Articles

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The city(II): Ecumenopolis, world-city of tomorrow

The trend of city growth must eventually lead from megalopolis to Ecumenopolis, a single planet-wide city including all Earth's inhabitants. This evolution is inevitable, nor, says Dr. Doxiadis, is it desirable to avoid it. Instead, we must plan now to make Ecumenopolis fully livable and comfortable for man. Already the main features of the world-city can be perceived: tentacles of nature interwoven and reaching everywhere into built-up areas; utilities lines, food transport tubes and high-speed roadways all moved underground; and the vast population living in easeful small-town-like units of 30,000 to 50,000 people.

WHY THE CRISES IN OUR CITIES

About thirty-five years ago, when one talked of cities, the only questions raised were, as a rule, questions of the aesthetics of buildings: whether a particular house or monument was beautiful or ugly. Later, when the world began to suffer severely from the poor state of communications, all one heard on every hand was about the crisis in urban communications, and more particularly about too many motor-cars. Later still, social problems arose in certain countries, and people began to view the urban crisis from that particular aspect. In some countries, the problems were specifically racial, as in the United States, where the situation is more delicate than elsewhere. And so the urban crisis then took on the appearance of a social crisis.

Sometimes, also, the urban crisis was poorly understood, because each person tended to regard it from his own particular point of view. Certain people, in fact, referred to it as a crisis in small-scale organic unity, that of the family; others saw it as resulting from the disappearance of small neighborhoods and towns, and yet others as something inherent in large cities and big centres of population. Each one, in fact, saw only a single factor of the general crisis in space.

Actually, the crisis is nothing other than that of the entire system. This is an essential principle we must understand: it is the crisis of a system we commonly refer to as the city, but which it would be more accurate to call the human settlement.

The crisis is a general one. We shall understand this if we consider the city from a rational point of view. To do so, we must try to view it under three aspects.

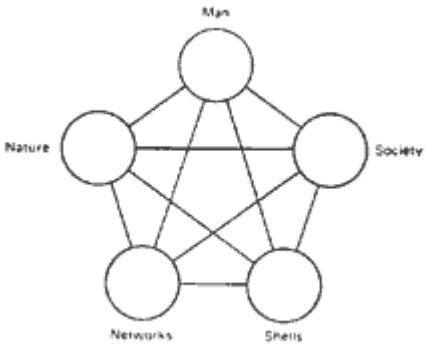

Fig. 1. The five elements that compose the city.

The five elements

First we must try to understand of what it is composed. Five elements enter into its composition (Fig. 1). The first of these is nature, the soil which gave it birth. By not taking this simple fact into account, our efforts have been doomed to failure. We have, in fact, polluted the atmosphere and the waters, destroyed beautiful country-sides, exhausted the natural resources, killed off the animals, insects and plants in a word, annihilated the city's natural setting.

The second element is man, who is frequently left out of the calculations. All we need to do is look at a city from the air to realize that the most important place is allotted to motor-cars, and man occupies only the second place; that the city is covered with colossal buildings. We have so completely failed to recognize man's existence as to prevent our children from using the streets. In this way man is left exposed to various forms of psychosis and neurosis which are far more serious than the accidents which stain our streets with blood, for they are the diseases of a man who is no longer free to wander about and grows up, for the first time in history, with the feeling of being more at ease in the heart of nature than in the city.

Thirdly, society, painstakingly created by man, and producing, in turn, human settlements. We are incapable of creating a society. All we can create are enormous masses of people incapable of performing their normal functions. Men are more and more separated in space from each other; the necessary contacts between them are lacking. The women, left alone in the suburbs without a second car at their disposal become 'nervy', and the men who have to drive for several hours back and forth also become tense and nervous. It is curious to observe that when men are scattered over vast tracts of territory they lose contact with the small surface points of unity - the family, the neighbors. In this way we create a city with nothing human about it.

