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Author(s): Beatriz Colomina

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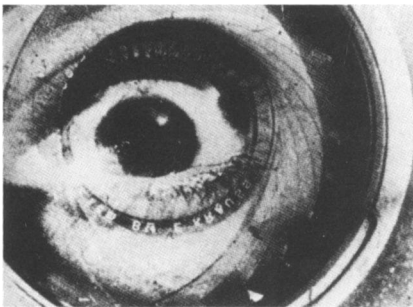
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# Beatriz Colomina

## Le Corbusier and Photography

*Beatriz Colomina is Adjunct Assistant Professor at Columbia University and a Consulting Editor of Assemblage.*



2. Still from Dziga Vertov's *The Man with the Movie Camera*, 1928–29

### The Mechanical Eye

There is a still from Dziga Vertov's movie "The Man with the Movie Camera" in which a human eye appears superimposed on the reflected image of a camera lens, indicating precisely the point at which the camera — or rather, the conception of the world that accompanies it — dissociates itself from a classical and humanist episteme.

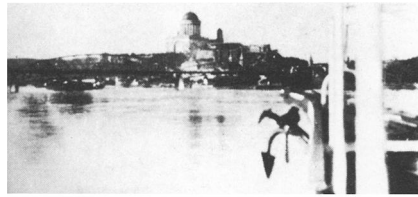
The traditional definition of photography, "a transparent presentation of a real scene," is implicit in the diagram instituted by the analogical model of the camera obscura — that which would pretend to present to the subject the faithful "reproduction" of a reality outside itself. In this definition, photography is invested in the system of classical representation. But Dziga Vertov has not placed himself behind the camera lens to use it as an eye, in the way of a realistic epistemology. Vertov has employed the lens as a mirror: approaching the camera, the first thing the eye sees is its own reflected image.

In film, light leaves its traces on the sensitive emulsion, imprinting on it permanent shadows. The manipulation of two realities — the superimposition of two stills, both traces of material realities — produces something that is already outside of the logic of "realism." Rather than *represent* reality, it *produces* a new reality.

Photography and cinema seem, on first reflection, to be "transparent" mediums. But that which is transparent, like the glass in our window, reflects (particularly at night) the interior and superimposes it onto our vision of the exterior.



1 (frontispiece). Sigmund Freud's study, Berggasse 19, Vienna, detail of mirror in the window near his worktable



3. View of the Cathedral of Esztergom. Photograph by Charles-Edouard Jeanneret, 1911, and drawing realized after it.

The glass functions as a mirror when the camera obscura is lit.

Freud placed in the window of his studio, near his worktable, a framed mirror. “The mirror (the psyche) is in the same plane as the window. The reflection is also a self-portrait projected to the outside world.”<sup>1</sup> Freud’s mirror, placed in the frontier that separates interior from exterior, undermines its status as a fixed limit. The line of frontier is not a limit that separates, excludes, dissociates, . . . a Cartesian limit; the line of frontier is a figure, a convention, its aim is to permit a relation that has to be defined continuously, it is a “shadow line.”<sup>2</sup>

### Thinking Photography

In the rare cases when criticism has addressed the subject of Le Corbusier and photography it has done so from within the position that holds photography as a transparent medium of representation, oscillating constantly between a realistic interpretation of the medium and a formalist interpretation of the object. Giuliano Gresleri’s *Le Corbusier: Viaggio in Oriente* shares in this critical investment, particularly at the delicate point where it takes on the connotations of a nostalgic album by an amateur photographer.<sup>3</sup> The subtitle of this book is indicative of a general, conservative concept of artistic production, *Gli inediti di Charles-Edouard Jeanneret fotografo e scrittore*. First, “inediti,” unpublished, hitherto unheard of: Gresleri would seem to maintain the notion that the “original” has not yet been relinquished to reproduction, deriving thereby a presumably higher value. Then, Le Corbusier “fotografo” and “scrittore”: Gresleri projects onto Le Corbusier’s work a grid that divides knowledge into watertight compartments, presenting him as some sort of multitasking individual capable of producing valuable work in different, specialized branches of knowledge, and, of course, misses the point. Le Corbusier as photographer, writer, painter, sculptor, editor, these divisions — often encountered in standard academic criticism — mask what is, in fact, Le Corbusier’s nonacademic method of working.

This nonacademic method is manifest in Le Corbusier’s travels, which played an essential part in his formation (I am not referring here to what is conventionally understood

as the “formative period” but to his entire lifework). A journey represents the possibility of an encounter with “the other.” During Le Corbusier’s first trip to Algiers, in the spring of 1931, he made drawings of naked Algerian women and acquired postcards of naked natives surrounded by accoutrements from the oriental bazaar. The Algerian sketches and postcards seem, at first glance, a rather ordinary instance of the ingrained mode of a fetishistic appropriation of women, of the East, of “the other.” As Victor Burgin has written:

In fetishism, an object serves in place of the penis with which the child would endow the woman (her ‘incompleteness’ threatening the child’s own self-coherence). Fetishism thus accomplishes that separation of knowledge from belief characteristic of representation; its motive is the unity of the subject. . . . The photograph [or drawing or postcard] stands to the subject-viewer as does the fetishized object. . . . We know we see a two-dimensional surface, we believe we look through it into three-dimensional space, we cannot do both at the same time — there is a coming and going between knowledge and belief.<sup>4</sup>

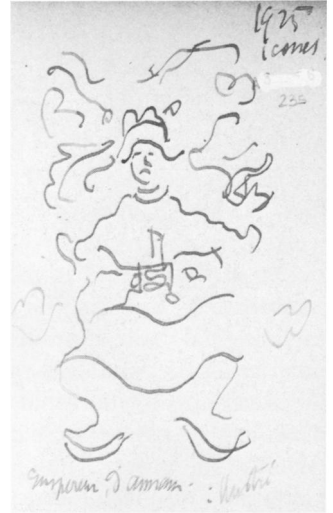
Le Corbusier, as Stanislaus von Moos has noted, turned this material into preparatory studies for a projected monumental figure composition, “the plans of which seem to have occupied Le Corbusier during many years, if not his entire life.”<sup>5</sup> With the reworking of his own fetishized drawings, Le Corbusier dissolved the object and opened the way to a more fruitful method of creation, perhaps reconciling his encounter with the other by re-forming and re-presenting it.

Drawing, as has often been noted, plays an essential part in Le Corbusier’s process of the “appropriation” of the exterior world. “By working with our hands, by drawing,” Le Corbusier writes, “we enter the house of a stranger, we are enriched by the experience, we learn.”<sup>6</sup> And in clear opposition to a passive, consumeristic, fetishistic use of the camera, he writes: “When one travels and works with visual things — architecture, painting or sculpture — one uses one’s eyes and draws, so as to fix deep down in one’s experience what is seen. Once the impression has been recorded by the pencil, it stays for good — entered, registered, inscribed. The camera is a tool for idlers, who use a machine to do their seeing for them.”<sup>7</sup> Certainly statements such as this (which accompanies some of Le Corbu-

sier's drawings of his journey to the Orient published in his late work *Creation is a Patient Search*) have gained the architect the reputation of a proverbial phobia of the camera — a reputation so strong as to make the discovery of the stock of photographs that he took while traveling in the East into a “surprise.” Yet it is difficult to understand how this view of Le Corbusier could flourish given such evident manifestos of a sensibility for the photographic image as his printed works.

The material in *Viaggio in Oriente* reveals the existence of drawings — such as the Cathedral of Esztergom viewed from the Danube — realized “after” photographs.<sup>8</sup> This practice of drawing an image after it has been fixed by the camera appears throughout Le Corbusier's work, recalling his no less enigmatic habit of repeatedly sketching his buildings, even long past their final construction. He redrew not only his own photographs but also those he encountered in newspapers, catalogues, postcards. The archives of *L'Esprit Nouveau* hold numerous sketches on tracing paper that are obvious reworkings of found photographs. These depict such unlikely subjects as *horreurs* (as Le Corbusier would have said) like “Khai Dinh, the present emperor of Annam” or “The opening of the English Parliament. The king and queen” (taken from *L'Illustré* and reproduced in *L'Art décoratif d'aujourd'hui*), side by side with a portrait of M. Gaston Doumergue, President of the French Republic.<sup>9</sup>

Apparently aimless (these drawings were not intended for publication), this activity seems to indicate Le Corbusier's resistance to a passive intake of photography, to the consumption of images occurring in the world of tourism and mass media. In the face of an explosion of information in the illustrated newspapers, industrial catalogues, and advertisements — with their pretense to represent reality by extensive documentation, by the addition of “facts” — Le Corbusier operates by exclusion. In the terms conditioned by the logic of mass media, a photograph does not have specific meaning in itself but rather in its relationship to other photographs, the caption, the writing, and the layout of the page. As Roland Barthes proposed, “All images are polysemous; they imply, underlying their signifiers, a ‘floating chain’ of signifieds, the reader able to choose some and



