



# Extrapolating Transparency

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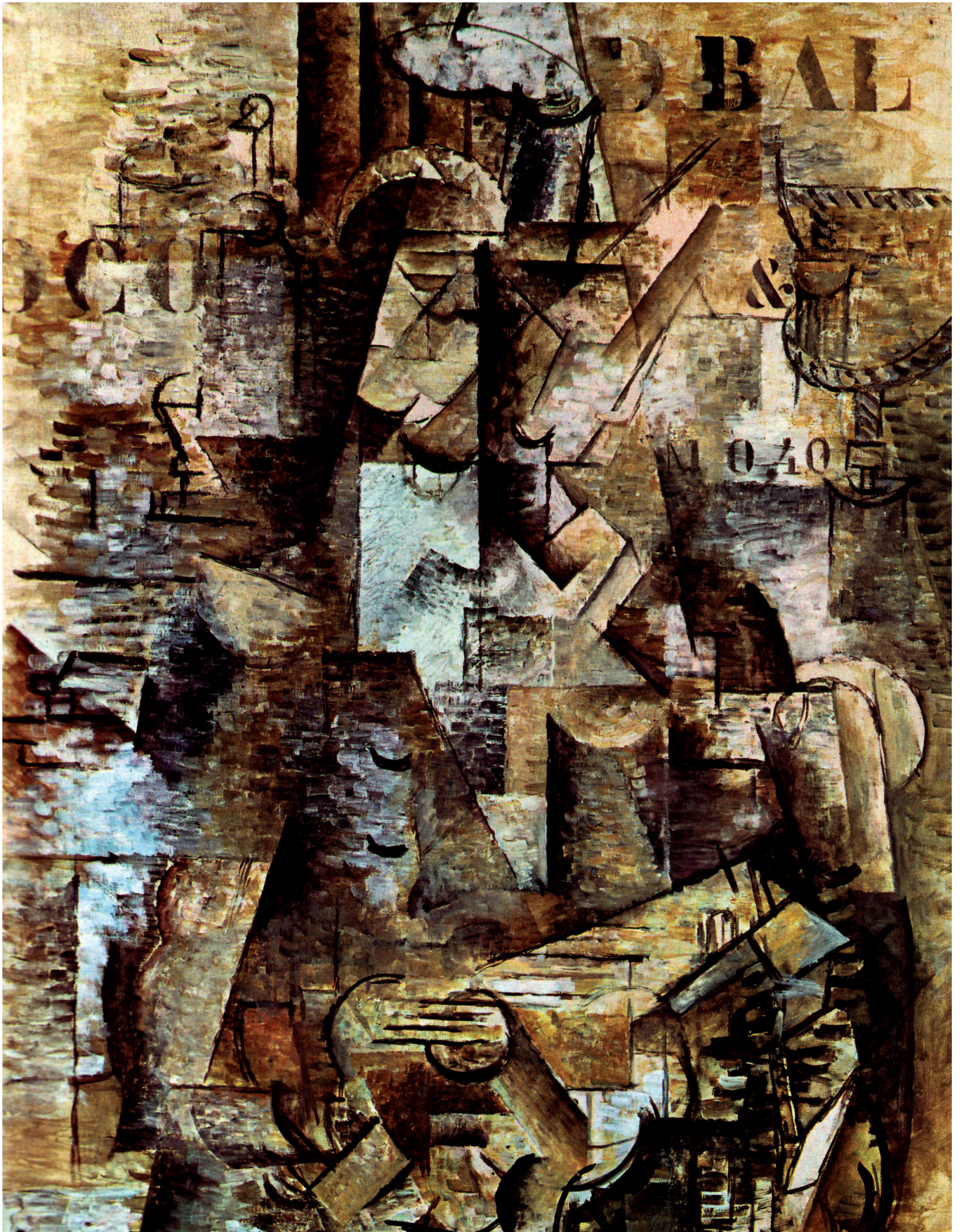
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The argument we would like to expose here stems from the conviction that, in the sub-urban condition which is ours today, the great challenge facing us is not so much the expansion of cities (for which the term *urbanism* was coined some 150 years ago) as the *deepening* of territories, a poetic and theoretical task which could be designated by the notion of *sub-urbanism*<sup>1</sup>. What this sub-version of urbanism requires in our view is not necessarily a complete break away from the critical tools and concepts of urban design, but a further transposition of those tools in the vertical or sectional matrix of landscapes which, whether urban, suburban or rural, can all be seen as palimpsests or hypertexts: space-times articulating a complex stratification of layers and uses, memories and prophecies. The writings of Colin Rowe are particularly interesting in this respect. Although *Collage City* and the nebulae of contextualist essays somehow failed to carry their stimulating intuitions beyond the stage of the city and past the ruminations of urban design, Rowe unquestionably stands, in the history of architectural criticism, as a master in transposition from painting to buildings and from architecture to urbanism. Which means that, taking in those essays what Marcel Duchamp called «swimming lessons», and stressing what they leave to be desired, sub-urbanism might find in them all the ingredients that are necessary to push the extrapolation a little further, into the four dimensional realm of landscapes and territories.

### PLOT

To illustrate this idea, let's take one of the masterpieces of Rowe's intellectual adventure *Transparency*<sup>1</sup>, written in collaboration with Robert Slutzky at Austin, Texas, in the mid 50's. Although this well known piece, which can be considered the manifesto of the Texas Rangers<sup>2</sup>, has been very influential and abundantly discussed, it might be useful to recall two or three things about its background and the structure of its argumentation.

First, one word about the circumstance: Rowe and Slutzky had met at Yale where the former had come from England to study with Hitchcock, while the latter, a painter by education, was a student of Josef Albers, particularly interested in gestalt theory and in Rudolf Arnheim's speculations on the psychology of art. The two mentors – Albers, who, according to Rowe, was «simply the best thing going»<sup>3</sup>, and Hitchcock, whose book *Painting Toward Architecture* had been published just a few years before<sup>4</sup> – are clearly in the background of the essay's argument, aimed against the doxa of the modern movement as represented by its «silver prince», Walter Gropius, and its official historiographer Siegfried Giedion, who had both orchestrated, from the GSD at Harvard, the diffusion of the modernist doctrine in architectural pedagogy.

Then, there is the immediate target, a little passage in *Space, Time and Architecture* (1941), where Giedion had celebrated the conquest of transparency in modern architecture, by proposing the workshop aisle of the Bauhaus, designed by Gropius in 1926, as the architectural equivalent of a Picasso, *L'Arlésienne*, 15 years older than the building, and characteristic of the period named «analytical cubism» by art historians:

Two major endeavors of modern architecture are fulfilled here, not as unconscious outgrowths of advances in engineering but as the conscious realization of an artist's intent; there is the hovering, vertical grouping of planes which satisfies our feeling for a relational space, and there is the extensive transparency that permits

Georges Braque, *Le portugais*, 1911, Basel, Kunstmuseum Basel



interior and exterior to be seen simultaneously, *en face* and *en profil*, like Picasso's *L'Arlésienne* of 1911-12: variety of levels of reference, or of points of reference, and simultaneity – the conception of space-time, in short.<sup>5</sup>

And Giedion gave a moral meaning to this transparency allegedly achieved by the building, explaining that it answered the main problem facing us: the reconciliation and fusion of individuals and society...

Against what they consider an ideological confusion and in order to distinguish what Giedion, in their eyes, unduly assimilated, Rowe and Slutzky are going to quote another propagandist of the modern movement, the Hungarian painter Gyorgy Kepes who, in *Language of Vision* (1944, a book which could be considered as the equivalent of *Space, Time and Architecture* in the field of graphic design and plastic arts, and was actually prefaced by Giedion), had given an excellent definition of modern transparency, illustrated by three paintings, a *Study of transparency* by Clifford Eitel, a *Portrait of Kahnweiler* by Picasso and a *Purist Still Life* by Ozenfant:

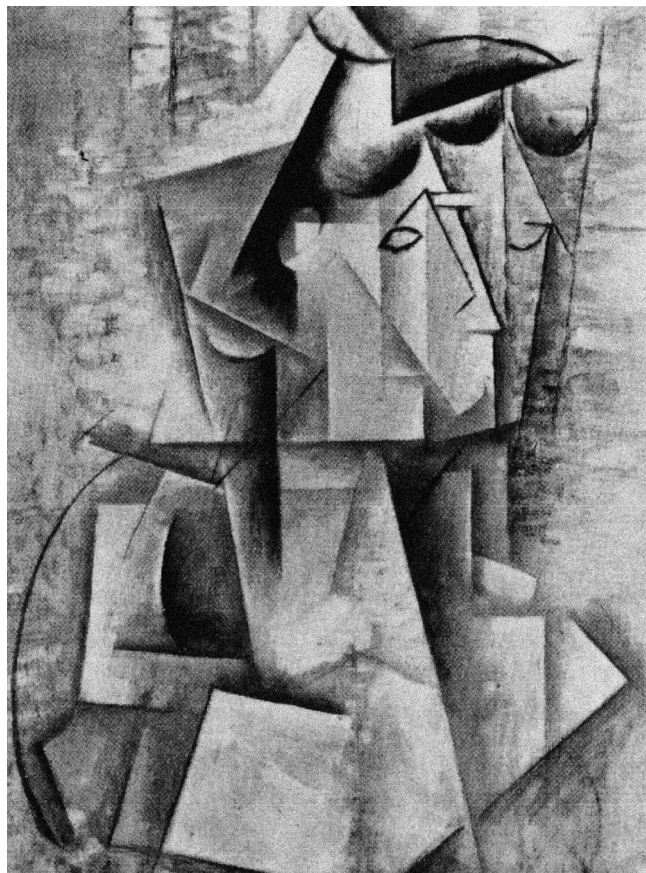
If one sees two or more figures partly overlapping one another, and each of them claims for itself the common overlapped part, then one is confronted with a contradiction of spatial dimensions. To resolve this contradiction, one must assume the presence of a new optical quality. The figures are endowed with transparency; that is, they are able to interpenetrate without an optical destruction of each other. Transparency however implies more than an optical characteristic: it implies a broader spatial order. Transparency means a simultaneous perception of different spatial locations. Space not only recedes but fluctuates in a continuous activity. The position of the transparent figures has equivocal meaning as one sees each figure now as the closer, now as the further one.<sup>6</sup>