The fourth element is buildings in general, what the architectural trade refers to as 'shells'. Technically, there has certainly been progress. But does this progress serve man's true interests? This cannot be proved. On the other hand, we cannot help thinking that these great blocks isolate men and turn them into cave-dwellers. And the idea of wandering through car-choked streets admiring the beauty of some of the buildings as you go along is, strictly speaking, inconceivable.

The fifth and last element is the networks: highways, railways, water-supply systems, electricity and telecommunications. All these become more and more technically perfect every day. If they are underground systems, as in the case of water-supply, electricity and

telephone, they cannot possibly inconvenience men from the technical or aesthetic point of view. If, on the other hand, they are on the surface, such as certain electrical and telephone systems, they can be disadvantageous, at any rate aesthetically. But it is in the road system that failure has been most marked. Motorways have the effect of breaking up a city's continuity and preventing it from functioning normally.

We therefore reach the conclusion that the failure of the system is due to the destruction of its elements and of the relationships between them. Because man cannot find joy in his home, because his habitation cannot offer him a better life, the entire city system suffers. Because the city expands rapidly, thanks to the motor-car and other centrifugal forces, it destroys the surrounding country-side and the entire system goes slowly from bad to worse.

The five points of view

We can also regard this system in other ways, from the scientific point of view, for example; or we can regard it as an economic, social or political system or, again, as a technological, civilizing or aesthetic one. From whichever angle we look at it, we see that the city, the human settlement, the system, instead of getting better is only getting worse. Everything goes to show that the results obtained bear no relation to the progress being made nowadays in all the spheres of human activity.

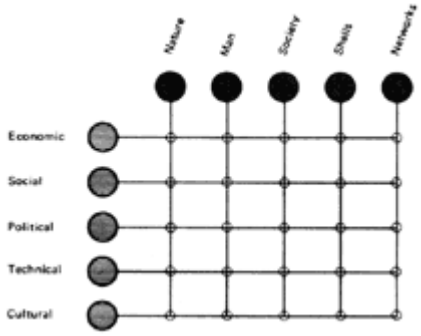

Fig. 2. The five elements considered from five points of view.

The problem becomes even more complicated when, looking at these five elements from different angles and from the five basic points of view -economic, social, political, technological, and cultural- you arrive at a great number of combinations, which show just how many demands will have to be satisfied and how difficult it will be to meet them all. Figure 2, just shows a simple combination of these variables.

These problems become even more complex if we admit that what we understand by the word 'city' is only an extremely simplified term for a phenomenon of infinitely greater complexity. The significant feature of the way in which our life in space is organized is no longer the city per se, but rather a system of human settlements. In antiquity, at the time of the city-states, we could perhaps have claimed that the system was composed of a city and some villages. Such city-states varied neither in size nor in the relationships between them; these latter were few in number and often much more hostile than pacific.

In maintaining that the same is true today -which unfortunately is what we do- we make a profound mistake, for the city systems in which we live are not limited by city's natural boundaries. No modern city could survive if its exits were to be closed. If its conduits were to be cut off, too, it would cease to exist, having neither water nor

Fig. 3. The fifteen space units.

electricity. Moreover, even if it were allowed to maintain relations with the surrounding villages, the city, as we know it, would still be unable to live. Its system of communications is very extended; it imports goods from a great distance and exports likewise to remote countries, and as it functions at an intense rhythm it ends by absorbing the neighboring villages. A village which has radio and television is no longer a village; it has been incorporated into the city network. It is ever receiving orders, and little by little begins to obey them.

Hence the following conclusion: we should not hold the concept of a dissociated 'city' -a concept which is, moreover, impossible to define- but envisage it as a system made up of many different units.

The fifteen space-units

If we closely and systematically analyze our living space, we shall discover that we live in fifteen different space units of increasingly greater dimensions (Fig. 3).

