Chapter 4

# Photourbanism: Planning the City from Above and from Below

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Photography shows cities in aerial shots, brings crockets and figures down from the Gothic cathedrals. All spatial configurations are incorporated into the central archive in unusual combinations which distance them from human proximity.

Siegfried Kracauer, ''Photography.''[1]

Aerial photography, in its context as an extension of the traditional "view from above" as it had been established in Paris from the first balloon flights of the 1780s to the photographic surveys from balloon by the photographer Nadar, served from the outset as at once a machine of the "real" and agent of the surreal, an increasingly privileged instrument of the double desire of planners – utopian and projective.[2] As Kracauer noted, this viewpoint, entirely distanced from the ground, tended necessarily to increase the natural "distance" inherent in the photographic medium, and thus to increase its assumed objectivity and of course its inherent manipulability devoid of the difficult and intractable individual or social subject.

And yet, the camera, with its real effect, is also a primary instrument of resistance to this view from above, and, building on the tradition of street photos, after the rediscovery of Atget in the 1920s increasingly served to counter the aerial views of planners with the "on the ground" views of radicals and nostalgics who called for the art of city planning to recognize the historical and social context. In this sense the debates and uses of photography in urban planning replayed in a new key the debates over demolition and reconstruction that had begun long before Baron Haussmann. Here I want to focus on two moments in the modernist history of this discussion (which still goes on): that of the confirmation of the aerial view in its planning role by Le Corbusier in the 1920s and 1930s, and that of the not entirely successful opposition to this vision in the 1950s and 1960s.

It is well known that Le Corbusier had a penchant for airplanes: the illustrations and text of *Vers une architecture* (G. Crès et Cie, Paris, 1923), his sketches of Latin America from the air, his photographic album *Aircraft* (The Studio, London, 1935), are only a fraction of the instances when his "complexe de Saint-Exupéry" was unequivocally demonstrated.[3] His enthusiasm for flight was, as he recalled in 1935,

provoked by hearing the roar of Le Comte de Lambert's airplane passing over his student garret in the Quai Saint Michel in 1909: "I heard a noise which for the first time filled the entire sky of Paris. Until then men had been aware of one voice only from above – bellowing or thundering – the voice of the storm." Later, when working for Perret he remembered that "Auguste Perret . . . burst into the atelier . . . 'Blériot has crossed the Channel! Wars are finished: no more wars are possible! There are no longer any frontiers!' "[4] From then on the aerial view, if not actual aerial vision, became a part of Le Corbusier's representational and conceptual technology. Airplanes, indeed, rapidly came to surpass cars in his lexicon of enthusiasms. If in *Vers une architecture*, the Delage grand sport was a modern equivalent to the Parthenon, the airplane stood as the model for the conception of the new house – "I place myself, from the point of view of architecture, in the state of mind of the inventor of airplanes,"[5] hence the presentation of the Maisons Voisin (not as the Maison Citrohan house *like* a car, but house *made* by an airplane manufacturer and according to the same principles). By 1932, indeed, the car had even been supplanted with respect to the Parthenon, as a photo from *La ville radieuse* (Vincent, Fréal et Cie, Paris, 1933) of two seaplanes seen through the columns attests.

We can trace a distinct evolution in Le Corbusier's thought, as he found in the airplane a model for architecture and a machine of planning. Thus in *Vers une architecture* the airplane was illustrated on the ground, in details and in flight throughout the second part of chapter 4, under the title "Eyes which do not see . . ." The first part of the book, "Liners," had been dedicated to the question of "organization," organization on the scale of a small city according to the implacable rules of the machine – "the liner is the first stage of a world organized according to the new spirit."[6] The last part, "Autos," had been dedicated to the emergence of standards and types, the quasi-Darwinian rules of evolution that governed the perfecting of Greek architecture from Paestum to the Parthenon, and equally auto design from the Humbert to the Delage. The second part, "Airplanes," by contrast, was about solving problems:

> The lesson of the airplane is not so much in the forms created, and, above all, one must learn not to see in an airplane a bird or a dragonfly, but a machine for flying; the lesson of the airplane is in the logic which presides over the enunciation of the problem and which has led to the success of its realization. When a problem is posed, in our epoch, it inevitably finds its solution. The problem of the house is not posed.[7]

The rest of the chapter deals centrally with the problem of the house – how to pose it and how to solve it, and deals not at all with the airplanes that profusely illustrate its principled argument. As Beatriz Colomina has pointed out, Le Corbusier's aim here was "the insertion of architecture into the contemporary conditions of production," conditions which included the publicity necessary to consumption.[8] Not a word, in a chapter entitled "Eyes which do not see" on the view from the plane itself – Le Corbusier had likely not yet been up in one; nor on the special world that is revealed from above, despite the fact that the frontispiece to Part II, taken by Le Corbusier from a publicity brochure for the Farman Goliath, dramatically illustrates this theme.[9] With respect to architecture, the airplane was important for what it represented as design submitted to the powerful functional determinants of flight.

But if this was true for Le Corbusier's understanding of architecture, it was certainly not the case for his developing theory of urbanism. Here the airplane was no longer so important as an analog of production methods – as in the Maisons Voisin described in *L'Esprit Nouveau* as models of serial production, the house as static airplane, the airplane as a flying house – as it was as a technique and visual instrument of planning. It was what the airplane revealed as a visual instrument, equivalent to the camera, the telescope, and the microscope that made it important. And most important to the design and planning of cities. If, as Colomina has argued, the photograph was more than a simple "record" of architecture for Le Corbusier, wherein the building itself might be envisaged as a kind of camera obscura through which to view the surrounding landscape, the aerial photograph, standing in for the planner's eye view, was the key for city form. This is evident from the illustrations to the *L'Esprit Nouveau* articles that made up the volume *Urbanisme* (G. Crès et Cie, Paris, 1925). Here, the idea of airplanes as simply the analogs of house design in their functionality and precision has been supplanted by the idea of the airplane as a central vehicle of knowledge, analysis, conception, and design.

In the various representations of the Ville Contemporaine, the diorama, so powerful a vehicle for the representation of the nineteenth-century metropolis, is challenged by the aerial view as the preferred representational device for the big city plan, a plan which is among the first to embed an airport at its center, significantly enough in the form of Saint Peter's, Rome. The photographic evidence for the new scale of the city is equally aerial: "At the same scale and at the same angle, view of the *Cité* of New York and of the *Cité* of the 'Ville Contemporaine.' The contrast is striking."[10] Le Corbusier had selected an aerial photo made of the Eiffel Tower from a balloon flight in 1909 for the cover of *L'Art Décoratif d'aujourd'hui*, a photograph that had already served Robert Delaunay for his painting of 1922, *La Tour Eiffel*, and in *Urbanisme* such views from the Eiffel Tower are used to simulate views from the office windows – "From these office windows will come to us the feeling of lookouts [*vigies*] dominating a world in order."[11] Other aerial photos are used, again to draw scale comparisons: a view of Venice and the Piazza San Marco to point to the "common measure of uniform quarters" contrasting with "the squares of splendor"; the aerial view of traditional settlements – Timgad, Kairouan; Chicago tenements contrasted with the "lotissments 'redents'"; and of Paris, the Place Vendôme. Two photos in particular, taken from the collection of the Compagnie Française aérienne, show, respectively, the quarter of the Archives, and the quarter of the Champs Élysées. They are compared with respect to the urban conditions they reveal. The captions read: "Is this a view of the seventh circle of Hell of Dante? No, alas, it is the terrifying shelter (*gîte*) of hundreds of thousands of inhabitants. The City of Paris does not possess these denouncing photographic documents. This view of the whole (*vue d'ensemble*) is like a sledge-hammer blow." Le Corbusier is sarcastic at the expense of the historicized romanticism of the tourist: "As for our promenades, we follow the labyrinth of streets, our eyes are ravished by the picturesque of these rugged landscapes, evocations of the past rise up," and pits such sentimental emotions against the rampant "tuberculosis, demoralization, poverty, shame" that "triumphs satanically" while the "Commission du Vieux Paris" nostalgically does nothing but collect and list examples of old wrought iron work.[12]