In the opening of their essay, Rowe and Slutzky literally borrow Kepes' definition of transparency, which they qualify as «admirable», emphasizing immediately how different it is from the current meaning of the word, which denotes either the physical quality of a substance or material (glass, water, etc.), or, on a more mental plane, the idea of a perfect clarity. «Here, they write, the transparent ceases to be that which is perfectly clear and becomes, instead, that which is clearly ambiguous»<sup>7</sup>. Now, everything would be for the best, and there would be no problem at all, if modernist critics (Giedion but also, as we will see, Kepes himself, and his mentor Lazlo Moholy-Nagy) were not in the biggest confusion, constantly passing, without notice, from one meaning to the other. This is why Rowe and Slutzky propose to establish a «basic distinction» between the two species of transparency: «Transparency may be an inherent quality of substance, as in a wire mesh or glass curtain wall», and one will speak of real or *literal* transparency, «or it may be an inherent quality of organization», and one will then speak of seeming or *phenomenal* transparency. The whole argumentation of the essay develops on this basis. Although we cannot retrace it in detail here, we would like to emphasize the fact that it proceeds in three steps or phases (and not in two as some commentators seem to assume), each of them being characterized by the extrapolation of the distinction in a reality of  $n+1$  dimensions.

#### PICTORIAL

Hence, the first part of the essay aims at clarifying the contrast between the two kinds of transparency in the 2-dimensional field of painting, where the third dimension (through





*Literal / Phenomenal: Pablo Picasso, L'Arlesienne, 1911-1912 and Walter Gropius, the Workshop wing of the Bauhaus, 1926 as compered in S. Giedion, Space, Time and Architecture, 1941*

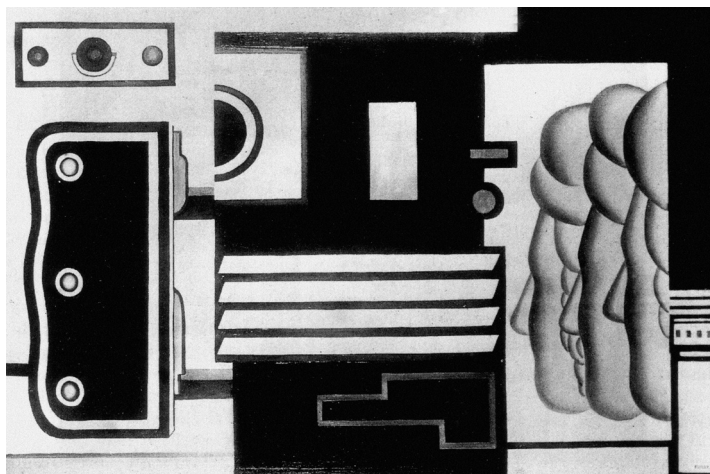
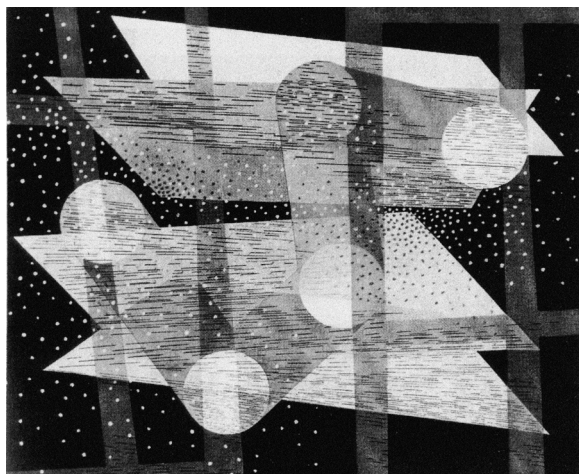
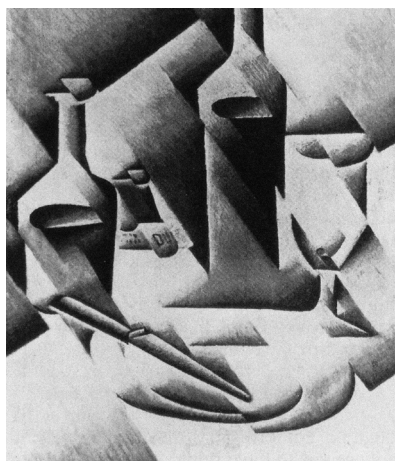
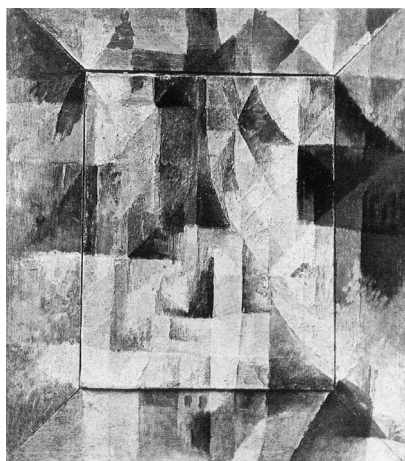
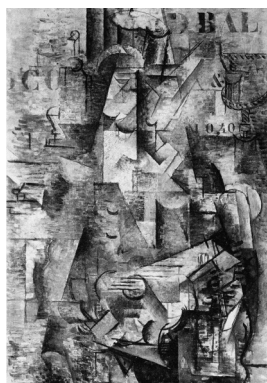
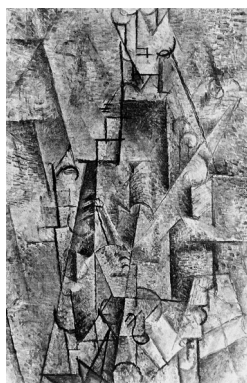


*Literal / Phenomenal*: Paul Cézanne, *Le Mont Sainte-Victoire*, 1904; Pablo Picasso, *Le Clarinettiste*, 1911 and Georges Braque, *Le Portugais*, 1911; Robert Delaunay, *Fenêtres simultanées*, 1911 and Juan Gris, *Bouteilles et couteau*, 1912; László Moholy-Nagy, *La Sarraz*, 1930 and Fernand Léger, *Trois visages*, 1926

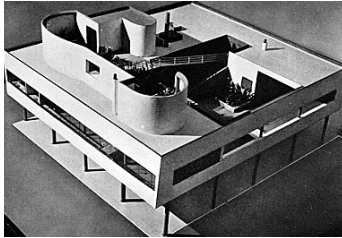
effects of depth) can only be «implied» or suggested. According to Rowe and Slutzky, if both kinds of transparency can be found in modern painting, the phenomenal has a smaller ecological niche than the literal: while the latter would be noticeable in both «machine aesthetic» and Cubism, «probably our feeling for phenomenal transparency derives from Cubist painting alone». In other words, Cubism is the only real arena where the two orders of transparency are simultaneously in play, and where the phenomenal, therefore, may actually be distinguished from the literal. Starting from a pre cubist painting where the two orders are already dimly present (a *Sainte-Victoire* by Cézanne), and proceeding then through a series of binary comparisons between contemporary canvases (presented in chronological order), the first part of the essay is thus devoted to a progressive and almost chemical isolation of the two kinds of transparency... as if these, very intricate and hardly discernable from one another in the beginning, had progressively given way to two diverging directions and aesthetics in modern painting. Thus, while the contrast is quite subtle in the first comparison involving two typical canvases of analytical cubism where both transparencies are in focus (a slightly more literal Picasso and a slightly more phenomenal Braque), but already sharper in the second where the spatial intricacies and fluctuations of a *Still Life* by Gris are opposed to the glass atmosphere of Delaunay's *Simultaneous Windows*, the aesthetic isolation of the two kinds of transparencies is finally complete in the last one staging the equivocal depth and highly structured matrix of a Léger (*The Three Faces*, 1926) against the unambiguous reading of a painting by Moholy (*La Sarraz*, 1930), floating a composition of translucent figures in «some private version of outer space [...] Léger's concern is with the structure of form; Moholy's with materials and light. Moholy has accepted the Cubist figure but has lifted it from out of its spatial matrix; Léger has preserved and even intensified the typically Cubist tension between figure and space».

At the end of this first part of the essay, a clearer distinction between the two transparencies in the field of painting can thus be harvested: «Literal transparency [...] tends to be associated with the *trompe l'oeil* effect of a translucent object in a deep, naturalistic space; while phenomenal transparency seems to be found when a painter seeks the articulated presentation of frontally aligned objects in a shallow, abstracted space»<sup>8</sup>. More fundamentally, while literal transparency simply imposes the illusion of depth on a passive observer for whom only one spatial reading of the work is plausible, phenomenal transparency, through the figure-ground ambiguities plotted in its shallow matrix, engages the mind of the observer in an active interplay of readings «which interpenetrate without destroying each other». In other words, while the given and obvious illusion of depth offered by literal transparency results in one shallow and passive reading, it is through the very perplexing shallowness of its spatial matrix that phenomenal transparency, generating a series of equivocal readings, acquires (or should we say *generates*) depth. Even though Rowe and Slutzky carefully refrain from clearly stating that the phenomenal would be the good way, and the literal a mere blind (although crowded) alley in modern art, they strongly suggest as much when they remark that Moholy, although avowedly impressed and stimulated by the equivocal quality of Cubist paintings, was himself «unable or unwilling to achieve» anything comparable. In any case, two traditions in modern painting are clearly distinguished by our authors: a phenomenal, cubist, and mainly Parisian school on the one hand (Picasso, Braque, Gris, Léger, Ozenfant, but also Mondrian and









Klee), and a rather literal, «machine aesthetics» nebulae on the other hand, flocked with figures from the Constructivist, De Stijl and Bauhaus movements (Kandinsky, Malevitch, El Lissitzky, Van Doesburg, Moholy...).