The first of these, and the smallest, is that of man himself -it is precisely the space occupied by the human body with all its limbs extended; the second is the room; the third, the dwelling; the fourth, the dwelling group; the fifth, the small neighbourhood. Leaping upward, we come to the eighth unit, the traditional town of 30,000 to 50,000 inhabitants; then to the tenth, comprising the metropolis with around two million inhabitants; the eleventh, the conurbation with several million inhabitants, and the twelfth, a new type of urban concentration going by the name of 'megalopolis', like the one stretching along the east coast of the United States or like those to be found in the region of the American and Canadian Great Lakes, or in the Netherlands, or along the banks of the Rhine, or yet again in the area stretching between Tokyo and Osaka which is known as Tokaido.

Finally, we come to the fourteenth and fifteenth units, the urban continent and Ecumenopolis, the universal city. These constitute a world system that we cannot, of course, actually see because it remains to be created, but which we should be able to visualize were we able to record the total movements of aircraft in the sky, those of trains and motor vehicles on the earth, and the torrents of news circulating by telephone, telegraph and television. These fifteen spatial units govern that total urban system which I call the city.

If we now consider this system with its fifteen units, and if we combine them with the five elements and five points of view so as to form a complex of forces exerting their influence on the city, we shall then realize that we are talking of billions and trillions of aspects and problems Ian

enormously complicated system.

We might naturally ask ourselves if this is the first time that the city has fallen sick. Obviously it is not. A city is, generally speaking, always sick. Sometimes it is the dwellings that are unsuitable for habitation and become slums; in other instances service installations are faulty or lacking, as in the past, when there were no town mains of any kind. In certain cases, it is the people themselves who are abnormal so that the community does not function properly. Diseases peculiar to cities, just as human diseases, have always existed. Sometimes remedies could be found for them, sometimes not. But all these diseases differed from our own in that they were restricted to a single element, a single aspect.

Nowadays, the disease of the city is also that of the whole system. It forms part of that system's very existence and increases as the system expands. We can say today that every city is, by definition, sick and that it is always moving towards a crisis, because no single one of its elements is immune from disease.

INTENSIFICATION OF THE CRISIS

If we have succeeded in understanding the exact nature of the crisis and the reasons for it, we shall also be able to realize easily enough that it can only get worse and worse as time goes on, if things are allowed to remain as they are. It is because we have been unable to grasp this state of affairs that we find ourselves incapable of dealing with it rationally and have no assurance that we will be able to avert the worst.

Since the cause of the crisis in the system is essentially the latter's size, obviously as the size grows, the problems arising out of it will grow in the same proportion. Assuming that the world population at the end of the century will be double the present population of 3,500 millions, (and more likely it will be something more), that means it will have reached 7,000 million. In the generation immediately following, that is to say, by the year 2030, the population will probably have quadrupled, but even if this were not so, it is bound to be very much higher than 7,000 million. If this rate of increase continues, we shall have reached a figure of over 20,000 million by the end of the twenty-first century. Such a population increase will call for a corresponding increase in the units which compose the main elements of the city.

But population is only one aspect of the question. A city is not composed only of human elements; there are others besides, such as buildings and mains of various kinds, which complicate the problem. To be able to deal with questions of buildings and mains, we have to know something about the economy. We know, of course, that the economic potential of the population is expanding. We

may therefore expect per capita income to rise steeply, to at least double the present one in the course of the generation. This means that the gross revenue of a medium-sized town will have quadrupled.

As a first approximation, as the population increases, the need for surface space increases proportionately. However, since incomes go up, people demand more space for their dwellings and service networks. They also have more cars at their disposal and they insist on more room for them, too. And with rising prosperity, the mileage covered by each car constantly increases, so that new motorways have to be built. We can, therefore, say that it is not just the city itself which needs more room, but also every individual in it. This explains how it is that in a good many urban centres, over the past forty years, the surface area has multiplied twice or even three times. We are led to face this additional problem: that the demand for urban space is bound to increase at a faster rate than the population and, in certain cases, will greatly outstrip the growth of the economy.