The aerial photograph (an accusatory document not yet owned by the City of Paris) is now an instrument of battle, a legal submission in a trial over the proper nature of urban space. For Le Corbusier an aerial photograph alone reveals the whole truth, shows what is invisible from ground level, demonstrates the case against overcrowding decisively. The final "blow" of the Corbusian sledgehammer is to juxtapose the aerial view of the proposed area of redevelopment, the Marais, against the plan for renewal at the same scale.[13] The tailpiece of *Urbanisme*, a seventeenth-century engraving showing Louis XIV planning the Invalides, shows the figure of Fama hovering over Paris; Le Corbusier has simply substituted the airplane's eye for that of the absolute monarch.

The martial analogy is apt enough, for of course it was as an instrument of reconnaissance that the airplane photo came into its own in 1914–18. Gradually, as the war developed, aerial bombardment and aerial surveillance became indissolubly linked. As Le Corbusier reflected, in 1935: "The bird can be dove or hawk. It became a hawk. What an unexpected gift to be able to set off at night under cover of darkness, and away to sow death with bombs upon sleeping towns . . . to be able to come from above with a machine-gun at the beak's tip spitting death fanwise on men crouched in holes."[14] At the start of hostilities, a camera found in the wreckage of a captured German Zeppelin inspired the French to set up a photographic corps under the Armée de l'air, with the help of a former professor of photographic science at the University of Paris, Louis-Philippe Clerc. Together with a new aerial intelligence section of the Service Géographique de l'Armée under General Bourgeois, these two services thenceforward became the primary source of aerial images, classified and popular, well into the 1920s. Towards the end of the war, the development of military information began to support new archeological studies. In Syria, archeologists from France and Britain, themselves trained in aerial reconnaissance, started to use "aerial discovery photography" in their surveys.

This combination of the military and the urban, not new in the politics of replanning Paris since Haussmann, was consolidated by Le Corbusier in *La ville radieuse* (The Radiant City), published in 1933 and written after his own flight to Moscow. As he wrote in *Aircraft*, Le Corbusier had discovered the potential of the airplane, practically and conceptually on this trip: "I thought I would shorten the journey by taking an airplane. I discovered the airports at Le Bourget, Cologne, and Berlin. I perceived that persons by dint of faith and determination had little by little, higgledy-piggledy, equipped hangars, instruments, buildings, and staff. And that airports were stations like railway stations. One set off at a given time, and lo! One arrived with chronometric exactitude."[15]

The book *La ville radieuse* celebrates the new aerial experience with gusto. A photo of Coste having just crossed the Atlantic, October 1930, opens the book,[16] as does the example by the engineer Mopin of the project for a reinforced concrete cantilevered airplane hangar.[17] In keeping with the war ideology of the plan, The Radiant City itself was not simply conceived from the air; it was also conceived with a view to its survivability under aerial attack, sensed to be an increasing danger in the 1930s. Citing the evidence of French and German military strategists – Lt. Col. Paul Vauthier, *Le danger aérienne et l'avenir du pays* (Paris, 1930) and Dip. Ing. Hans Schoszberger, *Bautechnischer Luftschutz* (Berlin, 1934) – Le Corbusier argues for the Ville Radieuse as defensible space, defensible that is from air attack. Against

the "sinister apotheosis" heralded by aerial warfare, Le Corbusier argued that the type of city "Ville Radieuse," would, with its thin ribbons of buildings offering little surface for bombardment, its concrete flat roofs offering shelterlike protection, its air conditioning and elevation on pilotis protecting against poison gas, and its open parkland in which bombs might drop harmlessly, be the only kind of city "capable of emerging victorious from an air war."[18]

