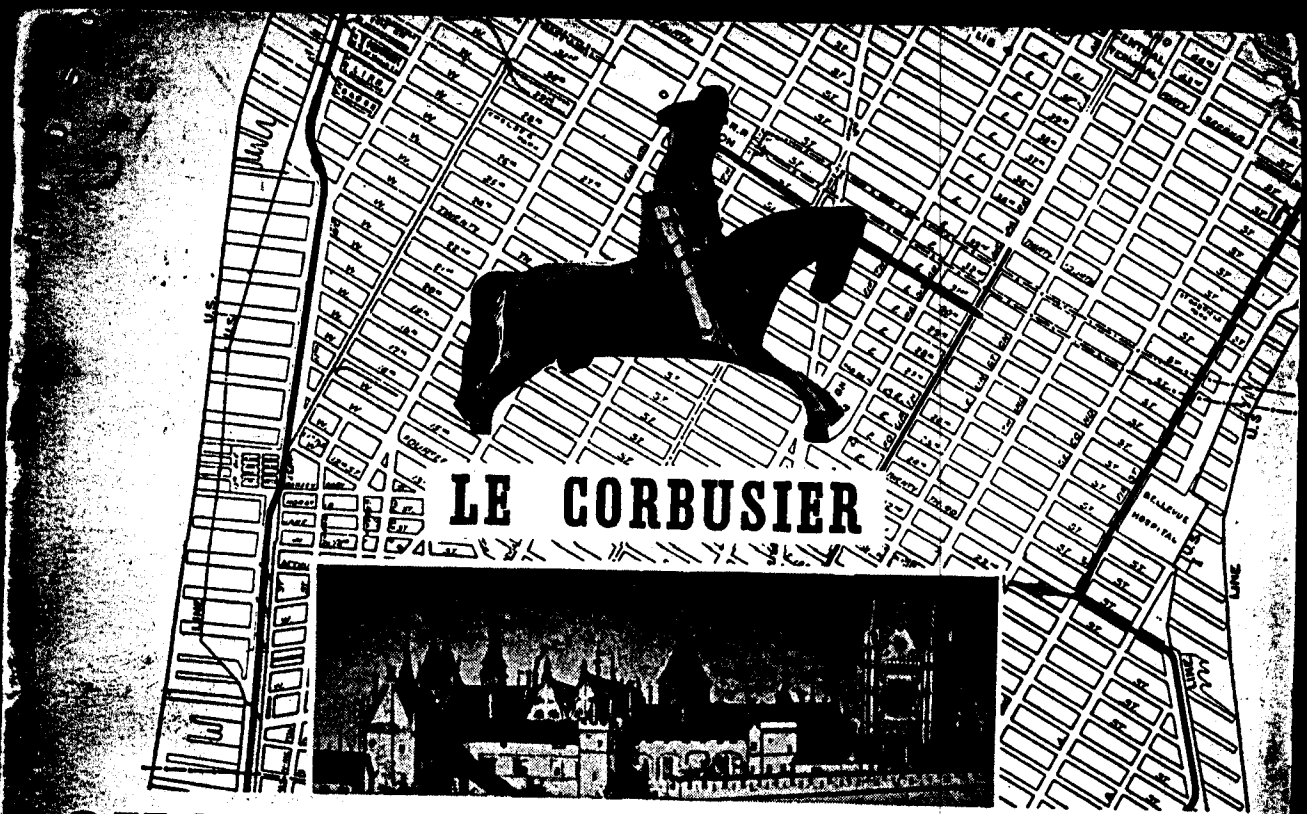

LE CORBUSIER

QUAND LES CATHEDRALES ETAIENT BLANCHES

VOYAGE AU PAYS DES TIMIDES

PARIS

EAST

LIBRAIRIE PLON

TRANSLATED FROM THE FRENCH:

QUAND LES CATHÉDRALES ETAIENT BLANCHES (1937)

BY FRANCIS E. HYSLOP, JR.

LE CORBUSIER

WHEN THE CATHEDRALS WERE WHITE

A JOURNEY TO THE COUNTRY OF TIMID PEOPLE

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WHEN THE CATHEDRALS WERE WHITE

NEW YORK, A VERTICAL CITY

New York is a vertical city, under the sign of the new times. It is a catastrophe with which a too hasty destiny has overwhelmed courageous and confident people, though a beautiful and worthy catastrophe. Nothing is lost. Faced with difficulties, New York falters. Still streaming with sweat from its exertions, wiping off its forehead, it sees what it has done and suddenly realizes: "Well, we didn't get it done properly. Let's start over again!" New York has such courage and enthusiasm that everything can be begun again, sent back to the building yard and made into something still greater, something mastered! These people are not on the point of going to sleep. In reality, the city is hardly more than twenty years old, that is the city which I am talking about, the city which is vertical and on the scale of the new times.

Morocco, which is contemporary with New York, is not under the sign of the new times. France established itself in the midst of a drowsy Moslem civilization. The evidences of brilliant moments sleep in the sun: in Fez, a superb city, and everywhere in the country, there are mosques, palaces of sultans and caliphs, markets still vibrating with life. They are a disillusioned race, but magnificent, noble, under the sign of dignity. France has been able to accomplish various things: she brought well-being, education, and above all loyalty and justice. Benefits which were somewhat imposed but which must be considered the indispensable signs of civilization. The army—an army of "professional" soldiers—was the authority. They furrowed the country with a magnificent network of roads of the French type. And cities were raised. Alas, they were behind the times, questions were unsolved. We always live under the burden of current ideas. While New York was rising into the air, London and the towns of Germany

were satisfied with the illusory idea of garden cities: a rural humanity, living idyllically in cottages, served daily by a purgatory of transportation systems. Every day they sank more deeply into the paradox. And New York also, and likewise Chicago, since that was the fashion, at the very moment when a vague feeling drove them to set up, straight and inflexible in the sky, the first landmarks of the new times. Thus France believed that she was doing the right thing: charming villages were set up for the admiration of the old and splendid Arab civilization, beneath the tutelary shadow of a modern army.

I believe that cities animated by the new spirit, ordered in an even grander way—infinitely grander—than those formerly erected by Louis XIV or Napoleon, constructed of steel and glass, standing erect beside the sea, or standing erect in the valleys or on the plateau at the foot of the Atlas Mountains, would have created among the Arabs an atmosphere of enthusiasm, of admiration, of respect, through the remarkable means at the disposal of architecture and city planning. In them the Arab would have found a teacher, a guide. No longer would he have raised his eyebrows in doubt. Both hands held out, abandoning from that moment all futile dissembling, he would have loved, admired, understood the new times, and respected France with all his conviction. Architecture and city planning can be great educators.

France wished to be charming. Its reputation is to be charming. Americans think that we are charming relations. They are not afraid of us, they are delighted by our company. When the cathedrals were white, the journeymen masons paid no attention to being charming. They had built and they were building structures of the greatest dignity in a burst of tension, energy, tenacity, and fidelity to a great idea. When they sculptured the porches or the capitals of Autun, of Moissac, of Vézelay or of Angoulême, the journeymen stonecutters were not concerned about being dainty. The harsh destiny of men struggling with the elements or the unfathomable unknown led their hearts and hands

toward robust, indeed tragic feelings. The times were strong. They were new times. They were building a world. And they were as much the less barbarous or primitive as the architecture was bold, a tangible sign of knowledge, of strength, of mastery in movement, increasing, in a process of becoming. Thus the leaderships are inscribed in the stone rising in the sky and in the power of the techniques. A unanimous feeling lifts up their enterprises: they believe.

For twenty years also, Buenos Aires, in an oppressive tumult, has been lifted up by the spirit of the times. When order is in control, that city will become one of the great places of the world.

And here are still other combinations: Moscow struggling with the dilemma of an inadequate technique and contradictory ideas; Barcelona, shaken by revolutionary eruptions, a city geographically dedicated to a new destiny. Rome, weighed down under an artificial *décor* by a resurrection (of dubious value) of its past, hesitates instead of speaking out with certitude. Finally Algiers, the capital of North Africa, a young colony which is inclined to courageous action, is held back by its city councillors and is uneasy about being the first to risk the adventure of the new times.

Where on the varied earth, in the whirlwind of innumerable conflicts, shall the young people of today go to breathe the air of the new times? There can be no doubt: a crust is scaling off of our stupefied societies. New skin! Spring! Renewal! The young are eager for a change of air. I feel myself young also; I have the desire, before dying, to share in something live and changing. I do not wish to be charming, but to be strong. I do not wish to be frozen, I do not wish to maintain things, but to act and create.

I cannot forget New York, a vertical city, now that I have had the happiness of seeing it there, raised up in the sky.

2 I AM AN AMERICAN

"I AM AN AMERICAN!"