4. Photographs from *L'Illustré* of Emperor Khai Dinh and President Gaston Doumergue and drawings realized after them, with a view to the *mise en page* of *L'Art décoratif d'aujourd'hui*, 1925

ignore others. Polysemy poses a question of meaning. . . . Hence in every society various techniques are developed intended to *fix* the floating chain of signifieds in such a way as to counter the terror of uncertain signs.”<sup>10</sup> While photography as constituted in the mass media is most often uncritically received as fact, Barthes further makes clear that “the press photograph is an object that has been worked on, chosen, composed, constructed.”<sup>11</sup> Le Corbusier takes pleasure in “deconstructing” the images thus “constructed,” isolating, for instance, some of them from their original context, an illustrated magazine or a mail-order catalogue, and drawing sketches after them.<sup>12</sup> Again, the sketch learns from what the photograph excludes. By drawing he is obliged to select, to reduce to a few lines the details of the image. The preformed image thus enters Le Corbusier’s creative process, but interpreted. As he himself would put it:

To draw oneself, to trace the lines, handle the volumes, organize the surface . . . all this means first to look, and then to observe and finally perhaps to discover . . . and it is then that inspiration may come. Inventing, creating, one’s whole being is drawn into action, and it is this action which counts. Others stood indifferent — but you saw!<sup>13</sup>

Drawing is an instrument of the *recherche patiente*. It is a technique to overcome the obsessive closure of the object, to reincorporate it into the process, a process of “no beginning and no end.” For Le Corbusier the process is more important than the product, as is also apparent in his writings, in which he constantly combines the bits and pieces of his thoughts in different contexts, reworking them, as if resisting a final form. As Peter Allison once put it, “In spite of the apparent repetitiveness, he seldom ever repeated himself exactly.”<sup>14</sup>

## Reflection and Perception

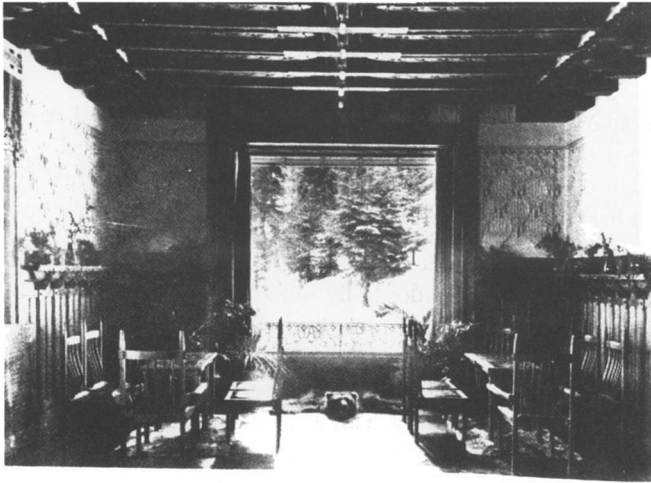
During his first trip to Italy and Vienna in 1907–8, Le Corbusier became aware of the difference between architecture and its photographic representation. This reflection on representation became a constant subject of his letters. In Vienna, where Charles L’Eplattenier had directed Le Corbusier and his companion Léon Perrin, the travelers could not find their way to the houses they had previously

seen in architectural magazines; Le Corbusier wrote to L’Eplattenier asking for the addresses of modern houses published in *Innen Architektur* and *Deutsche Kunst*: “Illogisme, se faire indiquer de La Chaux-de-Fonds des adresses pour Vienna; tant pis c’est ainsi.” L’Eplattenier sent them reproductions of Hoffmann interiors and included some of the music room designed by one of his students for the Mathey-Doret house in La Chaux-de-Fonds.<sup>15</sup>

The photographs of the music room disappointed Le Corbusier: “They are well done, but how pitiful is the effect! Perrin and I were really upset at what photography gives of the beautiful thing we know.” They consoled themselves by considering that their photographs of Florence and Siena taken a few months earlier, in fall of 1907, had also been a disappointment: “And we have consoled ourselves with the fact that from our stock of photographs from Italy, we do not have a good one of the beautiful architectural things [we saw], because the effect of photographs is always distorted and offensive to the eyes of those who have seen the originals.” The opposite was true for the *épatant* reproductions of Hoffmann interiors; at first they seemed impressive, but they did not withstand a close inspection:

“Look at the photographic effect of these halls and dining rooms of Hoffmann: they have unity, they are sober, simple, and beautiful. Let’s examine it closely and analyze it: What are these chairs? This is ugly, impractical, barbarian, and juvenile. These walls of taped gypsum, like in the arcades of Padua? This fireplace, a nonsense. And this dresser and these tables and everything? How cold, surly, and stiff it is. And how the devil is it built?

The atectonic quality of “modern Vienna” shocked and disgusted Le Corbusier, who had been educated in a vernacular crafts tradition. “Toute la construction est masquée et truquée,” he wrote to L’Eplattenier: “The German movement is in search of originality to the extreme, not occupying itself with construction, logic, or beauty. No point of support in nature.” He recriminated L’Eplattenier for having misdirected him (“You have sent us to Italy to educate our taste, to love what is [well] built, what is logical, and you want us to renounce all this, because of some impressive photographs in art magazines”), and suggested that he spend fifteen days in Vienna instead of relying on

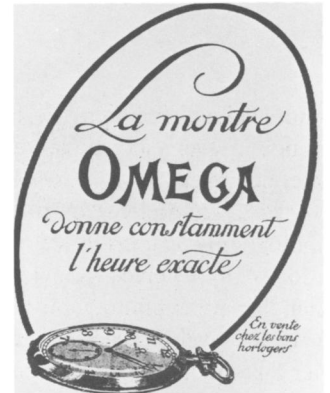
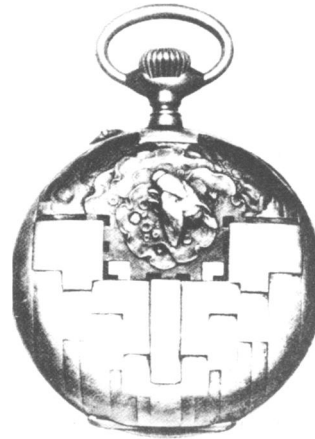


5. Music room of the Mathey-Doret house, La Chaux-de-Fonds, interiors by pupils of Charles L'Eplattenier, 1908



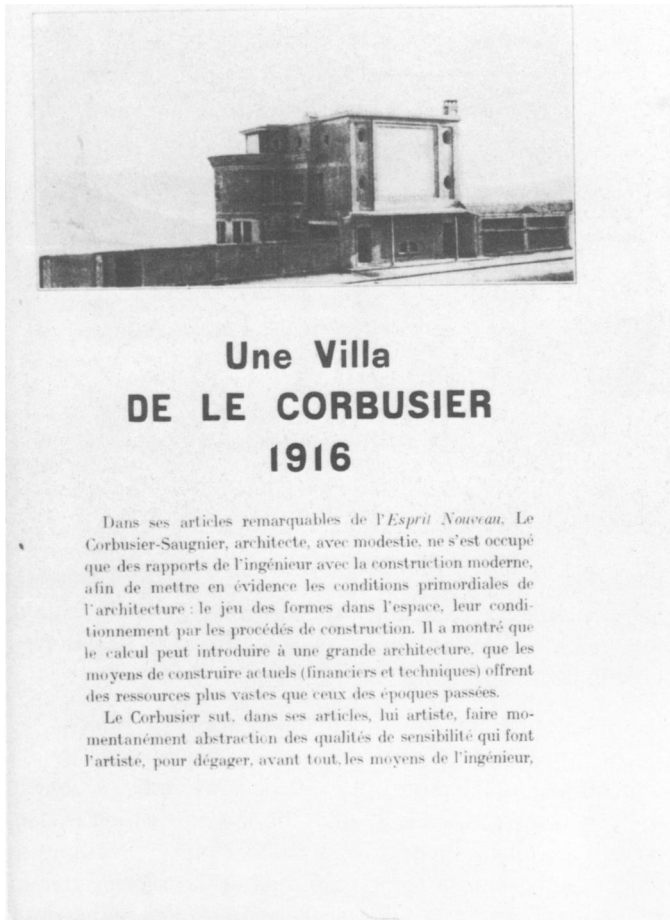
6. Adolf Loos, dining room of the Steiner house, 1910. As in Freud's study, the mirror is in the plane of the window.

7. Charles-Edouard Jeanneret, engraved watchcase, c. 1902, and Omega advertisement in *L'Esprit Nouveau* 2, 1921



magazine pictures. As for himself, Le Corbusier decided to leave Vienna for Paris to learn construction. "C'est ce qu'il me faut, c'est ma technique." Not surprisingly, he did very little drawing during his stay in Vienna.