For the new forms of regional city, built along freeways or sinuously following the contours of coasts and mountain ranges, the aerial photograph afforded even more dramatic support. Here Le Corbusier's experience in South America was decisive. He was lyrical in recounting his second major flight experience undertaken in 1929 in a wooden airplane piloted by Mermoz and Saint-Exupéry for the inaugural voyage of passenger service between Buenos Aires and Paraguay. From above Le Corbusier noted all the landscape features of Latin America, the colonial settlements, the forests, the rivers, and pampas.[19] The spectacle was, he wrote, "cosmic." The sight gave rise to an interesting analogy: "The Earth is like a poached egg, it is a spherical liquid mass surrounded by a wrinkled envelope," and, "like the poached egg, the Earth is saturated with water on its surface, it is in a constant process of evaporation and condensation."[20] The dawn over Uruguay, the dispersal of the mist and dew by the sun, seen always with respect from the infinite horizon line, is "vertiginous." But beyond this spectacle, there lay another – that of an earth decaying beneath the waters and jungles that covered it. Here, by contrast, "the poached egg inclined us towards melancholy, to despair; I think even to a neurasthenia of 'the poached egg'. The earth is marked with all the marbling of a body in putrefaction."[21]

Looking back in 1964 Le Corbusier remembered that Saint-Exupéry had warned him: "Be prepared M. Le Corbusier; the airplane has now endowed man with an eye that can look down from 12,000, from 30,000 feet above the ground." Le Corbusier retorted, accurately enough as we have seen, "For years I have been using an eye that is 30,000 feet above the ground!" The architect was now endowed with a new eye: the eye of a bird transplanted into the head of a man; a new way of looking: the aerial view. What the rational intelligence had acquired in the way of knowledge by analysis, by comparison, by deduction, suddenly becomes a matter of total and first-hand experience for the eye. And to see is a mode of perception unutterably more forceful than simply conceiving with the brain.[22]

The calm and purifying effect of travel at an altitude of 1,000 meters, supports, in Le Corbusier, what he terms "human visions," as opposed to those "infernal visions" from a train or car, a state of sight that approximates to that detachment necessary for calm reflection: "I exist in life," Le Corbusier concluded, "only on the condition of *seeing*."[23]

The philosophy of the poached egg joined to the "law of the meander", observed by Le Corbusier in his sketches of the Parana delta, was of course to inform his plans for Rio, and later for North Africa. The view from the air has enabled the colonial occupation of the landscape to be realized as a kind of infinite apotheosis of technical space. As Manfredo Tafuri described Plan Obus for Algiers, the spatial environment is taken over, in a "stream of fluxes": "By spreading like a magma into reality, technology – or its image – subsumes it." Viewed from the heights of the "new Acropolis" created by the airplane, "the battle of technology against nature" is grasped "with a sense of vertigo."[24]

As Le Corbusier uses it such an eye was, in Latin America, but above all in Algeria, not simply a surveying eye, but also a surveillance eye. The ethnologist Marcel Griaule, who had led the expedition to study the Dogon in 1936, underlined this in his eulogy of aerial photography to the Paris geographical society: "De toute évidence les documents qu'elle établit constituent des instruments de travail de premier ordre pour *l'Administration coloniale*: gouverner un peuple, c'est d'abord le connaître. . . . les études de l'ethnologie aidera, par le fait même, les gouvernements coloniaux dans l'exercice d'une tâche difficile et aux multiples aspects."[25] A means of understanding the indigenous population, of course, but also as colonial oversight. By means of aerial photography Griaule was able to survey the territory of the Niger, the land of the Dogons, with the help of the Air Ministry and the military air arm of Gao, in a third of the time that a land survey would have cost. From *Ville radieuse* to *Les quatre routes*, from 1935 to 1945, Le Corbusier increasingly expands this colonial/territorial/aerial vision to encompass the planning of Europe and the World, creating in the process a species of what Hans Speier, the political sociologist, and New York colleague in exile of Siegfried Kracauer, termed "Magic Geography" in an important article in the 1941 volume of *Social Research*.[26] A comparison of Le Corbusier's map of the aerial routes of Europe in *Les quatre routes* with Speier's illustration of the German use of maps in war propaganda is sufficient to make the point.