"Like us, like Americans, my friend. You can like them, they deserve to be liked. This is a country in which there is a great deal of confusion, a great deal of activity, a great deal going on, a country in which everything is open and everything is possible. Look at New York raised up around us, carrying up to hitherto inaccessible heights a vertical city. It is natural that your spirit should often protest. Well and good! But with your heart you can understand us; with your heart you can feel that we are young, a little mad, or rather children, and that we love work and great things; and that we know nothing of discouragements. We possess a great country which has made us great; at least it has made our undertakings great. We are strong. We are driving ahead; everything is changing here; events take place in days; with you it is in centuries! Everything is changing, everything is being transformed; tomorrow will be different. We have

a prodigious potential. When we shall have found our way, we shall do things that will please you.

"Come back to America, my friend, America is a great country."

A woman spoke to me thus, on my last evening in New York. My heart was a little torn by the imminent departure, a heart which had been torn every day for two months by hate and love of this new world which must be seen to be really known as it is. Hate or love: nothing more, nothing less. Daily debate. Better, debate through every minute in the midst of the stupefying city. Hours of despair in the violence of the city (New York or Chicago); hours of enthusiasm, confidence, optimism, in the fairy splendor of the city.

I am not able to bear the thought of millions of people undergoing the diminution of life imposed by devouring distances, the subways filled with uproar, the wastelands on the edges of the city, in the blackened brick streets, hard, implacably soulless streets—tenement streets, streets of hovels that make up the cities of the century of money—the slums of New York or Chicago.

I am offended by this blow at legitimate human hopes. Nevertheless, if I am observant, I discover that my despair is not always shared by the victims themselves. In New York, the people who have come in order to "make money" shake off black thoughts and, looking at the sparkle of the great avenues, the entrances of apartment houses and fine homes, think: "O.K., it will be my turn tomorrow!"

Seven million people are bound in the chains of New York, and that turn will never come unless they learn to adopt drastic measures.

Knowing quite well that that turn cannot come quickly enough for seven million beings, there are moments when I hate the city of today; clearly and coolly I know that a proper plan can make New York the city par excellence of modern times,

can actively spread daily happiness for these oppressed families —children, women, men stupefied by work, stunned by the noise of the rails of the subways or elevateds—who sink down each evening, at the end of their appointed tasks, in the impasse of an inhuman hovel.

In sober offices, on the fifty-sixth floor of the newest skyscraper, men carry on business. Big business probably. I do not have a sense of figures and I know from experience that it is often more difficult to make small matters come out right than big ones. In the domain of money, the law is like that of the swing at the fair: at the beginning the effort is normal; everyone can take off and make a start. But at a certain point in the swing, when the acrobat is on the horizontal, it becomes precarious; he is too far away from the gravitational norm, and gravity acts on him. Then it takes an effort of a very particular kind to achieve a vertical position, with head down, and having passed the "meridian" of the swing, to come on around effortlessly from that point. Brute strength is not enough. The repeated attempts require a regular and harmonious progression. Harmonious, that's the word. Harmony is the cause of the success. The most difficult thing—the real difficulty—comes when you are a hair's-breadth from success: at the moment of swinging over. If you manage it, you are thenceforth launched! Many will not succeed in managing it. Those who have passed over this financial hazard owe it to their merits just as they owe it to the combination of circumstances: the things necessary to make the effort profitable, to stimulate it, to support it, were present. It was a happy conjuncture. And now the financial swing moves easily, with no further effort required except a scrupulous supervision.

That is why the skyscrapers were not constructed with a wise and serious intention. They were applauded acrobatic feats. The *skyscraper as proclamation* won. Here the skyscraper is not an element in city planning, but a banner in the sky, a fireworks

rocket, an aigrette in the coiffure of a name henceforth listed in the financial Almanach de Gotha.

Beneath the immaculate office on the fifty-sixth floor the vast nocturnal festival of New York spreads out. No one can imagine it who has not seen it. It is a titanic mineral display, a prismatic stratification shot through with an infinite number of lights, from top to bottom, in depth, in a violent silhouette like a fever chart beside a sick bed. A diamond, incalculable diamonds.

The great masters of economic destiny are up there, like eagles, in the silence of their eminences. Seated in their chairs, framed by two plate glass windows which fuse their rooms with the surrounding space, they appear to us made out of the substance of this event which is as strong and violent as a cosmic mutation: New York standing up above Manhattan is like a rose-colored stone in the blue of a maritime sky; New York at night is like a limitless cluster of jewels. America is not small potatoes! In the last twenty years, facing the old continent, it has set up the Jacob's ladder of the new times. It is a blow in the stomach that strikes you like a hurricane.

"I am an American."

"It was not they who said it. I thought it for them.

How dare you curse New York? "Fairy catastrophe" (I shall return to that theme), unified splendor, scintillation, promise, proof, act of faith (what faith?), etc.

It is the first time that men have projected all their strength and labor into the sky—a whole city in the free air of the sky. Good God, what disorder, what impetuosity! What perfection already, what promises! What unity in a molecular state, grid-iron street plan, office on top of office, clear crystallization. It is sublime and atrocious, and nothing succeeds any longer. There is nothing to do except to see clearly, think, conceive, begin over again. Of course New York is ready to begin over again. Those people have courage!

That afternoon I had gone through the Holland Tunnel

to the other side of the Hudson and over the Skyway, an elevated road so named because it rises on piles or arches high above industrial areas, arms of the sea, railways and roads, over an immense expanse. A road without art because no thought was given to it, but a wonderful tool. The "Skyway" rises up over the plain and leads to the "skyscrapers." Coming from the flat meadows of New Jersey, suddenly it reveals the City of the Incredible Towers.

I shall come back to America. America is a great country. Hopeless cities and cities of hope at the same time. What an idea of the action between these two poles is thus expressed, what a battlefield is spread out between these two feelings which exist in the gasping heart of every man of action, of every man who believes enough in something to dare to attempt it, and who risks catastrophe for having wished to bring back trophies to the altar.

For, beyond the narrow limits of the average in human things, when magnitude enters into an undertaking (Assyrians, Hindus, Egyptians, Romans, and Gothic builders), the result becomes a public and civic thing and, like grace, makes a horror sublime.

All the French people whom I met on the ship going to New York, all those on this ship taking us back to Paris, resolve the question thus: "Once you have opened the door on America you cannot close it again."

NEW YORK IS NOT A COMPLETED CITY . . .

It is a city in the process of becoming. Today it belongs to the world. Without anyone expecting it, it has become the jewel in the crown of universal cities in which there are dead cities whose memories and foundations alone remain and whose evocation is exalting; in which there are living cities injured by the narrow mold of past civilizations. Here is nobility, grandeur of outlines. Here are expressive, animated, proud topographies, exciting landscapes. Here are the old wisdoms accumulated century after century, harmoniously joined together by the simple passage of years, although everything in it has been contrasts, contradictions, revolutionary progress in techniques and conceptions. Here is Paris, for example, jumbled, yet with a gracious harmony: vertical Gothic, pure rectilinear Renaissance, pure *Grand Siècle* horizontal, strong Louis XV, elegant and sober Louis XVI, square Napoleon, Eiffel filigree. Crown of noble cities, soft pearls, or glittering topazes, or radiant lapis, or melancholy amethysts! New York is a great diamond, hard and dry, sparkling, triumphant.

Suddenly New York has entered the family of the cities of the world, and not by the back door. The American is a Janus: one face absorbed by the anxieties of adolescence, looking toward the troubles of his consciousness; the other face as solid as an Olympic victor's, looking toward an old world which at certain moments he believes he can dominate. Reverse the situation: imagine in an urban drawing room a slightly awkward young man, sympathetic and hard-working, who has come a long way and who causes many well-established people to smile. One day his book, his speech, the battle he has won, explodes in the face of the world. He dominates. Look at his eyes: a hard flame of pride shines in them! Will he become an ass or a king?

New York is not a finished or completed city. It gushes up. On my next trip it will be different. Those of us who have visited it are asked this question: "When you were there in 1939, or in 1928, or in 1926, or in 1920, was such and such already there? Oh, really, you don't know then what an effect that makes!" Such is the rhythm of the city.

The architects rush in with their heads down; after having worked over the "styles" firmly and worthily, they are launched on the paths of the modern spirit. How are they getting along? Badly, very badly, and nevertheless there are successes. Detail, that is all trash! *Style* is developing without them, outside of them, by the result itself, by the formidable internal pressure which mobilizes their efforts. These debatable results, strange, amusing, or striking, are being worked out in the sky. A thousand feet of height is the rule in this frightening type of football. Well then! A thousand feet of height, in stone, steel and glass, standing up in the magnificently blue sky of New York, is a new event in human history which up to now had only a legend on that theme: that of the Tower of Babel.

A thousand feet of height looked at from the streets, or appearing as an ineffable spectacle from the plains of New Jersey, above the Palisades—the cliffs along the Hudson River—that is the scale of the new times.

At present, it is like a house-moving, all the furniture in confusion, scattered about, unkempt. But order will come.