#### ARCHITECTURAL

Their basic distinction being clearly established and illustrated in the two-dimensional field of painting, Rowe and Slutzky then proceed to transpose it into the three-dimensional field of architecture. Here, depth is, by definition, an actual given and not just the result of an optical effect. Literal transparency can therefore become a physical fact, and is actually so prevalent, so insistent, that most of the critics, whenever they try to identify an architectural equivalent of the transparency at work in modern painting, never come up with anything but literal (and this, even though the phenomenal and the ambiguous are the qualities they seem to praise in painting). For instance, Kepes himself had written, just under a photo looking through the large reflecting glass window panes of a house by George Fred Keck: «Contemporary architecture utilizes the transparent quality of synthetic materials, glass, plastics, etc. to create a design that will integrate the greatest possible number of spatial vistas. Inside and outside are in close relationship, and each viewpoint in the building offers the widest visible comprehension of space. Reflections and mirrorings, transparent and translucent building materials are carefully calculated and organized to focus divergent spatial vistas in one visual grasp»<sup>9</sup> in short, nothing but very material and literal transparency (provided we abstract the potentially ambiguous issue of reflections): a most regrettable relapse into the confusion which had led Giedion to compare the obvious transparency of the Workshop aisle of the Bauhaus with the rich ambiguities and fluctuations of *L'Arlésienne*.

In Rowe and Slutzky's eyes, both kinds of transparencies can be found in *L'Arlésienne*, including this fluctuating or equivocal meaning, which, according to Kepes's definition, characterizes the phenomenal. But this is not the case with the glass wall at the Bauhaus, which can only be read as «an unambiguous surface giving upon an unambiguous space»<sup>10</sup>. In this sense, Gropius's architecture must be paralleled to Moholy's paintings and to all those «simplifications of the Cubist image», where figures «float in an infinite, atmospheric, naturalistic void» (instead of being perplexed in an abstracted space) and where the picture plane never becomes the «uniformly activated field» one is confronted with in Picasso, Braque, Gris or Léger.

In order to find examples of phenomenal transparency in modern buildings, one should therefore look in a totally different direction, and turn towards the foxy tricks of Le Corbusier's architecture. The second (and most famous) part of the essay is thus focused on a very subtle analysis of a building which Rowe had already compared to Palladio's Malcontenta in his first piece of architectural criticism<sup>11</sup>: villa Stein-de Monzie, built at Garches in 1927. Here, the villa is «juxtaposed» to the Bauhaus wing, and presented, by contrast, as an almost perfect transposition, in the field of architecture, of the phenomenal transparency achieved by the Cubists and exemplified by Léger's *Three Faces*. Interestingly enough, this suggestion for a parallel between Le Corbusier and Léger was already in *Painting Towards Architecture*, where Hitchcock had superimposed, on two following pages, a model of villa Savoye (photographed in bird's eye view), and a reproduction of

*Superimposition: Le Corbusier, Model of Villa Savoye, 1929; Fernand Léger, Le Grand Déjeuner or Trois Femmes, 1921, New York, Museum of Modern Art, from H.-R. Hitchcock, Painting Towards Architecture, 1948*





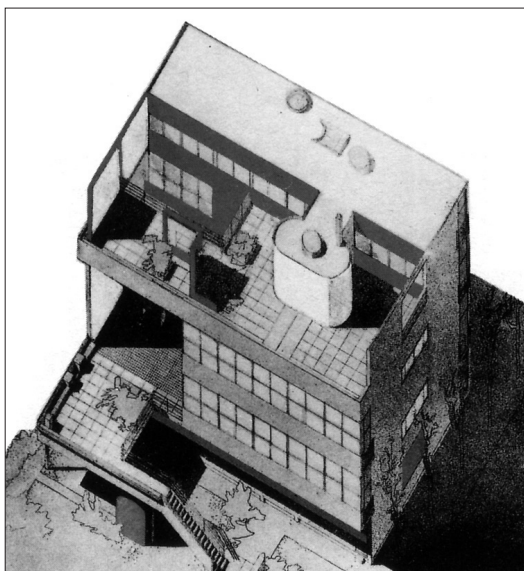
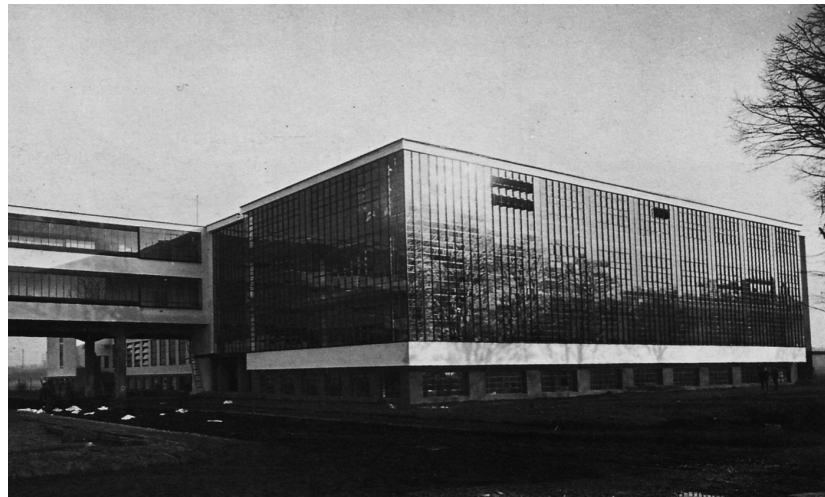
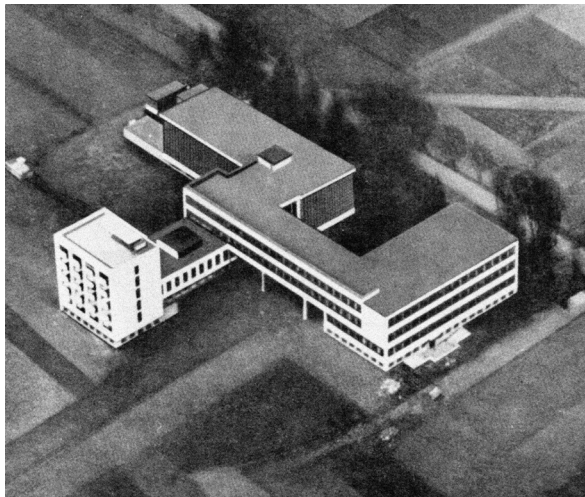
Léger's *Petit Déjeuner* (1921), as if his intention was to emphasize the similar iconographic intrications of planes, angles and curves, and the comparable ways they alternatively protrude or recess over and under a basic surface: here the floor of the terrace, there the picture plane<sup>12</sup>. But where Hitchcock had noticed a similitude, Rowe and Slutzky's ambition is to demonstrate a deep and fully functioning analogy (much more compelling than the one proposed by Giedion between Gropius and Picasso).

Despite having obvious common features with the workshop wing of the Bauhaus (cantilevered wall slabs, recessed ground floor, vast surfaces of glazing carried around the corners...), the garden façade of villa Stein, they explain, does not function at all in the same way. «Le Corbusier is primarily occupied with the planar qualities of glass and Gropius with its translucent attributes». While the workshop wing literally sucks the gaze of the observer through its glazing and into the internal space of the building, the façade of villa Stein, on the contrary, raises in front of him a series of vertical and parallel planes which, in accordance to Kepes's definition of transparency, «interpenetrate without optical destruction of each other»: «in itself, each of these planes is incomplete or perhaps even fragmentary; yet it is with these parallel planes as points of reference that the façade is organized, and the implication of all is that of a vertical layerlike stratification of the interior space of the building, of a succession of laterally extended space travelling one behind the other». Here lies the analogy with Léger's painting:

In *The Three Faces*, Léger conceives of his canvas as a field modelled in low relief. Of his three major panels (which overlap, dovetail, and alternatively comprise and exclude each other), two are closely implicated in an almost equivalent depth relationship, while the third constitutes a coulisse which both advances and recedes. At Garches, Le Corbusier replaces Léger's picture plane with the most highly developed regard for the frontal viewpoint (the preferred views include only the slightest deviations from parallel perspective); Léger's canvas becomes Le Corbusier's second plane; other planes are either imposed upon or subtracted from this basic datum; and deep space is then contrived in similar coulisse fashion, with the façade cut open and depth inserted into the ensuing slot.<sup>13</sup>

