

# The universal urban crisis

*The text that follows is a slightly edited version of a document by C.A. Doxiadis extracted from Emergence and Growth of an Urban Region, vol. 3: A Concept for Future Development (Detroit, Detroit Edison Co., 1970), pp. 3-8.*

## Introduction

The urban crisis is a universal phenomenon. Whether mankind deals with large or small cities, with countries of high or low income, developed or undeveloped, it is invariably faced with an urban crisis. This may appear in different forms and may not always be understood as such. Very often, in fact, it is not even recognized as a crisis. The reason is that the symptoms may vary. In some cities the crisis may appear as a grave traffic problem, a waste of natural resources, a social, economic, technological or human problem. Any systematic study of the urban crisis will, however, show that it is indeed a very large and universal phenomenon which started in the 19th century and is developing at a much higher speed today.

Because of the great number of forces affecting the urban scene – and there is no type of natural or man-made force which does not do so – cities and the crises they are passing through are very confusing and difficult to cope with. Many cities have many projects; some to solve problems of transportation, others to beautify certain areas or create important new communities. But there is hardly a city today, whether large or small, whose leaders pretend that they have taken the measures that can guarantee citizens a better future for their city.

The situation has reached threatening proportions and is becoming more menacing every day. At first, the urban crisis was not even recognized. And when recognition came, the phenomenon was not regarded as a real urban crisis: a problem affecting the whole system of urban settlements. It was thought to be a crisis only in the residential areas which were seen as slums; a crisis of low-income groups lacking proper homes; a crisis in the system of transportation; or a crisis in the quality of air and water. Even when groups of citizens protested, either because they themselves were suffering or because the whole system was under strain, the problem was not readily recognized as a crisis of the whole system. Almost everyone was speaking only of a partial crisis of the system, or accusing those who were speaking about the crisis of unnecessarily frightening other people.

It was only in the 1960's that the extent of the urban crisis began to be fully appreciated and recognized by city governments, national governments and international agencies all over the world. It may be doubted, however, whether it is viewed everywhere as a problem of the city in its entirety.

When people speak of an urban crisis, they usually refer to that part of the crisis related to a single symptom which causes them the worst problems. Others do not look upon the phenomenon as a crisis because it is not, according to them, accelerating at the high speed that would justify the definition of a crisis, or because it will not spell the death of cities. We do not agree simply because many cities all over the world continue to deteriorate, and because death has indeed already struck large or small parts of these cities.

## The main causes

What is really happening to our cities? What are the forces that are working to make them less than the most desirable places to work and live? Why does man have to face a situation that looks like a disease of the whole system as well as a real accelerating crisis?

Some people speak of the expanding size of cities as the main cause of their problems. "Large cities are unmanageable" is a current complaint heard from many expert sources. Man, however, has demonstrated his ability to successfully manage large and widespread institutions, corporations and national governments. If it is remembered that most of them have reached their present proportions over the last one hundred years, parallel with the growth of cities, it is further shown that man is more capable of dealing with problems of large dimensions than presently demonstrated in the cities. If one also considers that in biology there are organisms consisting of many parts much larger than the initial organisms, be they atoms, micromolecules or cells, it will be seen that size alone cannot be blamed as the cause of city problems.

The high rate of growth of cities, particularly in the last one hundred years, is also often mentioned as the principal cause of the city's problems. However, if it is remembered that in the past people built cities at much higher speeds, starting from nothing and actually building new cities in areas without any facilities or rebuilding ravaged cities; that private and governmental institutions such as large corporations or armies have grown at much higher speeds; then one can say that humanity has dealt successfully with organizations and institutions which have developed at much higher speeds than cities. So, rapid growth cannot be singled out as the main cause of the problems in the city.

A systematic study of growing cities around the world shows that the crisis may be explained in two ways.