It is interesting how close these letters come to Adolf Loos's criticism of photography and its shortcomings in representing architecture. In 1910 Loos wrote in "Architektur," "It is my greatest pride that the interiors which I have created are totally ineffective in photographs. . . . I have to forego the honour of being published in the various architectural magazines."<sup>16</sup> Loos was reacting to the confusion between architecture and the image of architecture so characteristic of the overfed journals of the Jugendstil. Le Corbusier was to go a step further than Loos. In Paris, more precisely with the experience of *L'Esprit Nouveau*, he came to understand the press, the printed media, not only as a medium for the cultural diffusion of something previously existing, but also as a context of production with its own autonomy. His encounter with the metropolis produced a break with L'Eplattenier's crafts formation where the object is identified with the world, where the material carries the traces of its maker. Such continuity between hand and object is inside a classical notion of the artifact and of the relationship between producer and product. With industry, mass production, and reproduction, this continuity is broken, inverting the relationship between producer and product. Production in a "consumer society" develops, as Adorno and Horkheimer noted, according to a logic completely internal to its own cycle, to its own reproduction. The main mechanism by which this is accom-



8. Charles-Edouard Jeanneret, Villa Schwob, as published in *L'Esprit Nouveau* 6, 1921

plished is the “culture industry,” the vehicles of which are mass media, cinema, radio, publicity, and periodical publications.<sup>17</sup>

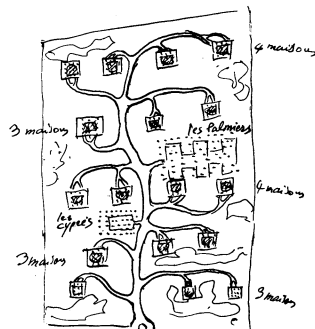
### Faked Images

In *L'Esprit Nouveau* 6, Le Corbusier published the only work he ever recognized from his La Chaux-de-Fonds period: La Villa Schwob. (This house, built in 1916, did not appear in the *Oeuvre complète*.) In the accompanying article, Ozenfant, under the pseudonym Julien Caron, remarked on the difficulties of capturing architecture through the eye of the camera: “And photography, which is already misleading when it reproduces surfaces (paintings), how much more so when it pretends to reproduce volumes.” Ironically, the published photographs of this house are *trompeuse*; indeed, they have been “faked.”

Le Corbusier air brushed the photographs of the Villa Schwob to adapt them to a more “purist” aesthetic. In the “façade sur la cour,” for instance, he masked the pergola in the court, leaving its white trace on the ground, and cleared the garden of any organic growth or distracting object (bushes, climbing plants, and the dog house), revealing a sharply defined outer wall. He also modified the service entrance to the garden, cutting the protruding vestibule and the angled steps with a straight plane aligned with the door (a difference observable in the original plans published in the same article). The window corresponding to the vestibule became a pure rectangular opening.<sup>18</sup>

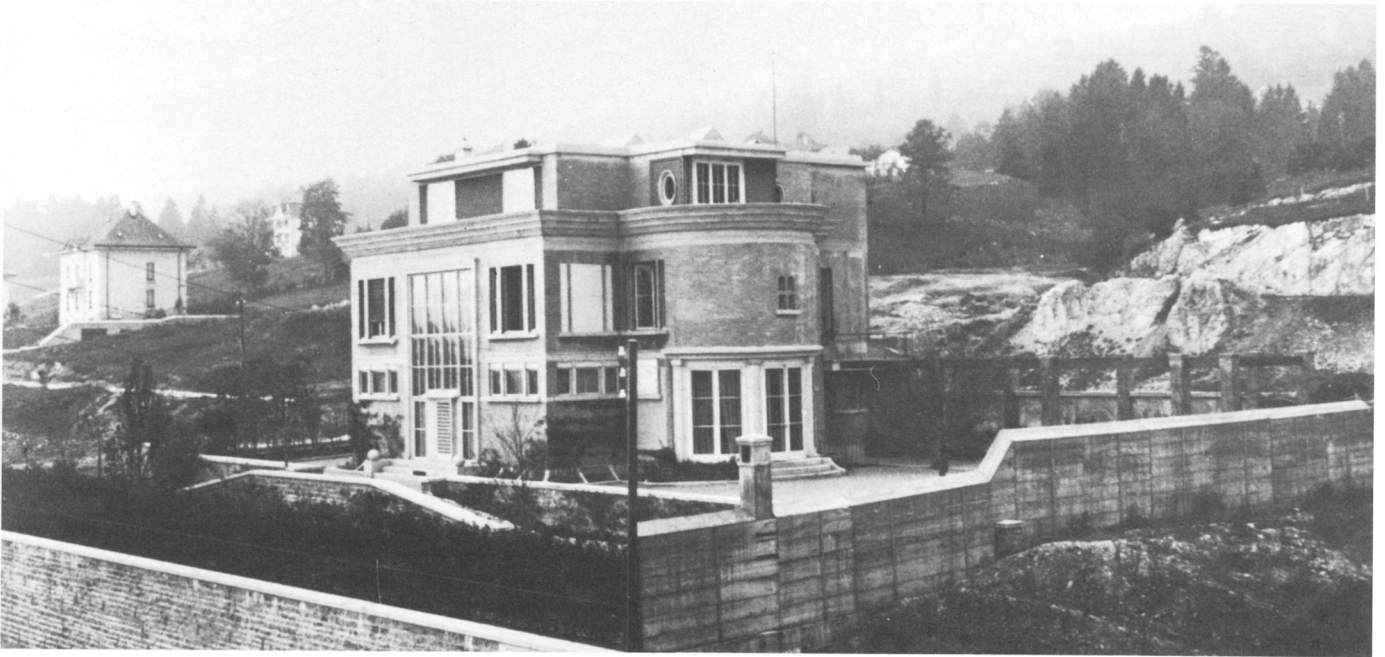
Le Corbusier discarded everything that was picturesque and contextual in this house, concentrating on the formal qualities of the object itself. But the most striking modification in the photographs of the front and back façades is the elimination of any reference to the actual site, which is, in fact, a steep terrain. By eliminating the site, he makes architecture into an object relatively independent of place. This relationship between an ideal object and an ideal site is a constant in Le Corbusier's architecture of the twenties. For example, he designed the small villa for his parents on the shores of Lake Geneva before he knew its specific location.<sup>19</sup> And in Buenos Aires he proposed an urban development consisting of twenty “replicas” of the Villa Savoye.<sup>20</sup>

11. Twenty replicas of the Villa Savoye for the Argentinian countryside, proposed by Le Corbusier in a lecture in Buenos Aires, October 1929, and published in *Précisions*

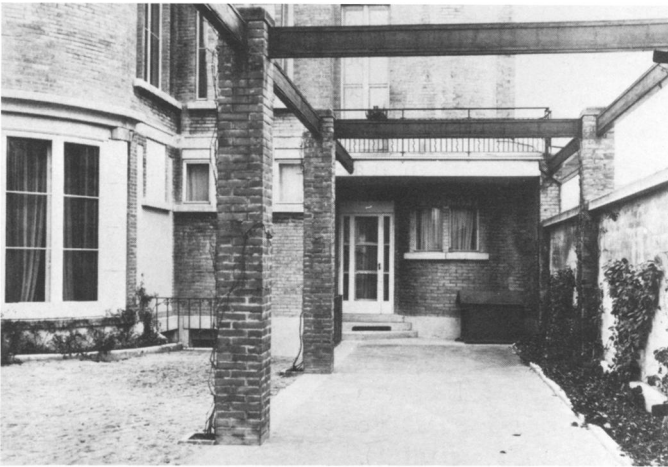




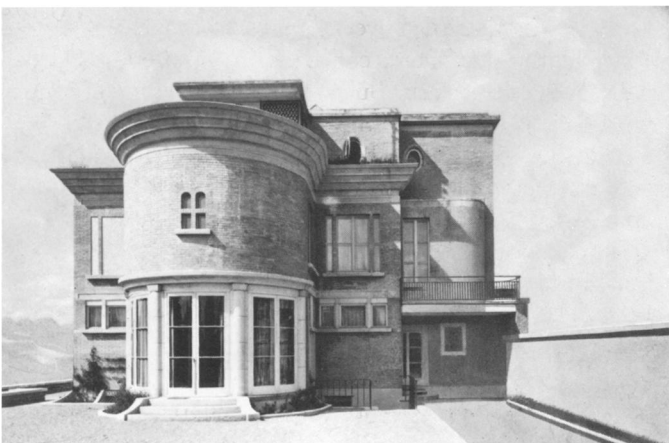
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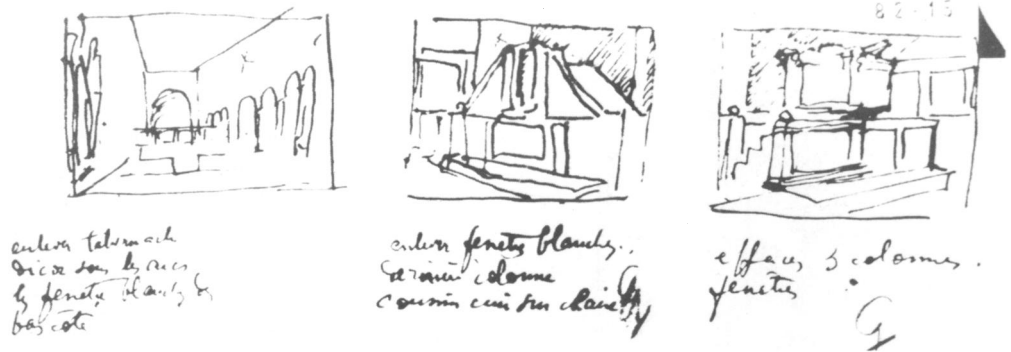
9. Villa Schwob, 1916, and  
detail of pergola (left).  
Photographs c. 1920.



