

Le Corbusier The Athens Charter

With an Introduction by Jean Giraudoux

Translated from the French by Anthony Eardley

With a new foreword by Josep Lluís Sert

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Foreword

The International Congresses for Modern Architecture, or Congrès Internationaux d'Architecture Moderne, known as CIAM, which were founded in 1928 in La Sarraz (Switzerland), had their fourth meeting in August of 1933 on a boat, the *Patris II*, which sailed from Marseilles to Athens, stayed for a week in Greece, and then returned to Marseilles.

The *Patris II* was a one-class boat, all the facilities being accessible to everyone without distinction. All passengers were Congress members or their friends and guests, all sharing a community of interests, eager to discuss everything related to the search for a better urban environment. All were aware of the great promises of change open to the western world since the end of World War I.

Previous Congresses had discussed housing in relation to modern technology and housing developments, which naturally brought them to the conclusion that these subjects were part of the larger complexes—the city and the urban regions.

The Athens conference would deal with cities in a new and unorthodox way. The Congresses prepared work on the chosen subject ahead of time. Local groups were commissioned to do this work following the same directives. The Amsterdam group set the standards of presentation (van Eesteren guided the work) for the Athens Congress. Thirty-three cities were analyzed in a common visual language—symbols, graphics, colors, and scales were the same for all plans. Descriptive texts were also unified to permit a comparative study method that would be understandable to all. The Executive Committee of the CIAM was responsible for the coordination and distribution of this preparatory work.



Meeting on board *Patris II*. Foreground, left to right: Bardi, Sert, van Eesteren, Giedion. L. MOHOLY-NAGY

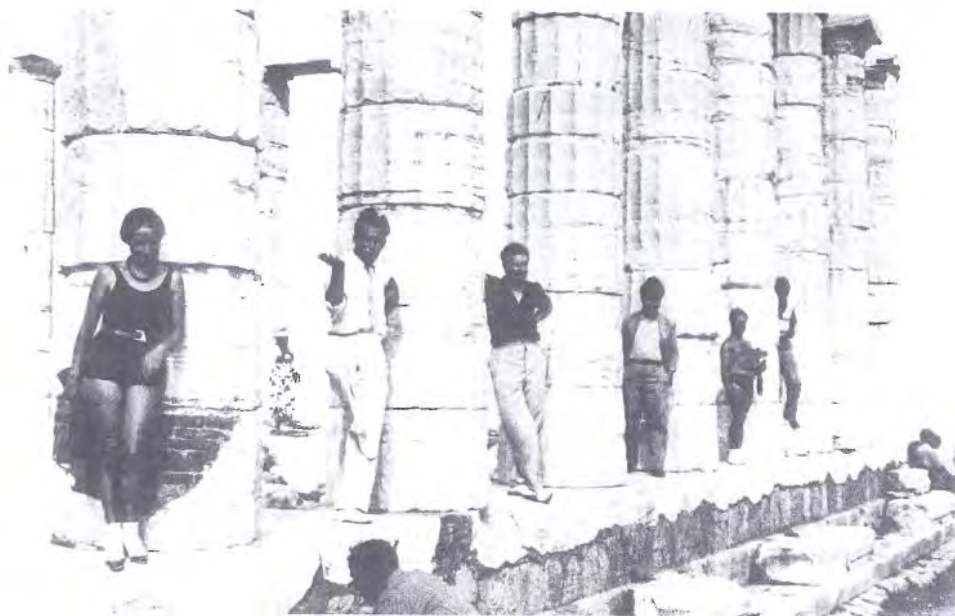


Left to right: Giedion, Helena Syrkus, Le Corbusier. L. MOHOLY-NAGY

Architects and city planners formed the nucleus of the conferences, but they were eager to hear the views and suggestions of such friends as Fernand Léger, László Moholy-Nagy, Christian Zervos, Dr. Pierre Winter, Dr. Neurath, Carola Giedion, Albert Jeanneret, and other distinguished artists, art critics, and scientists.

The boat and its facilities offered the ideal conditions for group meetings. Each committee worked at pre-established times and places, and later discussed in public the subject it had undertaken to explore.

Committees were open; there were no professional or age barriers. The many young people present were able to make their full contributions. The older, better known members of the Congress, such as Moser, van Eesteren, Giedion, Le Corbusier,



At Cape Sunion. *Left to right:* Moncha Sert, Ricardo Ribas, Wells Coates, Josep Torres Clave, and Sert. ERNO GOLDFINGER

Aalto, and Moholy-Nagy, were always available to participate in debates at any hour of the day and even during the warm nights of that Mediterranean summer.

I was part of a group of young architects from Barcelona who had just finished their professional studies. This was for some of us the first opportunity to hear and talk to the founders of the modern movement.

From the start, as the boat was leaving Marseilles, the interest and openness of the talks was evident to all. It is rare in international conferences of this type that the ice is broken from the very start, that cordiality is present in the first meetings, that there is a general feeling of the usefulness and timeliness of what is being discussed. The participants enjoyed their work, which continued, sprinkled with stories and an-

ecdotes, while they sunbathed and walked on decks in the evenings. The majority of professional gatherings today are composed of tired people in a hurry to finish their work, which is kept apart from the entertaining social gatherings; the Athens Congress was just the contrary

The Athens Charter that resulted from these discussions in the summer of 1933 is nearly forty years old. It is, in many ways, incomplete judged by today's standards. It does not deal deeply enough with economic, sociological, and ecological factors and with legal implementations; it is very much a product of architectural thinking, of a Congress composed mainly of architects. The principles outlined by this charter have, nonetheless, had considerable influence (good and bad) on much of the urban design work done since the last world war by architects and city planners.

The problems it outlines (results of the analysis carried out by that Congress) are still very real today, and the trends then prevailing have only been aggravated in the four decades elapsed.

In this sense, the document, in spite of its oversimplified statements and its considerable gaps, may serve as a starting point for the formulation of a "Charter of Urban Rights," which is badly needed.

It has taken more than thirty years for the mass media to comment on and discuss such matters in the daily press and for politicians to begin to worry about conditions in our cities today. Sociologists, economists, philosophers, and educators have joined architects and city planners in these concerns, but recently the voices of the citizens protesting and revolting against the abuses of greed, speculation, and exploitation of resources by the few make these conditions increasingly evident to the many. Back in the thirties CIAM was a voice crying in the wilderness. Events have confirmed much of what was stated forty years ago in the Athens Charter.

Josep Lluís Sert
Cambridge, Massachusetts
Spring, 1973

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Preface to the 1957 French Edition by Le Corbusier

The Athens Charter is being reprinted sixteen years after the first edition, which appeared in 1942,* in the depth of the occupation. One cannot imagine, one would not wish to imagine or even recall what kind of dispute took place preparatory to the reconstruction of France in the period that followed the debacle. It was a torrent of invective, reproach, rejection—invective against modern art; the reproach of those who had allowed themselves to be taken in by it; the rejection of technical solutions that were available or indispensable; the rejection of a coherent system of thought: architecture and urbanism indissolubly linked. To overcome so many doubts, friendship and a mutual love for the built object had enabled those responsible for this publication to illuminate the cover of the Charter with the name of Jean Giraudoux. Before the war he had written *Pleins Pouvoirs*, poignantly inviting the country to engage in the joys and risks of a grand and optimistic adventure—the construction of the modern age—and appealing to the only effective motivating forces: imagination and enthusiasm. Since 1928, the CIAM (International Congresses for Modern Architecture) had focused hitherto scattered energies, holding their meetings in various European cities. In 1933 it was Athens . . . In that 1941-1942 period of persecution and suppression of the profession of architecture and urbanism, the name of Athens appeared as a gleaming shield, and the word Charter as an injunction to think straight. The work of the Athens Congress established the basis for the Charter. A complex subject matter had to be edited, coordinated, placed within the public's grasp, and, in those

*Although Le Corbusier's work on the Charter and Giraudoux's introduction had been completed by late 1941, the Charter was actually published in April 1943. [A.E.]

times of confusion, it was necessary to find as anonymous a form as possible to avoid compromising the objectives sought in that publication with the name of an outcast like my own. Have things changed so very much, sixteen years later?

An immense, total mutation takes hold of the world: the machinist civilization is moving in amid disorder, improvisation, ruins . . . It has been going on for a century! . . . But a century also in which new sap is rising . . . A century in which visionaries have brought forth ideas, thoughts, and made proposals . . . A day will come, perhaps . . .

tive and intensive, when a crisis that appeared to be growth caused new nations to spring up all over the world, that the essence of the citizen spoiled and evaporated. Across the most impenetrable frontiers we have known there infiltrated a traditionless and faceless life, deliberately base and mediocre, servile before the national entity, but dissolving all its foundations in the simple-hearted. Contrasted with a nationalism that had never been more aware or more ambitious, more mindful of its duties and its distinguishing features, there emerged in the majority of countries a popular soul and a popular body whose cares, pleasures, and sustenance were common to all men, men whose leaders had knowingly reduced to the level of their lowest denominator. By the force of the epoch, the nation gained all that the citizen was losing through his lack of progress, with the result that the danger that threatens our civilization is becoming more definable. Just as most peasants and craftsmen have relinquished their national costume to the two or three performers who wear it on public holidays, so most citizens ask for nothing more than to surrender their spirit and their national virtue to a few amateurs, a few fanatics, a few rabble-rousers. It is to be feared that the national consciousness and mission may become the exclusive prerogative of an increasingly select cohort in the midst of a country overtaken by universal banality and indifference. It is to be feared that the concern to preserve the nation's sanity may one day be reserved to a caste, an oligarchy, and that the country's spirit may no longer be a function of the country as a mass and an entity, may no longer be its sap, but the cerebral act of an ever more isolated intelligence that will no longer be able to impose its own virtues and its own character upon a people except by artifice or tyranny. There will be nothing left of our civilization but its chiefs of staff, or its vestal virgins. It will be a war, or a ritual. Its mind and its mask will become more acute as paralysis overtakes its organs, and that will be the death of it, for though the historian claims the reverse, the great peoples have never died from the head down. It is, on the contrary, toward the time of their demise that they have at times found leaders best suited to the prime of their existence, and it is often to their greatest men that the spectacle of their death throes has been reserved. The great civilizations have died in a state of lucidity made all the more frightful by the fact that their surviving leaders had been their most polished and zealous products; and a nation reduced to an elite and a brain, to the generous or cynical pleasure seekers of what was once an instinc-

tive life now become a life of supreme luxury, is simply the prefiguration, scarcely more vivid, of those extinct peoples, of that imputrescible and vain elite whose spirit and visage we can still perceive as they drift beyond oblivion.

What measures can be taken, what charms employed, what transfusion given to remedy this destruction of the national soul within a citizen whom our fears would astonish—since he is daubed over again every morning in his country's brightest colors—that is the question that all political fronts meditate upon at this point in mid-century. I am not about to list their replies to it. But since the CIAM have done me the honor of urging me forward as a herald at the head of their phalanx, it behooves me to point out that their Athens Charter sets down the basic recipe unambiguously. It offers confirmation and support to those who have grasped the idea that the prime factor of longevity for a people is this: a people must be exactly as old as its times. No civilization, no matter how deeply rooted, no matter how regenerative, can consent to be outclassed or outdated by younger civilizations, even in fields of minor importance. At no time may it overlook or shrink from the increase of ease and facility by which mechanical or social progress enlist the citizen, and risk estranging him from his very nature. If the civilization does not grant him, unstintingly and in a form befitting its genius, the rewards of life that other civilizations enjoy, it will turn those rewards into lures, and no sooner will he have suspected their existence than they will entice him away from himself and alienate him from his civilization. Once he has become aware—with the help of the devil's primer, by which I refer to advertising and its billboard snares, with the help of the cinema, with the help of trade treaties, which are often nothing but a way of regulating the entry of suspicious goods into the national territory, and with the help, also, of that instinct which makes the human being crave his most recently discovered resources—once he has been made aware of privileges dealt out to others, he will never again ascribe their absence from his own life to a mere delay but to an incapacity. If he is inventive and given to trickery, he will find himself suddenly limited. If he leads a life of ease, he will feel himself diminished. Ultimately, the uneasiness he will experience after comparing his country's habits with those of countries better equipped for the age will be accepted with a sense of decline. Little by little, as he confronts those who enjoy a mode of life with a high rate of exchange, he will adopt the scoffing, renunciatory attitude of the citizen

whose currency is cheap. And in point of fact he is in decline. He is deprived of the rudiments of his self-esteem, that is to say, the health, freedom of movement, conditions for work and leisure comparable to those of others. Each morning he sets out for work with a heavy additional burden. He returns home in the evening needlessly weary, late, and careworn. With this progressive drying up of day-to-day satisfaction, this adaptation to conditions of uncompensated mediocrity and to the surrender of body and soul that it necessitates, his mind is induced to flee its inherent properties, its innate curiosity, replacing the sense of respect and gratitude that his country used to inspire in him with a sort of familial and familiar complicity. From that moment on, the question of the death of his civilization is raised. If we take as an example the country in which the Athens Charter is now being published, it is on this score, and on this score alone, that the question of our own death arises. It would be a mistake to attribute to a common flaw the loss of esteem experienced by the French people in 1940. What had long been the personal obsession of a few Frenchmen had merely been recognized by the people as a whole. It happened that through certain errors, certain unpardonable errors, the French people had ceased to be directly contemporaneous with events. These events, instead of being viewed in perspective, remained a blur in the myopic eyes of the people. The people had retained their gifts, their temperament, their workmanship, but because of their delay or idleness in adapting their country to modern life, they failed in recent decades to capture the youthfulness that each year of mankind overlays on the age of the world. Hence a defeat that the French have not as yet been able to place in the reality of things. Hence, also, a revolution that has slogans but no date. France is seeking its age, much more than its reason. It believed it would solve the problem by making a fresh start with its youth, but the youth of a country is young or old depending on the age of its country itself. Given an eye surgeon, the solution might not have been far distant, and the heart and liver surgeons might not have been needed.

