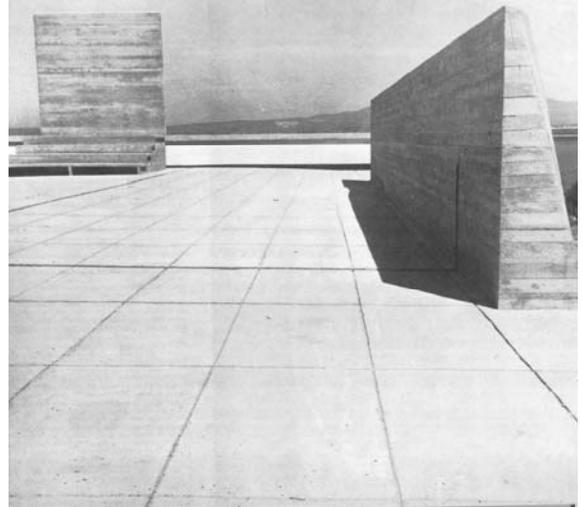


Figure 4. Elevated stage on *toit jardin* of the Marseilles *Unité*

Perhaps the most convincing phenomenal space of this sort is accomplished with the elevated stage of the Marseilles *Unité toit jardin*. With a square concrete wall as backdrop to the stage, Le Corbusier creates a floating focus that organizes open air into a palpable perspectival space that resonates. These square foci have always been part of Corbusian composition--the famed blank panel of the Villa Schwob, the square nose of the Maison Planex facade, the curious 'hole' in the center of '*le gratte-ciel cartésien*'--but after space is identified as the essence of architecture in the forties, they seem, more so than ever before, to establish an axis that arrests and reflects vision. In such instances, representation is made manifest and with this manifestation comes a sense of construed space.

At Ronchamp, the south wall is a composition of truncated pyramids each with its own focus and depth--illusory space created by light. But in sculpture, Le Corbusier freed this space from the 'picture plane', articulating each as an element independent of the others.

With this move, this creation of independent, individually focused 'space', another strategy for creating illusory space in architecture is suggested. At Marseilles, long corridors were a necessity and numerous. To transform *la rue*

intérieure into "une extraordinaire et mystérieuse symphonie", Le Corbusier used pattern light to create an illusion one can walk through.



Figure 5. Crypt chapels at La Tourette

These long, low tunnels, with their singular focus, force perspectival space on the spectator. At La Tourette, Le Corbusier employed these relentless, singular perspectives in combination to create multiple perspective space. From its corridors and cells to its dining room and chapel, the monastery is one truncated-pyramid space set beside another. With their continuous ribbon windows, corridors bear an uncanny resemblance to the *Aquitania* promenade. Each rectangular tube relentlessly insists on its own focus and whenever two or more tubes meet--at a corner or the junction of rooms--multiple foci are felt. In the crypt, Le Corbusier brought this strange illusionist experience to climax with false perspective. From its entrance, looking towards the end wall, as splayed and undulating walls converge and the floor gradually slopes up, one sees the

crypt space as deep. Traversing the space, one measures with one's body another depth. Looking back from the elevated, diminished end wall, one sees the space as surprisingly shallow. Here, rooted in the earth, with seven altars and intensely colored clouds calling forth the spirits, Le Corbusier has construed an architecture of inescapable illusion. The second visual order necessary to effect such illusion resides within the spectator, the spectator who has learned to read space, who has learned to see.

Le Corbusier insisted that we know the *notion* of vision. He believed 'seeing' a cognitive act, one that must be felt. He taught us to see, to see in a very particular way. With this notion of vision comes access to another world. Photography both exercised and informed this vision. In it, the objective and the subjective, fact and illusion, real and ideal could reside separately but simultaneously. The photograph testified to the existence of another reality, a higher order, a space that the poet sees and strives to recreate.

Endnotes

¹Le Corbusier, "Spirit of Truth," in Richard Abel, *French Film Theory and Criticism 1907-1939 (vol. 2)* (Princeton NJ: Princeton University Press, 1988): 111-114, p113. Translated from "Esprit de vérité," *Mouvement* 1 (June 1933): pp10-13.

²Ch.-E. Jeanneret and Ozenfant, "Purism," p66.

³Ch.-E. Jeanneret and Ozenfant, "Purism," p67.

⁴Ch.-E. Jeanneret and Amédée Ozenfant, *La Peinture-Moderne* (Paris: Éditions G. Crès, 1925), p iv.

