Problems of urban renewal

The text that follows is a slightly edited version of a document by C.A. Doxiadis extracted from Urban Renewal and the Future of the American City *(Chicago, IL, Public Administration Service, 1966), pp. 1-51.*

Introduction

The task

For the last thirty years I have been trying to develop, as well as to practice, a comprehensive view of human settlements leading to "Ekistics, the Science of Human Settlements." Nothing less than an organized science can help us understand their complicated problems. If we continue to believe that we can undertake to solve these problems through urban economics, urban sociology, physical planning, or architecture, we shall certainly fail. The problems of human settlements have always been very complicated; but because humanity has lived in small, practically static, settlements for thousands of years, we have never before had a crisis like the present one. It is only now that it has become apparent that without an overall, systematic understanding of the problems of human settlements we cannot solve them. It is too early to say when we shall be able to perfect this new science. What we can definitely state, however, is that we need a scientific multi-disciplinary approach. This is the road I have chosen for myself. It is with this knowledge, however little it may be compared with what we need, that I try to look at this complicated contemporary problem of the major human settlements in the United States.

When I was confronted with the task of writing a report on urban renewal in the United States of America to be submitted to the National Association of Housing and Redevelopment Officials who deal daily with this problem and know so much about it, I asked myself whether I was entitled to write this report and what my contribution might be. It took me some time to understand my role in fulfilling the task assigned to me. Finally, I came to the conclusion that I had been asked to undertake this task precisely because of my noninvolvement with the technicalities and the day-to-day operational problems of urban renewal. My role was that of an outsider who could view the whole situation from a distance, to evaluate its weaknesses and its strengths, with the purpose of helping toward a better understanding of present problems, future policies, and programs.

After considering several methods of approach, I decided to study the situation without becoming involved in the details of the urban renewal program. Although I had to learn about many problems, I wanted to keep at a distance that would allow me to have the proper perspective.

At the same time, however, it became apparent that I could not speak only of generalities, that I had to get a clear picture of the situation as it had developed. In this, I was especially helped by the fact that during the three years after we started talking about this problem I was personally connected with several urban renewal projects, such as Eastwick in Philadelphia, Pennsylvania, Parktown in Cincinnati, Ohio, Riverfront in Louisville, Kentucky, and Northwest 1, in Washington, DC.

These two aspects of the work that I had to carry out, which were to some extent contradictory, had to be merged and balanced in a way that would enable me to approach the problem of urban renewal effectively.

When I reached the conclusion that I had, on the one hand, to remain as far away from the details as possible but, on the other, to learn as much as possible about the problem, it became clear that I had to work in two ways and try to create a synthesis out of them. One way was to proceed through the anatomy of a special case, to find out what is happening within the American city of the present, in order to understand the necessity of urban renewal and its effects on the city. The other was to learn as much as possible about the whole existing situation of American cities by a survey of problems and solutions.

Within the limitations of the time and the facilities at my disposal for this project, I tried to work in both directions simultaneously. I proceeded in this manner for about a year, until I reached the point at which I tried to synthesize these two methods of approach in order to reach my conclusions.

Anatomy of a special case – TURA

When I speak of proceeding through the anatomy of a special case, I mean the study of the elements of one representative case as a means of clarifying general problems and their solution. The method is relatively simple if we have a great number of similar cases that have developed in a similar way. Then we can generalize our findings and reach conclusions valid for all similar cases. But the question was whether we could find a city whose problems of urban renewal were typical.

After studying several cities I found that it was too early to speak of one city typifying the problems faced by all cities, since there is such a variety of cities and such a short history of attempts to renew them. I, therefore, came to the con-

clusion that I should have to use an imaginary city with many characteristics common to most cities facing problems of urban renewal. In this way we would gain by constructing a model that would be more representative of the average situation than any single real city. This was the only method that could lead to useful conclusions at this stage of our work.

When I tried to imagine such a city, I found the problems could not be confined within the city limits. I therefore decided to construct as complete an urban area as possible, without trying to define in advance whether it should be a city, a metropolitan area, or a part of one or both. I let the case itself guide me about the type of area we should have to use.