And the express elevators take forty-five seconds to go from the bottom to the top, that is, for sixty-five stories, a time equal to that taken by our elevators, sanctimoniously installed in the Haussmann stair wells, to go to the sixth story.

IT IS A SAVAGE CITY!

Yes. But the men and women are clean and healthy.

Cleanliness is a national virtue in America. No filth, no dust. Sea breezes incessantly sweep through the limpid maritime sky. The offices are clean; the bath tubs, the shops, the glistening hotels; the dazzling restaurants and bars. The immaculate personnel, in shirt sleeves, is shining white. Food is wrapped up in bright cellophane. There is no more real dust than there is symbolic dust, everything is new and spotless, including the collegiate Gothic of the universities.

Paris bistro, you disappointed me on my return, with your faded charm. It's too old, too old, saddening! Not even a nice little old, something neat and clean!

In contrast, there is a style, a true style, in American cleanliness.

People who wash their shirts, paint their houses, clean the glass in their windows, have an ethic different from those who cultivate dust and filth. To prove that they possess an age-old culture, the latter preserve the cracks in the walls, the patina, and what is worse, they have even established the taste for patina, the love of the old, and because of that they hammer out modern "wrought iron" and soil the new wainscoting of their apartments with bistre.

A true culture manifests itself in fresh color, white linen, and clean art. Among the Cyclades of Greece, in the islands where a volcanic topography has prevented the introduction of the wheel—cart, bicycle, car—where transportation is possible only by mule-back; where consequently customs have remained millenary; where you still seem to recognize Agamemnon or Ulysses in the villages, the tradition of a living culture demands that, each Saturday, the joints of the stones forming the steps of the

house and those of the flagstones in front of the house, be painted with bright whitewash—a radiant filigree. Thus in the Islands each Sunday begins in cleanliness and whiteness; life is magnified by this testimony: be clean. Go through beautiful France in a car and you will see that this fundamental feeling of life, always renewed or renewable, has died down; that cracked walls, dirt, and negligence are masters of our spirits . . . except here and there, where there is still faith in the virtue of each hour.

THE STREETS ARE AT RIGHT ANGLES TO EACH OTHER AND THE MIND IS LIBERATED

Your mind is free instead of being given over every minute to the complicated game imposed on it by the puzzle of our European cities. Do you want to go from your home to the Opera, to Père-Lachaise, to the Luxembourg Museum, or to the Eiffel Tower? First get the city plan out of your drawer and look for the route. It is a task. Old gentlemen will pretend to discover in that the charm of Paris. I do not agree; nevertheless I accept the inconvenience imposed by the very history of the city; on my way I thank Louis XIV, Napoleon, and Haussmann for having cut through the city with some clear and intelligent axes.

Manhattan, in New York, is a granite rock more than twelve miles long and two miles wide, between the Hudson River and the East River. In length it is laid out in nine parallel avenues; across, in nearly two hundred streets parallel to each other and at right angles to the avenues. The avenue in the middle, Fifth

Avenue, serves as a spinal column for this gigantic sole. On one side it is west, on the other east. The first street is at the south, on the ocean side, the last is at the north, on the land side. Everything is ordered accordingly. You have to go to 135 East 42nd Street? Everything is determined with a Euclidean clearness. 42nd Street? You are at your hotel on 55th Street; you go to Fifth Avenue, go down thirteen streets. East? You turn left. 135? You walk to number 135. Thus you know instantly whether to walk, whether to take a taxi, or whether to catch the bus on the avenue or use the subway. I say that it is an immense and beneficent freedom for the mind. It will be said that I am stopping over an anatomical detail of the city and that I attach a great deal of importance to it. This is not an anatomical detail, but the outstanding and essential biological structure of the city. It is a question of a fundamental principle. Do you wish the proof of our own vagaries? This grille of streets, this "American layout," is precisely the excuse for the attacks of academicians and romantics. It is our particular vanity to be plunged in disorder down to the very base. We make a virtue of it; we affirm that it is life, rich, subtle, agreeable, and what not! Now the Romans laid out their cities in "the American way"; and the Greeks before them. The Egyptians also. And the French, in the time of the white cathedrals, when new cities were being born—the towns of the South in particular—planned in "the American way." Thus Saint Louis had Aigues Mortes executed, in one building campaign, in "the American way."

When the conquistadors left on caravels for the New World, they took along geometers with plans for cities conceived in advance, laid out in "the American way": the Spanish *cuadra* is one hundred ten square meters, the *cuadra* that you see everywhere from a plane, from Buenos Aires, going north, to Montevideo, to Ascension in Paraguay, in the immense pampas, as in the savanna of North America.

Are the Americans then the founders of civilization through the ages? Such is the conclusion to which you lead us, exiles

of our own day, lost in the underbrush of romantic garden cities! One man sowed that foolish idea. He was an intelligent and sensitive Viennese, Camillo Sitte, who, quite simply, posed the problem badly. In travels of discovery through Italy, in medieval cities strategically placed on hills and tightly encircled by military walls, he was won over by the art which so exactly adjusted house to house and palace to church—each stone of each city, a living and subtle plastic character, a spectacle of quality. The existence of these exquisite things, and on the other hand, the vast vulgarities of the second half of the nineteenth century, dedicated to great railroad projects, which brought about the dreary, sinister, and soulless expanses of the great modern cities: Vienna, Berlin, Munich, Budapest, etc. . . . On the basis of the urban horrors of 1870 he concluded his reasoning and declared: Confusion is beautiful, and rectitude is base. And because on a small scale, in small Italian towns—Orvieto, Siena, Perugia, etc. —the walls hung on the sides of hills, the uneven levels of the ground, pocket-sized open spaces bowed the streets under their yoke to allow a greater number of houses to pile up like the scales of a pineapple, he concluded that the beautiful was curved and that large cities should be contorted. The fashion was launched: Berlin and Vienna and Munich, and cities throughout the world, developed curves, became entangled in a net like that which a cat makes out of a skein of wool. The garden cities near London, *idem*, etc. . . . Morocco was constructed in a crooked way, since straightness was considered an enemy of the heart! One day in a committee meeting, M. Louis Bonnier, head architect of the City of Paris, who loves cathedrals and many excellent things, apostrophized a bewildered young architect in connection with his city plan project for Saint Raphael: "What is this, sir, this completely straight two-hundred-meter 'artillery range'? We shall not allow that to be executed!"

The ten main avenues of New York are nearly fifteen kilometers long. Such are the minds of the same epoch: one saying gee, another haw!

Fifteen kilometers long? Is it imaginable, is it allowable! Traditions, which have become academized, demand that every straight avenue terminate in a blaze of glory, or if you prefer, in a set piece: the Opera at the end of the avenue of that name, the Saint-Augustin church at the end of the Boulevard Malesherbes. A code established in the name of true beauty. Here again, let us denounce the deformation of accomplishments which had a harmonious origin: the Place de la Concorde is a notable composition: Gabriel's palaces, the rue Royale in the axis, and the Madeleine, one hundred and fifty meters away. Opposite, the Palais-Bourbon. A "classic" composition with a comprehensible axis; dimensions on a human scale. The spectacle is real, plastic. A royal composition. It is a place of glory, a porch of honor. It is not a street, much less a traffic artery. Let's not confuse things! Period of the carriage and pedestrian.

A city has a biological life. It is justly said of a man that he is "a digestive tube with an entrance and an exit." At the entrance or exit of the tube there is neither a church nor a palace. There is a free passage! A fundamental condition of health of a city is being traversed, irrigated, nourished from end to end, being free! Let's not graft plastic forms on this need which has a biological character. The occasion for that ought to be an appropriate one.

New York lives by its clear checkerboard. Millions of beings act simply and easily within it. Freedom of mind. From the first hour, the stranger is oriented, sure of his course.

We shall see that a plastic spectacle exists along the gigantic avenue. Also, that it could have a different character.

We shall see, further, that the street plan of Manhattan, proud and strong, established in colonial times, a model of wisdom and greatness of vision, is today in mortal danger because of the motorcar.

And that remedies as vigorous as the first plan are necessary, if the city does not wish to decline.

Life never stops. The torment of men will be eternal, unless

the function of creating and acting and changing, living intensely through each day, be considered an eternal joy.

THE SKYSCRAPERS OF NEW YORK ARE TOO SMALL!

On the morning after my arrival in New York the *New York Herald Tribune* printed in big type, over my caricatured newspaper photograph:

FINDS AMERICAN SKYSCRAPERS MUCH TOO SMALL
Skyscrapers not big enough
Says Le Corbusier at first sight
Thinks they should be huge and a lot farther apart.

At two o'clock I disembarked from the ship; at four o'clock reporters had gathered at the Museum of Modern Art.

The cardinal question asked of every traveler on his arrival is: "What do you think of New York?" Coolly I replied: "The skyscrapers are too small."

And I explained what I meant.