⁵Jeanneret and Ozenfant, *La Peinture*, p ii.

⁶Jeanneret and Ozenfant, *La Peinture*, p v.

⁷Ch.-E. Jeanneret and Amédée Ozenfant, "Purism," in Robert L. Herbert, *Modern Artists on Art* (New York: Prentice Hall Press, 1964): pp58-73, p73. "Le Purisme" initially appeared in *L'Esprit Nouveau* 4 (Jan. 1921): pp369-386.

⁸FLC Box B2-15. As quoted in Beatriz Colomina, "Le Corbusier and Photography," *Assemblage* 4 (1987): p15.

⁹This photograph and many others in this chapter are the work of the renowned Geneva photographer Frédéric Boissonnas whose firm would later photograph Villa La Roche and Maison Clarté. It is taken from Boissonnas' exquisite 1914 album, *Le*

Parthénon: l'histoire, l'architecture et la sculpture, intro. by Maxime Collignon, photographs by Frédéric Boissonnas and W.-A. Mansell & Co. (Paris: Ch. Eggimann, 1914), pl. 73, #1. Le Corbusier had this large folio in his personal library [FLC Doc. V-687].

¹⁰Le Corbusier, *Towards a New Architecture*, p220.

¹¹Le Corbusier, *Towards a New Architecture*, p203.

¹²The studio was completed in 1924. This photograph does not appear in the 1923 edition of *Vers une architecture*.

¹³Le Corbusier, "Spirit of Truth," p111.

¹⁴Le Corbusier, "Spirit of Truth," p113.

¹⁵Many of the photographs are high contrast, slightly blurred, and often grainy--qualities resulting from half-tone printing. Sharp value contrast robs the photograph of the subtle gradations of gray that might give it depth. Graininess, like the dots of *pointilliste* paintings, atomizes the picture's surface, emphasizing its physical constituency. It reveals the photograph as printed matter, as ink on paper, while simultaneously heightening the illusory, dream-like quality of the image. Its "coffee-groundish" depiction renders 'content' malleable, open to the interpretation of the viewer.

¹⁶Le Corbusier, *The Decorative Art of Today*, p207.

¹⁷Telephoto lenses, of course, compress space, rendering it not unlike the space in a Purist painting. But such would be at odds with the purpose of architectural photography.

¹⁸*The Diaries of Paul Klee*, p670 as quoted in Naylor, *The Bauhaus Reassessed* p90. Naylor traces these preoccupations with 'sensation' and 'making visible' to the Munich lectures (1894-1913) of Theodor Lipps and his book on perception, *The Aesthetics of Space and Geometrical Optical Illusions* (1897) and the 2-volume *Aesthetics: the psychology of beauty and art* (1903 & 1906).

¹⁹Le Corbusier, "Architecture and the Arts." The Pavillon Suisse photo mural was destroyed during the Occupation. In its place Le Corbusier painted a mural.

²⁰Sigfried Giedion, *Space, Time and Architecture* (Cambridge MA: Harvard University Press, 1941). See especially "The Research into Space: Cubism," pp355-363. The word 'space-time' was already in circulation, for instance, in Paul Tillich's 1933 "Das Wohnen, der Raum, und die Zeit" published in *Die Form*. Earlier, in his 1929 *Modern Architecture: Romanticism and Reintegration*, Henry-Russell Hitchcock mentions K. Lönberg-Holm's use of the term "time-space" architecture. The concept had been of particular interest to German philosophers as

early as the late nineteenth century. In 1893 August Schmarsow hypothesized the essence of architectural creation to be 'space shaping'. August Endell, Theodor Lipp, Herman Sörgel and others took up the topic in northern Europe.

²¹Le Corbusier, "L'Espace indicible," pp 9-10. English translation in Le Corbusier, *New World of Space*, pp7-9.

²²Le Corbusier, "L'Espace indicible," pp 9-10.

²³Le Corbusier, *Modulor 2*, p27, note 1.

²⁴Le Corbusier, *Modulor 2*, p 27.

²⁵Le Corbusier made this clear in a letter to Ronald Alley of the Tate Gallery, London, dated 25 June 1958, [FLC Box G1-14, #75] in which he related the history of his 'Taureaux' series of paintings.

²⁶One might compare this combination of diagonal and focal point with that proposed in the sketch '*L'entrée et la rampe au garage*' for Maison de M. X à Bruxelles, 1929 in the *Œuvre complète-1*, p205.