10. Villa Schwob, version as  
published in *L'Esprit Nouveau*



12. Le Corbusier, sketches of the interior of S. Maria di Cosmedin, with instructions for modifying the original photographs before their publication in *Vers une architecture*



An analysis of the *Oeuvre complète* uncovers a similar reworking of the photographic image. In the published photographs of the Villa Savoye, Le Corbusier masked, by painting gray, anomalous columns (wet columns perhaps) visible in other photographs of the villa. Interestingly, the published section of the Villa Savoye corresponds to an earlier version of the project rather than to the one that was built.<sup>21</sup> It becomes evident that for Le Corbusier any document from the process, which better reflects the concept of the house, takes precedence over the faithful representation of the actual built work. Furthermore, the distinction he makes between real space and the space of the page is equally clear. It is precisely because the latter is necessarily reductive that certain elements — such as wet columns — while innocuous in an experiential reading of the building, are distractive when seen in a photograph.

Likewise in the *Oeuvre complète*, consider Le Corbusier's elimination of two columns that frame the apse of the dining-room projection into the living room in the plan for the Villa Stein at Garches.<sup>22</sup> The resulting plan conveys the spatial, experiential reading of this house. The absence of the two columns reinforces the diagonal thrust of the villa, further disintegrating the "central axis" into fragments.<sup>23</sup>

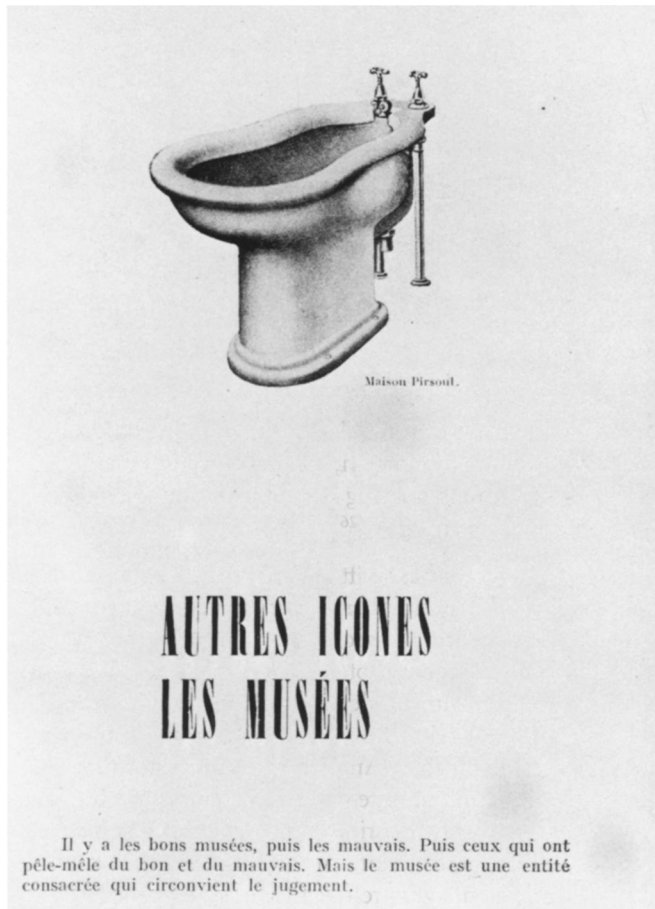
Outside his architectural work, Le Corbusier used analogous techniques to reinforce his theoretical arguments. For instance, in *L'Esprit Nouveau* and later in *Vers une architecture*, he published a photograph of Pisa taken from his own collection; but prior to its reproduction Le Corbusier traced portions of the print in black ink to stress the purity and clarity of lines in a platform.<sup>24</sup> A page of sketches from the working material of *Vers une architecture* reveals similarly notable instructions for modifications to be applied to the photographs of the church of S. Maria di Cosmedin in Rome.<sup>25</sup> These consist of removing tabernacles, decoration on the arches, leather pillows, columns, windows, and anything else that would distract the reader from seeing

Greece in "Byzantine Rome." The published text declares, "Greece by way of Byzantium, a pure creation of the spirit. Architecture is nothing but ordered arrangement, noble prisms, seen in light."<sup>26</sup>

Stanislaus von Moos has written that for Le Corbusier the relationship of the architectural work to a specific site and its material realization are secondary questions; that for him architecture is a conceptual matter to be resolved in the purity of the realm of ideas, that when architecture is built, it gets mixed with the world of phenomena and necessarily loses its purity.<sup>27</sup> And yet it is significant that when this same built architectural piece enters the bi-dimensional space of the printed page it returns to the realm of ideas. The function of photography is not to reflect, in a mirror image, architecture as it happens to be built. Construction is a significant moment in the process, but by no means its end product. Photography and layout construct another architecture in the space of the page. Conception, execution, and reproduction are separate, consecutive, moments in a traditional process of creation. But in the elliptic course of Le Corbusier's process this hierarchy is lost. Conception of the building and its reproduction cross each other again.

## Continuous Editing

In the division of tasks among the editorial group of *L'Esprit Nouveau*, Le Corbusier took as his responsibilities "administration et finances." Amédée Ozenfant and Paul Dermée, coeditors of the magazine, were in charge of the more traditional work of production and editing. But Le Corbusier opted to mix with the world outside the intellectual circles, to participate actively in the world of industry and finance, himself a "producer" rather than an "interpreter" — the classical task of the intellectual — of the new industrial reality.<sup>28</sup> As the magazine was largely financed by advertising, Le Corbusier came in contact with the culture of mass media.



13. Page from *L'Esprit Nouveau* 20, 1924

His avid collection of industrial catalogues, department store brochures, and images clipped from newspapers and magazines thus has, in part, a productive explanation.<sup>29</sup> Le Corbusier was in search of publicity contracts for *L'Esprit Nouveau*. In fact, many of these catalogues came from companies whose products were ultimately advertised in the magazine. But Le Corbusier also appropriated this material as a source of images for his articles and later incorporated them as illustrations in his books.<sup>30</sup>

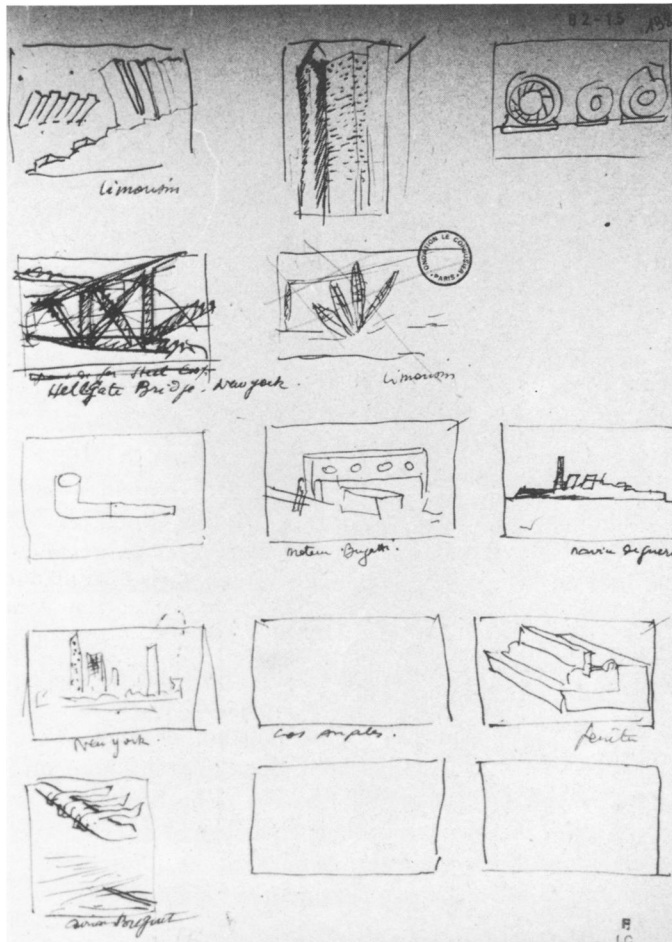
In *L'Esprit Nouveau* photography is not presented as an artistic project, rather as a documentary means. In Le Corbusier's articles photographs taken from publicity material coexist with images extracted from art books and photographs of his own work. But within these pages the world of "mass culture" intrudes into and violently unsettles the world of "high art." No matter how often Le Corbusier claims a higher rank for the art object than for the everyday object, his work is continually "contaminated" by the materials of low culture.<sup>31</sup>



14. Publicity brochure for *Vers une architecture*, 1923(?)

On the cover of the publicity brochure that Le Corbusier prepared for *Vers une architecture* he stated: "Vient de paraître" — interrupted by the reproduction of the book's cover — "Ce livre est implacable. Il ne ressemble à aucun autre." Inside he explained the novelty of his book in terms of his use of images: "This book derives its eloquence from the new means; its magnificent illustrations hold next to the text a parallel discourse, and one of a great power."<sup>32</sup>

Photography in Le Corbusier's book is rarely employed in a representational manner. Its conception and intention are fundamentally different. Instead it is the agent of a never-resolved collision of images and text, its meaning derived from the tension between the two. In this technique Le Corbusier borrowed much from modern advertising: the association of ideas that can be produced through the juxtaposition of images and of images with writing.<sup>33</sup> Images are not used to "illustrate" the text; rather they construct the text. Again in the publicity brochure he wrote, "This new conception of the book . . . allows the author to avoid flowery language, ineffectual descriptions; the facts exploding under the eyes of the reader by force of the images."



