

# Quelle

Le Corbusier, The Athens Charter (New York 1973); [Auszüge aus den Teilen: The City and Its Region, Habitation und Traffic]<sup>1</sup>

## 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 residencies, 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 with its particular area. One can consider a problem of urbanism only by continually referring to the constituent elements of the regions, 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 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 prepon-

<sup>&</sup>lt;sup>1</sup> Le Corbusier, The Athens Charter, New York 1973.43-45, 53-54, 56, 58, 61, 63-65, 79, 83-84

derate, 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 o 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 mens' undertakings and which will find their expression in the house, in the village, and 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. [...] [pp. 43-45]

## 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 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 such a structure erected centuries ago has long since been amortized; yet its owner is still tacitly allowed to consider it a market-able 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. [...] [pp. 53-54]

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 it, 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 occasion-ally 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. [...] [p. 56]

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 the 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 the 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 portion 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. [...] [p. 58]

Requirements [...] [p. 61]

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 wide-spread 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 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 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. [...] [pp. 63-65]

## 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 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. [...] [p. 79]

## 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. [...] [pp. 83-84]

Le Corbusier, The Athens Charter (New York 1973); [Auszüge aus den Teilen: The City and Its Region, Habitation und Traffic]. In: Themenportal Europäische Geschichte (2009), URL: <http://www.europa.clio-online.de/2009/Article=373>.

Auf diese Quelle bezieht sich ein einführender und erläuternder Essay von Rubin, Eli: The Athens Charter. In: Themenportal Europäische Geschichte (2009), URL: <http://www.europa.clioonline.de/2009/Article=372>.