This restoration of honor to an age does not, however, allow for hesitancy. That is the mistake of the half-educated leaders who imagine the modern and overall development of a people as a threat to its inherent virtues, and grant it only with stubborn and infrequent concessions. If anything, it is through just this system of quibbling and makeshift repairs that a people's intrinsic or acquired nature incurs the

risk of corruption. Every limitation placed on the way a citizen is granted his urban rights and allowed to enjoy them gives rise to a state of inequality which tends precisely to break up the body politic and to break down the country's overall functions. The coexistence in the same city, in the same life, of citizens equipped for the modern fray and citizens who are defenseless can only give rise to disparities in temperament, habits, and taste, which mean, ultimately, disparities in condition and esteem. The harm will become all the more irreparable as it pervades each class; the brilliance of the epoch and its sordidness will effect both the bourgeois and the working man alike, according to the whim or the routine of the municipalities. There will be a sordid zone of work and thought and a brilliant zone, and, bound by a lamentable human and national protocol, luminous beings and opaque beings will rub shoulders on the same level. The country's honor is no longer a possession, an indivisible glory. Nor is it even reserved to a caste or to a State within the State, but to those who have chanced to be touched by the sun. And as it is with honor so it is with audaciousness. Daring individuals may abound, but the general audaciousness of the country is on the ebb; and on the pretext of giving civic rights and concerns precedence over urban rights, the worst inequality is created: the inequality of human dignity. Little by little, the peasant himself will be so imbued with the stench of his century that the protocol of nature will not be adequate to protect him. The Athens Charter makes the recognition of this truth the principle for any government action, carried out not by an administrator but by a leader. While it is possible for the individual to make up for a poor start with energy and luck, it is essential that a whole people be launched, as a mass and a force, into that adventure, somewhere on a course between history and legend, between sun and ice, between metals and water, between work and play, between necessity and fantasy, that its life can become—on the threshold of this new age.

The Athens Charter



The sun
rises

The sun
rises again

The 24-hour solar day determines the rhythm of human activity

1

A Far Cry from a
Discreditable Palace

The Founding of the CIAM, 1928

The year 1927 saw the origin of one of those events which, because of what has preceded and attended them, mark an epoch in history. It was an event concerning architecture, that primordial science responsible for the shelter of men and their institutions.

After a hundred years of aesthetic debates, of constructive researches and technical conquests, the hour was about to strike for a full flowering, regular, authorized, and capable of influencing the architecture of the entire world, of putting an end to the stale controversies of the Schools, the feuds between "ancients" and "moderns," and of serving as a decisive springboard to a new art of building which, applied to every aspect of building operations, in both city and country, would everywhere reveal the solid reality and the truly human quality of its conceptions.

The indirect cause of this event was the international architectural competition for the preparation of plans for the Palace of the League of Nations in Geneva. The importance of the competition was felt by many, since three hundred and seventy-seven schemes arrived in Geneva, an imposing mass of finished designs which, set out side by side, would have extended for more than six miles . . .

The jury,* upon whose decisions the fate of the competitors depended, was a faithful mirror of the diverse points of view in vogue at the Schools or accepted by public opinion. It comprised four academicians and four of the most illustrious precursors of modern architecture, while the ninth member stayed prudently equidistant between the two tendencies.

* Lemaesquier (France), Gato (Spain), Burnett (England), — (Italy), Berlage (Holland), Karl Moser (Switzerland), Josef Hoffmann (Austria), Tengbom (Sweden), Horta (Belgium).

Seeing that what was at stake was a possible turning-point in architecture, the Academies, alarmed and agitated, engaged in a power play and did not hesitate to use utterly shameful tactics, devices that had already proven their effectiveness in such contests.* And for the jury it was Hobson's choice.

The League of Nations, split between two conflicting tendencies, the pressing reality of the needs of the present on the one hand and an obsession with the displays and conceits of the past on the other, then committed an act that marks its birthplace with an indelible scar and constitutes a downright legal abuse: the breach of the contract that the duly accepted program of the competition had established between the League and its participants.

Thereafter, it was driven by force of circumstance to plagiarize and pilfer from the victims of its ignorance and fickleness. This, it must be added, was done without the turning of a hair.

A sorry start for an organization called upon to secure the reign of justice in this world.

The issue, in which perspicacity and justice were involved, gave rise to a pretty uproar. To quite a number of people it became apparent that it involved the very methods of the League itself. The world press seized upon it, and in Geneva, sessions of the General Assembly were devoted to it.

In the world of architecture, while a contest registering the temperature of our epoch was played to its conclusion, and when the consolidated forces of the Academies became apparent in their triumph, ideas were exchanged across the frontiers, contacts were made, and, on a summer day in 1928, thanks to the generous hospitality of Mme. Helene de Mandrot, châtelaine of La Sarraz (Switzerland), individuals were brought together who, having examined the problem posed by the art of building at the present time, according to a program drawn up in Paris, could affirm a definite point of view and announce their intention to join together to set architecture henceforth before its true tasks.

* "These plans are drawn with printer's ink rather than India ink!" This petty, and moreover, deceitful assertion, enabled M. Lemaesquier, the representative of France, to cause the one scheme obtaining the highest concentration of votes from the first jury session to the sixty-fifth to be rejected, *hors concours*. Slender means, wide effects!

Thus, the CIAM, or International Congresses for Modern Architecture, and the CIRPAC, or International Committee for the Recognition of Contemporary Architectural Problems, the steering committee of the CIAM, were founded.

Since then, the CIAM have been at work.

Established on four continents and embracing twenty-three countries, they have never ceased to nourish their debates with works having characteristic programs. The dignity of the dwelling, the modern form of habitation, the drawing up of a statute for the dwelling, the principles that bind together the city and the land, the very basis of the built domain, were the successive objects of their concerns. They have bent their energies to the improvement of premises that give shelter to the individual and collective life of man and that, according to the general policies directing their selection, have the power to engender unrest and social hatred, or well-being, trust, and joy.

The sign under which, by co-optation, these men came together from all horizons, was a belief in the destinies of a truly human architecture, to which they were willing, bound together by friendship, to dedicate all their powers of invention, perseverance, courage, and devotion.

It was not mere "numbers" who were joined together but technical and moral "assets."

The CIAM have thus endured for thirteen years, experiencing, according to the circumstances of the moment, joys and sorrows, successes and setbacks.

From their work there came into view, slowly but surely, a statute for the human abode which, pursuant to climates, customs, and races, allows for every diversity of form, but submits each of them to those vital precepts which must dictate the law for every undertaking: a sound notion of the human scale and a profound respect for individuality.

First Congress / The Declaration of La Sarraz

The undersigned architects, representing national groups of modern architects, declare the unity of their views on the fundamental conceptions of architecture and on their professional obligations.

They lay particular stress on the fact that "to construct" is an elementary human activity, closely bound up with the evolution of life. The destiny of architecture is to give expression to the spirit of an age.

They declare today the need for a new conception of architecture, which will fulfill the material, sentimental, and spiritual demands of present-day life. Conscious of the profound disturbances brought about by machinism, they recognize that the transformation of the social structure and of the economic order inevitably entails a corresponding transformation of the architectural phenomenon itself.

They have joined together with the intention of seeking to harmonize the elements that confront them in the modern world and of setting architecture back on its true program, which is of an economic and sociological order, dedicated solely to the service of the human being. It is in this way that architecture will escape the sterilizing hold of the Academies.

Armed with this conviction, they declare their association for the realization of their aspirations.

THE GENERAL ECONOMY

The equipping of a country demands a close liaison between architecture and the general economy.

The notion of "output," which has become an axiom of modern life, does not imply maximum commercial profit but a production sufficient to satisfy human needs fully.

Genuine output will be the fruit of rationalization and normalization, as flexibly applied to architectural projects as it is to methods of industrial production.

It is necessary that architecture, instead of calling almost exclusively upon the services of an anemic craftsman class, make equal use of the vast resources afforded by industrial engineering, even though such a resolve would lead to achievements quite different from those that were the glory of ages past.

URBANISM

Urbanism is the disposition of different premises and places to shelter the development of material, sentimental, and spiritual life in all of its individual and collective manifestations. It embraces both urban aggregations and rural groupings.

Urbanism can no longer submit exclusively to the rules of a gratuitous aestheticism. It is functional by its very nature.

The three primary functions that urbanism must fulfill are:

- 1) dwelling;
- 2) working;
- 3) recreation.

Urbanism is concerned with:

- a) the occupation of the ground;
- b) the organization of traffic;
- c) legislation.

The three primary functions indicated above are not favored by the conditions now prevailing in the urban aggregation. The relationships between the different locations assigned to them must be recalculated in order to achieve a just proportion of built volumes and open spaces. Problems of traffic and density must be considered.

The ill-regulated parceling out of the ground into small lots, the result of sub-

division, sales, and speculation, must be superseded by an economy that will regroup real-estate holdings.

This regrouping, the basis of any urbanism capable of responding to present needs, will assure both the land holders and the community of the equitable distribution of increased values arising out of works in the common interest.

ARCHITECTURE AND PUBLIC OPINION

It is essential that the architects exert an influence on public opinion and bring the means and the resources of the new architecture to its attention. Academic teaching has perverted public taste and more often than not the authentic problems of habitation are not even raised.

Public opinion is ill-informed, and in the matter of the dwelling the users generally formulate their desires very poorly. Consequently, the dwelling has long been left out of the major preoccupations of the architect.

A handful of elementary truths taught in primary school could establish the core for an education in domestic science. This instruction would have the effect of giving new generations a sane conception of the dwelling. These generations, the future clients of the architect, would be in a position to direct him to the solution of the too-long-neglected problem of housing.

ARCHITECTURE AND THE STATE

The architects here present, having a firm determination to work in the true interests of modern society, believe that, by disregarding the problem of the dwelling in favor of a purely prestigious architecture, the Academies, conservators of the past, impede social progress.

Through their control of teaching, they corrupt the calling of the architect from the outset and, by having nearly exclusive rights to government commissions, they prevent the penetration of the new spirit which alone could enliven and renew the art of building.

La Sarraz, 28 June 1928

The CIAM / Article 2 of the Statutes: Composition of the CIAM

EXCERPT FROM THE STATUTES

Article 2: The purposes of the Association are:

1. to give expression to the contemporary architectural problem;
2. to represent the modern architectural idea;
3. to bring this idea into technical, economic, and social circles;
4. to see that the problem of architecture is recognized.

COMPOSITION

The general assembly of the CIAM, or the International Congresses for Modern Architecture, is composed of voting members and corresponding specialist members.

The CIRPAC steering committee, or the International Committee for the Recognition of Contemporary Problems of Architecture, is made up of national delegates elected by the assembly.

CATEGORIES OF MEMBERSHIP IN THE CIAM

1. Voting Members: Architects or urbanists of any country who are invited by the general assembly on a proposal from the CIRPAC.

2. Corresponding Specialist Members: Selected from among the specialists in activities relevant to architecture and urbanism.
3. Associate Members: Enlisted from among the young architects or students who wish to contribute their services to the work of the congresses and who have shown evidence of the necessary abilities.
4. Friends of the Congresses: Anyone sympathizing with the work of the congresses and lending moral or material support.

The national groups established at the present time have been organized wherever modern architecture has an active vehicle, namely: Algeria, Austria, Brazil, Belgium, Czechoslovakia, England, Finland, France, Germany, Greece, Holland, Hungary, Indochina, Italy, Japan, Norway, Poland, Spain, Sweden, Switzerland, Turkey, the U.S.A., and Yugoslavia.

1928-1939 / Eleven Years of Teamwork

From the day of their founding, the CIAM entered on a course toward actual achievements: tasks were assigned by the CIRPAC to each national group; the works were assembled at an appointed time and place; and there were discussions, resolutions, and publications.

This method has yielded results as exceptional as the "analyses" of thirty-three cities which were the groundwork for the Athens Congress and became the basis of the Charter.

The CIAM and the CIRPAC have chosen different countries as locations for their successive assemblies. Welcomed everywhere by municipal authorities and different groups, they gave rise each time, in both professional circles and public opinion, to a fertile inundation, a buoyancy, an awakening.

Geography imposes its limits, and the places of assembly could not be located at the extremities of the civilized world. But, while Japan, Brazil, Argentina, or the Transvaal could not be the hosts to the CIAM or the CIRPAC, they became, perhaps in compensation, uncommonly enthusiastic centers.

The CIRPAC has met in Basel, Paris, Brussels, Berlin, Barcelona, Paris, London, Amsterdam, Brno, and Zurich, the CIAM at La Sarraz, Frankfurt, Brussels, Athens, and Paris.

2 | Toward a
Worthy Dwelling

Second Congress / Frankfurt:

Die Wohnung fur das Existenzminimum

(The Low Cost Dwelling)

The second CIAM Congress met in Frankfurt in 1929, at the invitation of the city authorities and groups that had, for years, begun extensive experimental projects in that city, all dedicated to the family dwelling.

The theme assigned to the national groups by their CIRPAC steering committee was a search for dwelling types that would assemble most economically a maximum of acquisitions, both tangible and technical, from which the home, that vital shelter of the family, might benefit.

A uniformity of presentation was prescribed for all the drawings and anonymity encouraged the work of teams by dimming the occasionally embarrassing aura of certain masters who were too well known.

The outcome was the book of the second CIAM Congress,* which contained a hundred plans for new dwellings from Budapest, Paris, Brussels, Basel, Rotterdam, Utrecht, Dessau, Frankfurt, Vienna, Madrid, Celle, Turin, Lódz, Warsaw, Hamburg, Breslau, Bloomsbury, Karlsruhe, Oslo, Wiesbaden, Zurich, Stockholm, Stuttgart, Berlin, Milan, Moscow, and the U.S.A., classified into:

- single-family houses,
- two-family dwellings,
- multiple-family dwellings.

* *Die Wohnung fur das Existenzminimum*. Internationale Kongresse fur Neues Bauen (CIAM) and Städtisches Hochbauamt in Frankfurt-am-Main, 1930. Third edition, Stuttgart, Julius Hoffmann Verlag, 1933.

3 | Toward a New Form of Habitation

Third Congress / Brussels: *The Rational Housing Development*

The third CIAM Congress met in Brussels in 1930. The national groups had been given the task of working out schemes and preparing reports on a theme growing naturally out of the discussions of the preceding Congress. It was a matter of inquiring into which form of habitation would best accommodate a dwelling arrangement completely adapted to the needs of the family and would at the same time afford the most effective organization for the outside extensions of that dwelling: low, medium, or high buildings.

The problem was no longer that of the family cell itself, but that of the group; it was no longer a question of the individual lot but that of the development.

The inhuman character of large cities was evident to all from the outset, and the need to transform their structure entirely was agreed upon.

For all the proposals one may make regarding the improvement of the dwelling inevitably oblige one to reconsider the city itself. The problem of the dwelling entails that of habitation, and the problem of habitation is ineluctably joined to that of general urbanism.

The outcome of the third Congress was a set of reports and a collection of fifty-six graphic proposals.* These came from Letchworth, Haarlem, Brussels, Jumet, Rot-

* The book of the third CIAM Congress: *Rationelle Bebauungsweisen*. Internationale Kongresse für Neues Bauen, Stuttgart, Julius Hoffman Verlag, 1931, and Frankfurt-am-Main, Verlag Englert und Schlosser, 1931.

terdam, Basel, Amsterdam, Zurich, Turku, Paris, Stockholm, Utrecht, Denmark, Milan, Frankfurt, Wiesbaden, Warsaw, Cologne, Munich, Prague, Budapest, Sosnowiec, Berlin, and Karlsruhe.