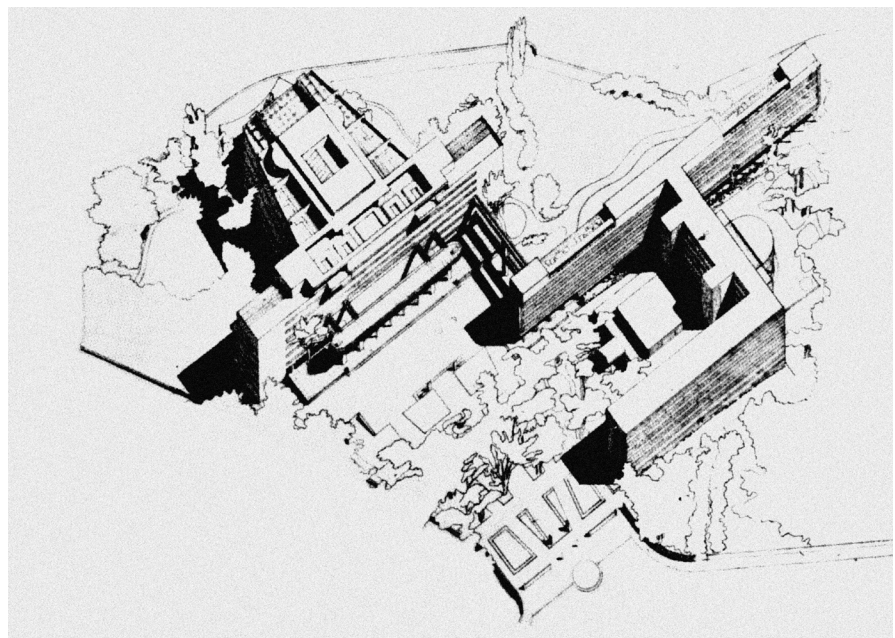
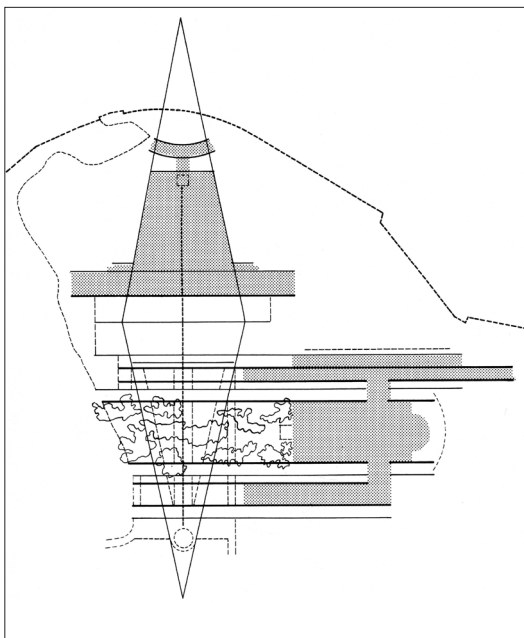
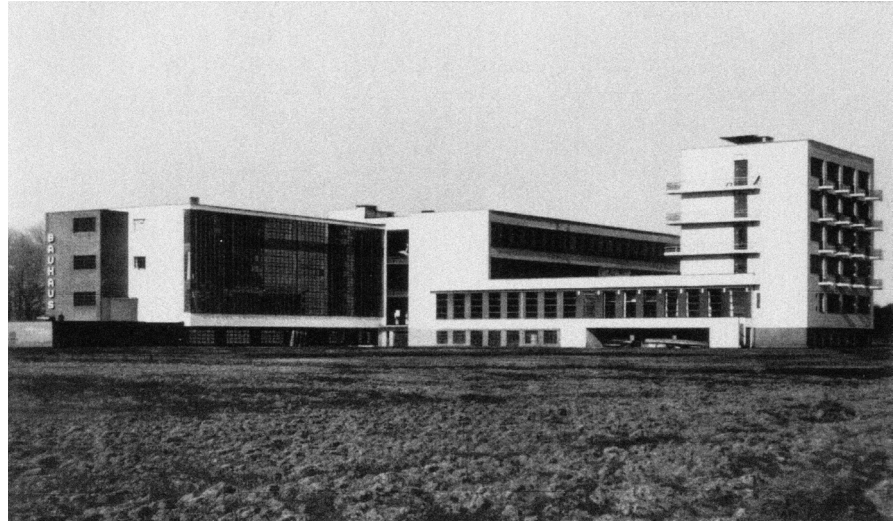
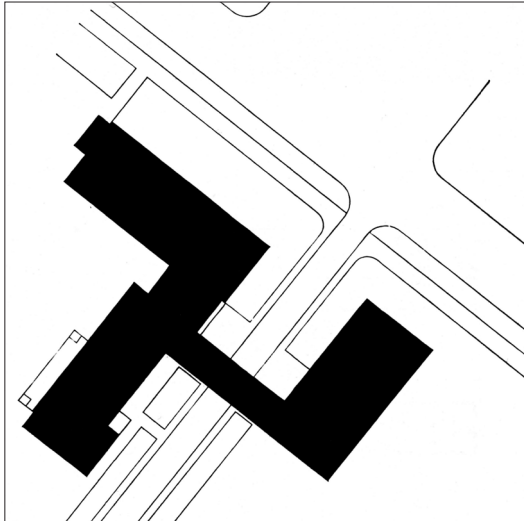
But the phenomenal transparency produced by the house does not just lie in the rather shallow, frontal and painting-like organization of its façade as contemplated from the outside. Being a piece of architecture, the house is here to be approached and penetrated by the visitor, who then discovers that his expectations as to the internal organization and division of its volume (inferred from his reading of the façade) are contradicted (though not destroyed) by the reality of an inside whose orientation is largely perpendicular to the stratified planes of the façade. In addition, Rowe and Slutzky – rolling the house like a dice and adopting on its terrace floor a point of view quite similar to the one Hitchcock had favoured in his book (on villa Savoye) – show that their observations on the vertical planes of the house can be extended to the stratification of its horizontal planes, each being potentially able to function as field activated by imposed or subtracted volumes.

Thus, throughout this house, there is that contradiction of spatial dimensions which Kepes recognizes as characteristic of transparency. There is a continuous dialectic between fact and implication. The reality of deep space is constantly opposed to the inference of shallow; and by means of the resultant tension, reading after reading is enforced. The five layers of space which, vertically, divide the building's volume and the four



*Confusion versus multivalence:*  
Walter Gropius, *Bauhaus*, 1925-1928,  
aerial view of the whole building and  
view of the workshop wing;  
Le Corbusier, *Villa Stein*, 1926,  
axonometry and view of the garden  
façade





*Pinwheel versus stratified plan:*  
Walter Gropius, *Bauhaus*, 1925-1928,  
situation and view; Rowe and Slutzky,  
analytical drawing of the Le Corbusier's  
Project for League of Nations; Le  
Corbusier, Project of League of Nations,  
1927, general axonometry, Paris, FLC

layers which cut it horizontally will all, from time to time, claim attention; and this gridding of space will then result in continuous fluctuations of interpretations.<sup>14</sup>

To express the same idea in different terms, one could say that visiting such a house is like visiting several houses set inside one another. As in Bach's fugues, where one note can belong simultaneously to several voices (while another, unplayed note is supplied by the listener), the same elements or portions of space can be incorporated into different and even virtually dissonant readings or spatial organizations. This analysis of villa Stein shows that the concept of phenomenal transparency applied to architecture serves to explain a *phenomenon of transparency* that has nothing to do with the visual porosity of the materials engaged in the building but relies instead on the mental activity of the subject, which is prompted to develop planes that, although suggested rather than given, nevertheless weave a network of expectations that the volumes defined by the architect will continually surprise or reorient. In short, where the use of literal transparency often exhausts depth in the very act of releasing it, phenomenal transparency ceaselessly opens up this depth, even though its devices appear to contain or restrain it. Whereas literal transparency tends to generate the confusion of space, phenomenal transparency organizes its multivalence.

#### URBANISTICAL

At the end of this demonstration, we understand that villa Stein and the workshop wing of the Bauhaus are as far apart on divergent roads as were Léger's *Three Faces* and Moholy's *La Sarraz*. The transposition of their basic distinction between the two kinds of transparencies from the two-dimensional field of painting to the three-dimensional field of architecture has been admirably achieved and we might have expected our authors to just seal it with a final point. But such is not the case. Instead, Rowe and Slutzky, carried by the spiralling movement of their argumentation, embark their reader in a third comparison involving the whole complex of the Bauhaus (and not just its glassy workshop wing) on the one hand, and Le Corbusier's project for the League of Nations in Geneva on the other. If their immediate goal is obviously to give a last turn of the screw to their demonstration and to leave absolutely no escape route to Giedion's faulty analogy, their deeper ambition is to demonstrate the relevance of their basic distinction, beyond the scale of the architectural object, in the broader field of building complexes and, ultimately, at the scale of urbanism. In other words, what is at stake in this last juxtaposition is not any more the spatial organization of a building *per se* but the way a complex of buildings produces, structures and manipulates the space, site or ground in which it takes place.

In *Mannerism and Modern Architecture*, written 5 years before *Transparency*, Rowe had tried to save something of Giedion's analogy by explaining that the Bauhaus complex, «disallowing focus» and «stretching the eye» of the observer toward the «peripheral disturbances» of its wings, functioned indeed as a mental abstraction: «it is significant that only from a non-visual angle, the “abstract” view from the air, can the Bauhaus become intelligible to the eye». Thus, if Le Corbusier was already clearly for him the true genius of abstraction, Rowe could still find in this most consensual manifest and emblematic building of modern architecture a confirmation of its fundamental aesthetic intention:



*Diapason*: Views of the site of the project for the League of Nations, with the horizontal lines of the quays, piers and bridges of Geneva, all included in Le Corbusier, *Une maison – un palais*, 1928, Paris, FLC

In this idea of disturbing, rather than providing immediate pleasure for the eye, the element of delight in modern architecture appears chiefly to lie. An intense precision or an exaggerated rusticity of detail is presented within the bounds of a strictly conceived complex of planned obscurity; and a labyrinthine scheme is offered which frustrates the eye by intensifying the visual pleasure of individual episodes, in themselves only to become coherent as the result of a mental act of reconstruction.<sup>15</sup>

Five years after having written those lines, Rowe, equipped with his distinction between literal and phenomenal transparencies, is on the contrary eager to show how the Bauhaus complex essentially fails to achieve anything but literal. The general organization and distribution of the complex are almost calculated to «eschew Cubist frontality». The overall pinwheel plan, even though it cannot be grasped in one glance (at least on site), nevertheless promotes oblique perceptions and diagonal views which always offer the unambiguous perception of a background and a foreground. In other words, it is like a machine explicitly fashioned to produce a maximum of literal depth. But with Le Corbusier's project for the League of Nations, things are entirely different:

Like the Bauhaus the project possesses heterogeneous elements and functions which lead to an extended organization and to the appearance of a further feature which both buildings have in common: the narrow block. But it is here again that similarities cease: for, while the Bauhaus blocks pinwheel in a manner highly suggestive of Constructivist compositions, in the League of Nations these same long blocks define a system of striations almost more rigid than is evident at Garches.<sup>16</sup>

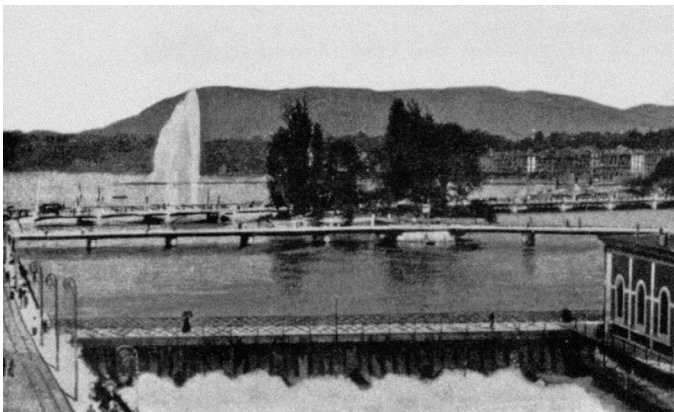
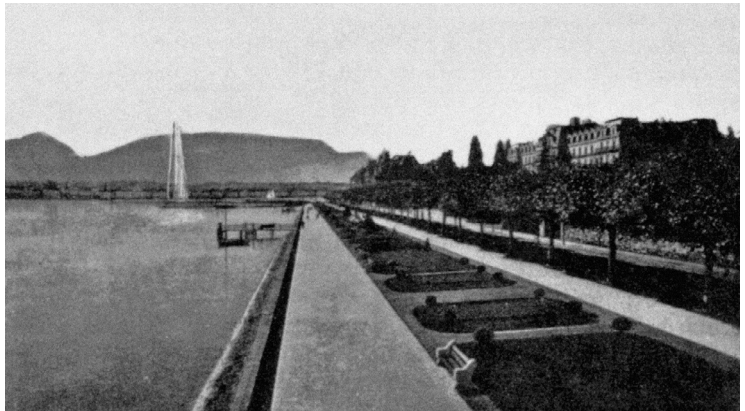
The essay thus invites the reader in an imaginary visit of this non-built project in order to show how the real depth of this stratification (in the progression from the entrance of the park towards the auditorium and the lake) is repeatedly checked, masked, contradicted and enriched by the virtual projection of the different slabs laid parallel to the lake. These successive lateral projections, further defined as terraces or slices of planted trees, would thus play, at the scale of a whole site, a role of *coulisses* analogous to the one played by the vertical plans, half real – half virtual, at the villa Stein: «The whole area becomes a sort of monumental debate, an argument between a real and deep space and an ideal and shallow one». Here again, transparency and depth are not obtained through the dematerialization of surfaces and plans but through their sharp definition:

Le Corbusier's planes are like knives for the apportionate slicing of space. If we could attribute to space the qualities of water, then his building is like a dam by means of which space is contained, embanked, tunnelled, sluiced, and finally spilled into the informal gardens alongside the lake. While by contrast, the Bauhaus, insulated in a sea of amorphic outline, is like a reef gently lapped by a placid tide.<sup>17</sup>

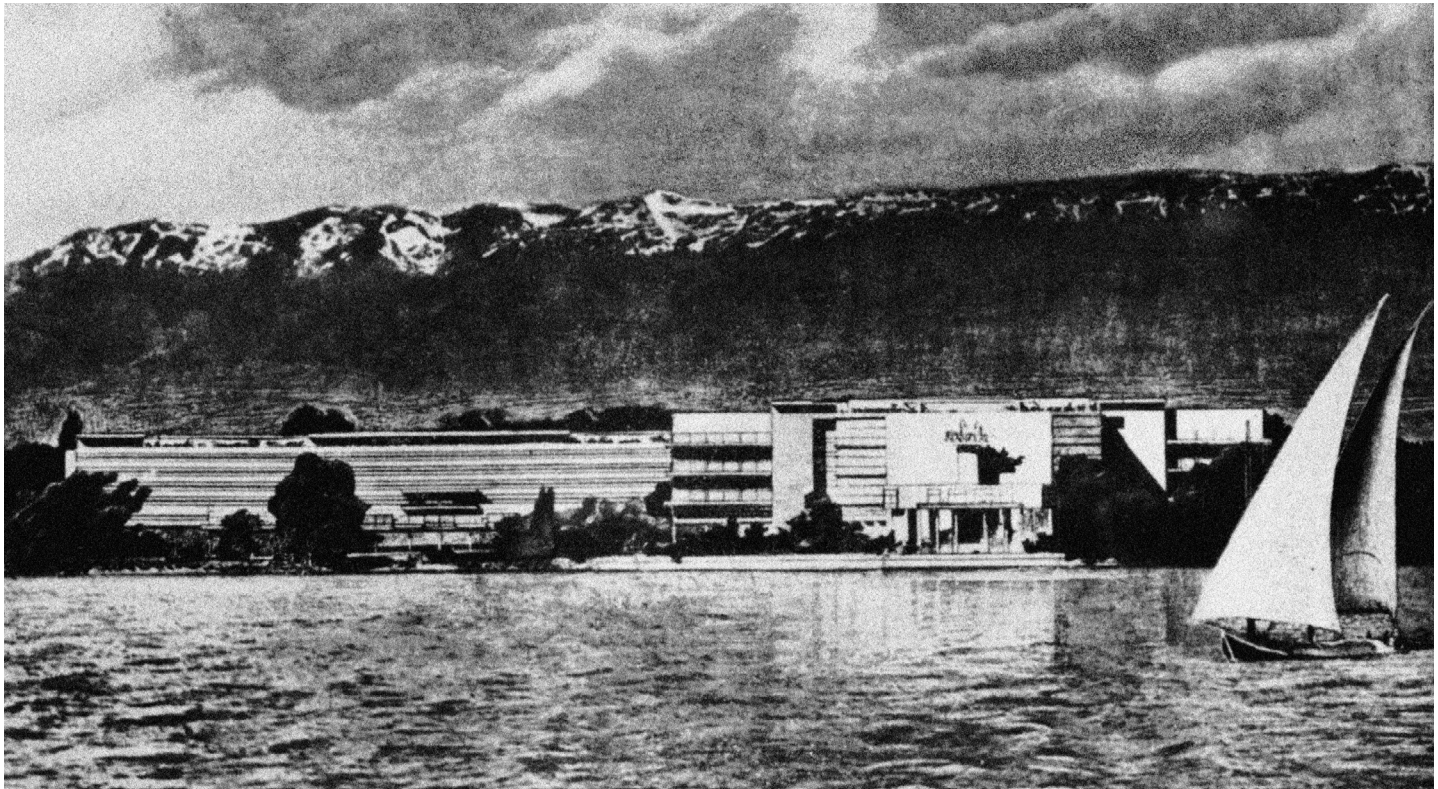
Giedion is therefore wrong in every possible way. Far from being comparable to the fully activated field of Cubist paintings, the Bauhaus is almost its antithesis: a passive figure lying in an unengaged space; and Rowe takes a malicious pleasure to stage it as a significant contribution to the current «process of loosening up» which Giedion had deplored elsewhere in his book.

#### PERPLEXITY

If I greatly admire Rowe and Slutzky's demonstration in this essay, its consistency, the logical sequence and growing momentum of its binary juxtapositions, I've always felt







that this last part left something to be desired. Compared to the brilliant and stimulating analysis of villa Stein, through which Rowe effectively translates the concept of phenomenal transparency from painting to architecture, it seems to me that his analysis of the project for the League of Nations, for all its suggestiveness, falls a bit short of what it might have been, i. e. a further transposition of the concept in the four-dimensional field of landscape architecture and urbanism.

First, as we have seen, this analysis basically repeats and quite literally amplifies that of the villa at the scale of a complex of buildings. The different *zeilenbauen* of the League and their virtual projections in the park simply take over the role played in the house by the stratification of its vertical planes. The Palace, as seen here by Rowe and Slutzky, is just a blown up House, and its analysis is even poorer since it does not address, unlike that of villa Stein, the horizontal layers, planes or coulisses of the project. Isn't that surprising? Wouldn't we expect a project of that scale to engage its site, its ground and the given layers of its territorial substratum? Of course, one might argue that, as the project was never built, the issue of its relationship to the site could hardly be analysed but in plan. Still, I wonder: is it Rowe's analysis which is short in this respect? Or is it Le Corbusier's project itself? To try to answer that question, one has to look into what Le Corbusier wrote of his project in *Une maison – un palais*, where – interestingly enough – the presentation of his proposal for the League of Nations directly follows an evocation of villa Stein, which Le Corbusier had concluded by this powerful statement; «*Jamais l'oeuvre architecturale participant du site qui l'entoure n'a dit son dernier mot*» (Never has the work of architecture, which participates to the site that surrounds it, uttered its last word)<sup>18</sup>. And this is precisely what the architect intends to illustrate with his design for the SDN, which is therefore introduced by ten pages devoted to «the problem», i.e. «the site». Ten pages where Le Corbusier raves about the «pure horizontale»: the smooth plane of the lake, the piers, the quays and the mole of Geneva, the striations of the Salève, and the undisturbed line of the opposite shore, which, by contrast, «gives the Alps their respective heights». «*Il n'y a pas de doute, la dominante est l'horizontale: le diapason*»<sup>19</sup>. The design, set on an inclined terrain, with lawns gently sloping down to the lake, will thus tune itself to this diapason: all the long and narrow buildings, «insinuated» in the site and fronting the magnificent view, and the Assembly itself, will all be erected on one virtual horizontal plane («*la cote zéro*») which is on a level with the ground and the road at the entrance of the park but culminates 9 meters above the lake and the shore. To achieve this perfect alignment above the sloping terrain, these buildings will be lifted on higher and higher piles as they near the shore, the auditorium and the secretariat being thus clearly suspended as a balcony overlooking the lake:

Ni fouilles.