For a moment my questioners were speechless! So much the worse for them! The reasoning is clear and the supporting proofs abundant, streets full of them, a complete urban disaster.

The skyscraper is not a plume rising from the face of the city. It has been made that, and wrongly. The plume was a poison to the city. The skyscraper is an instrument. A magnificent instrument for the concentration of population, for getting

rid of land congestion, for classification, for internal efficiency. A prodigious means of improving the conditions of work, a creator of economies and, through that, a dispenser of wealth. But the skyscraper as plume, multiplied over the area of Manhattan, has disregarded experience. The New York skyscrapers are out of line with the rational skyscraper which I have called: *the Cartesian skyscraper* ("Plans," *Revue internationale*, Paris, 1931).[1]

Let me explain the Cartesian skyscraper:

a) First of all, *it is realizable*, thanks to modern techniques: bold steel skeletons; lifting machinery; technique of sound-proofing. Extraordinary perfection of electric lighting, creation of precisely *conditioned air*, demonstrated efficiency of elevators, etc. . . .

b) The skyscraper easily reaches a height of a thousand feet. Intuitively, I accept sixty stories, or seven hundred and twenty feet, a dimension that seems to me good.[2]

c) The skyscraper is normally vertical, plumb, from top to bottom, without setbacks or slopes—unlike the New York skyscrapers, handled nonsensically as the result of a deplorably romantic city ordinance.

d) The skyscraper is a light radiator, which means that no office surface can be deprived of solar light. Consequently, it should have a form independent of that belonging to the ground plot, and developing from its three fundamental organs: elevators, corridors, offices planned with a depth directly proportioned to the height of the windows.

e) The skyscraper should not have offices on the north side. Its layout will depend on the path of the sun in the sky—which should be diagrammed. Combined with the necessities of stability, of resistance to the wind (the greatest adversary of the skyscraper), it will take, in plan, a characteristic form.

1 Article in the "Ville Radieuse" series: "Is Descartes an American?"
2 "A Contemporary City for Three Million People." Autumn Salon. Paris, 1922.

f) The skyscraper is built of steel—a skeleton woven like a filigree in the sky, a spidery thing, marvelously clear and free. There are no *walls* in the skyscraper, since a wall is not easily put in place at six hundred and fifty feet; why have one anyway? Until the introduction of new methods of construction in reinforced concrete or steel, a wall served to *support floors*. Today they are carried by posts which do not take up a thousandth part of the surface of the ground, and not by walls. The exterior of the skyscraper, the façade—the façades—can be a film of glass, a skin of glass. Why repudiate richness itself: floods of light coming in.

g) The skyscraper should be large. It can contain ten thousand, twenty thousand, thirty thousand, forty thousand occupants easily. It is worthwhile, then, to arrange its approaches and flawless means of transportation: subways, buses or trolleys, roads for cars.

h) Now we are ready to state the fundamental principle: the skyscraper *is a function of capacity* (the offices) *and of the area of free ground at its base*. A skyscraper which does not fulfill this function harmoniously is a disease. That is the disease of New York.

The Cartesian skyscraper is a miracle in the urbanization of the cities of machine civilization. It makes possible extraordinary concentrations, from three to four thousand persons on each two and one-half acres. It does so while taking up only 8 to 12 per cent of the ground, 92 to 88 per cent being restored, usable, available for the circulation of pedestrians and cars! These immense free areas, this whole ward in the business section, will become a park. The glass skyscrapers will rise up like crystals, clean and transparent in the midst of the foliage of the trees. It is sufficient to discover the proper relation of parcels of ground, of skyscraper distribution, of their spacing, of their capacity. A new law appears among the rules of this new game: the technical conditions of automobile traffic. It requires a new dimensioning of the stages between the intersections of automobile highways; the right spacing of these highways.

This must be explained still further: if the skyscraper is large enough, the expenses of foundations are immediately divided up among admirably efficient installations: the common services of the skyscraper restaurants, bars, showrooms, barber shops, dry-goods stores, etc. . . . Office life, made intensely productive through mechanical rationalization: post office, telephone, telegraph, radio, pneumatic tubes, etc. . . . thus the benefit of excellent psycho-physiological conditions: luxury, perfection, quality in the whole building—halls, elevators, the offices themselves (quiet and pure air). Here I call to mind the business offices of Paris; ah! wretched, mediocre and miserable offices, an unsuspected degradation of the spirit of work—those entrances, those grotesque, ridiculous, idiotic elevators, those dark and bleak vestibules, and the series of dim rooms open on the hubbub of the street or on the dreariness of courts. Ah! no, let no one continue to defend the "good-natured" charm of these Homaisian installations where nothing, nothing, is efficient. I repeat: where the spirit is afflicted. Already in New York Rockefeller Center affirms to the world the dignity of the new times by its useful and noble halls, just as the skyscraper of Howe and Lescaze does in Philadelphia.

Here I wish to evoke the true splendor of the Cartesian skyscraper: the tonic spectacle, stimulating, cheering, radiant, which, from each office, appears through the transparent glass walls leading into space. Space! That response to the aspiration of the human being, that relaxation for breathing and for the beating heart, that outpouring of self in looking far, from a height, over a vast, infinite, unlimited expanse. Every bit of sun and fresh, pure air furnished mechanically. Do you try to maintain the fraud of hypocritical affirmations, to throw discredit on these radiant facts, to argue, to demand the "good old window," open on the stenches of the city and street, the noise, air currents, and the company of flies and mosquitoes? For thirty years I have known the offices of Paris: conversations cut to pieces by the uproar, suffocating atmosphere, the view broken thirty feet

away by the walls of houses, dark corners, half-light, etc. . . . Impostors should no longer deny the gains of our period and by their fright prevent changing from one thing to another, keeping the city or cities in general from going their joyously destined way.

The skyscrapers of New York are too small and there are too many of them. They are proof of the new dimensions and the new tools; the proof also that henceforth everything can be carried out on a new general plan, a symphonic plan—extent and height.

Their history is mixed up with questions of utility and questions of vanity. They built tall buildings in Wall Street because it was necessary to be grouped around the Stock Exchange, in order to be able to act quickly. One sees canyons surging up, deep and violent fissures, streets such as no one had ever seen before. Not ugly either! I will even say: a very strong architectural sensation which is equal to that experienced in the narrow streets of Rouen and Toulon, with in this case the enthronement of a grandeur and intensity well calculated to inspire courage. Later, I shall speak of one of the most remarkable architectural sights in the world: the face of Washington seen against the Doric columns of the Sub-Treasury, at the foot of the cliff formed by the skyscrapers of Wall Street.

The skyscrapers born out of national conditions in Wall Street multiplied thereafter, first on that site, establishing the mystically alluring city seen far out at sea by the traveler, which gives him a high idea of American destiny before suddenly assaulting him, a half hour later, with its savagery and brutality, when the boat comes into direct contact with it in the Hudson.

The skyscrapers then disappear in an area of several miles, an urban no man's land made up of miserable low buildings—poor streets of dirty red brick. They spring up again suddenly in mid-town (the center of the city) much higher, fitted out with "architecture" and charged with a mission; the proclamation of

a proper name, that of a financial success, a fortune, a monetary power. Thus in the Middle Ages, at San Gimignano in Tuscany, the struggles for control among the families of the little city brought about the construction of fantastically high towers, one after another, each one higher than the last; height indicated the triumph of one family and the crushing of another. San Gimignano has the appearance of a pincushion, and the spectacle delights tourists while troubling common sense; hirsute beauty —yes, beauty, why not? The cataclysms of nature—jagged rocks, Niagara, Alps, or canyons, do they not compel our admiration by the effect of power, the feeling of catastrophe? In New York, it is by a thousand feet of height that the game is played—the game of skyscrapers, the sport of skyscrapers. Those mad Americans, how they have enjoyed themselves! Competition—football, boxing, the risky diversions of cowboys—there is a quality of spirit in all that. They celebrate the completion of each skyscraper. There are festivities, while building everyone laughs, is gay, fires rockets: a success is crowned. The troubadours of the new world sing of their loves. That was during the period of prosperity. Friends! it is all new, it is the burst of youth of a new world; there are in the world, in Manhattan, new white cathedrals.

They are sublime, naïve, touching, idiotic. I admire the enthusiasm which projects them into the sky. In the Olympic Games their pole vaulters surpass previous world records. Theirs are record skyscrapers.