The Congress considered the different possible ways of using low, medium, and high buildings. It established that the higher apartment buildings could bring an apt solution to the problem of the dwelling without implying, however, that this solution might be the only acceptable one.

It is thus necessary to pursue the study of habitation in height, even though obstacles of a financial nature, and those resulting from municipal regulations, are set against it, and in spite of the aesthetic or sentimental prejudices that may be hostile to it.

Since the advent of the garden cities, a generous movement launched by the English to release men from the inhumanity of the modern city, municipal officials tend to regard the single-family house as the sole remedy for a disastrous situation. Unhappily, this solution leads to a scattering of dwellings and to the complete alienation of certain inhabited areas. Now the aim is not the dissemination of the elements of the city, but rather—and in this the Germans, like the French and Dutch members of the CIAM, are of quite the same mind—the aeration of the city.

High structures respond to this purpose since they permit a considerable increase in open spaces which can become reserves of trees and verdure.

These reserves closely encircling the dwelling-places will turn the joys of nature into a daily occurrence and not merely an optional Sunday pleasure.

The CIAM do not consider the high apartment building the only possible solution to the problem of the dwelling. But this form of habitation entails so many advantages that it seems necessary to pursue studies concerning the possible opportunities that it affords and to embark on certain experimental applications without delay.

The studies of the Germans, the French, the Dutch, the Czechoslovakians, and the Hungarians all bear witness to the need for a total transformation of the cities, in which the conditions for healthy and normal housing have become impossible. Long before the mode for garden cities, which very quickly proved incapable of meeting the requirements for a rational, healthy, and fruitful life, there was an indication

that high structures were a form of habitation more responsive to the individual and collective needs of men. The utilization of the third dimension to liberate generous areas of ground presents many opportunities for the disposition, in the immediate proximity of the dwelling, of all the social organizations that lighten the tasks of the mistress of the house and the mother of the family: child welfare centers, educational and athletic establishments, and the like.

4

The Home
of Man

Fourth Congress / Athens: *The Functional City*

The Fourth Congress is born under a lucky star. A ship—a beautiful cruising vessel—conveys it for four radiant summer days through the three seas of France, Italy, and Greece to Athens. Glamour surrounds its meetings: the entire Greek cabinet takes part in its principal assembly before an audience of fifteen hundred guests. Then a respite granted to its members gives them an opportunity for personal contacts presided over by a thrilling architecture and nature, on the Acropolis in Athens, at Delphi or at Delos, at Olympia or in the Cyclades.

The return finds them grouped in further discussions aboard ship and unites them in a conclusion that may have historic importance. Marseilles, at the end of the cruise, was the scene of the final dispositions.

That cruise ship was turned into meeting rooms, committee rooms, and secretarial offices. There was only one sound: the hissing and splashing of water along the hull; there was only one atmosphere: youthfulness, trust, modesty, and professional conscience. After those two weeks of fervent work, a precious result: *The Athens Charter*.

The Athens Charter unlocks all doors to the urbanism of modern times. It is a reply to the present chaos of the cities. In the hands of the authorities, itemized, annotated, clarified with an adequate explanation, the Athens Charter is the implement by which the destiny of cities will be set right.

The Charter must be placed on the table of authority, in both the municipalities

and the councils of State. It is not the work of one individual but the conclusion of an elite group of constructors passionately attached to the new art of building, that is to say, armed with the certainty that the *Home of Man*—collapsing of decay in one quarter and skimped beneath the rod of voracious money everywhere else—must be reconsidered: the home of man, the decent and friendly shelter for life's joys and setbacks, the focal point of the family, the receptacle for the individual and collective powers that are latent in each of us, the key-cell of a harmoniously organized society.

These homes are in urban or rural aggregations, in boundless cities or in straggling villages. The crisis of humanity that is rife in the cities has repercussions throughout the country. There is no alternative but to deal with the cities, which are the ruin of mankind today! To deal with them with complete effectiveness one must know these cities, learn what they are and what they are made of. It was necessary to analyze cities of every category, to establish their present condition and to compare them one with another in order to ascertain whether they were being affected by some single malady in different guises. It was necessary to see whether anything real, anything effective, could in fact be done and whether it ought to be undertaken. A remedy to the evil had to be proposed. And, as the measure of those measures to be taken, it was necessary to choose the one that is incontestable: man, the human scale, and their indissoluble relationships with the environment are the measuring-rod, the rule that leads to harmony. That rule is the law of the sun and a respect for the conditions of nature.

Convened in Barcelona from the 29th to the 31st of March 1932, the CIRPAC had set a severe program of analysis to be addressed to thirty-three cities in eighteen countries—Amsterdam, Athens, Baltimore, Bandung, Barcelona, Berlin, Brussels, Budapest, Cologne, Como, Dalat, Dessau, Detroit, Frankfurt, Geneva, Genoa, The Hague, Karlsruhe, Littoria, London, Los Angeles, Madrid, Oslo, Paris, Prague, Rome, Rotterdam, Stockholm, Utrecht, Verona, Warsaw, Zagreb, and Zurich. This is a considerable, indeed an immense piece of work, if one bears in mind that it is a matter of free labor and necessitates the assembling of teams.* Following the established custom of the CIAM, all the drawings are divided according to a standard module and

* Certain maps for Berlin, London, and Paris cover areas of 175 square feet, and three maps are required for the presentation of each city.

mounted on aluminum sheets furnished by a Swiss company. These sheets are set up everywhere aboard the boat; in Athens they form the substance of an imposing exhibition. They exist, they remain, they are at our disposal from now on, an authoritative source for consultation in this hour of premonition, less than ten years before the world-wide scramble for spoils that will cover the earth with debris and will, more than anything else, pose the cardinal question: that of the reconstruction of the human habitat, that of the *Home of Man*.

Result:

- a) the book of the Fourth Congress of Athens, the anticipated United States publication of which has been delayed on account of the insecurity of the times;
- b) a major album of plates, edited by the Dutch, publication of which has been subject to the same difficulties;
- c) the present work, published through the initiative of the CIAM-France Group: an explanation of *The Athens Charter*.

5

For the City
and for
the Earth

Fifth Congress / Paris: *The Dwelling and Leisure*

The fifth CIAM Congress is held in Paris amid the ostentation of the international "Art and Technics" Exhibition.

As far back as 1932 the French delegation of the CIRPAC, acting on the motivating idea of the CIAM that "The real question to be concerned with in the modern world is that of the dwelling," had made a proposal to the appointed organizers of the future Paris exhibition to name this world-wide confrontation the "International Exhibition of Habitation." Precise overall plans and a comprehensive program* accompanied this suggestion. It went unanswered.

A new proposal was made in 1935 on the theme "A Modern Form of Habitation." Its realization would be the formation of an "Annex to the Exhibition," on the Bastion Kellermann in the south of Paris. A "unit of habitation" accommodating nearly three thousand residents was to be erected as *a reality*. Every problem would be dissected before the visitors: horizontal and vertical movement, the foundation, various forms of construction in the main elements of the building, the many varied dwelling types for every social class and every kind of family, and the "extensions of the dwelling" (the common facilities for household provisioning, health and sickness care, daily leisure, and the like). A large part of this imposing unit might be displayed in an unfinished stage of building—as a demonstration of construction methods, available materials, and equipment—and showing solutions to problems of sound and thermal

* A 36-page brochure: 1937: *Exposition Internationale de l'Habitation*

insulation and "regulated air" (heating, cooling, and ventilation). A small part of the undertaking would be placed in the hands of the national groups of the CIAM, the remainder being made up of the French forces.

Soundly prepared, the project was accepted by the General Directorate of the Beaux-Arts and the Prefect of the Seine, and it was passed by the Legislative Assembly. But its back was broken some time afterward in the Paris Municipal Council as the result of an unforeseeable maneuver. A serviceable weapon had been concealed in the law: on the close of the Exhibition, the landowner (the Municipal Council) was given the option to demand the demolition of the work, *built as a reality*, and representing an outlay of forty-two million francs. That sentence in the law, which had in fact been inserted into the text, had not been called to the attention of the scheme's originators, who believed it alluded only to accessories to the CIAM-France enterprise, constructed on secondary pieces of ground. It was not until all the plans were prepared and all the necessary arrangements were made at the 1935 meeting of the CIRPAC in London, that they were bluntly informed otherwise

The CIAM were undaunted. They organized their Paris Congress within the framework for such manifestations exactly as prescribed in the 1937 "Art and Technics" Exhibition program.

The theme relates closely to the reality of the epoch: "The Dwelling and Leisure" (City and Country).

The dwelling antagonistic to the family in the city—the dwelling in bad condition, which discourages one, the dwelling deprived of its indispensable extensions, the harbinger of a population decline.

The rural dwelling, collapsing with decay, so often unhealthy, ill-adapted to present conceptions of minimum comfort; the fields, vacated for a great many reasons, will never be occupied again if the family cannot find there what makes daily life agreeable and renders the daily task less overwhelming.

To city dwellings, the key is to be found in urbanism. For only a new urbanism will call into action the factors bearing the needed joys, the "essential joys": the sun, space, and verdure.

The creation of rural dwellings raises problems of tradition, of the region, of

folklore, but it also provides an affirmative answer to the new material and spiritual needs, created in the very atmosphere of the age.

Today, the abyss of unemployment yawns before a modern society possessing armies of docile slaves which are the machines. Let this anguish change into calm security, let this unemployment take another name, hereafter described by these words: *free time!* This is the only conclusion to which wisdom may lead, the day when normal employment will have recovered its rights. The inevitable advent of free time in a saturated economic system poses a most important problem. With what disinterested activity will these hours be occupied? We shall have to give our minds to it and prepare the receptacle for new activities, for adolescence and the mature ages alike. The institution of new practices, the establishment of *grounds and premises* capable of receiving them. This is a matter for architecture, a matter for urbanism.

The Paris 1937 CIAM Congress has fully opened the debate. The book of this Fifth Congress* treats its aspects at greater length.

* The fifth CIAM Congress, Paris, 1937: "Logis et Loisirs"; Collection de l'Equipement de la Civilization Machiniste, *L'Architecture d'Aujourd'hui*, Paris, 1937.

6

The CIAM-France
Group Intervenes
Today

The CIAM doctrine has found its widest audience among the professionals and, to a singular extent, among municipal authorities beyond our borders.

Before the world-wide disaster, just as today at an hour when governments are studying the manner of rebuilding the accumulated ruins, they appealed to the theses and the men of the CIAM. The plans for the city of Amsterdam are in the hands of the president of this group; Stockholm is developing its eminently social structures on the CIAM doctrine; Brazil and Argentina invite CIAM personalities to conduct lectures in urbanism and to lay the foundations for major plans; Turkey wishes to reconstruct its plans for Smyrna; Finland has entrusted the Finnish delegate of the CIAM as the director of its reconstruction; Belgium has placed the CIAM group at the head of the Departments of Architecture and Urbanism in the Commission for National Reconstruction; Japan commissioned the CIAM delegate with official works; the Catalonian government entrusted the plan for Barcelona, as well as the construction of model housing quarters, to one of the vice-presidents of the CIAM (aided by a French colleague); for these last ten years the CIAM group in Algiers has struggled over the plan for that city, improving the scheme in a significant manner; in Italy the CIAM group was appealed to on many occasions; in Greece the entire government took part in the main meetings of the Fourth Congress in Athens, and expressed forceful opinions in several pronouncements; Harvard University in the U.S.A. has conferred its chair of architecture and urbanism upon another vice-president of the CIAM, and then appointed the secretary general of the CIAM as lecturer in the history of architecture; a "Committee on Highway Intersections" in the U.S.A. applies the doctrine of the CIAM to the inextricable traffic of New York and Chicago; the Rockefeller Foundation (The Museum of Modern Art in New York) invited one of the originators of La Sarraz to explain the CIAM thesis in twenty-two cities in the U.S.A. The teaching of architecture and urbanism at the University of Johannesburg in the Transvaal

is based solely on the CIAM theses. Through the instrumentality of the President of the International Red Cross in Switzerland, the CIAM group has come to an agreement with the "International Relief Union" to publish the review *Civitas, International Review for the Reconstruction of the Human City*, a major organ of intelligence in the service of municipal authorities and professionals in all countries: "The president of the International Relief Union considers that at first sight the I. R. U. would not deviate in the least from its objective in contributing to the success of a venture whose object would be to alleviate human sufferings, notably those that ensue from the destruction of housing for whatever cause: natural disasters, wars, public disturbances, and the like." So said the president, Senator Ciraolo, with regard to this initiative on the part of the CIAM.

France has not, as yet, called upon the French CIAM group to contribute to the study of problems posed by the reconstruction of destroyed cities. In 1937, the Directorate of the "Art and Technics" Exhibition commissioned the public health specialists G. and A. Daniel to write *Art et Technique de la Santé*, the definitive statement on the progress achieved to date regarding this question. In this serious, two-volume work, which includes an important contribution to habitation, no mention was made of the CIAM. Questioned later on, one of the authors disclosed that he had "followed the 'Fortnight of Housing and Planning' organized in July 1937 under the patronage of important French associations; I am astonished and painfully surprised, now that I have been able to acquaint myself with the doctrines of the CIAM, that a thesis as consequential as that of the CIAM had not so much as once been referred to, by either the speakers or the chairmen, in the entire course of that magnificent conference . . . !"

In this hour of major preparation, 1941, the CIAM-France group, offering the country its complete devotion, has felt it a duty to make *The Athens Charter* available to the public.

The Charter

The following note appears at the end of the 1943 edition: "The terminology of the Charter without a doubt requires some adjustments, but one must not lose sight of the fact that the text presented here is the result of debates among the assembled representatives speaking ten different languages."

One | **Generalities**

The City and Its Region

Observations

- 1 The city is only one element within an economic, social, and political complex which constitutes the region.

The political city unit rarely coincides with its geographical unit, that is to say, with its region. The laying out of the political territory of cities has been allowed to be arbitrary, either from the outset or later on, when, because of their growth, major agglomerations have met and then swallowed up other townships. Such artificial layouts stand in the way of good management for the new aggregation. Certain suburban townships have, in fact, been allowed to take on an unexpected and unforeseeable importance, either positive or negative, by becoming the seat of luxurious residences, or by giving place to heavy industrial centers, or by crowding the wretched working classes together. In such cases, the political boundaries that compartmentalize the urban complex become paralyzing. An urban agglomeration forms the vital nucleus of a geographical expanse whose boundary is determined only by the area of influence of another agglomeration. The conditions vital to its existence are determined by the paths of communication that secure its exchanges and closely connect it with its particular area. One can consider a problem of urbanism only by continually referring to the constituent elements of the region, and chiefly to its geography, which

is destined to play a determining role in this question—the lines of watersheds and the neighboring crests that delineate natural contours and confirm paths of circulation naturally inscribed upon the earth. No undertaking may be considered if it is not in accord with the harmonious destiny of the region. The city plan is only one of the elements of this whole that constitutes the regional plan.