- The first way is that the city – a system of people living together, pooling their energies, and developing a community with a common economy – is growing out of balance in certain areas. In the past the number of people were growing at the same rate as the energy they produced, and economic growth was a direct result of the growth in the number of people and their energy. Therefore, the city was a system where people, energy, economy and physical formation

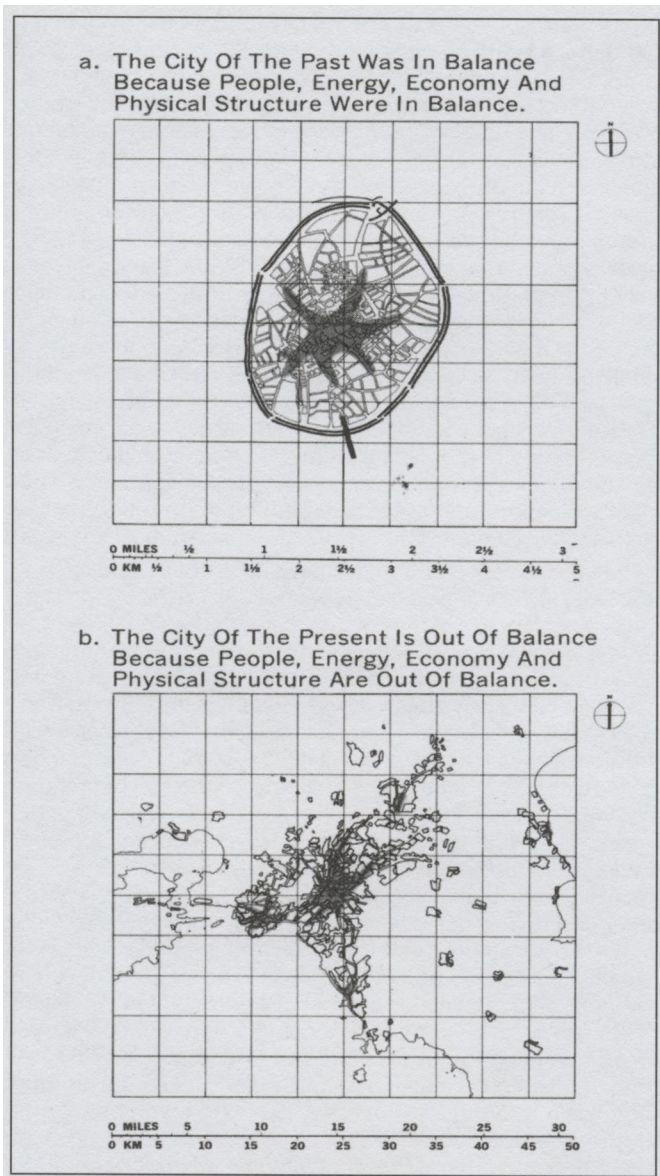


Fig. 1: The city of the past and the city of the present.