15. Original page of sketches from the draft manuscript of *Vers une architecture*

In fact, Le Corbusier's books were conceived through a continuous editing of found images. The working material of *Vers une architecture* reveals as much.<sup>34</sup> It consists of a series of sketches, grouped as vignettes, which correspond to the images to be displayed. Some images come from Le Corbusier's memory ("carte postale, où est la carte postale?" is the footnote to one vignette); others are extracted from machinery catalogues, from Frédéric Boissonnas's albums of Greece, and so forth. Almost invariably Le Corbusier transformed these photographs. Beyond removing them from their original context, he painted on them, erased their details, reframed them; these, then, are images that have been worked on, chosen, composed, constructed.

Though photography makes everything accessible — "distant places, famous people, springtime" — choice rather than accumulation is its essence. Framing is the issue of photography. The photographs of Greece by Boissonnas that Le Corbusier published in *Vers une architecture* were taken primarily from Maxime Collignon's *Le Parthenon* and *L'Acropole*.<sup>35</sup> Some were reframed, and bear a resemblance to his own sketches in *Le Voyage d'Orient*. They are "incomplete." They create a tension that pulls toward the missing element. As Stanford Anderson, referring to the sketches, has observed:

We hold no vantage point from which we may possess the building objectively. And if we did possess such a vantage point, these drawings tell us we would be missing something else. Experience itself and the knowledge which comes only through experience. . . . At a conceptual level Le Corbusier is concerned with how we correlate experience and knowledge. . . . This insistence on experience is more forceful when made in the presence of a work [the Parthenon] for which we have previously instilled modes of appropriation. . . . Le Corbusier did not repeat or make more precise the earlier researches into the orders, . . . he produced a set of sketches which evoke vividly the sequential experience of the ascent of the Acropolis.<sup>36</sup>

Boissonnas's photographs exemplify the previously instilled mode of an aestheticized appropriation of the Parthenon. The enormous plates of this book force the reader to step back every time he turns a page, presenting each image as an object for contemplative immersion, as a "work of art." Le Corbusier breaks away from his source when he wrenches these images from the sanctuary of high art,

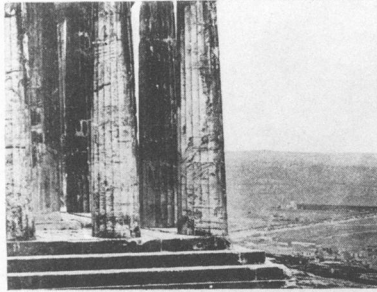


Photo Albert Morand. Le Parthénos.  
Petit à petit, le temple se formalise, passe de la construction à l'architecture. Cent ans plus tard le Parthénon fixera le point culminant de l'ascension.

du guerrier et du prêtre, pour atteindre à ce qu'on appelle justement la culture. La culture est l'aboutissement d'un effort de sélection. Sélection veut dire écarter, émonder, nettoyer, faire ressortir nu et clair l'Essentiel.

Depuis le primitivisme de la chapelle romane, on a passé à Notre-Dame de Paris, aux Invalides, à la Concorde. On a épuré, affiné la sensation, écarté le décor et conquis la proportion et la mesure; on a avancé; on a passé des satisfactions primaires (décor) aux satisfactions supérieures (mathématiques).

S'il recse des armoires bretonnes en Bretagne, c'est que les Bretons sont demeurés en Bretagne, bien loin, bien stables, toujours occupés à la pêche et à leur élevage. Il n'est pas séant que les messieurs de la bonne société dorment, en leur hôtel de Paris, dans un lit breton; il n'est pas séant qu'un monsieur qui possède une limousine dorme dans un lit breton, etc. Il suffit de se rendre compte et de tirer les deductions logiques. Posséder une limousine et un lit breton, c'est, hélas, couraant.



Photo Albert Morand. Le Parthénos.  
Chaque partie est décisive, marque le maximum de précision, d'expression; la proportion s'y lit catégorique.

Tout le monde s'écrit avec conviction et enthousiasme : « La limousine marque le style de notre époque! » et le lit breton se vend et se fabrique toujours chez les antiquaires.

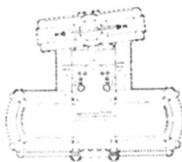
Montrons donc le Parthénon et l'auto afin qu'on comprenne qu'il s'agit ici, dans des domaines différents, de deux produits de sélection, l'un ayant abouti, l'autre étant en marche de progrès. Ceci ennoblit l'auto. Alors! Alors il reste à confronter nos maisons et nos palais avec les autos. C'est ici que ça ne va plus, que rien ne va plus. C'est ici que nous n'avons pas nos Parthénons.

\*\*\*

Le standard de la maison est d'ordre pratique, d'ordre constructif. J'ai tenté de l'énoncer dans le précédent chapitre sur les avions.

Le programme Loucheur qui comporte 500.000 logements à construire en dix ans fixera sans doute celui de l'habitation ouvrière.

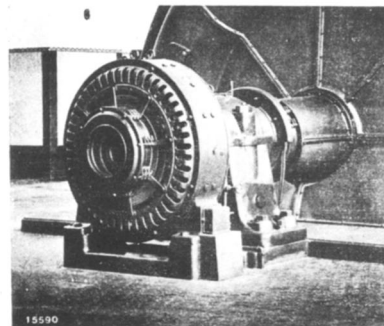
Salon d'Automne.



Salon de l'Aéronautique.

Lui, l'ami, n'avait rien à contredire aux enthousiasmes de Paul; il les partageait. Mais il était trop artiste pour n'avoir pas, de longtemps, cherché une explication à l'émoi qu'il avait aussi ressenti et surtout, pour n'avoir pas, depuis longtemps, cherché à vaincre la profonde démolition qui l'avait saisi lorsque, par exemple, passant sans transition en 1921 du *Salon d'Automne* à celui de l'*Aéronautique*, dans ce même Grand Palais, il s'était senti écrasé par la splendeur de la machine et n'avait regagné son atelier que dans le doute et la négation. Il avait réagi découvrant le rapport fécond qui pouvait unir l'œuvre d'art qu'il poursuivait à la machine qu'il admirait. Il tenta de donner à Paul la leçon recue de la machine : la machine est un événement si capital dans l'histoire humaine qu'il est permis de lui désigner un rôle de conditionnement de l'esprit, rôle aussi décisif et combien plus étendu que l'imposaient dans les âges les légendes guerrières remplaçant une race par une autre race. La machine n'oppose pas une race à une autre race, mais un monde nouveau à un monde ancien dans l'unanimité de toutes les races.

La machine, phénomène moderne, opère dans le monde une



Brown-Boveri.

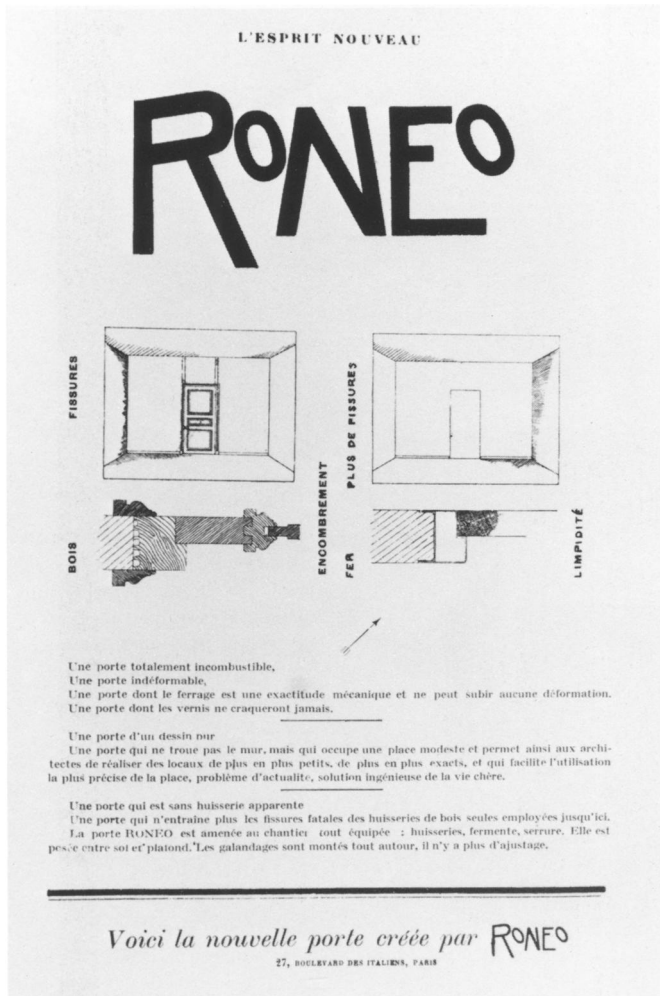
réformation de l'esprit. Une preuve tangible que nous sommes bien loin du terme de l'évolution commence, c'est qu'une langue universelle n'est point encore en usage, qui ferait tomber cette haute barrière de carton dressée à l'endroit des frontières désormais subjuguées, barrières de nuit sur un site qui s'éclaircit.