2 Juxtaposed with economic, social, and political values are values of a physiological and psychological origin which are bound up in the human person and which introduce concerns of both an individual and a collective order into the discussion. Life flourishes only to the extent of accord between the two contradictory principles that govern the human personality: the individual and the collective.

In isolation, man feels defenseless, and so, spontaneously, he attaches himself to a group. Left to his own devices, he would construct nothing more than his hut and, in that state of insecurity, would lead a life of jeopardy and fatigue aggravated by all the anguish of solitude. Incorporated in a group, he feels the weight of the constraints imposed by inevitable social disciplines, but in return he is to some extent ensured against violence, illness, and hunger. He can think of improving his dwelling and he can also assuage his deep-seated need for social life. Once he has become a constituent element of a society that sustains him, he contributes, directly or indirectly, to the innumerable undertakings that provide security for his physical life and foster his spiritual life. His efforts become more fruitful and his more adequately protected liberty stops short only at the point where it would threaten the liberty of others. If there is wisdom in the undertakings of the group, the life of the individual is enlarged and ennobled by them. But if sloth, stupidity, and selfishness preponderate, the group—anemic and given over to disorder—brings its members nothing but rivalry, hatred, and disenchantment. A plan is well conceived when it allows fruitful cooperation while making maximum provision for individual liberty, for the effulgence of the individual within the framework of civic obligation.

3 These biological and psychological constants are subject to the influence of their environment—the geographical and topographical condition, the economic circumstances, the political situation. In the first place they are influenced by the geographical and topographical condition, the constitution of the elements, land and water, nature, soil, climate . . .

Geography and topography play a considerable role in the destiny of men. It must never be forgotten that the sun dominates all, imposing its law upon every undertaking whose object is to safeguard the human being. Plains, hills, and mountains likewise intermediate, to shape a sensibility and to give rise to a mentality. While the hillsman readily descends to the plain, the plainsman rarely climbs up the valleys or struggles over mountain passes. It is the crestlines of the mountain ranges that have delimited the “gathering zones” in which, little by little, men have gathered in clans and tribes, joined together by common customs and usages. The ratio of the elements of earth and water—whether it comes into play on the surface, contrasting the lake or river regions with the expanses of the steppes, or whether it is expressed as comparative rainfall, resulting in lush pasturelands here and heaths or deserts elsewhere—it also fashions mental attitudes which will be registered in men’s undertakings and which will find their expression in the house, in the village, and in the city. Depending on the angle at which the sun strikes the meridional curve, the seasons collide abruptly or succeed one another with imperceptible transitions; and although, in its continuous roundness, the Earth admits of no interruption from one parcel of land to the next, countless combinations emerge, each with its particular characteristics. Finally, the races of mankind, with their varied religions and philosophies, multiply the diversity of human undertakings, each proposing its own mode of perception and its own reason for being.

4 Secondly, these constants are affected by economic circumstances, by the resources of the region, by its natural and artificial contacts with the outside world . . .

Whether it be a circumstance of wealth or of poverty, the economic situation is one of the mainsprings of life, determining whether its movement will be in a progressive or a recessive direction. It plays the role of an engine which, depending on the power of its pulsations, brings prodigality, counsels prudence, or makes sobriety an imperative; it conditions the variations that delineate the history of the village, the city, and the country. The city that is surrounded by a region under cultivation is assured of its provisions. The city that has a precious substratum at its disposal becomes rich in substances that will serve it as exchange currency, especially if it is equipped with a traffic network ample enough to permit convenient contact with its near and distant neighbors. The degree of tension in the economic spring, though partly dependent on invariable circumstances, may be modified at any time by the advent of unexpected forces which chance or human initiative may render productive or leave inoperative. Neither latent wealth requiring exploitation nor individual energy has any absolute character. All is movement and, in the long run, economics is never anything but a momentary value.

5 Thirdly, the constants are affected by the political situation and the administrative system.

The political situation is a more unstable phenomenon than any other, the mark of a country's vitality, the expression of a wisdom that is approaching its apogee or is already on the slope of its decline . . . While politics is essentially unstable by nature, the administrative system, which is its outcome, possesses an inherent stability which affords it a greater permanence over time and precludes too frequent modification. As a manifestation of changeable policy, its duration is assured by its own nature and by the very force of things. It is a system that, within somewhat rigid limits, administers the territory and the society consistently, imposes its ordinances upon them

and, by bearing evenly on all the levers of control, determines uniform modes of action throughout the entire country. Yet, even if the merits of this economic and political framework have been confirmed by experience over a period of time, it can be shaken in a moment, whether in one of its parts or in the whole. Sometimes a scientific discovery is enough to upset the equilibrium, to reveal the discord between the administrative system of yesterday and the pressing realities of today. It may happen that communities, having managed to renovate their own particular framework, are crushed by the overall framework of the country—and this latter may, in turn, be immediately subject to the assault of major worldwide trends. There is no administrative framework that can lay claim to immutability.

6 Throughout history, specific circumstances have determined the characteristics of the city: military defense, scientific discoveries, successive administrations, and the progressive development of communications and means of transportation by land, water, rail, and air routes.

History is inscribed in the layouts and in the architectures of cities. Surviving layouts and architectures constitute a guideline which, together with written and graphic documents, enables us to recreate the successive images of the past. The motivations that gave birth to the cities were varied in nature. Sometimes it was a defensive asset—and a rocky summit or a loop of a river saw the growth of a fortified village. Sometimes it was the intersection of two roads, a bridgehead, or an indentation in the coastline that determined the location of the first settlement. The city had an uncertain form, most frequently that of a circle or semicircle. When it was a center of colonization, it was organized like a camp built on axes at right angles and girdled by rectilinear stockades. Everything was disposed according to proportion, hierarchy, and convenience. The highroads set out from the gates of the enclosure and threaded indirectly to distant points. One can still recognize in city plans the original close-set nucleus of the early market town, the successive enclosing walls, and the directions of divergent routes. People crowded together within the walls and, according to the

degree of their civilization, enjoyed a variable proportion of well-being. In one place, deeply human codes dictated the choice of dispositions while, in another, arbitrary constraints gave rise to flagrant injustices. Then the age of machinism arose. To an age-old measure that one would have thought immutable—the speed of man's walking pace—was added a new measure, in the course of evolution—the speed of mechanized vehicles.

7 Hence the rationale governing the development of cities is subject to continual change.

The growth or decrease of a population, the prosperity or decline of the city, the bursting of fortified walls that become stifling enclosures, the new means of communication that extend the area of exchange, the beneficial or harmful effects of a policy of choice or submission, the advent of machinism, all of this is just movement. With the progression of time, certain values become unquestionably engrained in the heritage of a group, be they of a city, a country, or humanity in general; decay, however, must eventually come to every aggregation of buildings and roads. Death overtakes works as well as living beings. Who is to discriminate between what should remain standing and what must disappear? The spirit of the city has been formed over the years; the simplest buildings have taken on an eternal value insofar as they symbolize the collective soul; they are the armature of a tradition which, without meaning to limit the magnitude of future progress, conditions the formation of the individual just as climate, geographical region, race, and custom do. Because it is a "micro-cosmic motherland," the city admits of a considerable moral value to which it is indissolubly attached.

8 The advent of the machinist era has provoked immense disturbances in the conduct of men, in the patterns of their distribution over the earth's surface and in their undertakings: an unchecked trend, propelled by mechanized speeds, toward

concentration in the cities, a precipitate and world-wide evolution without precedent in history. Chaos has entered the cities.

The use of the machine has completely disrupted the conditions of work. It has upset an ancient equilibrium, dealing a fatal blow to the craftsmen classes, emptying the fields, congesting the cities, and, by tossing century-old harmonies on the dung-hill, disturbing the natural relationships that used to exist between the home and places of work. A frenzied rhythm coupled with a discouraging precariousness disorganizes the conditions of life, impeding the mutual accord of fundamental needs. Dwellings give families poor shelter, corrupting their inner lives; and an ignorance of vital necessities, as much physical as moral, bears its poisoned fruits: illness, decay, revolt. The evil is universal, expressed in the cities by an overcrowding that drives them into disorder, and in the countryside by the abandonment of numerous agricultural regions.

Two

**The Prevailing
Condition of the
Cities – Critical
Examination and
Remedial Measures**

Habitation

Observations

- 9 The population is too dense within the historic nuclei of cities, as it is in certain belts of nineteenth-century industrial expansion—reaching as many as four hundred and even six hundred inhabitants per acre.

Density—the ratio between the size of a population and the land area that it occupies—can be entirely changed by the height of buildings. But, until now, construction techniques have limited the height of buildings to about six stories. The admissible density for structures of this kind is from 100 to 200 inhabitants per acre. When this density increases, as it does in many districts, to 240, 320, or even 400 inhabitants, it then becomes a slum, which is characterized by the following symptoms:

1. An inadequacy of habitable space per person;
2. A mediocrity of openings to the outside;
3. An absence of sunlight (because of northern orientation or as the result of shadow cast across the street or into the courtyard);
4. Decay and a permanent breeding ground for deadly germs (tuberculosis);
5. An absence or inadequacy of sanitary facilities;
6. Promiscuity, arising from the interior layout of the dwelling, from the poor arrangement of the building, and from the presence of troublesome neighborhoods.

Constrained by their defensive enclosures, the nuclei of the old cities were generally filled with close-set structures and deprived of open space. But, in compensation, verdant spaces were directly accessible, just outside the city gates, making air of good quality available nearby. Over the course of the centuries, successive urban rings accumulated, replacing vegetation with stone and destroying the verdant areas—the lungs of the city. Under these conditions, high population densities indicate a permanent state of disease and discomfort.

10 In these congested urban sectors the housing conditions are disastrous, for lack of adequate space allocated to the dwelling, for lack of verdant areas in its vicinity and, ultimately, for lack of building maintenance (a form of exploitation based on speculation). This state of affairs is aggravated further by the presence of a population with a very low standard of living, incapable of taking defensive measures by itself (its mortality rate reaching as high as twenty percent).

The interior condition of a dwelling may constitute a slum, but its dilapidation is extended outside by the narrowness of dismal streets and the total absence of those verdant spaces, the generators of oxygen, which would be so favorable to the play of children. The cost of a structure erected centuries ago has long since been amortized; yet its owner is still tacitly allowed to consider it a marketable commodity, in the guise of housing. Even though its habitable value may be nil, it continues with impunity, and at the expense of the species, to produce substantial income. A butcher would be condemned for the sale of rotten meat, but the building codes allow rotten dwellings to be forced on the poor. For the enrichment of a few selfish people, we tolerate appalling mortality rates and diseases of every kind, which impose crushing burdens on the entire community.

11 The growth of the city gradually devours the surrounding verdant areas of which its successive belts once had a view. This ever-increasing remoteness from natural elements aggravates the disorder of public health all the more.

The more the city expands, the less the "conditions of nature" are respected within it. By "conditions of nature" we mean the presence, in sufficient proportions, of certain elements that are indispensable to living beings: sun, space, and verdure. An uncontrolled expansion has deprived the cities of these fundamental nourishments, which are of a psychological as well as physiological order. The individual who loses contact with nature is diminished as a result, and pays dearly, through illness and moral decay, for a rupture that weakens his body and ruins his sensibility, as it becomes corrupted by the illusory pleasures of the city. In this regard, all bounds have been exceeded in the course of these last hundred years, and this is not the least cause of the malaise with which the world is burdened at the present time.

12 Structures intended for habitation are spread out across the face of the city, at variance with the requirements of public health.

The first obligation of urbanism is to come into accord with the fundamental needs of men. The health of every person depends to a great extent on his submission to the "conditions of nature." The sun, which governs all growth, should penetrate the interior of every dwelling, there to diffuse its rays, without which life withers and fades. The air, whose quality is assured by the presence of vegetation, should be pure and free from both inert dust particles and noxious gases. Lastly, space should be generously dispensed. Let us bear in mind that the sensation of space is of a psycho-physiological order, and that the narrowness of streets and the constriction of courtyards create an atmosphere as unhealthy for the body as it is depressing to the mind. The Fourth Congress of the CIAM, held in Athens, has proceeded from this postulate: sun, vegetation, and space are the three raw materials of urbanism.

Adherence to this postulate will enable us to judge the existing condition of things and to appraise new propositions from a truly human point of view.

13 The most densely populated districts are located in the least favored zones (on badly oriented slopes, or in sectors invaded by fogs and industrial gases and vulnerable to floods, etc. . . .).

No legislation has yet been effected to lay down the conditions for the modern habitation, not only to ensure the protection of the human person but also to provide him with the means for continual improvement. As a result, the land within the city, the residential districts, the dwellings themselves, are allocated from day to day at the discretion of the most unexpected—and at times the basest—interests. The municipal surveyor will not hesitate to lay out a street that will deprive thousands of dwellings of sunshine. Certain city officials will see fit, alas, to single out for the construction of a working-class district a zone hitherto disregarded because it is invaded by fog, because the dampness of the place is excessive, or because it swarms with mosquitoes . . . They will decide that some north-facing slope, which has never attracted anyone precisely because of its exposure, or that some stretch of ground reeking with soot, smoking coal slag, and the deleterious gases of some occasionally noisy industry, will always be good enough to house the uprooted, transient populations known as unskilled labor.

14 Airy and comfortable structures (homes of the well-to-do) occupy the favored areas, sheltered from hostile winds, and are assured of pleasing views of the landscape—a lake, the sea, the mountains, etc.—and of abundant sunshine.

The favored areas are generally taken up by luxury residences, thus giving proof that man instinctively aspires, whenever his means allow it, to seek living conditions and a quality of well-being that are rooted in nature itself.

15 This biased allotment of habitation is sanctioned by custom and by the supposedly justified provisions of municipal administrations, namely, zoning resolutions.

Zoning is an operation carried out on the city map with the object of assigning every function and every individual to its rightful place. It is based on necessary differentiations between the various human activities, each of which requires its own specific space: residential quarters, industrial or commercial centers, halls or grounds intended for leisure hours. But while the force of circumstances differentiates the wealthy residence from the modest dwelling, no one has the right to transgress rules that ought to be inviolable by allowing only the favored few to benefit from the conditions required for a healthy and well-ordered life. It is urgently necessary to modify certain practices. An implacable legislation is needed to ensure that a certain quality of well-being is accessible to everyone, regardless of monetary considerations. It is necessary that precisely defined urban regulations forbid, once and for all, the practice of depriving entire households of light, air, and space.

16 Structures built along transportation routes and around their intersections are detrimental to habitation because of noise, dust, and noxious gases.