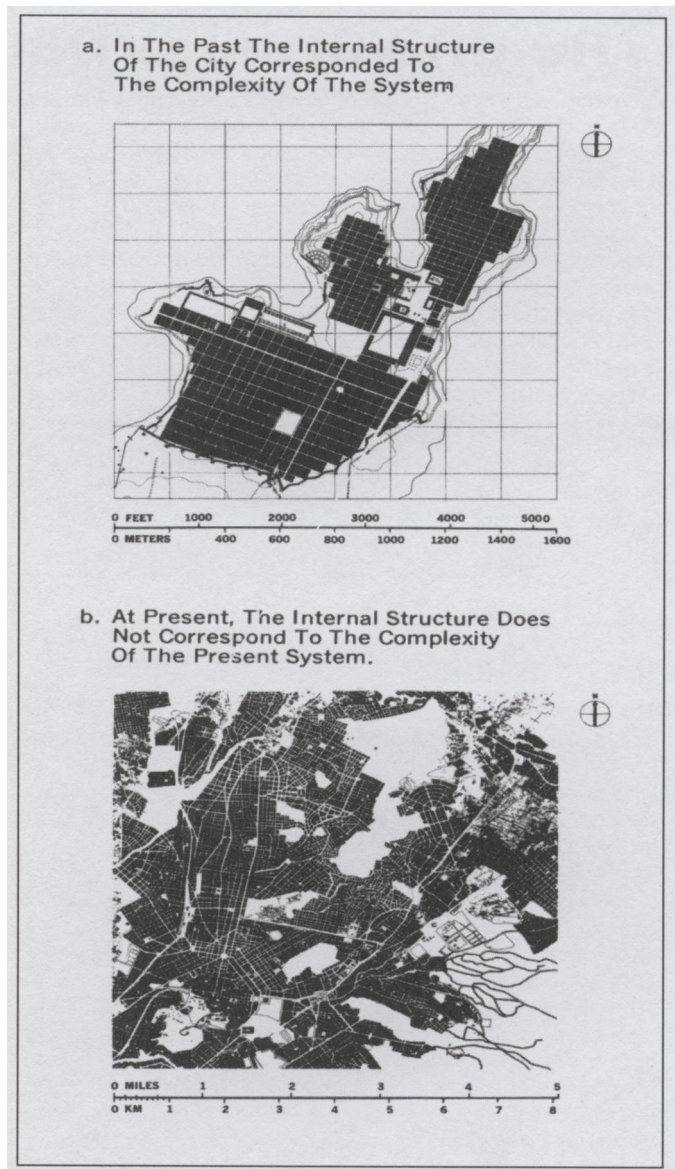


Fig. 2: The structure of the city.

were in balance (fig. 1a). During the last hundred years, because of the differing rates of growth of population, energy and economy, systems have developed which lack balance (fig. 1b). For example, people in general go far out of the cities because the commercial forms of energy help them do so, only to recognize afterwards that by their action they have led to a system which they cannot support properly in economic terms. They are faced with numerous problems which affect all of them, or for the most part and to a greater extent, the weakest economic groups.

- The second way to explain the crisis is that the city, like any other growing system, develops an increasing degree of complexity which is always served, in nature or in society, by corresponding physical and institutional structures. The cities of today have not yet reached the stage where they have a structure serving their increasing complexity in the same way as the structure of a century ago served the complexity existing in those days (fig. 2). In this respect, the situation is getting worse.

From these observations one can conclude that neither size nor rate of growth alone is the cause of the problem; instead, lack of balance and proper structure in the cities. It might be true that the size of cities and their rate of growth are at the origin of the problem. This, however, is not because either size or rate of growth cannot be managed, but because within the big, growing cities man is not able at present to deal with these problems. He has not been able to achieve the needed balance of forces and to provide the proper physical and institutional structure as he did in the past.

The fact that man is still not able to control the size and speed of growth of cities creates a crisis. The real cause of the problem, however, is the gap which exists at present between size and speed of growth of cities and man's inability to cope with them. He cannot even pretend that enough is known about these problems since it is admitted that not even the existence of the crisis was recognized before the 1960s and that, today, it is not appreciated in its full extent.

There are many cities and urban areas in the world about

which hundreds and thousands of reports and plans have been drafted over the last twenty years. People are beginning to ask what can be done with all these reports and plans. There are, in addition, knowledgeable people in business and science who are beginning to question whether there are indicators to show the gravity of our cities' problems. Because of the lack of even basic tools, such as indicators of the different phenomena, many of the reports and plans do not shed sufficient light on the problems confronting us. There exist reports on the same city which do not show how life will be changed by the acceptance of a new plan. In some cases, reports even contradict each other because they are not aimed at any specific goal, are not inspired by the same principles, or do not use a consistent methodology.

### Man's inability to control the crisis

There are four main reasons why man seems unable to control the urban crisis.