Ni murs de soubassement

[...]

On pense: un palais, pour être digne, doit avoir des soubassements de forteresse.

Ici: le soleil passe dessous,

le jardin passe dessous,

la vue passe au travers; du haut du terrain on verra, par places, scintiller le

lac sous les bâtiments du secretariat;

et il n'y aura jamais de locaux humides ou sans lumière.<sup>20</sup>

“Une conception paysagiste”:  
Les garages ouverts, sous les pilotis  
and La vue du Lac, from Le Corbusier,  
*Une maison – un palais*, 1928, Paris, FLC



Horizontal stratification: a nave ploughing through the layers of the site: Vignola – Ammannati, *Villa Giulia*, Rome 1550–1555, from C. Steenbergen, W. Reh, *Architecture and Landscape*, 1996; P.-M. Letarouilly, Topographic map, 1853 and Axonometric reconstruction of the geomorphology; P. van der Ree, *Elevation*, 1992; Vertical composition with the nymphaeum and P.-M. Letarouilly, *View from the top of the valley*, 1853

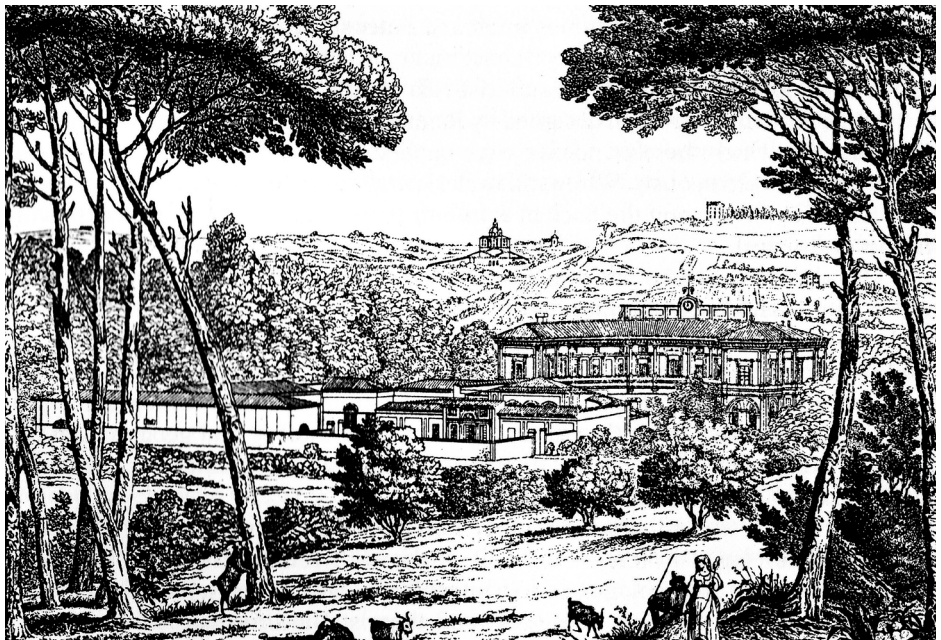
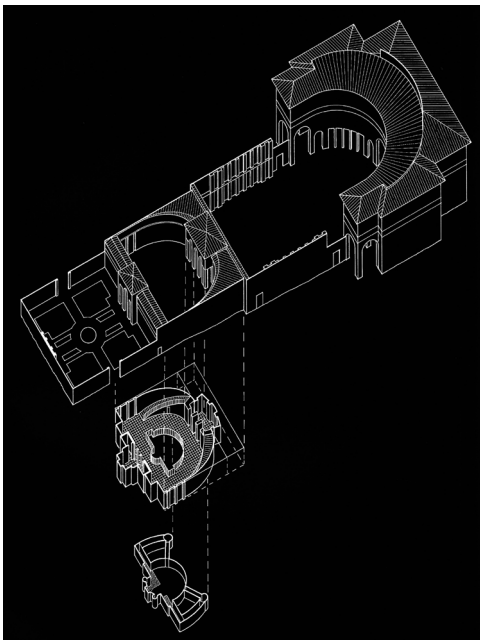
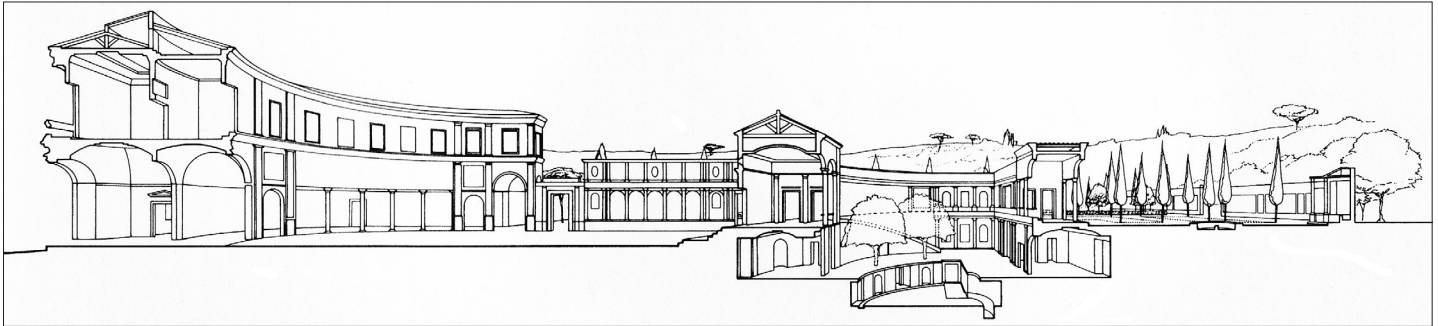
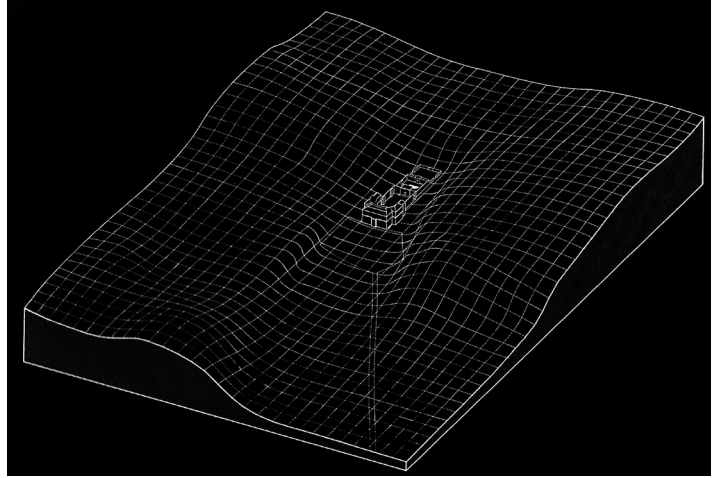
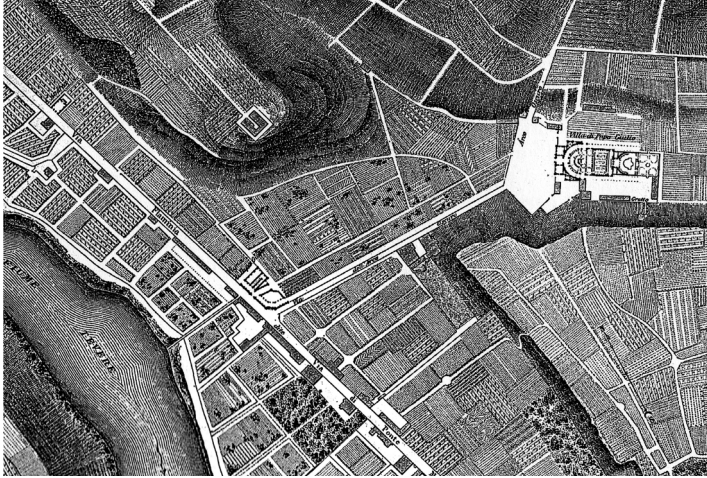
This fundamental disposition, which lifts the base line of the buildings (redoubled by the «*impéccable*» roofline) above the natural slope of the site, and convokes in between, by oblique perception, the smooth and mirroring plane of the lake, is at least as important as Le Corbusier's decision to arrange his buildings as a set of coulisses and vertical screens that channel and delay the spatial explosion of the landscape. Isn't it here first – or at least in the combination of those two moves – that one should look for the specific effects of transparency or depth that this design aims at producing? We can at least imagine how the visitor, in his progress towards the auditorium, would have penetrated into this fluctuating game of cards, and into those superimposed sheets of space, in turns opaque or luminous. In any case, Le Corbusier precisely identifies and baptizes what he obviously considers as the fundamental idea of his design:

Une telle disposition des bâtiments est une *conception paysagiste*. Nous connaissons le site à merveille; nous sommes loin de la ville: le lac, les arbres, les prairies, les montagnes, des horizons immenses. On ne pouvait songer à une conception urbaine, forum, Piazza de Venise, place de l'Opéra, etc., où des successions de rues, de places, des masses de bâtisses diverses peuvent épauler les coupes ou les dômes couronnant une composition pyramidale. Chez nous, la fermeté n'était point dans des soubassements cyclopéens; elle était en haut, sur le ciel, par la ligne impeccable d'une unique horizontale.<sup>21</sup>

Now, what kind of transparency is this landscapist conception likely to produce? Would it be phenomenal? Or only literal? Or a bit of both? We have seen, of course, that this superimposition of planes was supposed to engender a certain tension and reverberation between several layers or sheets of space. But can we really speak of interpenetration, of ambiguity? Isn't this idea of an architectural plane simply projected above the plane of nature – which Le Corbusier would actually replay and implement later (for instance at La Tourette) – a bit literal, or even simplistic? The answer to this question is all but evident: first because the simple and the literal may not be without interest or poetry, and second because literal and phenomenal transparencies are not necessarily exclusive of one another. Isn't the phenomenon of reflection between different planes (alluded to by Le Corbusier... and by Kepes) a sign that dialectical relationships may be woven between the literal and the phenomenal?