Once we are willing to take this factor into consideration we will assign habitation and traffic to independent zones. From then on, the house will never again be fused to the street by a sidewalk. It will rise in its own surroundings, in which it will enjoy sunshine, clear air, and silence. Traffic will be separated by means of a network of foot-paths for the slow-moving pedestrian and a network of fast roads for automobiles. Together these networks will fulfill their function, coming close to housing only as occasion demands.

17 The traditional alignment of habitations on the edges of streets ensures sunlight only for a minimum number of dwellings.

The traditional alignment of buildings along streets involves an inevitable arrangement of the built volume. When they intersect, parallel or oblique streets delineate square, rectangular, trapezoidal, and triangular areas of differing capacities which, once built up, form city "blocks." The need to admit light into the centers of these blocks gives birth to interior courtyards of varied dimensions. Unhappily, municipal regulations leave the profit-seekers free to confine these courts to utterly scandalous dimensions. And so we come to this dismal result: one façade out of four, whether it faces the street or the courtyard, is oriented to the north and never knows the sun, while the other three, owing to the narrowness of the streets and courts they face and to the resulting shadow, are half deprived of sunlight also. Analysis reveals that the proportion of city façades that get no sun varies from one-half to three-quarters of the total—and in certain cases, this ratio is even more disastrous.

18 Structures intended for collective use, as habitations, are arbitrarily distributed.

The dwelling shelters the family, a function that constitutes an entire program in itself and poses a problem whose solution—which in days gone by was sometimes a happy one—is nowadays most often left to chance. But outside the dwelling, and close to it, the family also requires the presence of collective institutions that could be considered actual extensions of the dwelling. These are: supply centers, medical services, infant nurseries, kindergartens, and schools, to which should be added the intellectual and athletic organizations that give adolescents an opportunity for the work or play suited to the particular aspirations of their age, and, to complete the "health-equipment," grounds and playing fields adapted to physical culture and daily sports activities for everyone. Although the benefit to be derived from these collective institutions is unquestionable, the masses are still badly in need of them. Their realiza-

tion has barely been sketched out, and this in the most fragmentary manner, quite unrelated to overall housing needs.

19 Schools, particularly, are frequently situated on traffic routes and are too far away from housing.

Apart from any judgment as to their curricula and their architectural disposition, schools, as a general rule, are badly situated within the urban complex. Too far from the dwelling, they put the child in contact with the perils of the street. Moreover, they usually provide only instruction as such, so that the child under six and the adolescent over thirteen are consistently deprived of the pre-school and post-school organizations that would respond to the most imperative needs of those ages. The prevailing condition and distribution of the built domain is ill suited to the innovations that would not only shield childhood and youth from multifarious dangers but would also offer them the conditions that, alone, make a sound education possible, an education capable of guaranteeing them, in addition to instruction, a full physical as well as moral development.

20 The suburbs are laid out without any plan and without a normal connection to the city.

The suburbs are the degenerate progeny of the *faubourgs*, or "bastard boroughs." The borough was once a unit organized within a surrounding defensive wall. The *faux bourg* or false borough was backed against the wall from the outside and built out along an approach road deprived of protection. This was the outlet for the excess population, and the people had to accommodate themselves to its insecurity whether they liked it or not. At the time when the creation of a new fortified wall eventually embraced the false borough and its stretch of road within the bosom of the city, the first violence was done to the normal rules governing city layouts. The age of machinism is characterized by the suburb, a stretch of ground with no particu-

lar plan where all the dregs of society are dumped, where all the risky ventures are tried out, where the most modest working classes often live next to industries that are assumed, *a priori*, to be temporary—though some of them will experience enormous growth. The suburb is the symbol for waste, and, at the same time, for the risky venture. It is a kind of scum churning against the walls of the city. In the course of the nineteenth and the twentieth centuries this scum has become a flood tide, then an inundation. It has seriously compromised the destiny of the city and its possibilities of growth according to rule. The abode of an unsettled population enmeshed in numerous afflictions, the suburb is a culture medium of revolt, and is often ten times, even a hundred times, larger than the city. There are those who seek to turn these disordered suburbs, in which the time-distance function poses an ominous and unanswerable question, into garden-cities. Theirs is an illusory paradise, an irrational solution. The suburb is an urbanistic folly, scattered across the entire globe and carried to its extreme consequences in America. It constitutes one of the greatest evils of the century.

21 Attempts have been made to incorporate the suburbs into the administrative system.

Too late! The suburb has been belatedly incorporated into the administrative system. Throughout the entire area of the suburb an improvident code has allowed property rights to become established, and it declares them inviolable. The owner of a piece of vacant ground on which some shack, shed, or workshop has sprouted up, cannot be expropriated without multiple difficulties. The population density is very low and the ground is barely exploited; nevertheless, the city is obliged to furnish the suburban expanse with the necessary utilities and services: i.e., roads, utility mains, means of rapid communication, policing, street lighting and cleaning, hospital and school facilities, and the rest. The ruinous expense caused by so many obligations is shockingly disproportionate to the few taxes that such a scattered population can produce. On the day the Administration intervenes to redress the situation, it comes up against insurmountable obstacles and ruins itself in vain. To ensure the

city the means for a harmonious development, the Administration must take responsibility for the management of the land surrounding the city before the suburbs spring up.

22 The suburbs are often mere aggregations of shacks hardly worth the trouble of maintaining.

Flimsily constructed little houses, boarded hovels, sheds thrown together out of the most incongruous materials, the domain of poor creatures tossed about in an undisciplined way of life—that is the suburb! Its bleak ugliness is a reproach to the city it surrounds. Its poverty, which necessitates the squandering of public funds without the compensation of adequate tax resources, is a crushing burden for the community. It is the squalid antechamber of the city; clinging to the major approach roads with its side streets and alleys, it endangers the traffic on them; seen from the air, it reveals the disorder and incoherence of its distribution to the least experienced eye; for the railroad traveler, excited by the thought of the city, it is a painful disillusion!

Requirements

23 Henceforth, residential districts must occupy the best locations within the urban space, using the topography to advantage, taking the climate into account, and having the best exposure to sunshine with accessible verdant areas at their disposal.

The cities, as they exist today, are built under conditions injurious to the public and private good. History shows that their founding and their development have resulted from a succession of deep-seated causes, and that not only have the cities been expanded, but they have also been often renewed over the centuries, and on the

same site. By abruptly changing certain century-old conditions, the age of the machine has reduced the cities to chaos. Our task at this point is to extricate them from their disorder by means of plans that will provide for the staging of undertakings over a period of time. The problem of the dwelling, of habitation, takes precedence over all others. The best locations in the city must be reserved for it; and if they have been pillaged by greed or indifference, every effort must be made to recover them. Several factors contribute to the well-being of the dwelling. We must seek simultaneously the finest views, the most healthful air (taking account of winds and fogs), the most favorably exposed slopes, and, finally, we must make use of existing verdant areas, create them if there are none, or restore them if they have been ruined.

24 The selection of residential zones must be dictated by considerations of public health.

The universally acknowledged laws of hygiene bring a grave indictment against the sanitary conditions of cities. It is not enough to formulate a diagnosis or even to discover a solution; the solution must be prescribed by the responsible authorities. In the name of public health, entire districts should be condemned. Some of them, the result of hasty speculation, merit only the pickaxe. Others should be spared in part, for the sake of their historical associations or for the elements of artistic value that they contain. There are ways of saving whatever deserves to be saved while relentlessly destroying whatever constitutes a hazard. But it is not enough to make the dwelling healthier; its outside extensions—places for physical education buildings and various playing fields—must be created and planned for by incorporating the areas that will be set aside for them into the overall plan ahead of time.

25 Reasonable population densities must be imposed, according to the forms of habitation suggested by the nature of the terrain itself.

The population densities of a city must be laid down by the authorities. They may vary according to the allocation of urban land to housing and may produce, depending on the total figure, a widespread or a compact city. To determine the urban densities is to perform an administrative act heavy with consequences. With the advent of the machine age, the cities expanded without control and without constraint. Negligence is the only valid explanation for that inordinate and utterly irrational growth, which is one cause of their troubles today. There are specific reasons for the birth of the cities and for their growth, and these must be carefully studied in terms of forecasts extending over a period of time: fifty years, let us say. A population figure can then be envisaged. It will be necessary to house this population, which involves anticipating which space will be used, foreseeing what "time-distance" function will be its daily lot, and determining the surface and area needed to carry out this fifty-year program. Once the population figure and the dimensions of the land are fixed, the "density" is determined.

26 A minimum number of hours of exposure to the sun must be determined for each dwelling.

Science, in its studies of solar radiations, has disclosed those that are indispensable to human health and also those that, in certain cases, could be harmful to it. The sun is the master of life. Medicine has shown that tuberculosis establishes itself wherever the sun fails to penetrate; it demands that the individual be returned, as much as possible, to "the conditions of nature." The sun must penetrate every dwelling several hours a day even during the season when sunlight is most scarce. Society will no longer tolerate a situation where entire families are cut off from the sun and thus doomed to declining health. Any housing design in which even a single dwelling is exclusively oriented to the north, or is deprived of the sun because it is cast in shadow,

will be harshly condemned. Builders must be required to submit a diagram showing that the sun will penetrate each dwelling for a minimum of two hours on the day of the winter solstice, failing which, the building permit will be denied. To introduce the sun is the new and most imperative duty of the architect.

27 The alignment of dwellings along transportation routes must be prohibited.

The transportation routes, that is to say, the streets of our cities, have disparate purposes. They accommodate the most dissimilar traffic loads and must lend themselves to the walking pace of pedestrians as well as to the driving and intermittent stopping of rapid public transport vehicles, such as buses and tramcars, and to the even greater speeds of trucks and private automobiles. The sidewalks were created to avoid traffic accidents in the days of the horse, and only then after the introduction of the carriage; today they are absurdly ineffectual now that mechanized speeds have introduced a real menace of death into the streets. The present-day city opens its countless front doors onto this menace and its countless windows onto the noise, dust, and noxious gases produced by the heavy mechanized traffic flow. This state of things demands radical change: the speed of the pedestrian, some three miles an hour, and the mechanized speeds of thirty to sixty miles an hour must be separated. Habitation will be removed from mechanized speeds, which will be channeled into a separate roadbed, while the pedestrian will have paths and promenades reserved for him.

28 The resources offered by modern techniques for the erection of high structures must be taken into account.

Every age has used the construction technique imposed on it by its own particular resources. Until the nineteenth century, the art of building houses knew only bearing walls of stone, brick, or timber framing and floors made of wooden beams. In the nineteenth century, a transitional period made use of iron sections; and then, finally,

in the twentieth century came homogeneous structures made entirely of steel or reinforced concrete. Before this completely revolutionary innovation in the history of building construction, builders were unable to erect premises exceeding six stories. The times are no longer so limited. Structures now reach sixty-five stories or more. What still must be resolved, through a serious examination of urban problems, is the most suitable building height for each particular case. As to housing, the arguments postulated in favor of a certain decision are: the choice of the most agreeable view, the search for the purest air and the most complete exposure to sunshine, and finally, the possibility of establishing communal facilities—school buildings, welfare centers, and playing fields—within the immediate proximity of the dwelling, to form its extensions. Only structures of a certain height can satisfactorily meet these legitimate requirements.

29 High buildings, set far apart from one another, must free the ground for broad verdant areas.

Indeed, they will have to be situated at sufficiently great distances from one another, or else their height, far from being an improvement of the existing malaise, will actually worsen it; that is the grave error perpetrated in the cities of the two Americas. The construction of a city cannot be abandoned, without a program, to private initiative. Its population density must be great enough to justify the installation of the communal facilities that will form the extensions of the dwelling. Once this density has been determined, a presumable population figure will be adopted, permitting the calculation of the area to be reserved for the city. To determine the manner in which the ground is to be occupied, to establish the ratio of the built-up area to that left open or planted, to allocate the necessary land to private dwellings and to their various extensions, to fix an area for the city that will not be exceeded for a specified period of time—these constitute that important operation, which lies in the hands of the city authority: the promulgation of a "land ordinance." Thus, the city will henceforth be built in complete security and, within the limits of the rules prescribed by this statute, full scope will be given to private initiative and to the imagination of the artist.

Observations

30 Open spaces are generally inadequate.

In certain cities, open spaces still exist. They are, for our day, the miraculously surviving remnants of reserves established during the course of history: parks surrounding princely mansions, gardens adjoining private houses, shaded promenades occupying the sites of a demolished fortification system. The last two centuries have greedily cut into these reserves—the authentic lungs of the city—covering them with buildings and setting masonry in place of grass and trees. At one time, open spaces had no other reason for existence than the pleasure and amusement of a privileged few. The social point of view, which today gives new meaning to the use of these spaces, had not yet emerged. Such areas may be the direct or the indirect extensions of the dwelling: direct if they surround the habitation itself, indirect if they are concentrated in a few large areas a little farther away. In either case, their assigned purpose will be the same, namely, to meet the collective activities of youth and to provide a favorable site for diversions, strolls, and games during leisure hours.

31 Even when open spaces are of an adequate size, they are often poorly located and are therefore not readily accessible to a great number of inhabitants.

When modern cities include a few sufficiently extensive open spaces, they are situated either on the city outskirts or in the midst of a particularly luxurious residential area. In the first instance, being remote from the working-class districts, they serve city-dwellers on Sundays alone and have no effect on their daily lives, which will continue to take place in trying conditions. In the second instance, they will actually be forbidden ground for the masses, and their function will consequently be reduced to that of embellishing the city without fulfilling their role as useful extensions of the dwelling. In either case, the severe problem of public health remains unimproved.

32 The remoteness of the outlying open spaces does not lend itself to better living conditions in the congested inner zones of the city.

Urbanism is called upon to devise the rules required to assure city-dwellers of living conditions that will safeguard not only their physical health but also their moral health and the joy of life that results from these. The working hours, often exhausting for the muscles or the nerves, should be followed every day by an adequate amount of free time. These hours of freedom, which machinism will unfailingly increase, will be devoted to a refreshing existence amidst natural elements. The maintenance and the establishment of open spaces are, therefore, a necessity, a matter of public welfare. This theme forms an integral part of the fundamentals of urbanism, and the city administrators should be compelled to give it their fullest attention. A just proportion of constructed volumes to open spaces—that is the only formula which resolves the problem of habitation.

33 In order to be accessible to their users, the few athletic facilities that are provided have generally been fitted out on a temporary basis, on sites destined for future housing or industrial districts. The result is precariousness and incessant upheaval.

A small number of athletic associations, eager to make use of their weekly leisure time, have found temporary shelter on the outskirts of cities but, since their existence is not officially recognized, it is, as a rule, extremely precarious. The hours of free or leisure time may be placed in three categories: daily, weekly, and yearly. The daily hours of free time should be spent close to the dwelling. The weekly hours of free time allow excursions out of the city and its vicinity. The yearly period of free time, that is to say, vacations and holidays, permit real travel, away from both the city and its region. Thus stated, the problems implies the creation of verdant reserves: 1) around the dwelling; 2) within the region; 3) throughout the country.