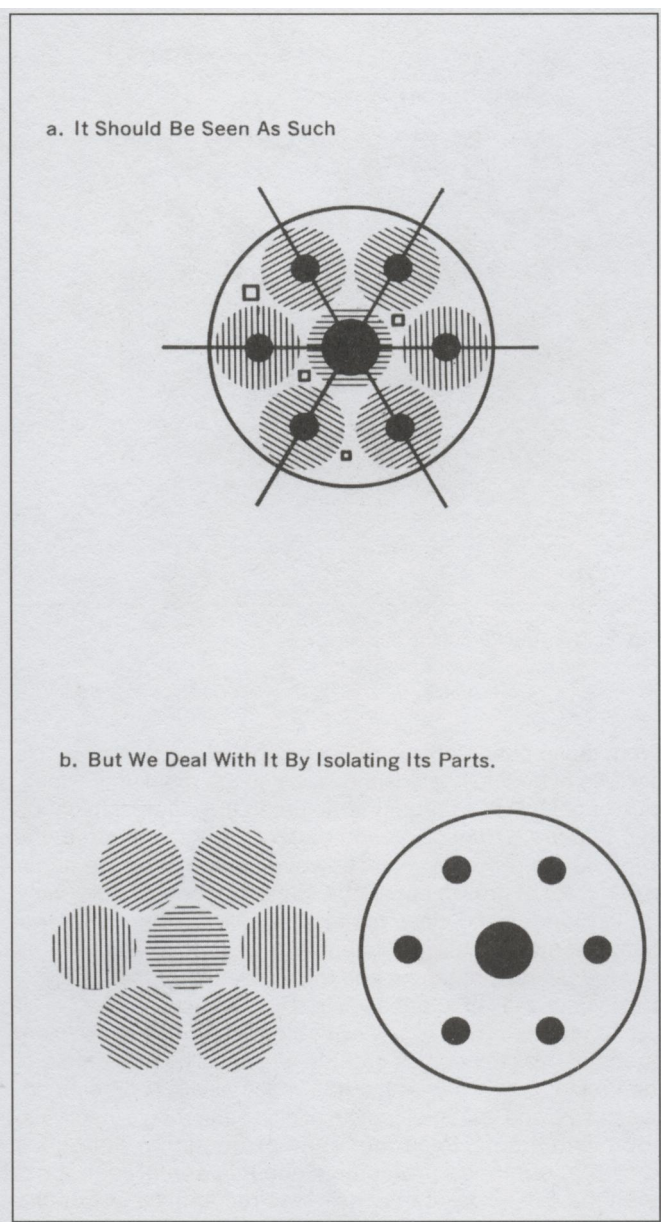


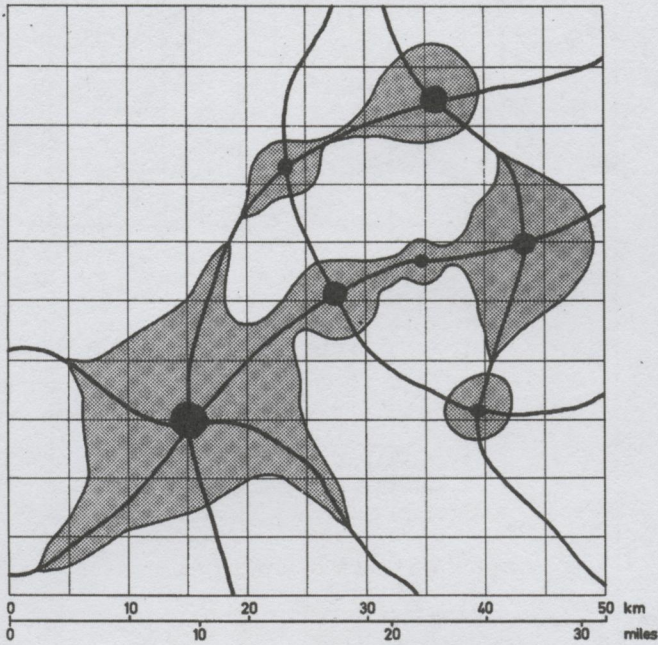
Fig. 3: The real city is one organism.