Intact, le facteur humain demeure, la machine étant conçue par l'homme pour des besoins humains; la est l'élément solide et efficace : la machine est construite sur le système spirituel que nous nous sommes donné et non sur une fantaisie, système qui nous constitue un univers tangible; ce système, arraché article par article au monde qui nous entoure et dont nous participons, est assez cohérent pour déterminer la création d'organes remplissant des fonctions semblables aux phénomènes naturels. Vérification rassurante.

Le miracle de la machine, c'est donc d'avoir créé des organes

16. Double-page spread from *Vers une architecture*, 1923, with reproductions of photographs by Frédéric Boissonnas taken from *Le Parthénon*

17. Double-page spread from *L'Art décoratif d'aujourd'hui*, 1925. The photograph of the turbine was extracted from a catalogue of the company Brown-Boveri (c. 1924) and reframed.



18. Roneo advertisement in *L'Esprit Nouveau* 27, 1924, comparing traditional wood door (left) with Roneo metal door (right)

19. Le Corbusier, "Roneo" drawing, illustrating the polemic between Le Corbusier and Auguste Perret over the *fenêtre en longueur*

reduces their size, and places them next to the everyday images of newspapers and industrial catalogues (which themselves have undergone equivalent transformations). Mass media makes everything contiguous and equivalent. Le Corbusier does not pretend to maintain a hierarchical division of the material by genre or type. Instead, he presents the collision of fragments corresponding to the experience of culture in the society of media. Thus his work becomes a critical comment on the conditions of culture in our time.

### A Window with a View

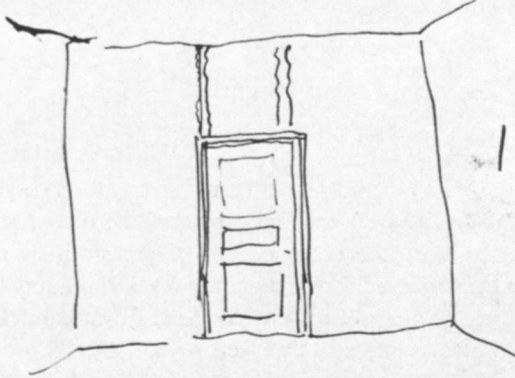
There is a drawing by Le Corbusier (with the heading "Roneo") in the archives of *L'Esprit Nouveau* that illustrates the bitter and long-lasting controversy between Auguste Perret and Le Corbusier over the *fenêtre en longueur*.<sup>37</sup> Perret maintained that the vertical window, the *porte fenêtre*, reproduces an "impression of complete space" because it permits a view of the street, the garden, and the sky, giving a sense of perspectival depth. The *fenêtre en longueur*, by contrast, diminishes perception and a correct appreciation of the landscape. In fact, Perret argued, it cuts out of view precisely that which is most interesting: the strip of the sky and the foreground that sustains the illusion of perspectival depth. The landscape remains, but (as Bruno Reichlin has put it) as though it were a planar projection sticking to the window.

In this dispute Perret expresses, with an exceptional clarity, the authority of the traditional notion of representation within a realistic epistemology, representation defined as the reproduction of an objective reality (is this what he means by "complete space"?). Le Corbusier's work undermines this concept of representation; the *fenêtre en longueur* is paradigmatic of its achievement in architecture.

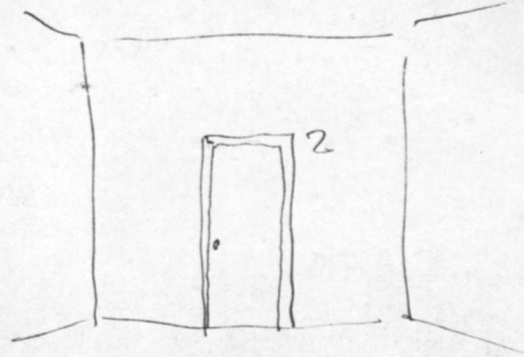
Classical paintings attempt to identify images with their models. Built up with shapes and images of recognizable objects — bottles, glasses, books, pipes — Purist paintings, as Ozenfant and Jeanneret claim, eschew this identification. In *La Peinture moderne* they define the objects that they chose to represent in their paintings as those of "the most perfect banality," which have "the advantage of a per-



Roncá



1



2

la porte avec des ferrures

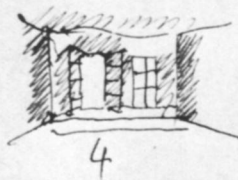
avec des ferrures de chambre à air  
qui font de la porte un meuble

la porte est un objet

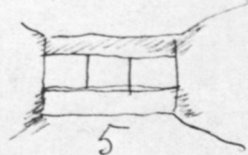
2 fois  
d'autre élément de l'intérieur  
méritant d'attirer l'attention  
il n'y a pas de ferrures

photo de la porte

3



4



5

une porte moderne.  
incombustible,  
ne bouge pas  
ne brûle pas  
tout en fer.

6



7

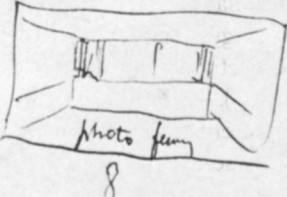


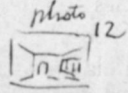
photo ferrure

8



photo

11



photo

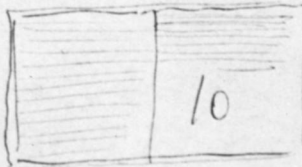
12



9



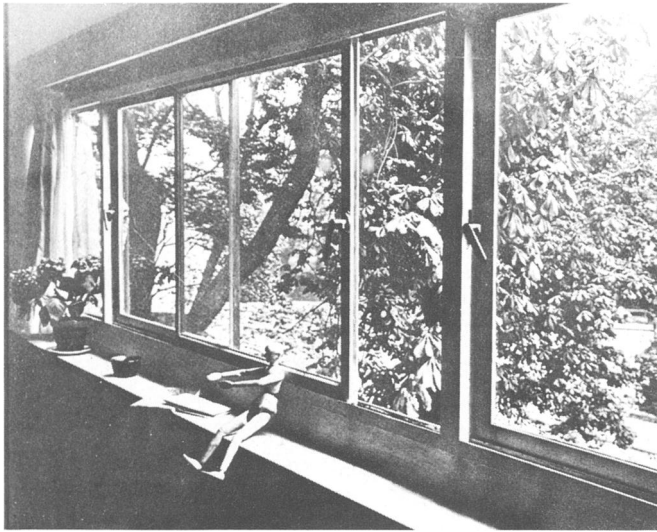
10



10

volée Rome

400

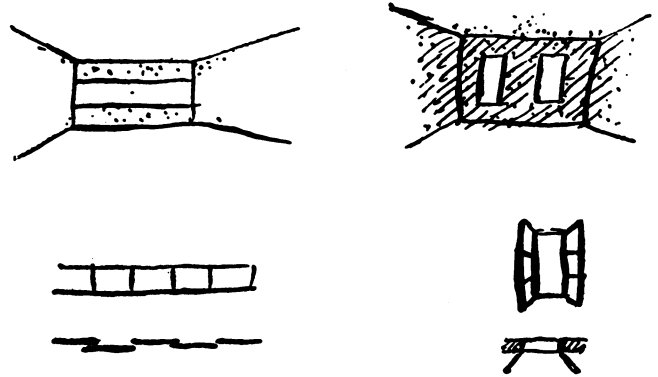


20. Le Corbusier and Pierre Jeanneret, Maison Cook, 1926

fect readability and of being recognized without effort.”<sup>38</sup> Objects on the canvas are therefore like words in a sentence: they refer to recognizable things, but the objects in the world that are represented are less important than the conjunction of differential units within the painting itself, each element being qualified by its place in the ensemble, or in Saussure’s words, by “differences without positive terms.”<sup>39</sup>

Viewing a landscape through a window implies a separation. A window breaks the connection between being in a landscape and seeing it. Landscape becomes purely visual, and consequently available to experience only through memory. Le Corbusier’s *fenêtre en longueur* works to put this condition, this caesura, in evidence.