34 The sites that could be set aside for weekly leisure activities are often poorly connected to the city.

Once the sites close to the city that would make suitable centers for weekly leisure activities have been selected, the problem of mass transportation must be faced. This problem should be borne in mind from the moment the regional plan is first sketched out; it involves the investigation of various possible means of travel: roads, railroads, or rivers.

Requirements

- 35** Hereafter, every residential district must include the green area necessary for the rational disposition of games and athletic sports for children, adolescents, and adults.

This decision will have no effect unless it is supported by a genuine act of legislation: the "land ordinance." This ordinance will possess a diversity that corresponds to the needs to be satisfied. The population density, for instance, or the percentage of open area and built-up area may be varied, depending on functions, locales, and climates. Built volumes will be intimately blended with the green areas surrounding them. The built-up areas and the planted areas will be distributed on the basis of a reasonable amount of time needed to go from one to the other. In any event, the urban fabric will have to change its texture; the urban population centers will tend to become green cities. Contrary to what takes place in the "garden cities," the verdant areas will not be divided into small unit lots for private use but, instead, dedicated to the launching of the various communal activities that form the extensions of the dwelling. Kitchen gardening, the usefulness of which is actually the principal argument in favor of the garden cities, might very well be considered here: a percentage of the available ground will be allocated to it and divided into multiple individual plots, but certain collective gardening arrangements, such as tilling, irrigating, and watering, can lighten the labor and increase the yield.

- 36** Unsanitary blocks of houses must be demolished and replaced by green areas: the adjacent housing quarters will thus become more sanitary.

An elementary knowledge of the principal notions of health and sanitation is sufficient to detect a slum building and to discriminate a clearly unsanitary city block. These

blocks must be demolished, and this should be an opportunity to replace them with parks which, at least in regard to the adjacent housing quarters, will be the first step toward improved health conditions. Some of these blocks, however, may happen to occupy sites particularly suitable for the construction of certain buildings indispensable to the life of the city. In that event, intelligent urbanism will be able to assign to them the purpose that the overall regional plan and the city plan will have envisaged, in advance, as the most efficacious.

37 The new green areas must serve clearly defined purposes, namely, to contain the kindergartens, schools, youth centers, and all other buildings for community use, closely linked to housing.

The green areas that will have been intimately amalgamated with built volumes and integrated into the residential sectors will not have the embellishment of the city as their sole function. First, they must play a useful role, and it is facilities of a communal nature that will occupy their lawns: day nurseries, pre-school and post-school organizations, youth clubs, centers for intellectual relaxation or physical culture, reading rooms or game rooms, running tracks and outdoor swimming pools. These will be the extensions of the dwelling, and must be subject, like the dwelling itself, to the "land ordinance."

38 The weekly hours of free time should be passed in favorably prepared places: parks, forests, playing fields, stadiums, beaches, etc. . . .

Nothing, or virtually nothing, has yet been provided for the weekly hours of leisure time. Vast spaces in the region surrounding the city will be reserved and equipped, and made accessible by sufficiently numerous and convenient modes of transportation. These spaces are no longer a matter of lawns around the house, more or less

densely planted with trees, but of actual forests and meadows, natural and artificial beaches, which will constitute a vast and carefully tended preserve offering the city dweller numerous opportunities for healthy activity and beneficial relaxation. There are places on the outskirts of every city which are capable of fulfilling this program and which can become readily accessible provided there is a well-considered organization of the means of communication.

39 Parks, playing fields, stadiums, beaches, etc. . . .

A program that will comprise every kind of relaxation activity must be decided upon: walking or hiking, alone or in groups, through the beauty of the landscape; every kind of sport—tennis, basketball, soccer, swimming, athletic exercises; staged entertainment—concerts, open-air theaters, and the various spectator sports and tournaments. Finally, specific facilities will have to be undertaken beforehand: the means of circulation, which will require rational organization; lodging-places—hotels, inns, and camping grounds; and one last, but not least important, provision—a supply of drinking water and food whose availability must be absolutely assured in all these places.

40 An assessment must be made of the available natural elements: rivers, forests, hills, mountains, valleys, lakes, the sea, etc. . . .

Owing to the improvements in mechanized means of transportation, the question of distance is no longer a determining factor in this context. It is better to select appropriate natural elements, even though it may necessitate seeking them somewhat far afield. It is a matter not only of conserving the natural beauties that are still untouched but also of repairing the damage that certain of them may have suffered; in short, human industry will be called on to create in part the sites and landscapes to answer the program. This is another and very considerable social problem for which

municipal officials are responsible—it is the problem of finding a counterpart to the exhausting labors of the week, of making the day of rest truly invigorating for physical and moral health, of never again forsaking the population to the many disgraces of the streets. Putting the hours of leisure to fertile use will forge health and spirit in the inhabitants of cities.

Work

Observations

- 41** The places of work—factories, craft workshops, business and public administration offices, and commercial premises—are no longer rationally located within the urban complex.

In the past, the dwelling and the workshop, being linked together by close and permanent ties, were situated near one another. The unforeseen expansion of mechanism has disrupted those harmonious conditions; in less than a century it has transformed the character of cities, shattered the age-old traditions of the craftsman classes and given birth to a new, anonymous labor force, which drifts from place to place. The rise of industry depends essentially on the means by which raw materials are supplied and on the facilities through which manufactured products are distributed. So industries rushed headlong to establish themselves along the railroad tracks introduced in the nineteenth century and on the banks of waterways, whose capacity was increased by steam navigation. But the founders of industry, by taking advantage of the immediate supply of food and lodging available in the cities, established their companies within the city or on its edges, heedless of the misfortune that might come of it. Implanted in the heart of residential districts, the factories fill them with noise and air pollution. Set on the outskirts and far removed from these residential districts, they force the workers to travel long distances every day in the tiring hustle and bustle of rush hour, needlessly causing them to lose part of their leisure time. This disruption

of the former means of organizing work has led to an indescribable disorder and raised a problem that has, as yet, received only haphazard solutions. From this emerges the great ill of our time: the nomadism of the working population.

42 The connection between habitation and places of work is no longer normal; it necessitates the covering of inordinate distances.

From now on, normal relationships between those two essential functions of life—inhabiting and working—are disrupted. The faubourgs are full of workshops and mills, while the major industries, which continue to experience unlimited growth, are forced out into the suburbs. Since the city has reached its saturation point and is unable to accommodate any more inhabitants, suburban cities have been hastily thrown together, vast and densely packed batches of uncomfortable little rental apartments or endless housing developments. Morning, noon, and night, in summer and winter, the interchangeable labor force, which has no stable bond attaching it to industry, goes through its perpetual shifting in the depressing jostle of public transportation. Whole hours melt away in these disorganized displacements

43 The rush hours betray a critical state of affairs.

The public transportation services—suburban trains, buses, and subways—are in full operation only four times a day. There is frenzied commotion in the rush hours, and the users pay dearly from their own pockets for an arrangement that adds hours of jostling and scurrying to the stresses of the workday itself. Running these transportation systems is a painstaking and costly business; the amount that the passengers pay is not enough to cover their operating expenses, so they have become a heavy public burden. To remedy such a state of affairs, two conflicting propositions have been upheld: to support the transportation, or to support the users of transportation? The

choice must be made! The one implies an enlargement and the other a reduction in the diameter of the cities.

44 For lack of any program, there is unchecked expansion of cities, absence of forethought, speculation on land and other things, and industry, complying to no rule, establishes itself at random.

The land within the cities and in the surrounding areas is almost entirely privately owned. Industry itself is in the hands of private companies whose situation is sometimes unstable, being prone to all kinds of crises. Nothing has been done to subject industrial expansion to logical regulation; on the contrary, everything has been left to improvisation, which may occasionally favor the individual but which always overburdens the collective.

45 Offices in the city are concentrated in business districts. Located on the best sites in town and provided with the most complete circulation systems, these business districts quickly fall prey to speculation. Since they are private undertakings, the organization necessary to their natural development is lacking.

The corollary of industrial expansion is the growth of business, private administration, and trade. Nothing in this area has been seriously estimated and planned. One must buy and sell, bring workshop and factory into contact with supplier and customer. These transactions require offices. Offices are premises requiring specific and critical facilities, indispensable to the efficient conduct of business. When they are isolated in separate offices, such facilities are costly. Everything points to a grouping of offices so that each is assured of optimum working conditions: ease of move-

ment within, ready communication with the outside world, light, peace and quiet, high-quality air, heating and cooling systems, post office and telephone exchange, radio, etc. . . .

Requirements

46 The distances between places of work and places of residence must be reduced to a minimum.

This implies a new distribution of all the places that are given over to work, in accordance with a carefully elaborated plan. The concentration of industries in belts around the large cities may have been a source of prosperity for certain firms, but the deplorable living conditions that have resulted for the masses must be denounced. This arbitrary disposition has given rise to an intolerable promiscuity. The time consumed in going back and forth between home and work bears no relationship to the daily course of the sun. Industries must be transplanted to the passageways for raw materials, along major waterways, highways, and railroads. A passageway is a linear element. Hence, instead of being concentric, the industrial cities will become linear.

47 The industrial areas must be independent of the residential areas, and separated from one another by a zone of vegetation.

The industrial city will extend along the canal, the highway, or the railroad, or, better yet, along all three traffic ways together. Once it has become linear instead of annular, the city will be able to align its own parallel band of habitation as it develops. A verdant zone will separate this band from the industrial buildings. The dwelling, which will thereafter stand in the open countryside, will be completely protected from noise and pollution and yet will be close enough to eliminate the long daily

journeys to-and-fro; it will once again become a normal family organism. Thus recovered, the "conditions of nature" will help put a stop to the nomadism of the working population. The inhabitants will be able to choose from three available types of habitation: the individual house of the garden city; the individual house coupled with a small farm; and lastly, the collective apartment building furnished with all the services necessary to the well-being of its occupants.

48 The industrial zones must be contiguous to the railroad, the canal, and the highway.

The entirely new speed of mechanized transportation, whether utilizing road, rail, river, or canal, necessitates the creation of new traffic routes and the transformation of existing ones. This calls for a program of coordination that must take account of the new distribution of industrial establishments and the workers' dwellings that accompany them.

49 The craft occupations, closely bound up with the urban life from which they directly arise, must be able to occupy clearly designated places within the city.

The handicrafts differ from industry by their very nature and call for appropriate dispositions. They emanate directly from the cumulative potential of the urban centers. The crafts of bookmaking, jewelry, dressmaking, and fashion find the creative stimulus they need in the intellectual concentration of the city. They are essentially urban activities, whose work premises can be situated in the most intensely active points in the city.

50 The business city, devoted to public and private administration, must be assured of good communications with the residential quarters, as well as with industry or craft workshops remaining within or near the city.

Business has taken on so great an importance that the selection of the urban location to be reserved for it requires very special study. The business center must be located at the confluence of the traffic channels that serve the various sectors of the city: habitation, industry and craft workshops, public administration, certain hotels, and the different termini (railroad stations, bus stations, ports, and airports).

Traffic

Observations

51 The present network of urban streets is a set of ramifications that grew out of the major traffic arteries. In Europe, these arteries go back in time far beyond the Middle Ages, and sometimes even beyond antiquity.

Certain cities built for purposes of defense or colonization have had the benefit, since their origin, of a concerted plan. To begin with, a regularly formed fortification wall was laid down, against which the high roads came to a halt. The interior of the city was arranged with useful regularity. Other cities, greater in number, were born at the intersection of two cross-country high roads or, in some cases, at the junction of several roads radiating outward from a common center. These transportation arteries were closely linked to the topography of the region, which often forced them to follow a winding course. The first houses were established along their edges, and this was the origin of the principal thoroughfares, from which, as the city grew, an increasing number of secondary arteries branched out. The principal thoroughfares have always been the offspring of geography, and while many of them may have been straightened and rectified, they will nonetheless always retain their fundamental determinism.

52 The main transportation routes, originally conceived in terms of pedestrian and wagon traffic, no longer meet the requirements of today's mechanized means of transportation.

For reasons of security, ancient cities were surrounded by walls. Consequently, they were unable to expand as their population increased. It was necessary to practice economy in order to obtain the maximum habitable area from the land. This accounts for the system of close-set streets and alleys that afforded access to the greatest possible number of front doors. Another consequence of this organization of cities was the system of city blocks, built perpendicularly above the street from which they took daylight and perforated with interior courtyards built for the same purpose. Later, when the fortified walls were expanded, the streets and alleys were extended beyond the initial nucleus as avenues and boulevards, while the nucleus itself retained its original structure. This system of building, which has long ceased to correspond to any need, still carries the force of law today. The city block, a direct by-product of the street system, still exists. Its façades give onto more or less narrow streets and interior courtyards. The traffic network that encloses it has multiple dimensions and intersections. Intended for other times, this network has not been able to adapt to the new speeds of mechanized vehicles.

53 The dimensioning of streets, ill adapted to the future, impedes the utilization of the new mechanized speeds and the orderly progress of the city.

The problem arises out of the impossibility of reconciling natural speeds, the pace of man or horse, with the mechanized speeds of cars, tramcars, trucks, and buses. The mixture of both is the source of countless conflicts. The pedestrian moves about in perpetual insecurity, while mechanized vehicles are obliged to brake incessantly and so are incapacitated—which does not, however, prevent them from being a continual source of mortal danger.

54 The distances between street intersections are too short.

Before reaching their normal cruising speed, mechanized vehicles have to start up and gradually accelerate. Sudden braking can only cause rapid wear and tear on major parts. A reasonable unit of length between the starting-up point and the point at which it becomes necessary to brake must therefore be gauged. Street intersections today, which occur at intervals of 100, 50, 20, and even 10 yards, are not suited to the proper operation of mechanized vehicles. They should be separated by intervals of from 200 to 400 yards.

55 The width of the streets is inadequate. Attempts to widen them are often very costly and ineffectual operations.

There is no uniform standard for street widths. It all depends on the number and type of vehicles they accommodate. The old thoroughfares, which were laid down by topography and geography from the very beginnings of the city and which form the trunks for an endless ramification of streets, have almost always maintained a heavy traffic flow. They are generally too narrow, but widening them is not always an easy or even an adequate solution. It is essential that the problem be investigated much more thoroughly.

56 Confronted with mechanized speeds, the street network seems irrational, lacking in precision, in adaptability, in diversity, and in conformity.

Modern traffic circulation is a highly complex operation. Traffic channels intended for multiple use must simultaneously permit automobiles to drive from door to door, pedestrians to walk from door to door, buses and tramcars to cover prescribed routes, trucks to go from supply centers to an infinite variety of distribution points, and certain

vehicles to pass directly through the city. Each one of these activities requires a specific lane, geared to meet clearly distinguished requirements. Thus it is necessary to engage in a detailed study of the question, to consider its present state, and to seek solutions that really correspond to precisely defined needs.