- Man often continues to see the city through the eyes of experts in separate disciplines dealing with single aspects of city life. People speak of the transportation problem and try to solve it through the transportation engineers or the transportation economists only, in many cases without even bringing these two professions together. Cities suffer from the social aspects of the crisis and try to solve them by mobilizing only the sociologists or other social scientists. Man suffers from air or water pollution and tries to deal with these as separate problems, or looks at the aesthetic problem of the city only through the eyes of the architect or the artist. All these problems are simply aspects of one and the same organism: the city of man (fig. 3a). To continue to deal with them separately by isolating its parts (fig. 3b) is like refusing to see that man himself is a single organism which cannot be looked at separately as body or senses or mind. Medicine for man has made far greater progress than medicine for cities because it has developed an effective interdisciplinary approach. The interdisciplinary approach is beginning to be tried in many cities today, although it has not yet produced a real synthesis.

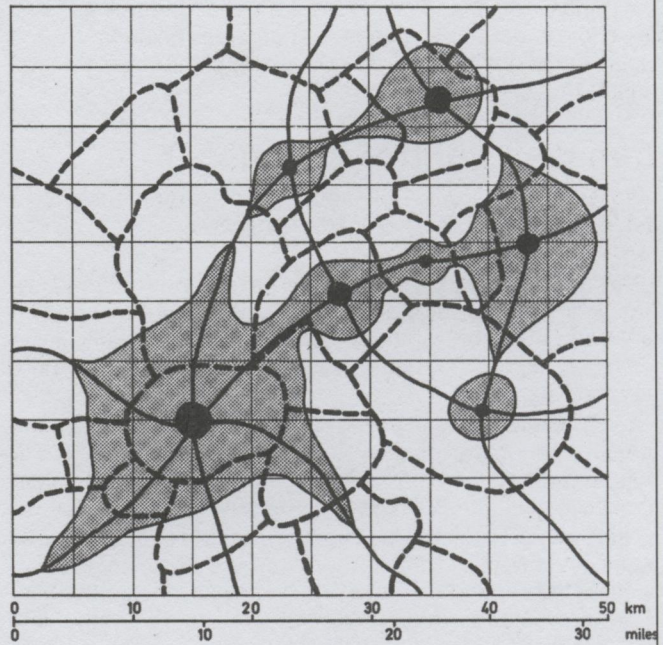
- The second reason for man's inability to control the crisis is that he is still dealing with the wrong area and the wrong size. Many people think of the city as built-up areas only (fig. 4a). Others believe that the city is limited within the institutional boundaries of the municipality (fig. 4b). The real city of man, however, has always been defined by his ability to move within a certain area, within a certain time-span and always within the same day. Since the dawn of history, the city has been defined by the kinetic field of man who had the ability to move around and form his small village community, his city or his metropolis. This was followed by establishment of the appropriate institutional structure. Today, the individual man who lives in one city and works in another, whose wife works in yet another city, and whose children go to school somewhere else, views the whole area as his city, but many people still fail to see this (fig. 4c). Someone is referred to as a farmer because he works on a farm and is thought of as an isolated inhabitant of the world, as was the case a century ago. But nowadays, he may work on his farm during the day and still be able to attend an evening class in the nearby city. Moreover, his wife may have a job in another city. He is no longer a village dweller; he is the inhabitant of a great city of man (fig. 4d). The city has changed, but this fact still has not been sufficiently recognized in studies for the future.

- The third reason for man's inability to control the urban crisis is that he still thinks in a very narrow time-frame. When planning for the future, when preparing to build better cities, people think of one-, five- and ten-year programs, whereas this is a system whose main parts, the people and the buildings, have an average life-span of seventy years. There are parts, such as roads and facilities, which have a much longer life, not in physical terms, but in terms of the commitments they create with rights-of-way, etc. Though the time schedule for the city as a whole should be longer than the life expectancy of its parts, probably twice as long – up to 140 or 150 years – schedules are shorter than those used by man himself when planning for his own life, security, safety and settlement. It can be seen how inadequate this approach is if one looks at the urban system and how it grows under the impact of forces arising every ten years. In fact, it will be seen that in every generation, which has a length of about thirty years, there are ten new groups of people, buildings and projects entering into the picture and disappearing about seventy years later. In such a system, committed by action everyday for more than seventy years, mankind tries to cope with the situation by means of one-, five- and ten-year programs. Such action contributes to great failures of insight and of solutions (fig. 5).