From that task, once accomplished, resulted the death of the city at the base. The ground was killed. The fields should have been preserved. The overwhelmed local authorities inconsiderately allowed a policy of laissez faire. Nevertheless, they intervened in order to encourage further these floral games. The lawmakers concerned themselves with preventing a nocturnal darkness in the streets, in full daylight. Is their intention supported by rational considerations? No legislation has ever been so contrary to common sense. The laws forbid skyscrapers rising

vertically from their bases; thus the skyscraper will become a pyramid, will fade away from the street, will slide into oblique wall surfaces and will appear to be a stylus flanked by other styluses. The drawings supplied in support of the law show that the Cartesian spirit was brushed aside in conceiving this ravishing delirium: they wanted to do something "beautiful," "living," "triumphant." They wished to make the city a tiara of innumerable cathedrals. In the twentieth century, a period of the steel skeleton and big money, everything was sacrificed to a thought which was in some ways disinterested. The debate was not dragged out, as with us, through fifty years of disputes between architects' councils, supported by magazines and exhibitions of projects on paper. No. It is in this that the USA is the USA. The city was constructed at a tremendous rate; it sprang up vertically, a skyscraper every month or it may be every three months. Skyscrapers? The city is full of them, the sky is full of them; from below it is a prodigious flaming holocaust. Let no one say lightly that Americans act only in order to pile up dollars. Here they have given proof of the strength of their enthusiasm, of their youthful openness, of their nascent exuberance.

During this epic period, in Paris—Paris stimulated by these new cries—the magistrates responsible for the destiny of the city were also trying to legislate: the six-story houses heretofore allowed are too high; their height should be limited by law to four stories. In particular, the thirty-three kilometers of the zone fortified by Napoleon III, in process of destruction, was involved; money questions cut short so many "high" thoughts. In ten years —while New York moved as a unit to a position of leadership through its gigantic undertakings—were constructed the thirty kilometers of low cost housing of the City of Paris which will remain in history. Will it be a glaring proof of definitive abdication? "French" was opposed to "American." Without ever going to see what was there, they definitively ennobled "French" by a flattering characterization: measure, our beautiful measure.

These flowers of perfumed rhetoric covered a little the disturbing musty odor which assailed our noses.

Everything finally bears fruit, a tangible result was attained: the socialist commune of Boulogne, independent of Paris though representing an eminent industrial and working-class district of Paris, animated by the purest intentions, saddled itself with a magistrate's law forbidding thenceforth buildings of more than four stories. At the edge of this commune, on the very border of the zone of Napoleon III, I succeeded in completing the last normal six-story building, and I personally live in the attic comprising the seventh and eighth stories. I live at an altitude of seventy-two feet while my friend Harrison works at a height of eight hundred and twenty feet in Rockefeller Center. And when we take the elevator at the same moment, we arrive at our doors at the same time, in forty-five seconds. Reader, I ask you this: was not Delaisi, in naming one of his books *The Contradictions of the Modern World*, already aware that the world goes around badly and that in this century of certitudes we are submerged in incertitudes?

During these ten years New York raised itself into the sky; but the Soviets in Moscow denounced the skyscraper as "capitalist." A denaturing of the objects in question.

During this time, also, New York, having built too many skyscrapers too small, ossified its soil, disorganized the streets to such an extent that the city officials are still disturbed by it. They no longer know what to do with their city, their streets, their destroyed circulation. In the beautiful maritime sky of Manhattan they have made sparkling cathedrals for themselves.

I am not dismayed. Americans are strong enough to admit that this tremendous flowering of the "boom period" should be demolished and replaced by structures which are noble, but also efficient. The skyscraper as a useful instrument, a function of height and the area of available ground, that is the next task for New York. It will be the third metamorphosis of the city. Later on in the book, I shall explain this matter technically.

THE SKYSCRAPERS ARE GREATER THAN THE ARCHITECTS

I was in a mood for joking when I landed in America! That was my answer two days later, to a question from my friend Brooks, a *New York Times* editor. By that statement I meant to say that the notable thing about American skyscrapers today is their height. It is a question of footage, of quantity, with architecture, character, the architectural miracle, completely disregarded.

I was as it were shocked by the lack of architectural imagination in so many places where one is in a position to recognize the *quality* of a discovery. I shall speak later of the psychological significance of such failures. The USA is a country of boldness or courage and of great uneasiness, two states which are connected, moreover, and which are productive when they are in the right proportions.

It is an odd thing that the modern skyscrapers are the weak ones. The Italian Renaissance skyscrapers are of excellent quality, in contradiction with what I imagined before seeing them. For, prior to 1925, Brunelleschi and Palladio were in control. After 1925, after the plaster fanfares of our historic Exhibition of Decorative Arts—an event which made it possible for the masses to express a desire for "modern living" and which revealed that the professional world was not at all prepared to respond to that excellent aspiration; the result was the fixing of an indigent "1925 style," flat and false, made of plaster, for barbershops—the Americans made the plunge. By their works they prove to us what a long and deep effort is required to bring into being a genuine architecture. They did not measure up to their task; this modern architecture is poverty-stricken as much in its ensemble as in its detail; for that reason I consider it ephemeral; its years are numbered. Nevertheless, since they are building over there,

comfortable it is. It is clear that we have created all kinds of comforts. Obviously we use them, we all use them and perhaps we do not have the time to digest anything: we do not have a minute in our lives in which we can make *appraisals* and nothing leads us to make *appraisals*, that is, to try to go to the bottom of things. We are in a whirlwind, we are the whirlwind, we do not have good judgment about anything that is outside of the whirlwind."

One Monday morning, I took one of the immense trains which drain Connecticut and pour out on the ramps of Grand Central the crowds of people necessary for the life of the city. There are no interior partitions in the coaches; they are large units of space with closed windows. Air conditioning supplies constantly renewed pure air. One of the cars of the train is a bar and grillroom; there are small tables to the right and left of the grill; on the long free side there is a counter with rotating stools. You have breakfast there: milk, hot chocolate, eggs, bacon, etc. . . . You serve yourself.

Throughout the train there is a characteristic cleanliness. There is only one smoking car. It is rather skimpy! Young women come in to smoke Chesterfields or Camels (fifteen cents a pack). (The French administration sells them to us in Paris for sixty-six cents! Likewise, another office has tripled the price of Ford cars in France.) The American countryside is rural; a large part of the horror of suburbs is eliminated in America because *there are no walls* around houses and estates. Nowhere. The houses spring up in prairies, surrounded by trees. That gives the landscape a kind of amplitude which is new to us. I like the walls of our old villages; they were modest, fitting, and always handled in an architectural way. I mean that those smooth and dignified walls disregarded the three *orders of architecture* and the lucubrations of architectural draughtsmen. But our suburbs are modern, the fruit of the instruction of the schools and of the taste for an appearance of "richness"; they are discouraging.

We have finally reached the outskirts of New York which

are as frightful as the center of Paris or Berlin. The train plunges into a tunnel, passes under the river and stops in Grand Central.

THE FAIRY CATASTROPHE

New York is an event of worldwide importance. I have called it the first place in the world on the scale of the new times, the work yard of our era. Twenty years ago New York was still only a strange, faraway city; we had a somewhat harsh opinion of the people and their city; we said: "America, 'way off there." And we remained quiet in our acts and thoughts, bound to the old scale. But the world broke out here and there; it was swollen with sap and swollen with pus; the eruption floods the world with pus and sap. New York, strong, proud of itself, in prosperity or in depression, is like an open hand above our heads. An open hand which tries to knead the substance of today. New York has a style, has style, is mature enough to have acquired style. There are not just ragged things there; there is quality. A spirit is asserting itself; it shows itself in a section of Fifth Avenue, beside Central Park, or along Park Avenue; the people, the shops, the products, the architecture, have achieved a character which is grand, intense, and healthy. It is full of life; they are places of robust life. The Place de l'Opéra in Paris is no longer anything but a relic.

Americans tell you: "New York is not America." They are very conscious of it, they recognize themselves more readily in New England, in Boston, city of thought and meditation; in

Chicago, rival of New York; in the innumerable "American" cities (ah! yes, what a unitary character in the gridiron plans, the extraordinary vigor, the activity); and then there is the diversity of this immense territory in which France, in its surface area, would be no more than a pocket handkerchief: the North with its snow, bordering on Canada; the South with constant heat in Florida—at Miami—palm trees and resort cities and water sports; New Orleans with its Negroes and the busy shipping of the Mississippi. Then the expanses of grain extending as far as the eye can see to the foot of the Rocky Mountains. The canyons. Finally, at the very end, their paradise: California and the access to the Pacific, the islands, Tahiti, and new amusements. China faces them. Americans are thoroughly comfortable in their colonial style cottages—an architecture of high quality which expresses a healthy spirit, an ample and reasonable life.

New York, they feel, is a little bit diabolical. New York is not American. It is a world capital and has no frontier. I myself have the right to become a *New Yorker*, if I am strong enough to cut a furrow in New York. I should not thereby become an American!