With the close of hostilities, and with the enormous advances in technology stimulated by military reconnaissance in 1941–5, the aerial view became institutionalized as a central tool of planning, and, in France, largely through the efforts of Paul Chombart de Lauwe, a geographer and ethnologist at CNRS, attached to the Musée de l'Homme, who had himself crossed the Sahara in a tourist plane to aid the *mission ethnographique* of Griaule in 1936 and who was dubbed "le pilote ethnographe" (the enthnograph pilot) as he fought in the Free French Army from 1942–5.[27] Writing in 1948 in his edited volume *La découverte aérienne du monde* (Horizons de France, Paris, 1948) Chombart claimed "La vision aérienne du monde" (the aerial vision of the world) as *the* vision of modernity.[28] In the same volume Michel Parent, conservateur du Musée des plans en relief, wrote on "L'utilisation de la photographie aérienne par l'urbaniste" (the use of aerial photography by the urbanist) both as a tool to criticize Haussmannization, and as a way to celebrate the three-dimensional modernity of Le Corbusier's projects for La Porte Maillot, and the visionary perspectives of Le Corbusier whose spatial slogans and representations, he notes, are derived from aerial photography.[29] "The aerial view of the center of Paris," wrote Parent, "demonstrates to what extent Haussmann was led to disembowel the old quarters, to sometimes denature sites that the centuries had patiently harmonized."[30] This did not prevent him from eulogizing the projects of Le Corbusier, who had succeeded, he claimed, in realizing the perfect intersection of the "aerial vision and three-dimensional urbanism," against what he called "mole urbanism," the view from too close to the ground:

> Le Corbusier, great visionary of architecture and of future urbanism, has for the last twenty years oriented us to such researches. All his slogans, on the architecture of three dimensions, the synthesis of the major arts, are expressed in drawings derived from aerial photography. From the terraces of the great administrative blocks to come, aerial vision is called upon to

become the everyday vision of the city, and whatever one says, this vision is by no means despondent.[31]

Two years later, Chombart followed with a technical manual on *Photographies aériennes* that would, he claimed, lead to a new understanding of "the study of man on the earth," of human geography, ethnology, and archeology, but also of urban sociology and planning.[32] Accompanied by a detailed case study of the village of Urt in the Southwest of France, analyzing the relations between Basque and Gascon inhabitants through their spatial traces, Chombart systematically studies the method of local and regional aerial surveys, and the interpretation of photographs at all scales. But he is most concerned with the different technologies and geometries of vision appropriate to each specialization – special filters, colored screens, fast films, infrared views, and, above all different angles of view. A careful exposition of angles, of flight patterns, and of the distortions produced on irregular terrain, is followed by a geometrical analysis of correction techniques, stereoscopic views and their examination, in order to serve the needs of different disciplines.

Turning from the territory as a whole, to the city of Paris, Chombart, in a work that greatly influenced the Situationists after 1958, found that one of the best forms of documentation not only of the physical milieu, but also of social processes, was the aerial survey: "In the study of social space, an important part of its explication is linked to aerial views and graphic documentation. The aerial survey and research by comparative maps allows, not only the representation of the social space, but also the study of certain processes."[33]

The aerial view of a city, indeed, is, in Chombart's terms, the only means of developing a synthetic vision of its social space – "l'espace social" – which is the theme of the first part of his Paris study, a work influenced strongly by Maurice Halbwachs. Le Corbusier's *Plan Voisin* for Paris, conceived from this point of view, is for Chombart, "however exaggerated it has been from certain points of view," admirable, and the first to open up a "true debate" over planning, especially as it takes account of the value of the "essential symbolic monuments" of the city and their accessibility by the whole population. Chombart continued his interest in Le Corbusier in research into the housing solutions and their social results in the built *Unités d'habitation* after 1949.