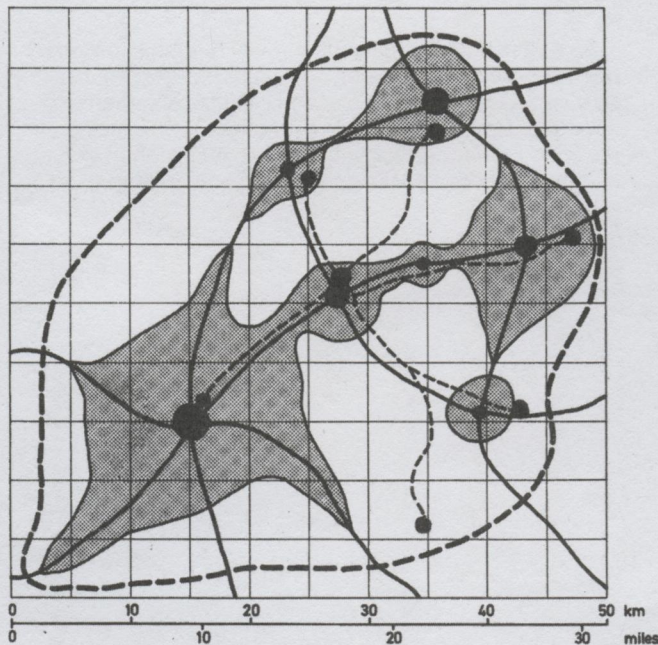
wrong conception of Human Settlements based on built-up areas



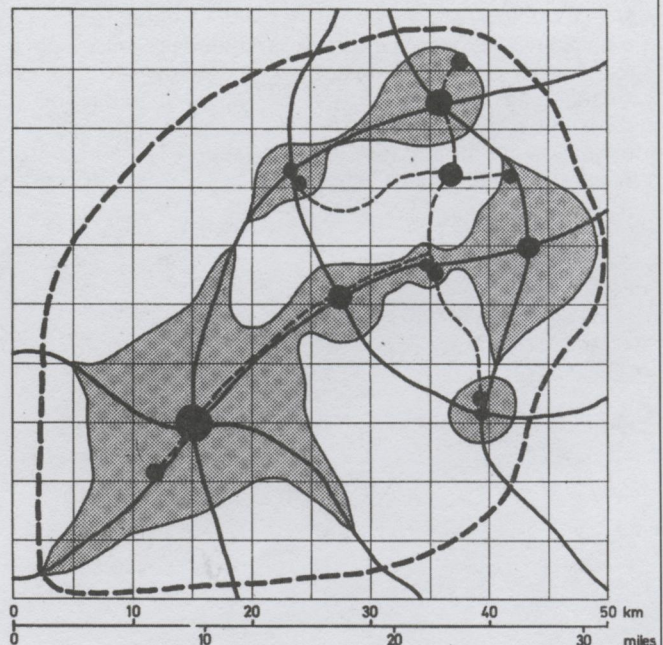
wrong conception of Human Settlements based on administrative boundaries



the real Human Settlements as defined by an urban dweller



the real Human Settlements as defined by a "farmer,"



(Source: Reproduced from C.A. Doxiadis, "The Future of Human Settlements," a speech delivered at the 14th Nobel Symposium, *The Place of Value in a World of Facts*, Stockholm, Sweden, September 1969; printed by Doxiadis Associates as Document R-GEN-A443, September 1969, p. 3. Proceedings published by John Wiley, New York).