We now see that, where we have a population with an increased economic potential and therefore insisting on more living space, our whole system of human settlements is bound to become much more complex than the actual growth in population would seem to justify. Likewise, the whole body of problems increases at a faster rate than does either the world population or the urban population.

ESCAPIST SOLUTIONS

Most people are not yet aware of the major problems. But there are some who understand them because they think and they make calculations, even though these may not always be very accurate. Such people endeavor to find solutions. At present these are, in fact, but escapist solutions. I propose to enumerate the main ones in the order of their appearance.

In the first category we can place solutions based on various myths. These are, for example, the myth of optimism, which foresees the solution of all problems in emigration to other planets or in the abolishing of motor-cars; the myth founded upon imaginary concepts, such as the assertion that people are living today in high-density urban agglomerations, whereas the medium-sized town of today is in fact less densely populated than it was a generation ago; the myth that our problems would be solved by increasing the height of buildings, although, on the contrary, these enormous constructions create new problems without at all solving the human ones.

There is a whole series of other more realistic Utopias, those which are based on some dream of reconstruction which is entirely divorced from logic. According to these,

cities are no longer necessary.

There is still another form of Utopia based on the application of the same abortive solutions to various problems which were tried at the end of the nineteenth century; these led to a host of Utopian groups which founded Utopian communities. This is a typical escapist solution.

Then there are escapist-motivated solutions which take the form of ideal cities and technological Utopias. These advocate the creation of parking lots on the flat roofs of dwellings, or the construction of buildings shaped like huge metal tanks capable of moving from place to place.

The most dangerous escapist solutions are those which advocate a return to small towns. Actually, many of us have been born and raised in such towns and we still see them in our mind's eye and dream of going back to them. This form of Utopia takes on different aspects, such as the ideal little towns like those imagined by Skinner with his Walden Two, or like those described in Aldous Huxley's last book, Island, in which there is a small island where people live in little towns.

Still more dangerous is the theory recommending as the ideal solution the establishment of new satellite towns outside the large cities. Yet do we not now possess the evidence of experience, showing that the satellite towns established sixty years ago have for the past thirty years been urban sectors and that the same fate has befallen those established thirty years ago?

THE PATH OF THE FUTURE

We have now reached the point where we must decide on the future road to follow. The question is: are we now capable of examining systematically the various practicable alternatives for the future which are open to us? I believe we are.

First among the roads we can follow is that of research into basic causes, and the first among these to be studied must be the world population increase. Even if a decision on birth control could be adopted immediately, two generations would go by before we could convince the inhabitants of remote villages in India or South America to apply it. This means that in all probability we will reach the figure of 7,000 million and then 12,000 million before the population increase can be arrested.

Given this increase in world population, it is permissible to ask whether the urban population must necessarily rise too. Could we not arrange to keep this population in the countryside? That is something quite out of the question. Man's belief in the freedom of the individual (which all peoples are coming to hold as firmly as their belief in

human progress) makes it impossible for us to intervene directly in a man's decisions. We cannot say: 'Live in the villages, even if you are not needed for rural work to produce food, which can today be produced by a reduced number of people.'

The general increase in farm productivity will sustain the swelling of urban populations and the decrease of the rural population. The result will be that, in a world population of 7,000 million in the year 2000, 5,000 million will be city dwellers. Consequently, the urban population will not simply have doubled, as is sometimes naively thought, but will have quadrupled. And when the world population reaches 12,000 million, the lowest leveling-off point, 10,000 million people will be city-dwellers, six or seven times the present number.

Let us now consider the third road open to us. Given the fact of the increase in the urban population, might it not be possible to restrict the growth of our cities by directing the surplus population to new towns? We should give this solution serious thought. We could, indeed, build new towns to absorb that population if the necessary funds were available; for such towns call for a bigger capital investment per head for fewer services, especially during the first few years, the first decades, the first generations, until they reach the size of our present-day cities.