The Chombart de Lauwe of whom I have been speaking, pilot, ethnographer and sociological expert in the aerial view, is also, interestingly enough the source of much of the evidence cited by the Situationists between 1958 and 1968 as they sought to develop a radical critique of urbanism and of Le Corbusier in particular. The first issue of the *International Situationist*, of June 1958, republishes Gilles Ivain's "Formulaire pour un urbanisme nouveau," illustrated by a large-scale aerial photograph of Southeast Paris (pp. 6–17) and a "map" showing typical geographical features (p. 20). Immediately following this article, was another, entitled "Venice a vaincu Ralph Rumney" (p. 28), who was reported as having set out to make a psychogeographic map of Venice, but finally reduced (by boredom) to a "purely static position" and lost in the Venetian "jungle," again illustrated by a map taken directly from Chombart showing all the movements of a young girl student living in the sixteenth arrondissement (PAP, I, 106), where the spatial limits are represented by her house, her piano lessons, and her courses at Sciences politiques. The Situationists,

of course, argued strongly for the breaking of these spatial and psychological boundaries and the creation of a new "psychogeographic map" of the city, broken up into psychically unified quarters linked by arrows representing vectors of more rapid or random movement. Guy Debord recommended taxis. Here again Debord's map seems inspired by one of Chombart's, delineating the social organization of a sector of Paris.

Here, as Peter Wollen has argued (in a conversation with me), the Situationists are espousing, and with very similar methods, an equal if opposite vision of urbanism as totalizing, and from above, as that of their enemy Le Corbusier. It was not until 1961 that Raoul Vaneigem, in "Commentaires contre l'urbanisme," *International situationist*, 6 (1961), 33–7, finally developed the Situationist critique of Chombart in detail. Between 1961 and 1968, the *IS (International Situationist)* increasingly avoided propositions of a physical kind (Constant was expelled already in 1960 for daring to fix the Situationist vision in the concrete terms of an architectural project), and espouses an urbanism which is like no urbanism ever before conceived – a "unitary urbanism" of the streets and of the psychological and political desires and needs of the populace. Photos now celebrate the "unpaved street" – "Under the street the beach" – and the graffiti revolution of 1968.

Here there emerges the other side, so to speak, of the photographic revolution – that which inherently criticized the view from above: for photography, as the surrealists had demonstrated, was an equally powerful instrument of critique, employing all the modernist techniques of "making strange" and relying specifically on the "real effect" of the camera, whose increasing portability (the Leica) allowed the fleeting moments of the everyday to be captured as verité. As Pierre Mac-Orlan noted in his preface to the republishing of Atget's work in 1930, such photographs reveal the intimacy of a city – not its "official personality": "It is not through official architecture that cities impose their personalities, but by that indefinable appearance of popular streets which are so many little songs of a very delicate kind of patriotism." The little popular chanson, the small street, the familiar streetcry, has since the thirties been opposed to official culture with all the nostalgia of music halls, photo-magazines, both on the Left and the Right. Adrian Rivkin in his *Street Noises* has characterized this sensibility with respect to Maurice Chevalier; René Clair in film, and Robert Doisneau in photography fixed the genre.

One would think then, that so powerful a movement as this, fueled by Poujardism on the Right and the Popular Front mentalité on the Left, and doubly fueled by post-Second World War nostalgia for a settled France and a peaceful empire, would have brought the view from above decisively down to earth. And in one sense of course this happened, especially for the generation of the fifties and sixties. Many leaders of the uprising in 1968, readers of the *IS*, and influenced by Henri Lefebvre's call for the citizen's "right to the city" and his emphasis on the delicate and important structures of everyday life, were drawn from the student body of the Ecole des Beaux Arts. Influenced by the Situationists, these were increasingly open to revise principles of architecture that had so seriously damaged the centers of cities and created wastelands in the *banlieue*. Architects and theorists such as Antoine Grumbach, Roland Castro, Christian de Porzamparc, and others, began to revise their notions of urban intervention, developing a theory of the "impure" as against the "purity" of conventional modernism, and arguing that the city should build on itself

as a continuation of the process of transformation over centuries, as opposed to the idealistic rupture installed by modern development.