Instead of attempting to answer that question here, what I would like to show, by focusing on another example, is that the notion of phenomenal transparency can effectively be transposed into the field of landscape architecture (or what I call *sub-urbanism*) and that, provided we apply it to the layering of horizontal planes on a site, it might even equip us with a deeper understanding of the art of garden. Given that Rowe and Slutzky themselves embarked into using their concept to decipher the architectural compositions of buildings frankly pre-modern and dating from as far back as the 15th or 16th centuries<sup>22</sup>, I will also pick my examples in the most classic history of garden design.

The first one is villa Giulia, the famous mannerist composition built for pope Julius III in a little dry valley, just outside the walls of Rome, by Vignola and Ammannati. This villa with its enclosed garden is laid in the bed of that side valley to the Tiber. The *giardino segreto* is a succession of enclosed spaces, surrounded by walls which directly emanate from the casino itself, and whose heights diminish as they extend deeper in the valley. The flattened bed of the valley, where the *giardino segreto* actually lays is thus separated





*Sectional ambiguity: the swing of architecture and nature: Le Nôtre, The Gardens of Vaux-Le-Vicomte, 1661, the base plane of architecture, view of the central axis; the inclination of nature, side views of the petit parc on the left and on the right of the central embroidered parterres (Photos of Charles Dars)*

from the heavily planted slopes which are nevertheless visible above the walls, forming the large landscape theatre within which the whole design is nestled. But the *giardino* itself, in turn, acts as a frame or a jewel case for a nymphaeum, placed in its centre, which, replicating the overall arched pattern of the casino, explores, both physically and symbolically, the subterranean waters that obviously stand here as the underlayer of this whole landscape. Three horizontal strata are thus identified, abstracted and encased into one another by the design: the deep waters filtering in the nymphaeum, the dry bed of the valley in the *giardino segreto*, and the planted heights of the amphitheatre wherefrom the Vaticano could be seen and visually related to the pope's *villa suburbana*. Could we say that the design's intention was to mentally superimpose those three layers? That it was conceived of as an elaborate section through the distinct planes and *imaginaires* of the site? Could we detect here an agency of phenomenal transparency? Here again, I will leave the question open, since my intention in evoking this first example was merely to stress the importance of horizontal stratification in landscape design and, thereby, to introduce my next and final one.

#### A «SONGE DE VAUX»

This last example, I will take it in Vaux-le-Vicomte, a vessel of space which is maybe, in terms of «*jardins à la française*», the most consensually admired reference. I will not venture – even though the exercise might prove to be everything but vain – to play on the word coulisse, so resonant in the realm of classic scenography and landscape design, and compare the stratification of vertical planes (real or virtual, built or merely planted) that the visitor goes through as he progresses from the gate of the park up to its herculean vanishing point, to those of villa Stein or of the League of Nations. Even if the perpendicular axes that the visitor discovers as he walks through the gardens invite him to engage the same portions of space in different spatial configurations which are imbricated into one another, even if the abyss of a channelled vale suddenly opens up between a basin and a wall of grotesques which, at first sight, seemed to bound and feed this basin, even if the space continually dilates and retracts (swells and shrinks), forcing our visitor to adopt, one after another, a series of different readings which are all made simultaneously possible by the design itself, those phenomena are so typical of the world of perspective and its characteristic manipulations that it would be paradoxical to describe them with the allegedly “modern” concept of transparency. As a matter of fact, the plan and scenography of Vaux, even if they are loaded with surprises, are highly governed by hierarchy and orientation, and they do not seem to be haunted by ambiguity. However, what happens when we start to probe this plan and if, paying deeper attention to the sophisticated game of earthworks and terraces, we interrogate its thickness, its topography?

If, standing on the stairs of the castle's rear façade, one contemplates the gardens, the entirety of the «petit parc» seems at first sight to be almost absolutely on a level, at least up to the wall of grotesques, and the two sides of the main central axis give an impression of perfect symmetry. This architectural plane reigns over the site, and its smooth horizontality is, to use Le Corbusier's expression, its *diapason*. However, a certain vibration emanates from that apparent flatness. After a while, if you resist the persuasive powers of manipulated perspective, you discover the cause of this vibration. You realize that, in





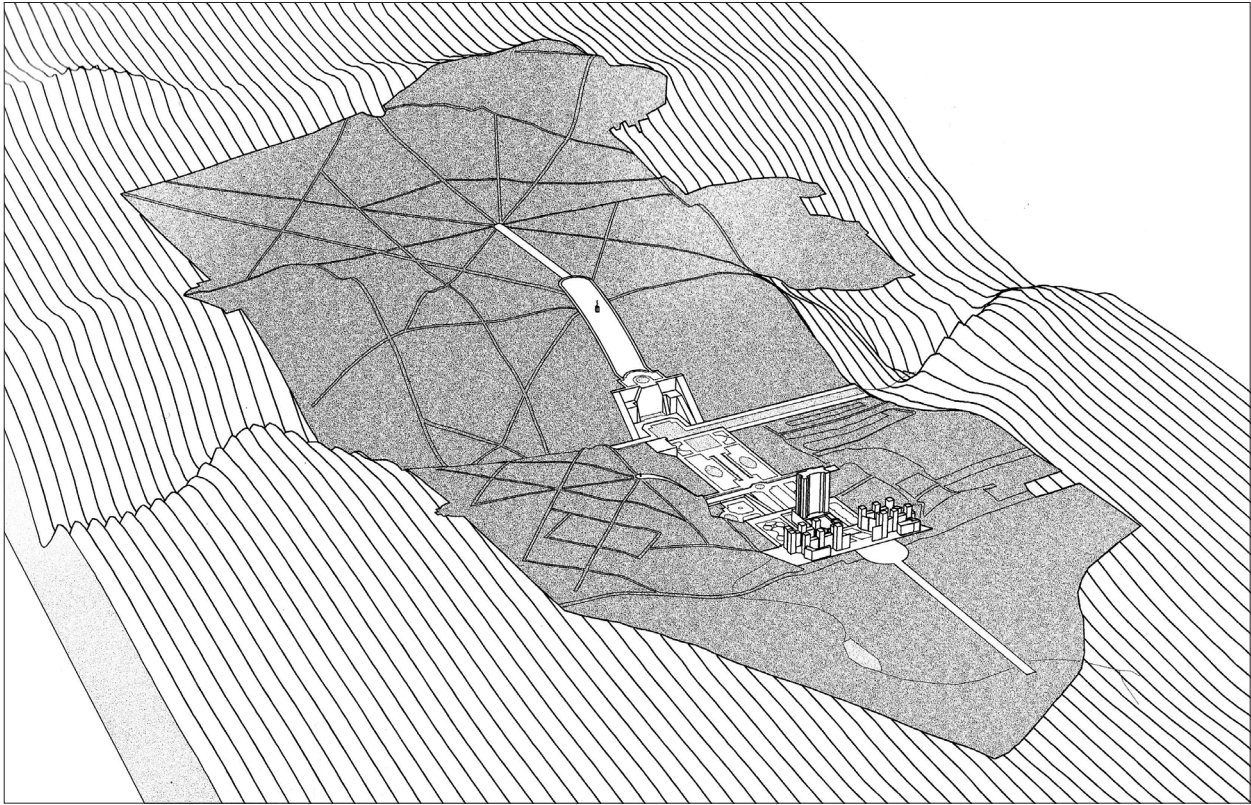
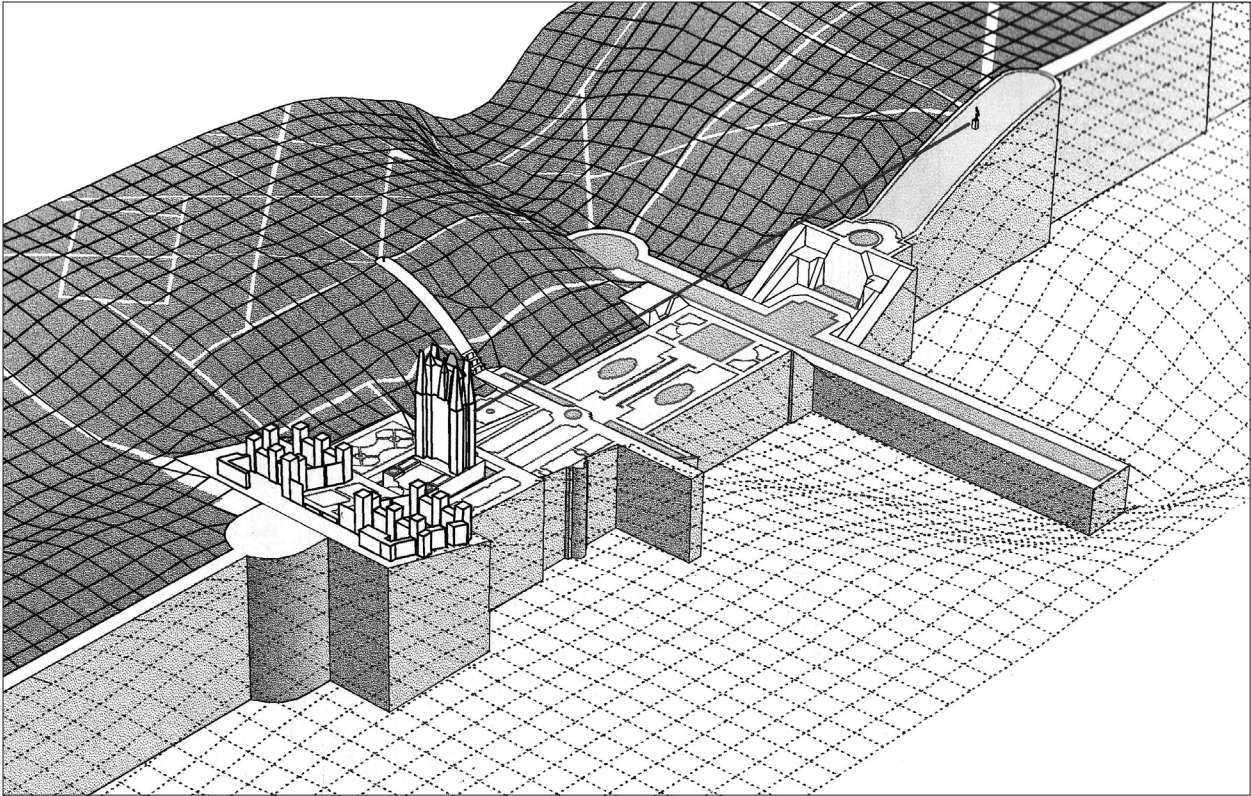
*Interplay: Le Nôtre, The Gardens of Vaux-Le-Vicomte, 1661, Topographic models from C. Steenbergen, W. Reh, Architecture and Landscape, 1996.*  
A serpentine brook feeds the basins displayed along the central spine of the park, obliquely inserted through the rockings of a topography carved by the former