But why do we want the new towns to reach the size of today's cities? The answer is that only towns of a certain size can give men a greater number of options. Some people will say that even a town of modest size can have a theatre and a hospital, and, indeed, towns of 50,000, 80,000 or 250,000 inhabitants (this last being the fashionable figure just now) will be attractive to a certain proportion of the population.

The answer to this argument is simple. There was a time when a man was presumably content in a village of 700 inhabitants, which could support a primary school. What people forgot was that such a village could well have insisted on having a secondary school, a vocational school, and a university for its children.

Some will still argue that small towns like this can even meet the cost of maintaining a theatre. But where is the man who will be content with just one theatre, on the model of the small cities of ancient Greece, where the theatre was only obliged to open its doors during important festivals? Might he not well prefer a city with five, ten or twenty theatres, where he could choose between various productions? And why would he be content with a hospital with 200 beds if his disease calls for the attention of a number of specialists, which only university centres are able to provide? In fact, we cannot logically conceive of a city of fixed size which can satisfy our needs. The larger a city the more the needs it serves,

which is why people are increasingly attracted to cities.

Should we enlarge our present cities or should we build new ones? The answer is that, theoretically, we could build new ones, provided we make them at least as large as the present ones. In view, however, of the fact that the exodus is from small cities to large ones and that, whatever the size of the new cities we wish to build, their actual construction is bound to take a considerable number of years -one, two or possibly three generations- the population flow will obviously be away from them. Consequently they will prove a failure, for we cannot possibly force these generations to accept dictated solutions to problems which involve their being told where they are to live.

So the answer to this difficult question is as follows: evolutionary and constructive forces will inevitably lead to the growth of cities of the present type in response to the need to satisfy all the requirements of the inhabitants. This does not mean that a certain number of cities of a new type will not be built, but the building of them will be difficult, and will only affect a small proportion of the population.

Thus we are led to the following conclusion: the most probable, logical and practical solution among the three we have been discussing is the progressive expansion of the present type of city as a result of the massive influx of an ever-increasing population.

TOWARDS ECUMENOPOLIS

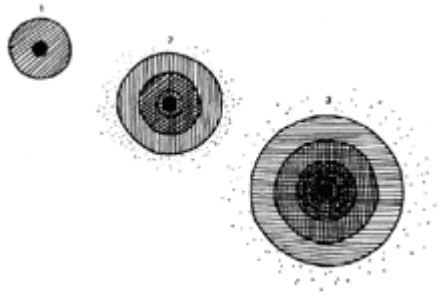

Fig. 4. Cities initially expand in concentric circles.

Our present cities are developing into increasingly complex systems. Starting with the city which develops in concentric circles (see Fig. 4), we finally reach the one which is strung out along the main artery linking it up with the nearest town, port or coast. We thus pass naturally from the city we are familiar with to a system of cities linked together, forming an urban complex with great numbers of inhabitants (Fig. 5).

This brings us at last to the following conclusions: under the growing pressures of these various forces -economic, biological, demographic, etc.- we are gradually creating a bigger and bigger system of settlements, a system which, left to develop blindly, can only worsen daily and eventually bring us to catastrophe. This system will very quickly assume world proportions. From the megalopolis we shall pass to cities extending over continents, and thence to Ecumenopolis, or world city. Its advent is inevitable. Any strict analysis reveals that there is nothing logical, rational or practical we can do to avoid it.

Ecumenopolis will be shaped by the forces engendered in cities of the present type as they attract huge populations in the future; by great systems for transportation, the

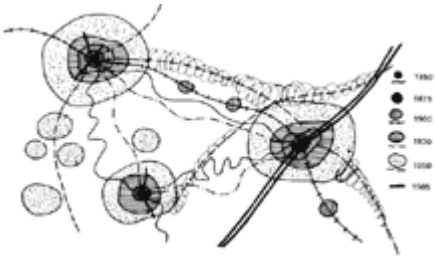

Fig. 5. An urban complex, formed as population expands and cities become increasingly linked together.