57 Magnificent layouts, intended for show, may once have constituted awkward obstacles to traffic flow, and they still do.

What was admissible and even admirable in the days of horse-drawn carriages may now have become a source of constant disturbance. Certain avenues, which were conceived to ensure a monumental perspective crowned by a memorial or a public edifice, are a present cause of bottlenecks, of delays, and sometimes of danger. Such architectural compositions must be preserved from the invasion of mechanized vehicles, which they were not designed to accommodate and to whose speeds they can never be adapted. Traffic has now become a function of primary importance to urban life. It requires a carefully prepared program capable of providing whatever is needed to regularize its flow and to establish its indispensable outlets, thus doing away with traffic jams and the constant disturbance of which they are the cause.

58 In many cases, when the time comes for the expansion of the city, the track network of the railroad system proves a serious obstacle to urbanization. It hems in residential areas, depriving them of necessary contacts with the vital elements of the city.

Here again, time has flown too swiftly. The railroads were built before the prodigious industrial expansion that they themselves caused. By penetrating the cities, they arbitrarily cut off entire areas. The railroad track is a road one does not cross; it isolates certain areas from others which, having been gradually covered with dwellings, have found themselves deprived of contacts that are indispensable to them. In some cities, this situation has serious effects on the general economy, and urbanism

is called upon to consider the modification and realignment of certain railroad systems in such a way as to draw them back into the harmony of an overall plan.

Requirements

- 59** The whole of city and regional traffic circulation must be closely analyzed on the basis of accurate statistics—an exercise that will reveal the traffic channels and their flow capacities.

Traffic circulation is a vital function whose present state must be expressed by graphic methods. The determining causes and the effects of its different intensities will then become clearly apparent, and it will be easier to detect its critical points. Only a clear view of the situation will permit the accomplishment of two indispensable improvements; namely, the assignment of a specific purpose to each traffic channel—to accommodate either pedestrians or automobiles, either heavy trucks or through traffic—and then the provision of each such channel with particular dimensions and features according to the role assigned it—the type of roadway, the width of the road surface, the locations and kinds of intersections and junctions.

- 60** Traffic channels must be classified according to type and constructed in terms of the vehicles and speeds they are intended to accommodate.

The single street, bequeathed by centuries past, once accepted both men on foot and men on horseback indiscriminately, and it was not until the end of the eighteenth century that the generalized use of carriages gave rise to the creation of sidewalks. In the twentieth century came the cataclysmic hordes of mechanical vehicles—bicycles, motorcycles, cars, trucks, and tramcars—traveling at unforeseen speeds. The

overwhelming growth of certain cities, such as New York, for example, brought about an inconceivable crush of vehicles at certain specific points. It is high time that suitable measures were taken to remedy a situation that verges on disaster. The first effective measure in dealing with the congested arteries would be a radical separation of pedestrians from mechanized vehicles. The second would be to provide heavy trucks with a separate traffic channel. And the third would be to envisage throughways for heavy traffic that would be independent of the common roads intended only for light traffic.

61 Traffic at high-density intersections will be dispersed in an uninterrupted flow by means of changes of level.

Through vehicles should not be slowed down needlessly by having to stop at every intersection. Changes of level at each crossroad are the best means to assure them of uninterrupted motion. Laid out at distances calculated to obtain optimum efficiency, junctions will branch off the major throughways connecting them to the roads intended for local traffic.

62 The pedestrian must be able to follow other paths than the automobile network.

This would constitute a fundamental reform in the pattern of city traffic. None would be more judicious, and none would open a fresher or more fertile era in urbanism. This requirement regarding the pattern of traffic movement may be considered just as strict as that which, in the area of habitation, condemns the northern orientation of any dwelling.

63 Roads must be differentiated according to their purposes: residential roads, promenades, throughways, principal thoroughfares.

Instead of being given up to everyone and everything, roads must be governed by different rules, according to their category. Residential roads and the ground intended for collective uses require a particular atmosphere. So that dwellings and their "extensions" may enjoy the peace and calm that they need, mechanized vehicles will be channeled through special circuits. The avenues containing through traffic will have no contact with the local roads except at specified connecting points. The great principal thoroughfares, which are linked to the whole of the region, will naturally assert their predominance in the network. And promenades will also be envisaged where a reduced speed will be strictly imposed upon every type of vehicle so that pedestrians will at last be able to mingle with them without danger.

64 As a rule, verdant zones must isolate the major traffic channels.

Since the throughways or major roads will be quite distinct from the local roads, there will be no reason for them to come near either public or private structures. It would be advantageous to line them with dense screens of foliage.

The Historic Heritage of Cities

65 Architectural assets must be protected, whether found in isolated buildings or in urban aggregations.

The life of a city is a continuous event that is expressed through the centuries by material works—lay-outs and building structures—which form the city's personality, and from which its soul gradually emanates. They are precious witnesses of the past which will be respected, first for their historical or sentimental value, and second, because certain of them convey a plastic virtue in which the utmost intensity of human genius has been incorporated. They form a part of the human heritage, and whoever owns them or is entrusted with their protection has the responsibility and the obligation to do whatever he legitimately can to hand this noble heritage down intact to the centuries to come.

66 They will be protected if they are the expression of a former culture and if they respond to a universal interest . . .

Death, which spares no living creature, also overtakes the works of men. In dealing with material evidence of the past, one must know how to recognize and differentiate that which is still truly alive. The whole of the past is not, by definition, entitled to last forever; it is advisable to choose wisely that which must be respected. If the continu-

ance of certain significant and majestic presences from a bygone era proves injurious to the interests of the city, a solution capable of reconciling both points of view will be sought. In the case where one is confronted with structures repeated in numerous examples, some will be preserved as documents and the others will be demolished; in other cases, only the portion that constitutes a memorial or a real asset can be separated from the rest, which will be serviceably modified. Finally, in certain exceptional cases, complete transplantation may be envisaged for elements that prove to be inconveniently located but that are worth preservation for their important aesthetic or historical significance.

67 and if their preservation does not entail the sacrifice of keeping people in unhealthy conditions . . .

By no means can any narrow-minded cult of the past bring about a disregard for the rules of social justice. Certain people, more concerned for aestheticism than social solidarity, militate for the preservation of certain picturesque old districts unmindful of the poverty, promiscuity, and diseases that these districts harbor. They assume a grave responsibility. The problem must be studied, and occasionally it may be solved through some ingenious solution; but under no circumstances should the cult of the picturesque and the historical take precedence over the healthfulness of the dwelling, upon which the well-being and the moral health of the individual so closely depend.

68 and if it is possible to remedy their detrimental presence by means of radical measures, such as detouring vital elements of the traffic system or even displacing centers hitherto regarded as immutable.

The exceptional growth of a city can create a perilous situation, leading to an impasse from which there is no escape without some measure of sacrifice. An obstacle can

only be removed by demolition. But whenever this measure is attended by the destruction of genuine architectural, historical, or spiritual assets, then it is unquestionably better to seek another solution. Rather than removing the obstacle to traffic flow, the traffic itself can be diverted or, conditions permitting, its passage can be forced by tunneling beneath the obstacle. Finally, it is also possible to displace a center of intense activity and, by transplanting it elsewhere, entirely change the traffic pattern of a congested zone. Imagination, invention, and technical resources must be combined in order to disentangle even the knots that seem most inextricable.

69 The destruction of the slums around historic monuments will provide an opportunity to create verdant areas.

In certain cases, it is possible that the demolition of unsanitary houses and slums around some monument of historical value will destroy an age-old ambience. This is regrettable, but it is inevitable. The situation can be turned to advantage by the introduction of verdant areas. There, the vestiges of the past will be bathed in a new and possibly unexpected ambience, but certainly a tolerable one, and one from which the neighboring districts will amply benefit in any event.

70 The practice of using styles of the past on aesthetic pretexts for new structures erected in historic areas has harmful consequences. Neither the continuation of such practices nor the introduction of such initiatives will be tolerated in any form.

Such methods are contrary to the great lesson of history. Never has a return to the past been recorded, never has man retraced his own steps. The masterpieces of the past show us that each generation has had its way of thinking, its conceptions, its aesthetic, which called upon the entire range of the technical resources of its epoch to serve as the springboard for its imagination. To imitate the past slavishly is to condemn ourselves to delusion, to institute the "false" as a principle, since the

working conditions of former times can not be recreated and since the application of modern techniques to an outdated ideal can never lead to anything but a simulacrum devoid of all vitality. The mingling of the "false" with the "genuine," far from attaining an impression of unity and from giving a sense of purity of style, merely results in artificial reconstruction capable only of discrediting the authentic testimonies that we were most moved to preserve.

Three

**Conclusions –
Main Points
of Doctrine**

71 The majority of the cities studied (by the Fourth Congress) today present the very image of chaos: they do not at all fulfill their purpose, which is to satisfy the primordial biological and psychological needs of their populations.

Through the efforts of the national groups within the International Congresses for Modern Architecture, some thirty-three cities were analyzed on the occasion of the Athens Congress: Amsterdam, Athens, Brussels, Baltimore, Bandung, Budapest, Berlin, Barcelona, Karlsruhe, Cologne, Como, Dalat, Detroit, Dessau, Frankfurt, Geneva, Genoa, The Hague, Los Angeles, Littoria, London, Madrid, Oslo, Paris, Prague, Rome, Rotterdam, Stockholm, Utrecht, Verona, Warsaw, Zagreb, and Zurich. These cities illustrate the history of the white race throughout the most diverse climates and latitudes. All of them bear witness to the same phenomenon: the disorder wrought by machinism in a situation that had previously allowed a relative harmony as well as the absence of any serious attempt at adaptation. In every one of these cities, man finds himself being molested. Everything that surrounds him stifles and crushes him. None of the things necessary for his physical and moral health has been preserved or introduced. A human crisis is raging in the major cities with repercussions throughout the land. The city is no longer serving its function, which is to shelter human beings, and to shelter them well.

72 This situation reveals the incessant accretion of private interests ever since the beginning of the machinist age.

The pre-eminence of private initiatives, motivated by self-interest and by the lure of profit, is at the root of this deplorable state of affairs. Not one authority, conscious of the nature and the importance of the machinist movement, has yet taken any step to avoid the damage for which no one can actually be held accountable. For a hundred years, every enterprise was left to chance. Housing and factories were constructed, roads laid out, waterways and railroads cut and graded, everything multi-

plied in haste and in a climate of individual violence that left no room for any preconceived plan or premeditation. Today, the damage has been done. The cities are inhuman; the ferociousness of a few private interests has given rise to the suffering of countless individuals.

73 The ruthless violence of private interests provokes a disastrous upset in the balance between the thrust of economic forces on the one hand and the weakness of administrative control and the powerlessness of social solidarity on the other.

The sense of administrative responsibility and of social solidarity is daily driven to the breaking point by the keen and continually renewed forces of private interest. These diverse sources of energy are in perpetual conflict, and when one attacks, the other defends itself. In this unhappily uneven struggle it is generally the private interests that triumph, ensuring the success of the strong at the expense of the weak. But good sometimes comes from the very excess of evil, and the immense material and moral disorder of the modern city may ultimately result in the formation of new legislation for the city, a legislation supported by strong administrative responsibility, which will establish the regulations indispensable to the protection of human well-being and dignity.

74 Although the cities are in a state of continuous transformation, their development is conducted without precision or control, and in utter disregard of the principles of contemporary urbanism which have been laid down by qualified technical specialists.

The principles of modern urbanism, evolved through the labors of innumerable technicians—technicians in the art of building, technicians of health, technicians of social organization—have been the subject of articles, books, congresses, public and private

debates. But they still must be acknowledged by the administrative agencies charged with watching over the destiny of cities, agencies that are often hostile to the major transformations proposed by the new data. The authorities must first be enlightened, and then they must act. Clearheadedness and energy can salvage this dangerous situation.

75 On both spiritual and material planes, the city must ensure individual liberty and the advantages of collective action.

Individual liberty and collective action are the two poles between which the game of life is played. Any undertaking whose object is to improve the human condition must take these two factors into account. If it does not manage to satisfy the often contradictory requirements of both, it is inevitably doomed to failure. In any event, it is impossible to coordinate them in a harmonious way without preparing in advance a carefully studied program that leaves nothing to chance.

76 The dimensions of all elements within the urban system can only be governed by human proportions.

The natural measurements of man himself must serve as a basis for all the scales that will be consonant with the life and diverse functions of the human being: a scale of measurements applying to areas and distances, a scale of distances that will be considered in relation to the natural walking pace of man, a time scale that must be determined according to the daily course of the sun.

77 The keys to urbanism are to be found in the four functions: inhabiting, working, recreation (in leisure time), and circulation.

Urbanism expresses the condition of an era. Until now, it has tackled only one problem, that of traffic circulation. It has been content to open up avenues or lay out streets, thus forming blocks of buildings whose purpose has been left to the hap-

hazard ventures of private initiatives. This is a narrow and inadequate view of its mission. Urbanism has four principal functions. First, to assure mankind of sound and healthy lodging, that is to say places in which space, fresh air, and sunshine—those three essential conditions of nature—are abundantly available. Second, to organize places of work in such a way that instead of being a painful subjugation, work will once more regain its character as a natural human activity. Third, to set up the facilities necessary to the sound use of leisure time, making it productive and beneficial. And fourth, to establish links between these different organizations by means of a traffic network that provides the necessary connections while respecting the prerogatives of each element. These four functions, which are the four keys to urbanism, cover an enormous area, since urbanism is the outcome of a way of thinking, integrated into public life by means of a technique for action.

78 Plans will determine the structure of each of the sectors allocated to the four key functions and they will also determine their respective locations within the whole.

Since the CIAM Congress in Athens, the four key functions of urbanism have called for special measures offering each function the conditions most favorable to the development of its own activity so that they may be manifested in all their fullness and bring order and classification to the usual conditions of life, work, and culture. By taking account of this necessity, urbanism will transform the face of the city, break with the crushing constraint of practices that are no longer justified, and open an inexhaustible field of action to the creative. Each key function will have its own autonomy, based on circumstances arising out of climate, topography, and local customs; each will be regarded as an entity to which land and buildings will be allocated, and all of the prodigious resources of modern techniques will be used in arranging and equipping them. In this distribution, consideration will be given to the vital needs of the individual, not to the special interest or profit of any particular group. Urbanism must guarantee individual liberty at the same time as it must take advantage of the benefits of collective action.

79 The cycle of daily functions—inhabiting, working, recreation (recuperation)—will be regulated by urbanism with the strictest emphasis on time saving, the dwelling being regarded as the very center of urbanistic concern and the focal point for every measure of distance.