Opposed to the wholesale demolition of quarters, however, this generation was unsuccessful in saving the nineteenth-century market of Les Halles, torn down to make way for a commercial development. And no amount of debate around this act of "vandalism" hindered the government in instigating the Centre Pompidou which, designed by the British architect Richard Rogers in partnership with the Italian Renzo Piano, was to influence the nature of French Modernism to the present. Completed in 1977 this high-tech fantasy, with its inner tubes, so to speak, revealed on the outside as a multicolored framework, and accessible to the public by way of banks of transparent escalators that form a "facade" from which to view the city, has set the tone for a generation of architects, and guided the style and method of President Mitterand's *grands projets*.

In this sense, from the vantage point of the end of the twentieth century, the aerial vision of Le Corbusier, and his posthumous "effect", has never ceased to inform French Modernism. Indeed, the entire program of Mitterand's *grands projets* implemented by Bernard Tschumi, which encompassed the development of the Parc de La Villette on the site of the former nineteenth-century abattoirs of Paris – the glass pyramid serving as the new entrance to the Louvre by I. M. Pei, the cubic "arch" at La Défense, the new "popular" Opera on the Place de la Bastille and the library – seems to have been conditioned by the sense that, from the air, the prismatic forms of the new projects will become comprehensible as a set of modern insertions. By a combination of high-tech construction and services, geometric purism, and a dedication to transparency given material emphasis in the case of the Louvre pyramid by the effort to manufacture a nonreflective glass and, in the case of the library, the attempt to make the towers transparent against all the programmatic needs of sheltering the books from daylight, these projects were, as selected personally by Mitterand himself, symbolic of centuries of French rationalism. Heirs to the grand building programs of Louis XIV, to the revolutionary cult of geometrical forms in the architecture of Claude-Nicolas Ledoux and the festivals of Jacques-Louis David, to the glass and iron architecture of architects like Henri Labrouste and Victor Baltard, to the large-scale planning projects of Haussmann, and finally, to Le Corbusier's brilliant absorption of these traditions into an abstract modernism, the *grands projets* summarize more than three centuries of state-centralized sponsorship of modernity and its architectural representation.

Perhaps we might have to recast the apparent opposition between the view from above and that from below in a more complementary way, say, for example in terms such as those presented by Lamorisse's classic movie *Le Ballon Rouge*. On the one hand, the stills from the film echo those of the Doisneau school; the grimy but familiar quarters, the romanticism of the "zone" pervasive *sine Apollinaire*, the everyday routine punctuated by moments of truancy all found their place in a vision of "situation" and small events; the *mineur* as opposed to the *majeur.* On the other hand, if we look at Pascal and notice where he is looking, it is always up, to the sky, and to the magic floating spheres that inhabit it. And when Pascal finally escapes from his tormentors – mother, school officials, local bullies – it is to the sky that he eventually ascends, holding onto the balloons that will enable him to look down with comfort at the world he has escaped. Back then to where Nadar started. We

might well imagine that in later life Pascal settled down to a professional career as an architect or planner, maybe taking his revenge on the quarters of his repression, by razing them and replacing their small alleyways with big spaces. Certainly, the generation following 1968 seems to have no qualms over reviving the omnipresent view from above, the Corbusian gaze, as the successful visual polemics of the photo collages of Dominique Perrault's Bibliothèque de France bear witness.