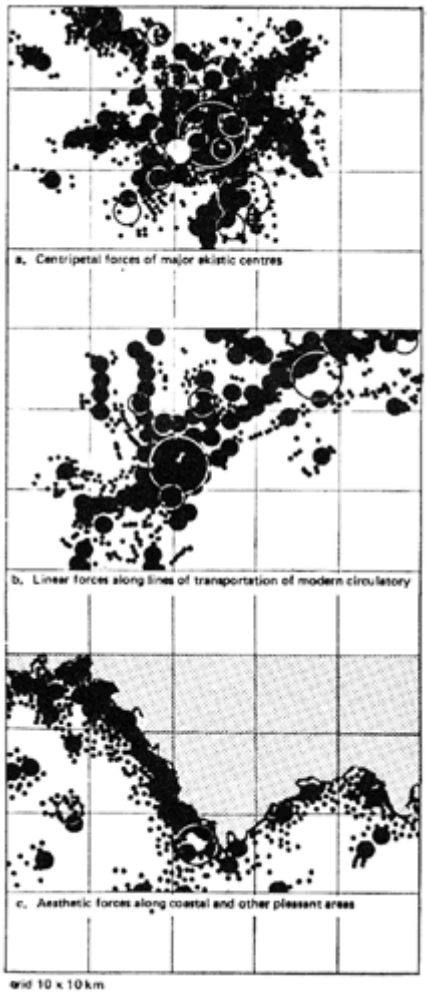

Fig. 6. The three forces which will shape Ecumenopolis.

inevitable magnet for industry and other activities; and by forces of an aesthetic nature, such as the attraction exerted by the seaboard on increasing numbers of people (Fig. 6).

People will want to enjoy aesthetic pleasures at home; they will want to be able to build their houses overlooking an attractive valley, or along the coast with beaches opening before them, even though the crowded city centre is some distance away. At the same time, we must bear in mind the attraction of the vast plains, where water abounds, where the climate is mild.

All the above allows us gradually to form an idea of what the universal city will look like. As a result of research conducted by the Athens Centre of Ekistics we can already imagine to some degree how it will appear within a century or a century and a half (Fig. 7). (with refernce to the Ecumenopolis in Greece, please see Fig. 9)

Ecumenopolis, this world-city that will en-globe the whole of humanity, will be a frightening conurbation, but, as we made clear earlier, we have no evidences that enable us to conclude that a better sort of city can be created. Once we are convinced that this city is inevitable, we can only form one conclusion: if it is built on today's lines, according to present-day trends, it will be a city doomed to destruction, that which Lewis Mumford referred to some time ago as a necropolis - city of the dead.

There is still, of course, another road that could be followed: to avoid it altogether. But, as has been already pointed out, this is not a logical or practical solution. I would like to emphasize here that we have no reason to claim today that we know any more about the reasons why it would be a good thing to avoid establishing a universal city than did the citizens of ancient Athens, about 3,000 years ago, when Theseus decided to concentrate the rural population in one town, the tiny city of Athens, with only a few thousand inhabitants. How could they tell then whether or not they should avoid establishing this initial town in the plain of Athens? Doubtless similar arguments were used then in favor of the scheme and against it as are used today in the case of the universal city.

It is high time we accepted our responsibilities and started working toward something which must be done right. To do this, we must understand that the real challenge does not lie in whether or not to create the world-city; it lies in creating it correctly, taking into account the human factor, so that man who, at present, sees his values disintegrating around him, may be able to find them again.

THE OUTLINES OF ECUMENOPOLIS

In the preceding sections of this study, I have tried above all to clarify the problem so it can be fully understood, for

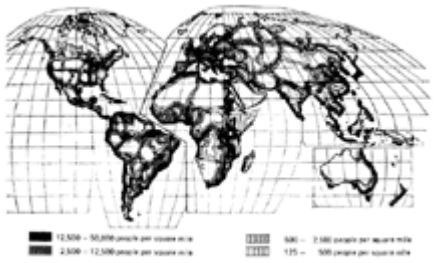

Fig. 7. Ecumenopolis, 100-150 years from now.