Something about this “Roneo” drawing is paradoxical: Le Corbusier intends by his drawing to illustrate the superiority of the *fenêtre en longueur*; in actuality, the intensity and detail with which he draws Perret’s *porte fenêtre*, in contrast to the sketchiness of his rendering of the *fenêtre en longueur*, makes the former much more emotionally charged.<sup>40</sup> This may be seen, above all, in the way in which Le Corbusier draws the human figure in each. In the *porte fenêtre*, a man stands at the center of the window, holding it open with wide-stretched arms — recalling Perret’s assertion (in an imaginary dialogue published by Le Corbusier in the *Almanach d’architecture moderne*) that “a window is man himself. . . . The *porte fenêtre* provides man with a frame, it accords with his outlines. . . . The vertical is the line of the upright human being, it is the



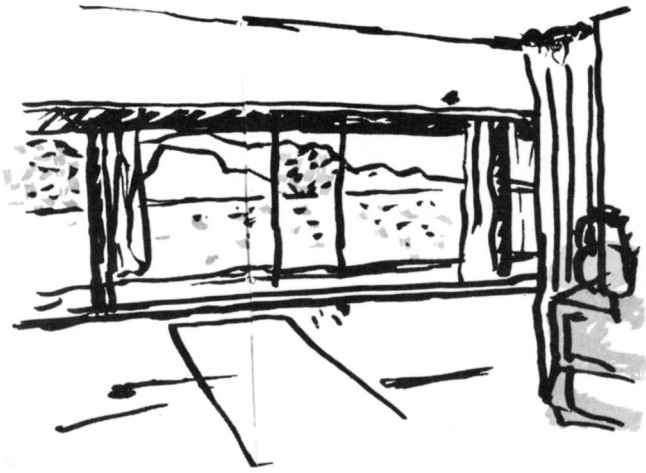
21. Le Corbusier, sketch of the confrontation between the *porte fenêtre* and the *fenêtre en longueur*

line of life itself.” In the *fenêtre en longueur*, which opens by sliding, a diminutive figure occupies a position peripheral to the window. In 1925 Le Corbusier wrote in the *Almanach*, “fenêtre, élément type — élément mécanique type: nous avons serré de près le module anthropocentrique.”<sup>41</sup>

Any concept of the window implies a notion of the relationship between inside and outside. In Le Corbusier’s work this relationship has to do with the contrast between the infinity of space and the experience of the body, a body that has become a surrogate machine in an industrial age. As he writes in *L’Art décoratif d’aujourd’hui*: “Decorative art is the mechanical system that surrounds us . . . , an extension of our limbs; its elements, in fact, *artificial limbs*. Decorative art becomes orthopaedic, an activity that appeals to the imagination, to invention, to skill, but a craft analogous to the tailor: the client is a man, familiar to us all and precisely defined.”<sup>42</sup> And in a footnote to the book, Le Corbusier wrote that when the typewriter came into use, anthropocentrism became standardization: “This standardization had considerable repercussions upon furniture as a result of the establishment of a module, that of the *commercial format*. . . . An international convention was established [for paper sheets, magazines, books, newspapers, canvases, photographic prints].”<sup>43</sup>

Perret’s window corresponds, as Reichlin has shown, to the traditional space of perspectival representation in Western art. Le Corbusier’s window corresponds, I would argue, to the space of photography. It is not by chance that Le Cor-



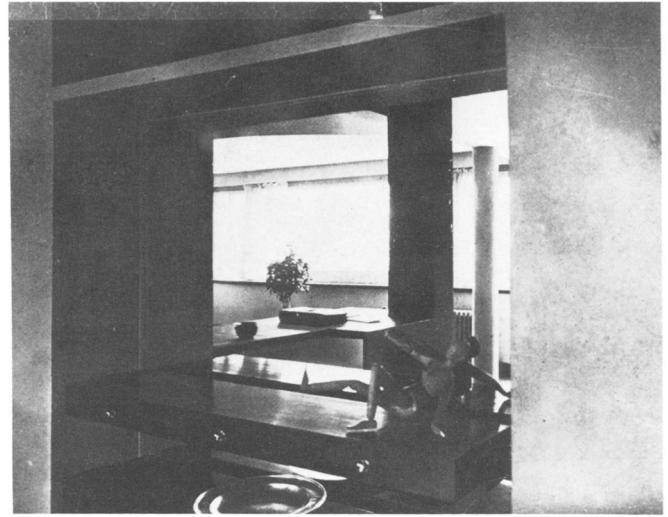


22. Le Corbusier, small villa for his parents, Corseaux, view through interior overlooking Lake Geneva

busier continues the polemic with Perret in an argument in *Précisions*, demonstrating “scientifically” that the *fenêtre en longueur* illuminates better, by relying on a photographer’s chart that gives times of exposure. Though photography (as with film) is based on single-point perspective, between photography and perspective there is an epistemological break. The point of view in photography is that of the camera, a mechanical eye. The painterly convention of perspective centers everything on the eye of the beholder and calls this appearance “reality.” The camera — and more particularly the movie camera — posits that there is no center.

Using Walter Benjamin’s distinction between the painter and the cameraman, we could conclude that Le Corbusier’s architecture is the result of his positioning himself behind the camera.<sup>44</sup> By this I refer not only to the aforementioned implications, Le Corbusier as “producer” rather than “interpreter” of industrial reality, but also to a more literal reading that sees in the deliberate dispersal of the eye in Le Corbusier’s villas of the twenties — effected through the architectural promenade together with the collapsing of space outside the *fenêtre en longueur* — the architectural correlative of the space of the movie camera.

The *fenêtre en longueur* that stretches along the façade of the villa for Le Corbusier’s parents in Corseaux on Lake Geneva (1923) — a house that became central to the Perret–Le Corbusier controversy — does not open by sliding. The window is divided into four elements, each of which is divided into three panels. The central panel, a



23. Maison Cook, view showing the *fenêtre en longueur* of the opposite wall reflected in the mirror of the buffet

rectangle, opens by pivoting; the two square panels are fixed. How important these divisions are for Le Corbusier is evident in his sketches of the house: the view outside each panel seems relatively independent of the adjacent view. The grouping of curtains in the side post, also stressed in Le Corbusier’s sketches, reinforces the quadri-division of this window.

The panorama “sticking” to the window glass is superimposed on a rhythmic grid that suggests a series of photographs placed next to each other in a row, or perhaps a series of stills from a movie. What is more, in the “Roneo” drawing the *fenêtre en longueur* does slide open; and, when opened, one glass panel is overlaid on another. This window is divided into three square panels; the central one is fixed. The individual does not occupy the center of the window when opening it, but must stand to the side. More than at Corseaux, he is displaced.

We imagine a boat going down the lake. Viewed from a *porte fenêtre* there would be an ideal moment: the boat appears at the center of the opening directly in line with the gaze into the landscape — as in a classical painting. The boat would then move out of vision. From the *fenêtre en longueur* the boat is continuously shot, and each shot is independently framed.

With Le Corbusier’s *fenêtre en longueur* we are returned to Dziga Vertov, to an unfixed, never reified image, to a sequence without direction, moving backward and forward according to the mechanism or the movement of the figure.

## Notes

A condensed version of this text is published in German and French in *L'Esprit Nouveau, Le Corbusier und die Industrie 1920–1925*, ed. Stanislaus von Moos (Berlin: Ernst & Sohn, 1987). It is also a chapter in a book in preparation *L'Esprit Nouveau: Le Corbusier and the Media*. Financial support for this study came from a grant from the Fondation Le Corbusier. I would like to thank Kenneth Frampton, Michael Hays, Alicia Kennedy, and, especially, Sandro Marpillero for their careful reading and suggestions.