For a traveler, New York is the great event of the journey. To penetrate American life—the real life—would require years —a genuine exploration. I am going to surprise you: Americans do not know America, the country is too large; they have neither the occasion nor the time, nor the means, nor any real reason to travel in their country. No more do the New Yorkers know New York. New York is too large and the day has only twenty-four hours. Travelers have a point of view about the city: we have come to see, to study, to understand, to judge. The average, ordinary life does not take up our attention. If the opportunity presented itself we could understand and enjoy the life of the cowboy on his ranch. We should find there a natural *man*, and that is the bottom of the question. In the innumerable cities of the USA we divine average societies in the process of development, on the long road of quality; the average, average situations

seem to us mediocre and they cannot hold our interest. What we require is the potential which belongs to the *great cities*. Drama, intensity, violence even, human substance—the human quality which is unbridled here and which elsewhere, in the average cities, covers itself with shame. New York is a world capital and has no shame. It is raw.

Whether it is in Chicago or in New York, you will be shown only the handsome quarters; you will never be entertained except by hosts in comfortable circumstances; very comfortable, terribly comfortable in the midst of pathetic masses. The slums of Chicago are terrible. The slums are the tragic zones where there are only hovels, lives crushed by the horror of the physical setting, lodgings which are not just burrows but instruments of torture. The slums are not simply physically ugly. Chicago, for instance, offers a striking spectacle in Drexel Avenue which is composed of private houses in the form of German Renaissance castles; some years ago it was the center of high life. One day, as a result of one of the violent shifts which are part of the destiny of cities (Paris: Place des Vosges emptied to fill up the Faubourg Saint-Germain; the boulevard of Saint Martin abandoned for the Madeleine Boulevard; then, today, a great movement toward the Champs Elysées and the creation of an important new center in the west at the expense of the boulevards which have enjoyed a hundred glorious years, etc. . . .), Chicago was cut in two: the east-west axis of the city (like the Avenida de Mayo in Buenos Aires) determined the destiny of two sections of the city. The fashionable quarter was in the south; suddenly it changed to the north. The southern part was abandoned. Who will live in these princely (and dubious) residences on Drexel Avenue? No one. Nevertheless, after a certain amount of time, the Negroes take it over. They settle down behind broken windows covered over by boards; a villa becomes a village; there are weeds in the rubbish-filled gardens, behind rusting iron fences. There is misery there. For whoever says *Negro* in the USA says pariah. This slum, then, is sinister not because of the place itself

but because of the kind of spirit which has sown death in this former "paradise." But there are slums in all the horror of the word: shanties of wood and blackened brick which show a neglect, a disintegration, a complete decay of that sign of vitality: maintenance. They wring your heart. They are new slums. They are from twenty to fifty years old. The tuberculous blocks in Paris, the Barrio Chino in Barcelona (a center of prostitution), are an admission that misery is the normal lot of the cadavers of cities, of the putrefying sections of the city. It is a tragic sign of decadence: it means that something has gone wrong with the social machine, it is an accusing witness of the times which have allowed some members of society to rot for the sake of loading other, privileged persons with jewels, rings, rivers of pearls and diamonds.

I scarcely more than glimpsed the slums of New York and I believe that New Yorkers never see them in their daily rounds; they are unaware of them. If they knew the slums, it would make them sick at heart and they would make new city plans. For the world needs city planning in order to conquer human misery.

For instance, in the "moral" slums of Chicago I noticed this: laboring men and office workers are obliged to travel more than fifty miles a day in streetcars and buses in order to earn their living!

From a plane you can grasp more clearly the wretchedness of urban agglomerations and particularly the calamity in the lives of millions of Americans who are thrust into the purgatory of the transportation system. You get the idea of catastrophe, urban catastrophe—the harassed life of men, women, and children; the sections in which human wastes stagnate—the poor devils so battered by their situation that they do not have the mind, the strength, the power, or the means to get together and cry halt. The national leaders and the city fathers are unconscious of *the reality of their misery*. After a stimulating cocktail they pass through the golden portals of Grand Central Terminal into a Pullman which takes them to their car; after a ride along charming country roads they enter the quiet and delightful living rooms of their colonial style houses.

Americans are eminently democratic—except about Negroes and that is a very grave question which cannot be resolved in a superficial way—they are good-natured, cordial, and companionable. The misery of our times comes from the fact that those who rule are those who have succeeded and who, consequently and quite naturally, live in conditions of material well-being. Inevitably, in spite of themselves and despite an evident good will, they are ignorant of the great charnel house of human misery. The day is only twenty-four hours long and each morning one must take up again the task left behind the evening before; it is a tiring job; thus the circuit closes, tightly, automatically. One cannot bring accusations against those who have succeeded for surrounding themselves with gracious things and thus losing sight of the urban catastrophe.

Moreover, New York is fascinating because of the other catastrophe, the fairy catastrophe: Manhattan, a city of skyscrapers, a vertical city.

The island is spread out like a sole in the water of the Hudson and East rivers. The fins along the two flanks represent the most perfect disposition of forms for a mercantile port. When you see it from a plane you think: Manhattan is a type-area for a modern city; the range of banks sheltered from the sea has the purity of a theorem. But now look at it on foot, along the avenue which skirts the river; the docks and ships form the teeth of a comb as far as you can see. The arrangement is clear, logical, perfect; nevertheless, it is hideous, badly done, and incongruous; the eye and the spirit are saddened. What could have been a communal enterprise, ordered in a serene and monumental unity, what could have been an endless jewel case for those marvels: liners or freighters—everything lacks order, everything has been badly constructed in the worst parts and even in the best ones. It was done by rapacious money-grubbers. This fringe along the water, around the whole periphery of Manhattan, is nothing but dirty

scum. Nevertheless, necessity has already forced a fresh start. Since nothing had been conceived systematically, it had not been possible to look ahead. Along this too narrow waterfront avenue —which is supposed to serve two opposed purposes: as an artery for easy circulation, and as the location of quiet basins for loading and unloading—there exists the most complete confusion. You should watch a liner unload or take on passengers with their trunks. It is an edifying sight! What a wretched business! You get by of course! Will contemporary society then go on forever in the chaos of an everlasting getting by? Will getting by be our only discipline? What a failure and what a shameful opportunity is afforded those who are unscrupulous or overcunning! Since the avenue on the river was bottled up and unusable, it was decided to construct the saving instrument of all modern city planning: the highway on piles, in the air, free, connected with the ground by ramps at appropriate intervals—the highway on which cars can travel at full speed. Above the hell of traffic, you leap forward, you escape into a real joyousness by means of the elevated highway: you see the ships, the water, the skyscrapers, the sky; you are free!

Ah! if the docks could be done over again, reconstructed in a unified way! Docks are hangars; there is no mystery about that, nor any secret of construction. Encircling all of Manhattan, more than twenty miles, pure and splendid docks would form a necklace of useful architecture around the city. It would be both efficient and profitable. My hand trembles, I am tempted to pick up a pencil. It would be so easy to do it well. That single project would illustrate the benefits of communal enterprise. Blind and self-seeking men have spoiled everything!

Within the ring of its docks Manhattan thrusts itself up into the sky. A great many skyscrapers fill the space, shut off the horizon. I did not imagine that there were so many of them; I imagined a few examples of boldness and vanity. But the whole city is vertical—or at least it seems to be, for a limited number of verticals succeed in taking up the blue of the sky.

It must be said that here the skyscrapers are an architectural accident. Imagine a man undergoing a mysterious disturbance of his organic life: the torso remains normal, but his legs become ten or twenty times too long. Thus the torso of normal houses set in normal plots of ground has suddenly been raised up on an unexpected support. They have become lost in an abstract tangle of calculations. As a result of paper calculations and new methods of construction, stimulated by somewhat unreasonable considerations, they have ignored the contingencies and plunged themselves into the unknown: three hundred feet, six hundred feet, a thousand feet. . . .

The former contingencies remain and the result has been catastrophe.

The torsos of buildings were pierced with windows; the disproportionately large supports also. I have already mentioned the cottage or private-house windows, the traditional windows which belong to the period of heavy walls of brick or stone. Anachronistic windows which nevertheless have one virtue—they express the presence of a normal man, a man behind an old-fashioned window. Thus punctuating the blue sky in a very simple, regular, and automatic way—yes, a fatal and indisputable way—there are now in the sky hundreds of thousands of windows, perhaps millions. It is very moving. Mediocre and retrograde poets who write about sunsets falling on old stones, you deny that man—good-natured man, with two feet, a head, and a heart—is an ant or a bee subject to the necessity of living in a box, a case, behind a window; you ask for a complete freedom, a complete fantasy, in accordance with which everyone would act in his own fashion, carried along by a creative lyricism in ever-new paths, never beaten paths, but individual ones, various, unexpected, extemporized, endlessly fanciful. Well, here is the proof that a man holds fast to the box which is his room; and a window opens on the outside world. It is a law of human biology; the square case, the room is a useful creation, proper to human beings. The window behind which a man stands is a poem of intimacy, of the

free consideration of things. A million windows in the blue sky. The fairylike atmosphere begins with them.

A hundred times I have thought: New York is a catastrophe, and fifty times: it is a beautiful catastrophe.