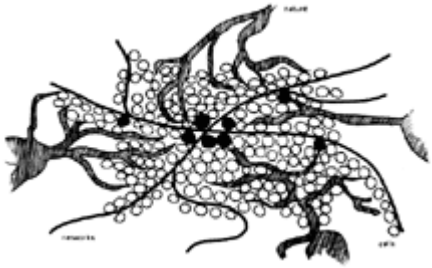

Fig. 8. The interweaving of nature, transportation networks and population cells in Ecumenopolis. The cells have from 30,000 to 50,000 people each.

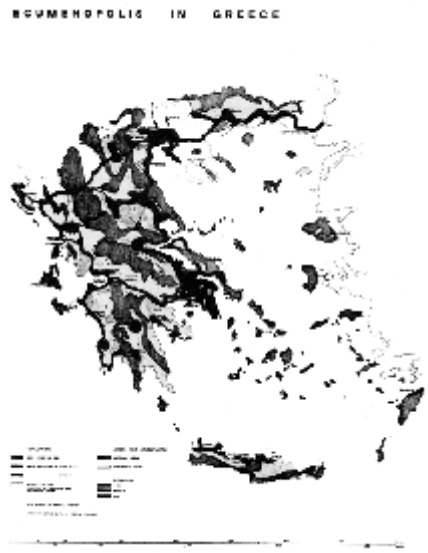

Fig. 9.

understanding is an essential condition for success. If we fail today to deal with this problem, it will be because we have not understood it.

In Athens we are presently applying ourselves to the collection of data on human settlements. This systematized knowledge forms an organized discipline which is becoming a science, called 'ekistics'-the science of human settlements.

We must realize that ekistics cannot be restricted merely to understanding the problem; it must also lead to solutions for tomorrow. How is it that man in the past possessed the necessary strength, imagination and courage to build permanent settlements when he was still a hunter? How is it that he then went on to build villages, towns, industrial cities and metropolises? Why shouldn't we today have the necessary courage to conceive and build the world-city? To do it, we need, in addition to science, technology and art. Thus, we shall have to make ekistics a science, a technology and an art, all in one.

If we set to work in this way, we shall come to realize that we really can create Ecumenopolis. It is of no special importance to us to know exactly what the size of the city will be. For it will not make much difference to us that, going in certain directions, we would pass through hundreds of miles of urban centres. What will really matter is to know that, after a journey of ten or twenty minutes or of one to five hours, as the case may be, we can be certain of finding the country-side.

When we see the problem in this light, we shall understand that size and shape are of no special concern; what matters is a proper balance between elements. We shall then affirm this conclusion: that nature must be converted into a gigantic network with tentacles penetrating deeply into all parts of the universal city so as to reach every residential area -a system of woodlands transformed into parks, intersected by avenues and gardens, within easy reach of our homes (Fig. 8).

The size of a city should not worry us if we know that we can control the atmosphere and keep it unpolluted. There are small towns where the atmosphere is contaminated by a great number of cars and large towns where the atmosphere is clean. What is important is to ensure that pollution from industrial plants and vehicular traffic is under control. Then we will be able to breathe better air in a large city than we could in a small town without proper pollution control.

Proceeding in this way enables us to understand, little by little, how the elements of nature will penetrate the city. A similar approach can establish the nature of the various networks. Transportation problems have nothing whatever to do with the size of a city. They are the result of lack of

organization and because we have not yet learned that men and machines cannot exist on the same footing.

Urban transportation will function properly when it is placed beneath the surface, like arteries in the human body. As soon as we grasp this fact, we can take the first steps in the right direction - indeed, we have already done so. At one time, water was carried in surface conduits; the same was true -and still is in many places- of sewage drains; overhead electric and telephone wires are still a common sight.