1. Marie-Odile Briot, "L'Esprit Nouveau: son regard sur les sciences," in *Leger et l'esprit moderne*, exhibition catalogue (Paris: Musée d'Art moderne de la ville de Paris, 1982), p. 38.
2. I have borrowed the concept of a "shadow line," *linea d'ombra*, from Franco Rella's literary analogy to Joseph Conrad's novella *The Shadow Line*, proposed in "Immagini e figure del pensiero," *Rassegna* 9 (1982): 78.
3. Giuliano Gresleri, *Le Corbusier: Viaggio in Oriente* (Venice: Marsilio and Paris: Fondation Le Corbusier, 1984).
4. Victor Burgin, "Modernism in the Work of Art," in *The End of Art Theory, Criticism and Postmodernity* (Atlantic Highlands, NJ: Humanities Press, 1986), p. 19. The article first appeared in *20th Century Studies* 15–16 (December 1976).
5. Stanislaus von Moos, "Le Corbusier As Painter," *Oppositions* 19–20 (Winter–Spring 1980): 89. One of its manifestations was a mural completed in 1938 in the house that Eileen Gray had built for Jean Badovici in Cap Martin.
6. Le Corbusier, *Creation is a Patient Search* (New York: Frederick Praeger, 1960); English trans. of *L'Atelier de la recherche patiente* (Paris: Vincent & Fréal, 1960).
7. Ibid., p. 37.
8. Gresleri, *Viaggio in Oriente*, p. 141.
9. Le Corbusier, *The Decorative Art of Today*, trans. James Dunnett (Cambridge: MIT Press, 1987), pp. 9–11; English trans. of *L'Art décoratif d'aujourd'hui* (Paris: Editions Crès, 1925). For the corresponding sketches, see Fondation Le Corbusier A3 (6).
10. Roland Barthes, "The Rhetoric of the Image," in *Image-Music-Text*, trans. Stephen Heath (New York: Hill and Wang, 1977), pp. 38–39; original text, "Rhetorique de l'image," *Communications* 1 (1961).
11. Roland Barthes, "The Photographic Message," in *Image-Music-Text*, p. 19; original text, "Le message photographique," *Communications* 1 (1961).
12. I am permitting myself to use the fashionable word "deconstruction" with reference to Le Corbusier's manipulation of images not so much to insist on a presumed anti-philological vice as to call attention to Le Corbusier's knowledge of the thought of Nietzsche and, in particular, the Nietzschean critique to the concept of sign, of truth, interpreted not as the representation of an absolute content but as a stratification of signs. See, for example, Friedrich Nietzsche, "Unzeitgemasse Betrachtungen, Zweites Stück: Vom Nutzen und Nachteil der Historie für das Leben" (On the usefulness and disadvantages of history for life), somewhat mistranslated into English as "On the Use and Abuse of History."
13. Le Corbusier, *Creation is a Patient Search*, p. 37.
14. Peter Allison, "Le Corbusier, 'Architect or Revolutionary'? A Reappraisal of Le Corbusier's First Book on Architecture," *AAQ* 3, no. 2 (1971): 10–20.
15. The correspondence between Le Corbusier and Charles L'Eplattenier is in the Fondation Le Corbusier. All quotations here are taken from the letters of 26 February, 29 February, and 2 March 1908. For an extensive commentary on Le Corbusier's early correspondence, see Mary Patricia May Sekler, *The Early Drawings of Charles-Edouard Jeanneret, 1902–08* (New York: Garland, 1977).
16. Adolf Loos, "Architektur," in *Sämtliche Schriften*, vol. 1 (Vienna and Munich: Verlag Herold, 1962), pp. 302–18; trans. Wilfried Wang in *The Architecture of Adolf Loos*, exhibition catalogue (London: Arts Council of Great Britain, 1985), p. 106. It should be noted that earlier English translations of this famous text omitted this and other relevant passages. For a further discussion, see Beatriz Colomina, "On Adolf Loos and Josef Hoffmann: Architecture in the Age of Mechanical Reproduction," *9H* 6 (1982): 52–58.
17. Max Horkheimer and Theodor Adorno, *Dialectic of Enlightenment* (New York: Continuum, 1972), esp. the chapter "The Culture Industry."
18. These "painted" photographs are in the Fondation Le Corbusier, Phototeque L2 (1).
19. Stanislaus von Moos, *Le Corbusier: Elements of a Synthesis* (Cambridge: MIT Press, 1979), p. 299.
20. Le Corbusier, *Précisions sur un état présent de l'architecture et de l'urbanisme* (Paris: Editions Crès, 1930), p. 139.
21. Margaret Sobieski pointed out to me the "missing" columns of the Villa Savoye. See Le Corbusier, *Oeuvre complète 1929–1934* (Zurich: Editions Girsberger, 1935), pp. 24–31.
22. Paul Spangler, in an unpublished paper on the four compositions, speculates on the meaning of Le Corbusier's omission of columns in the Villa Stein at Garches. See Le Corbusier and Pierre Jeanneret, *Oeuvre complète 1910–1929* (Zurich: Editions Girsberger, 1930), pp. 142, 144.
23. Colin Rowe has written, "At Garches central focus is consistently broken up, concentration at any one point is disintegrated, and the dismembered fragments of the center become a peripheral dispersion of incident, a serial installation of interest around the extremities of the plan" (*The Mathematics of the Ideal Villa and Other Essays* [Cambridge: MIT Press, 1977], pp. 1–28). The blind spot of this brilliant analysis — one that reflects a classical conception of representation and photography — is that Rowe dutifully restored the columns to their place on the plan of the Villa Stein vis-à-vis that of Palladio's Malcontenta, as though the way in which Garches was presented in the *Oeuvre complète* was merely a "printing error."
24. Fondation Le Corbusier, Phototeque L1 (10) 1.
25. Fondation Le Corbusier, B2–15.
26. Le Corbusier, *Towards a New Architecture*, trans. Frederick Etchells (London: The Architectural Press, 1927), pp. 150–51; English trans. of *Vers une architecture* (Paris: Editions Crès, 1923).
27. Von Moos, *Elements of a Synthesis*, p. 299.
28. Manfredo Tafuri rightly notes that "Le Corbusier did not accept the industrial 'new nature' as an external factor and claimed to enter it

as 'producer' and not as 'interpreter'" (*Theories and History of Architecture* [New York: Harper & Row, 1976], p. 32). Interpreters are, for Tafuri, those who perpetuate the figure of the artist-magician in the Benjaminian definition, those who, faced by the "new nature of artificial things" to be used as raw material in their artistic work, remain anchored to the principle of mimesis. On the opposite side is the artist-surgeon, again in the Benjaminian sense, one who has understood that reproduction techniques create new conditions for the artist, the public, and the media of production. Instead of passively admiring the "equipment," they go behind it and use it. See also Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations* (New York: Schocken, 1968).

29. Among the catalogues in the archives of *L'Esprit Nouveau* are those for automobiles by Voisin, Peugeot, Citroën, and Delage; airplanes and hydravions by Farman and Caproni; trunks and suitcases by Innovation; office furniture by Or'mo; file cabinets by Roneo; sport and hand traveling bags by Hermes. They include as well a more "extravagant" selection of turbines by the Swiss company Brown-Boweri; high-pressure centrifugal ventilators by Rateau; and industrial *outillage* by Clermont Ferrand and Slingsby. The archives also hold department store mail-order catalogues from Printemps, Au Bon Marché, and La Samaritaine.

30. See Beatriz Colomina, "L'Esprit Nouveau: Architecture and Publicity," *Production and Reproduction, Revisions* 2 (1987).

31. Thomas Crow has written that both Clement Greenberg and Adorno "posit the relationship between modernism and mass culture

as one of relentless refusal"; and yet, "modernism repeatedly makes subversive equations between high and low which dislocate the apparently fixed terms of that hierarchy into new and persuasive configurations, thus calling it into question from within" ("Modernism and Mass Culture in the Visual Arts," in *Modernism and Modernity*, ed. Benjamin H. D. Buchloh, Serge Guilbaut, and David Solkin [Halifax, Nova Scotia: The Press of the Nova Scotia College of Art and Design, 1983], p. 251).

32. Fondation Le Corbusier, B2 (15).

33. A similar sensibility to advertising is evident in Le Corbusier's photographs of his early villas. Von Moos has pointed out that most of them include cars, if not his own Voisin: "Indeed, it is often unclear in these images whether it is the car or the house that supplies the context for an advertisement of the contemporary good life" (*Elements of a Synthesis*, p. 84).

34. Fondation Le Corbusier, B2 (15).

35. Maxime Collignon, *Le Parthenon and L'Acropole*, photographs by Frédéric Boissonnas and W. A. Mansel (Paris: Librairie Centrale d'Art et d'Architecture Ancienne, n.d.).

36. Stanford Anderson, "Architectural Research Programmes in the Work of Le Corbusier," *Design Studies* 5, no. 3 (July 1984): 151–58.

37. See Bruno Reichlin's insightful analysis of this controversy, "The Pros and Cons of the Horizontal Window," *Daedalus* 13 (1984): 64–78.

38. Amédée Ozenfant and Charles-Edouard Jeanneret, *La Peinture moderne* (Paris: Editions Crès, 1925), p. 168.

39. Ferdinand de Saussure, *Course in General Linguistics*, trans. Wade Baskin (New York, 1966), p. 120.

40. Kerry Shear first pointed out to me the paradoxical nature of the "Roneo" drawing.

41. Le Corbusier, *Almanach d'architecture moderne* (Paris, 1925), p. 96.

42. Le Corbusier, *The Decorative Art of Today*, p. 72.

43. *Ibid.*, p. 76n.

45. In "The Work of Art in the Age of Mechanical Reproduction," Benjamin studies film techniques as an example of an art in which the reproduction techniques confer a new condition on the artist, the public, and the media of production. He writes: "Unlike the magician . . . the surgeon renounces facing the patient man-to-man; instead he penetrates his body operatively. The magician and the surgeon behave respectively like the painter and the operator. The painter keeps, in his work, a natural distance from what he is given, while the operator penetrates deeply into the texture of the data. . . . [The image] of the painter is total, that of the operator is multifragmented, and its parts are rearranged according to a new law. Therefore the cinematic representation of reality is vastly more meaningful for the modern man because, precisely on the basis of its intense penetration through the equipment, it offers him that aspect, free from the equipment, that he can legitimately ask from the work of art" (p. 233). Tafuri finds in this passage a principle by which to identify the distinctive features of the twentieth-century avant-gardes. It is interesting to note that he includes Marcel Duchamp among those who perpetuate the figure of the artist-magician (*Theories and History of Architecture*, p. 32). See also note 28.

## Figure Credits

1. Photograph by Edmund Engelmann. From *Berggasse 19* (New York: Basic Books, 1976).
2. From Dziga Vertov, *The Man with the Movie Camera*, 1928–29.
3. Giuliano Gresleri, *Le Corbusier: Viaggio in Oriente* (Venice: Marsilio and Paris: Fondation Le Corbusier, 1984).
4. Photographs from Le Corbusier, *L'Art décoratif d'aujourd'hui* (Paris: Editions Crès, 1925). Sketches from Fondation Le Corbusier. Reproduction forbidden.
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