Fig. 4: The real city reaches beyond traditional boundaries.

- Finally, mankind at times takes a somewhat narrow perspective in looking into the future. Although his future is conditioned by four forces – the constant past, the declining past, the continuing past and the created future – too often his actions in city building are defined merely by extrapolating existing trends. This means that only the three forces of the past are considered. To forget these trends would be a grave error. But to forget the fourth force – the ability of man to create the future – leads to stagnation.

### Can man control the crisis?

Is there any reason to believe that, if the urban crisis is so acute and if man has been unable to deal with it so far, he can ever hope to resolve it?

- This question may be answered in several ways. Every new problem is hard to solve at the beginning. The urban problem is greater than man's other problems, hence the difficulty is even greater. But there is no reason to believe that he cannot cope with it.
- A second answer to this question would be to look at all the forces at play in the urban system: the number of people, the built-up area, the economy, and the energy mobilized within the system, and to see that they grow steadily.
- There is one aspect of the city for which the indicators grow faster, and this is its complexity. Although there is no generally accepted method of measuring complexity, no matter how it is measured, complexity grows faster than the other aspects of the city.
- There is only one other force which seems to grow even more rapidly than the complexity of the system, although this cannot yet be proved. This is human knowledge. The study of trends encourages the belief that mankind can mobilize human knowledge to grasp and face the urban crisis and definitely resolve it.

Also, man now recognizes the problem, whereas ten years ago he did not. Experience has shown that once man is able to recognize a problem, even one not created by him, such as diseases of the human organism, he can develop the ability to solve it. He has brought numerous diseases under control and he is on the road to tackling many more. The same can justifiably be said about cities.

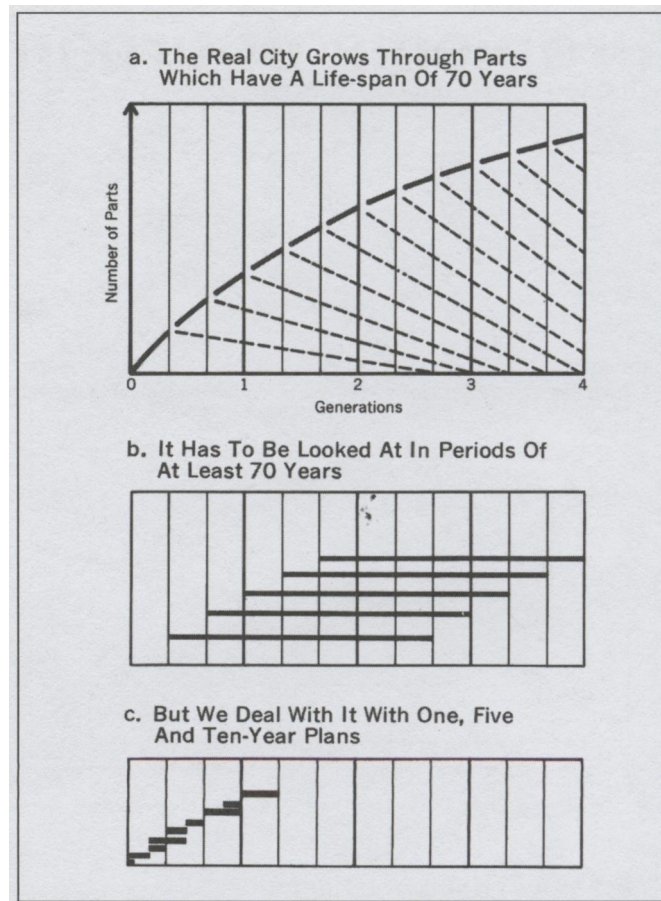


Fig. 5: The wrong and real time schedule.

As a result of the exploding force of human knowledge, man now has a chance not only to grasp the problem but to analyze and understand the city and its crisis and then to develop the right ideas about how to overcome it. Combining this with the wisdom needed for action, the conclusion may be drawn that humanity can successfully overcome the urban crisis.