## NOTES

1. Siegfried Kracauer, *The Mass Ornament: Weimar Essays*, tr., ed., and with an introduction by Thomas Y. Levin (Harvard University Press, Cambridge, MA, 1995), p. 62.
2. The history of aerial photography has often been written – the elegant volume by Beaumont Newhall, *Airborne Camera: The World from the Air and Outer Space* (Hastings House, New York 1969) is perhaps the most concise. It begins with the first balloon photograph taken by Nadar in 1856 and ends with the photos taken from the *Gemini IV* spacecraft in 1968.
3. See the important summary by Bruno Pedretti, "Il volo dell'etica," *Casabella*, 531–2 (January–February, 1987), pp. 74–80.
4. Le Corbusier, *Aircraft* (The Studio, London, 1935), pp. 6–7. The original, unpublished, French text, "En frontispice aux images de l'épopée aérienne," is printed in *Casabella*, 531–2, pp. 111–13.
5. *Vers une architecture*, p. 85.
6. Ibid., p. 80.
7. Ibid., p. 86.
8. Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media* (MIT Press, Cambridge, Mass., 1994), p. 159.
9. *Vers une architecture*, p. 81. See Stanislaus von Moos, (ed.), *L'Esprit Nouveau: Le Corbusier und die Industrie 1920–1925* (Ernst and Sohn, Zurich, 1987), pp. 248–9.
10. Le Corbusier, *Urbanisme*, p. 164.
11. Ibid., p. 177.
12. Ibid., p. 268.
13. Ibid., p. 274.
14. *Aircraft*, pp. 8–9.
15. Ibid., p. 10.
16. Le Corbusier, *La ville radieuse*, p. 15.
17. Ibid., p. 20.
18. Ibid., pp. 60–1.
19. Le Corbusier, *Précisions: Sur un état présent de l'architecture et de l'urbanisme* (Vincent, Fréal of Cie, Paris, 1930), pp. 4–7.
20. Ibid., p. 5.
21. Ibid., pp. 6–7.
22. Ibid., p. 83.
23. Ibid., p. 8.
24. Manfredo Tafuri, "*Machine e mémoire*": The City in the Work of Le Corbusier," in *Le Corbusier*, ed. H. Allen Brooks (Princeton University Press, Princeton: 1987), p. 210 (203–18). This remains the most incisive and suggestive analysis of Le Corbusier's urbanism and its relation to 19th and 20th century thought.
25. "It is fully apparent that the documents it establishes constitute working tools of the first importance for the official administration: to govern a people is first to know

it . . . studies in ethnology will help, by the same token, colonial governments in the exercise of a difficult task with different aspects." (Marcel Griaule, "L'emploi de la photographie aérienne dans la recherche scientifique," *L'Anthropologie* 1937), pp. 474–5. The *Géographie universelle* of the geographer P. Vidal de La Blache filled with aerial photos as a result of the development of this "cartographie aérienne" between 1935–9.

26. Hans Speier, "Magic Geography", *Social Research*, 8 (1941), 310–30.
27. Emmanuel de Martonne, *Géographie aérienne* (Paris, 1948), p. 15.
28. Paul-Henri Chombart de Lauwe, ed., *La découverte aérienne du monde* (Horizons de France, Paris, 1948), pp. 19–56.
29. Michel Parent, "L'utilisation de la photographie aérienne par l'urbaniste," in *La découverte aérienne du monde*, pp. 316–26.
30. Ibid., p. 316.
31. Ibid., p. 325.
32. Paul-Henri Chombart de Lauwe, *Photographies aériennes. Méthode – Procédés – Interprétation. L'étude de l'homme sur la terre* (Armand Colin, Paris, 1951).
33. Chombart de Lauwe, *Paris et l'agglomération parisienne*, 2 vols. (Puf: Paris, 1952), vol. 2, p. 5. In his bibliography Chombart cites Le Corbusier's article, "L'habitation moderne," in *Population*, Paris, 1948, as well as *La ville radieuse*, 1935 and the *Destin de Paris* (Sorlot, Paris, 1941).