the first subdivision of the park, the two lateral parterres located on the left and on the right of the central embroidered ones are not at all on the same level. While the one on the right is slightly higher than the central part, the one on the left is, on the contrary, significantly lower and sunken. You see that in this last area the box trees cut at a height of approximately two meters make up for a difference of level which is about the same size. If you consult the topographical models published by Clemens Steenbergen and Wouter Reh in *Architecture and Landscape*<sup>23</sup>, where the heights have been helpfully exaggerated, you start to understand the reason of this situation. While its main axis is oriented perpendicularly to the Ancueil valley whose river has been turned into a canal, the whole garden is in fact laid across an affluent vale – carved by a brook whose waters feed the ditches and basins – which traverses it diagonally. This oblique crossing between the garden's axis and the natural orientation of the vale hosting it is cause of a double swing in the topography. While the relief slopes down from right to left in the first section of the garden, this inclination is reversed after the first circular basin which marks the pivoting point where the virtual brook of the vale crosses the axis of the garden: from there on, and across the second section of the park – which is in fact separated from the first by a significant difference of level concealing a first line of channelled water – the whole site rocks in the opposite direction. If this second terraced section of the garden is itself almost perfectly flat and symmetric – with its three basins where the running waters of the brook have been tamed in vast sheets of still life –, we see that this plane has obviously been cut in a slope whose significance is registered in the impressive retaining wall that bounds and holds the high terrace of the *mail* on the left. From this lateral and elevated balcony, concealed in the trees but commanding a comprehensive view of both the central axis of the garden and that of the canal (unsuspectable from the main ground of the *petit parc*), it is the whole secret of the garden, its longitudinal section, which is revealed to the visitor. The strength of Le Nôtre's design is thus to inherit, to accommodate the main features and flows of the *natural* topography, finely translated through or under the architectural matter of the park, while conveying, through major earthworks and perspective manipulation, the pervasive idea of a unique, ideal and perfectly symmetric plan. Those different and seemingly contradictory projections (the level of nature, and the level of architecture, to speak like Le Corbusier) are simultaneously suggested to the visitor and, instead of destroying each other, they prove mutually enriching. All these planes or *horizons*, each developing and conveying an idea of the garden, are mentally superimposed or encased into one another by the visitor. Hence, they build up a depth, a thickness, and give space a density that, even in Vaux-le-Vicomte, is not just formal. The original engravings, adopting several points of view on the park and showing it adorned with sculptures, insist on the quality of those planes which, encoded, peopled with figures and phantoms, all *register* different levels in the world of nature, from the orchards and meadows of Pomona down to the grottoes and abysses of Neptune.

In Vaux, even more than in any other classical garden, it is clear that the *horizons* of the park are not to be searched for in the zenith or in the panorama of the garden, but within its grounds and in its very matter, where they coexist as so many different strata, registers or staves. Although rooted in fact, the notion that formal gardens are generally characterized by the unequivocal dominance of a central and telescopic axis, as well as



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by a focus on the far reaches of the environs (a visual capture of the landscape's *extension*), this notion often diverts our attention from the intensity, the sectional ambiguity which vibrates in the best of those gardens. In other words, it seems that the concept of phenomenal transparency, provided we would transpose it *in intention* – by applying it to the superimposition and interpenetration of horizontal planes – could help us describe very adequately the experience of landscape depth which is provided by those classical masterpieces of garden design. After all, couldn't we see those masterpieces, those three-dimensional logical pictures of the territory (but implemented on site), as machines aiming at producing depth *despite* (or even *through*) the very flatness of their apparent plan? I am naturally aware of the paradoxical nature of this analysis which philology and documentary history will not fail to fault for anachronism. As a matter of fact, my suburbanistic obsessions are maybe responsible for showing me a stratification of planes and landscape *imaginaires* in the sophisticated architecture of the ground at Vaux, and for deciphering an intensive matrix in sites which we have accustomed to praise for their delightful conquest of territorial expanse and their formal mastery of extension. But it is not scandalous, after all, to reread the past in the light of the present, and the great masterpieces of history may well be those which the incessant play of successive reinterpretations cannot exhaust, and where each period finds food for understanding itself. Now, what characterizes our time is probably the *suburban condition* of the world, which subsumes almost all territories, from the alleged cities to the so-called *countries*. The distinctive features of this suburban condition are the juxtaposition, the superimposition, the telescoping and overlapping of worlds which were so far pretty clearly distinguished in our minds as well as in our environment. Where secular economies tended to produce different and complementary territorial regimes, new processes have massively encouraged their dilution or confusion. In this historical situation, the intention of suburbanism is to check these processes and to lead them into producing more depth where, left to themselves, they naturally tend to enforce the flattening and obliteration of sites and situations.

<sup>1</sup> We have discussed this topic in *Sub-Urbanism and the Art of Memory*, London 2003, and in *Sub-Urbanism vs Super-Urbanism: From Central Park to La Villette*, «AA Files», 53, may 2006.

<sup>2</sup> See A. Caragonne, *The Texas Rangers: Notes from an Architectural Underground*, Cambridge, Mass., 1995, pp. 165-173.

<sup>3</sup> *Texas and Mrs Harris*, in *As I Was Saying*, I, p. 32.

<sup>4</sup> H.-R. Hitchcock, *Painting Toward Architecture*, New York 1948.

<sup>5</sup> S. Giedion, *Space Time and Architecture*, Harvard 1954 (first edition in 1941), p. 491.

<sup>6</sup> G. Kepes, *Language of Vision*, Chicago 1944, p. 77. Kepes, insisted on the modernity of this kind of transparency or interpenetration, absolutely different from the traditional, naturalist and perspectivist way of suggesting depth in painting, and insisted it was also in focus in modern technology, philosophy, psychology, physical science, literature, architecture, motion picture, photography,

stage design, and even in everyday life, as evidenced by the common phenomenon of radio waves (which interpenetrate and saturate our world without destructing each other)...

<sup>7</sup> Rowe and Slutzky, *Transparency: Literal and Phenomenal I* (1955), in C. Rowe, *The Mathematics of the Ideal Villa and Other Essays*, Cambridge, Mass., 1976, p. 161.

<sup>8</sup> *Ibid.*, p. 166.

<sup>9</sup> Kepes, *Language of Vision...*, cit., p. 79.

<sup>10</sup> *Transparency...*, cit., p. 167.

<sup>11</sup> *The Mathematics of the Ideal Villa*, «The Architectural Review», 1947, cfr. *The Mathematics of the Ideal Villa and Other Essays*, cit., pp. 1-27.

<sup>12</sup> H.-R. Hitchcock, *Painting Toward Architecture*, cit., pp. 25-27.

<sup>13</sup> *Transparency...*, cit., p. 168.

<sup>14</sup> *Ibid.*, pp. 169-170.

<sup>15</sup> C. Rowe, *Mannerism and Modern Architecture* (1950), in *The Mathematics of the Ideal Villa and Other Essays*, cit., p. 45.

<sup>16</sup> *Transparency*, cit., p. 174.

<sup>17</sup> *Ibid.*, pp. 175-176.

<sup>18</sup> Le Corbusier, *Une Maison, un palais*, Paris 1928, p. 76.

<sup>19</sup> *Ibid.*, p. 90.

<sup>20</sup> *Ibid.*, p. 94.

<sup>21</sup> *Ibid.*, p. 95.

<sup>22</sup> See Rowe and Slutzky, *Transparency: Literal and Phenomenal, Part II* (written I 1956, first published in «Perspecta» in 1972), in C. Rowe, *As I Was Saying*, I, pp 73-106. A third part was planned and drafted but never published (cfr. A. Caragonne, *The Texas Rangers: Notes from an Architectural Underground*, Cambridge, Mass., 1995, pp. 326-327).

<sup>23</sup> C. Steenbergen, W. Reh, *Architecture and Landscape: The Design Experiment of the Great European Gardens and Landscapes*, München-New York 1996, pp. 21-23, 151-185.