The day will come when all such installations will be below the surface. Goods will be transported through underground tubes. Some of these already exist. In Canada, important Networks of the kind are under construction for the transport of industrial products.

In the near future, no one will object to using underground roadways, just as no one made objections when the subways began transporting people at speeds of 15-20 miles an hour in London, Paris and New York, considerably faster than they had been used to in their horse-drawn cabs. Before very long, we shall be traveling underneath our cities at speeds of 60-200 miles an hour, spending perhaps between 5 and 10 minutes below ground, instead of driving for hours on roads, constantly irritated by the stop and go of traffic lights.

These new transportation networks will be much more satisfactory and will make it possible to have cities spread over very much wider areas while being much better organized.

When this programme has been carried out, we will then attain the solution which is of prime importance to us: freeing the surface of the earth for man to enjoy and to use for the development of his artistic gifts. In a word, the earth's surface will be used in harmony with man's way of life. We look back thus to the time, thousands of years ago, when man was both a researcher and a guinea-pig in the vast laboratory of life and did the experiments which enabled him to build throughout the world those beautiful cities which we still admire: ancient Athens Florence, the old Paris and old London, as well as Williamsburg in the United States. An intrinsic worth attached to these cities because they had been built on a human scale, to man's own measurements.

A careful study of the cities of the past shows that they never exceeded more than about 1 mile in length or about 1.5 square miles in area, and included no more than 50,000 inhabitants, when they were at their most successful. Cities which were much bigger were, in fact, the capitals of large empires and were never able to retain their organization for very long. They often deteriorated into anarchy, as in the case of Rome and Byzantium. If

they hoped to sustain an organized and integral life of their own, they had to be carefully planned from the start, like Peking and Changan (modern Sian), two ancient Chinese capitals.

Generally, then, any cities which exceeded the usual, the reasonable maxima were doomed to fail, were short-lived, and offer us no solution. Those that do offer a solution were the small cities of 30,000 to 50,000 inhabitants, covering an area of about 1.5 square miles. If we examine their structure rationally, we shall realize that we must return to something similar if we want to organize our life properly.

We thus reach what seems to be a paradox: on the one hand, the inevitable huge Ecumenopolis; on the other, the absolute need for man to live in small cities. But this only appears paradoxical. For following such reasonings to their logical conclusion, we arrive at a gigantic city of superhuman dimensions, made up of small units.

Thus, our thought processes have led us to the construction of huge cities composed of small towns, of vast urban complexes served by underground transportation systems, leaving the surface of the ground free, at man's disposal, and supplied with every human amenity. The conclusion we reach then is that Ecumenopolis, the world-city, will be made up of cells of 30,000 to 50,000 people.

In practice, we are already beginning to build such cities. Islamabad, the new capital of Pakistan, intended for 2.5 million inhabitants, has been laid out in this way. Before such cities are even finished, life there is already in full swing and anyone can go and study them in operation. It is very important to keep on studying them until they've been brought to perfection. Then by applying similar principles, it will be possible to transform some of the older cities.

Indeed, these principles have been applied to certain limited areas or even to certain cities which are planning the organization of the entire system on this sound basis. One example is Philadelphia (United States), which is now engaged in a gradual urban renewal project which will house 10,000 families on ground once covered with slums. There is also the immense urban region of Detroit, now in course of development and planned to accommodate by the year 2000 more than 10 million inhabitants enjoying maximum amenities.

So, after examining the nature of the crisis of the cities and the various escapist solutions, we have gradually synthesized a solution. This solution enables us to envisage the development of human settlements in a

practical manner and to build in such a way as to offer men a much happier form of existence by combining the advantages of the small towns of old -which were certainly considerable from the point of view of a humane way of life- with those of the large cities which alone are capable of enlarging our freedoms and chances of development.