One evening about six o'clock I had cocktails with James Johnson Sweeney—a friend who lives in an apartment house east of Central Park, over toward the East River; he is on the top floor, one hundred and sixty feet above the street; after having looked out the windows, we went outside on the balcony, and finally we climbed up on the roof.

The night was dark, the air dry and cold. The whole city was lighted up. If you have not seen it, you cannot know or imagine what it is like. You must have had it sweep over you. Then you begin to understand why Americans have become proud of themselves in the last twenty years and why they raise their voices in the world and why they are impatient when they come to our country. The sky is decked out. It is a Milky Way come down to earth; you are in it. Each window, each person, is a light in the sky. At the same time a perspective is established by the arrangement of the thousand lights of each skyscraper; it forms itself more in your mind than in the darkness perforated by illimitable fires. The stars are part of it also—the real stars—but sparkling quietly in the distance. Splendor, scintillation, promise, proof, act of faith, etc. Feeling comes into play; the action of the heart is released; crescendo, allegro, fortissimo. We are charged with feeling, we are intoxicated; legs strengthened, chest expanded, eager for action, we are filled with a great confidence.

That is the Manhattan of vehement silhouettes. Those are the verities of technique, which is the springboard of lyricism. The fields of water, the railroads, the planes, the stars, and the vertical city with its unimaginable diamonds. Everything is there, and it is real.

The nineteenth century covered the earth with ugly and soulless works. Bestiality of money. The twentieth century aspires to grace, suppleness. The catastrophe is before us in the darkness, a spectacle young and new. The night effaces a thousand objects of debate and mental reservation. What is here then is true! Then everything is possible. Let the human be written into this by conscious intention, let joy be brought into the city by means of wisely conceived urban machinery and by generous thinking, aware of human misery. Let order reign.

In the store windows I saw an album published for the Christmas season by Scribner's: *The Magical City*. I reflect and argue with myself. I change it to: *The Fairy Catastrophe*. That is the phrase that expresses my emotion and rings within me in the stormy debate which has not stopped tormenting me for fifty days: hate and love.

For me the fairy catastrophe is the lever of hope.

volcano. The industrialist asked Saarinen to come to America; he offered him a magnificent piece of ground out in the country. "Build what you consider useful for the development of American sensibility." Thus Cranbrook Academy was born. It is a retreat; a place where young men and young women come to study art, plunging into an atmosphere of beatification in the midst of fields and woods. They philosophize at work, they philosophize at meals; masters and students all eat together.

It is all a little farfetched, somewhat cut off from life. A result of the harshness of American life. An outpouring of self, a convent, a monkery: "My son, pray for my salvation, for one who is obliged to engage in the hard battle of money! . . ."

The buildings were designed by Saarinen. Thus, in Germany, at Hellerau near Dresden, was born a mystic town about 1910. A spiritual center, or one that wished to be so. If society is hostile to meditations it recognizes the usefulness of "monkeries." They can be as extravasated from the whole of life as the brutal life of business is deprived of true life. Thus, wisdom is lacking. Cranbrook, a paradisaic retreat for disheartened combatants, is very American.

The American professor is as different as possible from the businessman. Business pushes back the years of college into a radiant mirage. Today, the violence of Manhattan or Chicago, of Detroit or Pittsburgh, etc. Yesterday, heads bent over studies, "while there is still time." Around youth, dedicated or undedicated teachers. Quietude of university centers. Caste of teachers somewhat weakened by such a beautiful retreat in the midst of restricted Capuan delights. I like Manhattan and Chicago. Nevertheless, I am convinced that teachers have a role of capital importance, provided that the sap of the real flows from time to time through the verdant cities of study. When I had finished my talk about the ideas of the *Radiant City* at Cranbrook, the founder and Maecenas came up to shake my hand and said sadly: "But art, sir, what do you do about art?" The new times will discover the law of tomorrow in the furnace of cities. And art is not hatched in incubators.

CARAVAGGIO AND SURREALISM

Let's return to the Vassar girl absorbed in the study of Caravaggio.

Caravaggio, an Italian painter of the sixteenth century, "worked in a studio which was painted black; light came in only through a small overhead opening." Stop! Through him we discover a corner of the American soul. If we connect Caravaggio with contemporary surrealism, which is well represented in American collections, our diagnosis will be confirmed. This chapter draws us into the tangled catacombs of consciousness frequented by troubled, youthful hearts.

Caravaggio in university studies, surrealism in collections and museums, the inferiority complex which obsesses those who wish to break away from the simple arithmetic of numbers, the principle of family disturbances, the funereal spirit which appears in the hours of spiritual creation—that is the unexpected harvest which overloads my arms at the end of my first trip to the USA, in which I was concerned with the study of questions of city planning. Enough material to write a book in which these unexpected conclusions would be supported by arguments and sufficient proofs. City planning, which is bound up with the essential elements in the profound actions of a society, opens up indiscreet windows.

This inadvertently lifted veil which discloses devotions to Caravaggio, an Italian painter with a very disquieting mentality, a very talented painter, well thought of in the intellectuual circles of the USA, reveals, under well-bred external appearances, a complex disturbance and the anxieties of sexual life. Something is taking place in the very heart of being. Having observed that, my mind takes hold of a series of small manifestations as far removed as possible from the grandeur of the skyscrapers.

And the grandeur of the skyscrapers is suddenly explained. I realize that I am in the country of the timid people.

In its gigantomachy American city planning betrays a timidity which is a hazard at the very moment when it would be desirable to react and act rightly; it is the result of a lack of equilibrium, of unbalance, and it carries with it rather serious disturbances of the core of the social cell—the key of everything: the family.

I am afraid that I shall not be pardoned for being so indiscreet.

When a society has acquired its equilibrium, its maturity, its gestures and actions are clear, healthy, normal. The fundamental law of nature, the perpetuation of the species, no longer involves religious ritual, or uneasy hesitations, or violence, or fear. An action which has become conscious, it has moved to the plane of art. It is ennobled by the contribution of the imagination, aesthetic feeling, the cult of the beautiful. The idea of "art" implies knowledge, consciousness, mastery, perpetual discovery within the modest framework of available values, the mathematics of an ingenious, fertile, and infinitely varied equation. Art is above all constructive, positive, creative. A door opening on the unknown, discoverer of the new, maker of the new, maker of life. And not a collection of souvenirs, a museum of souvenirs, a memorial of souvenirs, an accumulation of dead things, even rare or sublime ones. The perpetuation of the species is a cosmic law; love, human creation, in the luminous joining together of sensuality and aesthetics. Both dominate societies in a varying degree, according as uneasiness or mastery is in control.

Today, then, a page of human history turns; all life opens up to be grasped in armfuls. An art has to be created entirely anew, made up of new relations, a stairway which rises up before us, regularly, in solid, successive, and reassuring steps.

The stairway already climbed, which falls away behind us, which the enlightenment of the spirit and natural causes have superseded, throwing it into shadow and even darkness? Those

are singularly disturbed spirits who wish to climb it again, descend it once more, and consequently, to renounce what is before us! Spirits upset by fear, apprehension, anxiety, anguish—frustration.

Caravaggio had his studio painted black; a sepulchral light fell from a small opening. His case belongs to psychiatrists. Is it in the name of art, Vassar student, that you enter that sewer? I believe that you were impelled by an unsatisfied heart.

European surrealism, born in the uncertainty of war, triumphed in the unchained postwar period. It opposed itself to cubism, the lucid gesture of constructive spirits seeking the conquest of the new times. Cubism is a powerful revolution. The discernment of new times. Health, strength, optimism, creation, the contribution of a few strong and healthy men. Someday it will be recognized that cubism was one of the decisive hours of the general revolution. Surrealism is a noble, elegant, artistic, funereal institution.

It was necessary to embalm and hide under flowers the remains of a dead society; chants and prayers were required. The altar is prepared and there are trophies on it. There are the green flames of a ceremony in memory of so many things that were. Purple curtains lighted by green flames, the evocation of ghosts, desubstantialization, dematerialization. Dream! Freud! Phantoms in limbo! Almost spiritism. Spiritualism, stories, evocation. Literature. There are no bones in it any longer, but disjointed things, unearthly, passing over into stupefying and promiscuous combinations. Sensitive souls, lacking in solidity, occupy themselves with these precious, crepuscular decorations. The sea withdraws; at the horizon the sun bleeds upon the exceedingly green water; there are ruins in the form of a cenotaph, the clouds are in tatters; fragments of columns lie on the ground; by association, cut up torsos of women and dark blood, birds, a horse of the decadent period of antiquity. Symbols, abbreviations, evocations. What liturgy is this? What refined, moving, spectral ceremony? What appeal to the past? Is it an entombment? They are bury-

ing what was, what has ceased to be. They are weeping over the dead. It is an excellent thing.

That is understood! But the ceremony is reaching its end. The new world is waiting for workers!

The intelligentsia of the USA gives its attention to these funeral rites. This country, which as yet is familiar only with technical maturity, faces the future uneasily. The American soul seeks refuge in the bosom of things that were. That is the present stage.