The desire to reintroduce the "conditions of nature" into daily life would seem, at first sight, to call for an even greater horizontal expansion of cities; but the necessity of regulating the different activities in accordance with the duration of the sun's course goes counter to that idea, which has the disadvantage of imposing distances incommensurate with available time. The dwelling is the urbanist's central concern, and the interplay of distances will be governed by its location in the urban plan in conformity to the solar day of twenty-four hours, which dictates the rhythm of men's activity and gives correct measure to all their undertakings.

80 The new mechanical speeds have thrown the urban milieu into confusion, introducing constant danger, causing traffic congestion and paralyzing communications, and jeopardizing hygiene.

Mechanized vehicles should be liberating agents, and, with their speed, should bring about appreciable gains in time. But their accumulation and concentration at certain points has become both a hindrance to traffic and a source of continual danger. They have, moreover, introduced into urban life many factors that are injurious to health. The combustion gases with which they fill the air are harmful to the lungs, and their noise causes in man a state of permanent nervous irritability. The speeds that are now possible arouse the temptation to a daily exodus, away from it all and back to nature; they stimulate an intemperate and unbridled taste for mobility and foster ways of life which, by splitting up the family, profoundly disturb the basis of society itself. They condemn men to spend wearisome hours in all sorts of vehicles and, little by

little, to abandon the practice of the healthiest and most natural function of all: walking.

81 The principle of urban and suburban traffic must be revised. A classification of available speeds must be devised. Zoning reforms bringing the key functions of the city into harmony will create natural links between them, in support of which a rational network of major traffic arteries will be planned.

By taking account of the key functions—housing, work, recreation—zoning will introduce a measure of order into the urban territory. The fourth function, that of traffic movement, should have only one objective: to bring the other three into effective communication with one another. Major transformations are inevitable. The city and its region must be equipped with a road network that incorporates modern traffic techniques and is directly proportionate to its purposes and usage. The means of transportation must be differentiated and classified for each of them, and a channel must be provided appropriate to the exact nature of the vehicles employed. Traffic thus regulated becomes a steady function, which puts no constraint on the structure of either habitation or places of work.

82 Urbanism is a three-dimensional, not a two-dimensional, science. Introducing the element of height will solve the problems of modern traffic and leisure by utilizing the open spaces thus created.

The key functions—inhabiting, working, and recreation—develop within built volumes that are subject to three imperative necessities: adequate space, sun, and ventilation. These volumes are based not only on the ground and its two dimensions but also, and especially, on a third dimension: height. It is by making use of height that urbanism will recover the open land necessary for communications and for leisure

spaces. A distinction must be made between sedentary functions, which develop inside volumes where the third dimension plays the most important role, and functions of traffic circulation, which, using only two dimensions, are tied to the ground; height plays a role only rarely and on a small scale—as, for instance, when changes of level are intended to regularize certain heavy flows of vehicular traffic.

83 The city must be studied within the whole of its region of influence. A regional plan will replace the simple municipal plan. The limit of the agglomeration will be expressed in terms of the radius of its economic action.

The particulars of a problem of urbanism are furnished by the sum of the activities that are carried out not only within the city itself but also throughout the region of which it is the center. The city's *raison d'être* must be sought and expressed in figures that will make it possible to forecast the stages of a plausible future development. The same operation applied to secondary population centers will provide a reading of the overall situation. Allocations, limitations, compensations can be determined, and these will provide each city, surrounded by its region, with its own character and destiny. Thus, each city will take its place and rank in the general economy of the country. The outcome will be the clear differentiation of regional boundaries. This is a total urbanism, capable of bringing equilibrium to each province and to the country as a whole.

84 Once the city is defined as a functional unit, it should grow harmoniously in each of its parts, having at hand the spaces and intercommunications within which the stages of its development may be inscribed with equilibrium.

The city will take on the character of an enterprise that has been carefully studied in advance and subjected to the rigor of an overall plan. Intelligent forecasts will have sketched its future, described its character, foreseen the extent of its ex-

pansions, and limited their excesses in advance. Subordinated to the needs of the region, assigned to provide a framework for the four key functions, the city will no longer be the disorderly result of random ventures. Its growth, instead of producing a catastrophe, will be a crowning achievement. And the increase in its population figures will no longer lead to that inhuman melee that is one of the afflictions of the big cities.

85 It is a matter of the most urgent necessity that every city draw up its program and enact the laws that will enable it to be carried out.

Chance will give way to foresight, and program will replace improvisation. Each case will be written into the regional plan; sites will be measured and allocated to various activities: there will be clear rules governing the undertaking, which will begin tomorrow and proceed, little by little, in successive stages. The law will lay down the "land statute," endowing each key function with the means for its best self-expression, for its location on the most favorable sites at the most useful distances from other functions. The law must also make provisions for the protection and care of those areas that will one day be occupied. It will have the right to authorize—and to prohibit; it will encourage any carefully evaluated initiatives but will take care that they fit into the overall plan and are always subordinate to the collective interests that constitute the public good.

86 The program must be based on rigorous analyses carried out by specialists. It must provide for its stages in time and in space. It must bring together in fruitful harmony the natural resources of the site, the overall topography, the economic facts, the sociological demands, and the spiritual values.

The work will no longer be confined to the precarious plan of the land-surveyor who projects blocks of apartment houses and the dust of future building lots without a

thought for the suburbs. It will be a true biological creation comprising clearly defined organs capable of fulfilling their vital functions to perfection. Soil conditions will be analyzed and the constraints they dictate identified; the general environment will be examined, and its natural assets arranged in hierarchical order. The major directions of traffic flow will be confirmed and placed in their proper positions, and the nature of their equipment determined according to their intended purposes. A growth curve will indicate the city's foreseeable economic future. Inviolable rules will guarantee the inhabitants good homes, comfortable working conditions, and the enjoyment of leisure. The soul of the city will be brought to life by the clarity of the plan.

87 For the architect occupied with the tasks of urbanism, the measuring rod will be the human scale.

After the downfall of the last hundred years, architecture must once again be placed in the service of man. It must lay sterile pomp aside, concern itself with the individual and create for his happiness the fixtures that will surround him, making all the movements of his life easier. Who can take the measures necessary to the accomplishment of this task if not the architect who possesses a complete awareness of man, who has abandoned illusory designs, and who, judiciously adapting the means to the desired ends, will create an order that bears within it a poetry of its own?

88 The initial nucleus of urbanism is a cell for living—a dwelling—and its insertion into a group forming a habitation unit of efficient size.

If the cell is the primordial biological element, then the home, that is to say the family shelter, constitutes the social cell. After more than a century of subjection to the ruthless games of speculation, the construction of this home must now become a humane undertaking. The home is the initial nucleus of urbanism. It protects the growth of man and gives shelter to the joys and sorrows of his daily life. If it is to be

filled with fresh air and sunshine inside, it must also be extended outside by various community facilities. So that dwellings can be more easily supplied with common services dealing conveniently with the supply of food, education, medical attention, and the enjoyment of leisure, it will be necessary to group them in "habitation units" of adequate size.

89 With this dwelling unit as the starting point, relationships within the urban space will be established between habitation, work places, and the facilities set aside for leisure.

The first of the functions that should engage the urbanist's attention is that of housing—and good housing. But people also have to work, and they must do so in conditions that demand a thorough revision of prevailing practices. Offices, workshops, and factories must be equipped in such a way as to guarantee the well-being necessary to the accomplishment of this second function. Finally, the third function, which is recreation, the cultivation of one's body and mind, must not be neglected. The urbanist will have to make provision for the sites and premises required for this purpose.

90 To accomplish this great task, it is essential to utilize the resources of modern techniques, which, through the collaboration of specialists, will support the art of building with all the dependability that science can provide, and enrich it with the inventions and resources of the age.

The machinist era has introduced new techniques which are one of the causes of the disorder and the upheaval of the cities. And yet it is to those very techniques that we must look for a solution to the problem. Modern construction techniques have established new methods, provided new facilities, made new dimensions possible. They have opened an entirely new cycle in the history of architecture. The new structures

will be not only of a scale, but also of a complexity unknown until now. In order to fulfill the many-faceted task that has been imposed on him, the architect will have to join with many specialists at every stage of the undertaking.

91 The course of events will be profoundly influenced by political, social, and economic factors . . .

It is not enough to admit the necessity of a "land ordinance" and of certain principles of construction. To pass from theory to action still requires a combination of the following factors: a political power such as one might wish—clearsighted, with earnest conviction, and determined to achieve those improved living conditions that have been worked out and set down on paper; an enlightened population that will understand, desire, and demand what the specialists have envisaged for it; an economic situation that will make it possible to embark upon and pursue building projects which, in certain instances, will be considerable. Yet it is possible, nonetheless, even at a time when everything is at a very low ebb, when the political, moral, and economic conditions are least favorable, that the necessity of building decent shelters will suddenly emerge as an overriding obligation, and that this obligation will provide politics, social life, and the economy with precisely the coherent goal and program that they were lacking.

92 and it is not as a last resort that architecture will intervene.

Architecture presides over the destinies of the city. It orders the structure of the dwelling, that vital cell of the urban tissue whose health, gaiety, and harmony are subject to its decisions. It groups dwellings in habitation units whose success will depend on the accuracy of its calculations. It reserves in advance the open spaces in the midst of which will rise volumes built with harmonious proportions. It arranges the extensions of the dwelling, the places of work, the areas set aside for relaxation. It lays out the circulatory network that will bring the different zones into contact with

one another. Architecture is responsible for the well-being and the beauty of the city. It is architecture that takes charge of its creation or improvement, and it is architecture that must choose and allocate the different elements whose apt proportions will constitute a harmonious and lasting work. Architecture is the key to everything.

93 There are two opposing realities: the scale of the projects to be undertaken urgently for the reorganization of the cities, and the infinitely fragmented state of land ownership.

Works of major importance must be undertaken without delay, since all of the cities in the world, ancient or modern, reveal the same defects arising from the same causes. But no partial effort should be made unless it fits into the framework of the city and the region as they have been laid down by an extensive study and a broad overall plan. This plan will necessarily include parts that can be carried out immediately and others whose execution will have to be postponed indefinitely. Many pieces of land will have to be expropriated and will become subject to negotiation. It is at this point that we shall have to beware the sordid game of speculation, which so often smothers in the cradle great ventures animated by a concern for the public good. The problem of land ownership and possible land requisition arises in the cities and in their outskirts, and it extends throughout the more or less extensive area that constitutes their region.

94 The perilous contradiction indicated above raises one of the most hazardous questions of our day: the urgency of regulating the disposal of all usable ground by legal means in order to balance the vital needs of the individual in complete harmony with collective needs.

For years now, at every point on the globe, attempts at urban improvement have been dashed against the petrified law of private property. Ground—the territory of

the country—must be made available at any time and at its fair market value, to be assessed before projects are worked out. The ground should be open to mobilization whenever it is a matter of the general interest. Countless difficulties have harassed people who were unable to gauge accurately the extent of technical transformations and their tremendous repercussions on public and private life. The absence of urbanism is the cause of the anarchy that prevails in the organization of cities and in the equipment of industries. Because we have misunderstood the rules, the fields have become empty, the cities have been filled beyond all reason, industrial concentrations have taken place haphazardly, workers' dwellings have become slums. No provision has been made for safeguarding man. The result is almost uniformly catastrophic in every country. It is the bitter fruit of a hundred years of undirected machinism.

95 Private interest will be subordinated to the collective interest.

Left to himself, a man is soon crushed by difficulties of every kind which he must overcome. If, conversely, he is subjected to too many collective constraints, his personality is stifled by them. Individual rights and collective rights must therefore support and reinforce one another, and all of their infinitely constructive aspects must be joined together. Individual rights have nothing to do with vulgar private interests. Such interests, which heap advantages upon a minority while relegating the rest of the social mass to a mediocre existence, require strict limitations. In every instance, private interests must be subordinated to the collective interest, so that each individual will have access to the fundamental joys, the well-being of the home, and the beauty of the city.

Afterword

The first official publication of the work of the Fourth CIAM Congress at Athens was reserved to *Les Annales Techniques*, the official organ of the Greek Chamber of Technics in Athens, which devoted a two-hundred-page Greek- and French-language triple issue to it, numbers 44, 45, and 46 combined, in November 1933. This issue contained an account of the Congress's meeting in Greece, the addresses, the various official statements, the outline of the "Functional City" Exhibition in Athens, accounts of the work of the Congress aboard the *Patris II*, the working party reports, the questionnaire preceding the drawing up of resolutions, and, finally, the "Findings," which under that provisional title actually constitute the "Athens Charter."

The Charter has been annotated for the first time in the present work which is being published in France in the year 1941. This truly revolutionary document takes on a singular importance at the present time, when catastrophe and destruction multiply their effects throughout the entire world.

As an affirmation of the obligations and the possibilities of a civilization at the turning-point in its development, the Charter can and must, in the comprehensive form given it in this edition, be submitted to public opinion. Public opinion, at this juncture, is the great mass of people who endure their lives in demolished homes, or in decrepit homes falling to pieces with age, or in homes lamentably deprived of the "essential joys."

The Charter will concern the professionals in architecture and urbanism, in construction and communications; it will turn them into adversaries or resolute supporters, divided in various ways, some on the side of ignorance, egoism, routinism,

and hide-bound prejudice, and others on the side of invention, imagination, science, courage, and faith.

It will be placed in the hands of sociologists, medical men, public health officers, economists, all of those who are accustomed to view the human phenomenon with detachment and from a number of points of view.

It will occupy the desks of municipal officials, who, having read it, will recognize where their essential responsibilities lie.

It will occupy the desks of men in government, and politics, which is the art by which plans are given a place in life, will find in it certain of its most dependable general directives.

The Charter is making its appearance in France, a country in which the business of construction possesses the strongest and the liveliest of traditions, a country which, for a thousand years, has never turned its back on truth, on good, but which has always created grandeur, and has revealed its peculiar genius through works in the "built domain," a country which in these last ten decades has invented the great modern techniques in the art of building.

In France, then, where the spirit of grandeur and the sense of beauty have always revealed themselves in structures and monuments that have illumined the world with their clarity, the Athens Charter appears today, in the hour of its National Revolution.

THE CIAM-FRANCE GROUP
1941

*The explanations clarifying the articles of the Athens Charter were drafted by the chief delegate of the CIAM for France and by Jeanne de Villeneuve, Baroness of Aubigny.**

* A copy of the original Plon edition of the Charter held in the Library at the Fondation Le Corbusier in Paris contains a pencil correction by Le Corbusier, presumably made with a view to future editions of the work. In it he modifies the above note on the Charter's authorship to read as follows: "The explanations elucidating the articles of the Athens Charter were drafted in 1941 by the chief delegate to the CIAM for France, who was Le Corbusier, and that text was voluntarily rewritten (those were the years of the Occupation) by Mme Jeanne de Villeneuve, Baroness of Aubigny." [A.E.]

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Anthony Eardley
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