The people in the USA who concern themselves with art (art historians, professors, directors of museums) are exceptional persons; their refined sensibility, their complete sincerity, their love, find standing around them the skyscrapers of Wall Street, the great bridges of New York, the stockyards of Chicago, Ford and his rationalized production, Pittsburgh and its blast furnaces. What a wall of stone, what a wall of fire, what an armature of steel! Advertising, the almighty dollar, time is money, the hundred-page newspaper, what crushing and suffocating forces! Day after day they are increasingly isolated, but also stronger. The body of the USA—which I have often drawn: enormous hands, titanic shoulders, feet like bridge foundations—appalls them. Nevertheless, all his energies given over to the hard labor of each day, the giant commands that thought and art live.—"What I do (for you see that I am caught in the gears—I struggle, I defend myself, I win), son, is not necessary for you. You who are free, prepare him, after my hard crossing through the Alps, for the imminent delights of Capua. . . ."

The blinding light of the blast furnaces of Pittsburgh and the yellow brilliance of gold are the accomplices of the green flames in the crypt of Caravaggio and on the altars of surrealism, bleeding with sacrifices and roses.

"QUAT'Z' ARTS" IN NEW YORK

"The men are tired of everything, the women are tired of the men"—remark made by an editor of one of the smartest fashionable magazines in America during the Quat'z' Arts Ball in New York.

"The women live with themselves; the men are in the city; the women seek entertainers or amuse themselves in the company of other women. American women are dominators and they dominate." (If you envisage a certain kind of society, you can get to the bottom of the import of these remarks.) A confidence expressed by a woman of the best society in a very handsome salon—the American style made up of Italian Renaissance and modern things molded together by the liveliest kind of feeling for contemporary life.

It should be clear, of course, that there is no question here of the great mass of the American people, but rather of the society which is formed by the tumult of capitals, places of enrichment, which, in all countries, is the barometer of significant currents. Persons useful to study because the fever that devours them reveals fundamental causes.

These two avowals have a negative character. The cultivated American, once he is pulled away from his business affairs, talks freely about his inferiority complex. Each time I am embarrassed by that gesture of humility; I see an erect Manhattan, the drives of Chicago, Ford in Detroit, and so many clear signs of youthful power. They seem to see a flash of steel in our glance and, behind our foreheads, a well-oiled chain of tests, appraisals, judgments. Certainly we reflect, we weigh, we try to see where things are going. Confronted by our considered approval, the pre-Hitler Germans often said: "You think that we are Barbarians, don't you?"

The Quat'z' Arts Ball is to be held in the immense rooms of the Waldorf-Astoria in New York. I shall go. First there is a visit to the costume company. The theme of the ball is: *An Exotic Festival in India.* I have always been suspicious of these imaginative courts. You fall from a height, you return to reality, you see what people are: what they wish to seem. In Montparnasse it is different, the artists are free (the good ones). At the gala celebrations on steamships or at costume balls on land, the goddess "Creation" is rather small and king "Pride" is fully inflated.

Quat'z' Arts in New York? Something to intrigue a Parisian. We shall see exhibitions by former students in painting and architecture at the Beaux-Arts in Paris. But in reality, aside from the effects of alcohol and the frankly nudist tendency of the Quat'z' Arts in Paris, on this absurd occasion the spirit has never shown itself like a phenomenon of spontaneous generation, has it? Alas, no, and again no! As the painting is, so are the architecture, the decoration, the ball. The little nude women brighten the affair, of course, and that is what makes it go.

At the Waldorf-Astoria there will be no little nude women, oh never!

The costume man wants to rig me out with a turban and a brocaded robe; this evening, for the same amount of money, I can be a rajah or a khan.

No usurped title, thank you! Not being a handsome fellow, I keep my anatomy out of sight. In spite of some protests, I insist on white and blue striped convict's trousers and an Indian army guard's vermilion coat (he would have loved to see me in a high-ranking officer's coat!); I find an enormous gold epaulette which I fasten on the left side. No military cap, sir, a white, pointed clown's hat, please. For color balance I put on a dark blue sash as a shoulder-belt, cut by a gold band. There are no pockets in my convict's trousers: bills go into my socks, my pipe and tobacco pouch into my belt. To finish off, three differently shaped spots of white on my cheeks and forehead, to perplex the curious.

If everyone does likewise, there will perhaps be some amusing sights!

It was a tremendous ball; three thousand costumed dancers. There were elephants, bears, clowns, and acrobats. Everyone was bedecked, covered with brocades, with plume turbans, Indian scarfs, shimmering silk; the ensemble was lusterless and flat, dull and without the least brilliance. Brilliance does not require silk. To achieve effects of color in costume many neutral tones are needed, and judicious accents of color, and mat stuffs. The Russian ballets of Diaghilev, "Parade," "The Three-Cornered Hat," designed by Picasso, taught us that. When the elephants came in there was a really sumptuous effect. In a particolored crowd, dressed up in silk, the gray skin of an elephant becomes a luxurious costume.

Everyone was handsome, and how! Clean-shaven, powdered, respectable, solemn. Everyone wisely displayed notable honors, all those of the East and Far East, from the emir to the rajah to the mandarin. Beggars? There are no people in rags at the festival in the midst of the skyscrapers! When you are a maharajah or governor of the English East Indies, you have to parade your costume. How many nobles there were that evening! Once a year masked balls help to satisfy the ambitions which struggle against the realities of everyday life. The light music does not succeed in shaking off the collective stiffness. As for me, my fate was soon settled. I was a discordant note; I was neither mad nor clownish, I was a sore thumb. I was out of place. I did not arouse the slightest smile, the slightest astonishment, the slightest curiosity, the slightest interest. Lost, poor fellow, I was the only one of my type, disagreeable, disapproved, rejected. I left ingloriously, thrust aside by respectability.

Conversation continued to be serious. A gentleman dressed like a Shakespearean ambassador said to me: "The 'civilization of the west' [poor France] is finished. In the USA and in Europe

it's all over, we shall never accomplish anything again; there are others surging up in the East!" I am willing to admit that the East, India or China, will speak to us in a useful way at some time, in a profound way. It will speak to us of ethics and not of dumping. I reply: "With its two thousand years, France is not old, the USA is young and has just begun!"

With three spots on my face, I feel that my friends should laugh at me for being concerned with such serious thoughts. But not at all! At the masked ball, the ambassador in purple, the mandarin in green, the maharajah with a plume discuss with me unfathomable problems.

THE FAMILY DIVIDED

I am risking a dangerous hypothesis. It is not with impunity that, in its first century, machine age society inconsiderately constructed its cities against the grain. The city-dwelling place, shelter of the family, of work and pleasure, accompanies the life of men, step by step. If the city is false, wrong, against common sense, the life of men is affected by it; and, denaturalized by the milieu which they have made for themselves, they undergo dangerous avatars. *The twentieth century has not built for men; it has built for money!* (Remark from my book, *The Radiant City*, later printed as an exergue in the reform program of the Union of War Veterans, of which 800,000 copies were published in France.) How do you measure that? By the fundamental social element, by the cell of the social body, by the family. In the USA the family is disturbed. I noted the admissions of that a

moment ago. For a long time I have looked for the damage done to life by the gigantic machinery of the disordered city: the distended cities of our times. In the USA the diagnosis comes out better than elsewhere, since they have worked on a larger scale, pushed the phenomenon to its limits.

Urban zones are no longer cities, but regions. In the case of Chicago and New York their diameter is more than sixty miles. They saw the problem in a large way? No, they saw it in a false way. The sun establishes a twenty-four-hour day. Its course is too rapid to allow the accomplishment of the essential functions of life in their daily cycle. They wished to dominate the situation, to stop up the crack through which equilibrium flows away: they used speed. The sun goes even faster. They constructed Pullmans, subways, highways, roads, and covered the country with swarms of automobiles. The country is on wheels; everything rolls. You are free because you are on the road at the wheel of your own car, because you can read the paper in the train! Industry is kept busy in creating this gigantic mass of machinery. I think that it is an illness. I said: "Yes, the cancer is in good health." My second series of talks could not get away from the same obsession; I spoke of the Great Waste and I saw that you had forged chains for yourselves. At the end of the series, I discover that the fundamental social element is ill: the family is cut in two.

The great waste can be analyzed. I shall do that later. It leads to hard labor. Life becomes nothing more than a battle without hope of victory. Day after day, an unbalanced situation. The atmosphere of the city is exciting, intoxicating, but exhausting. Half of this intense effort serves no useful purpose, simply makes wind. In the evening, you very much need to get away from it all. I have mentioned the cocktail parties at five o'clock, with fifty people standing up in a single room. You get up early in the morning and, in your car (a wonderful domestic tool, inexpensive and easily kept up—for mass production has made possible the organization of maintenance, repair, exchange), you