I thus came to construct TURA, which is a Typical Urban Renewal Area. By "typical," I mean representative of many of the characteristics common to most American cities facing urban renewal. By "area," I mean an urban area that can be distinguished from adjoining urban areas by intervening open spaces and by the fact that it has its own core of functions providing all necessary services for its whole area. I do not mean the area of an urban renewal project but the area of TURA, our study, which is as complete an urban entity as possible.

Thus, TURA is an imaginary urban area. It has been constructed to be used as a typical case study that will lead to an understanding of the problems of many of our urban areas. If it has been wrongly conceived, it will be misleading, but I had to face this risk. In order to minimize it, I checked my model with as many people as I could who have a good knowledge of the American scene, and their criticisms led me to make several alterations that made it as typical as it could be at this stage of our study.

I had to take certain risks; but I thought I could reasonably run them because of my wider involvement with problems related to the evolution of present-day cities in several parts of the world. The studies, which have assisted me enormously in conceiving properly the model of TURA, are mainly the studies of Dynapolis, the dynamic city, which I have been carrying out now for the last twenty-five years; the study of Ecumenopolis, or the City of the Future, which is being carried out under my direction in the Athens Technological Institute; and the study on the Human Community within our urban areas, which is being carried out by the same Institute.

Had it not been for these specific studies, and other more general studies that I have been making, I do not think that the model of TURA would have been as close as I believe it to be to the real situation.

Survey of urban renewal experience

Parallel to the study of the anatomy of a typical case I had to carry out a survey of the experience gained in urban renewal. Here, I had to face the difficult task of selecting a method of survey that would be practicable in relation to the limitations of time and money. In this respect I was also fortunate, as years of travel in the United States and visits to a number of cities had equipped me with a personal archive of impressions related to urban renewal problems.

Thus, I had the opportunity to use the experience of such cities as Baltimore, Boston, Cincinnati, Louisville, New York, Norfolk, Philadelphia, Pittsburgh, San Francisco, and Washington, where I had already met a number of the city officials and gained from their impressions and reactions. I also had had the opportunity of discussing with many more people, including developers, consultants, and leading citizens, their views on urban renewal problems.

The study of existing situations was divided into two phases: the first was a study of the literature and collected data on cities with urban renewal projects; the second was an analysis of the answers to questionnaires directed to all NAHRO members.

In surveying the literature and collected data, I turned to studies of problems of urban renewal, general or specific, and to officials who could provide me with specific data about their cities.

After this initial survey had acquainted me with some of the most interesting problems and cases, I undertook a study of many more through the questionnaire that was sent to all NAHRO members. Many of these people are the key members of Local Public Agencies (LPA's) engaged in urban renewal, and thus I secured the reactions of many people who are running such agencies. Of necessity, the questionnaire was general. It is, therefore, not possible to use the results of this survey as an accurate statistical description of the situation or of opinions about urban renewal; nevertheless, the survey acquainted me with a much greater number of problems and reactions than could otherwise have been obtained in a one-man study.

The 1960 census (the baseline for this study) showed 5 American cities with over 1,000,000 population. All these cities have urban renewal projects, all have urban renewal authorities, and all are NAHRO members; all sent information and data and 4 (80 percent) answered the questionnaire.

Of 16 cities with from 500,000 to 1,000,000 population, 15 have urban renewal projects, 13 have urban renewal authorities, and 12 are NAHRO members; 8 sent information and data and 9 (56 percent) answered the questionnaire.

Of 30 cities with from 250,000 to 500,000 population, 23 have urban renewal projects and urban renewal authorities, and 22 have NAHRO members; 10 sent information and data and 15 (50 percent) answered the questionnaire.

Of 79 cities with from 100,000 to 250,000 population, 53 have urban renewal projects, 52 have urban renewal authorities, and 37 have NAHRO members; 21 sent information and data and 32 (40 percent) answered the questionnaire.

Comparatively small percentages of cities with populations under 100,000 have urban renewal authorities and NAHRO members. For instance, of 2,037 cities with populations between 2,500 to 5,000, only 1 provided information and data, and for 27 there was indirect information – as they belong to the areas of larger cities that had responded. In the total group of cities under 100,000 population, 4 answered the questionnaire and for 37 there was indirect information.

These 5,304 cities, with a total population of approximately 113,000,000, constitute the urban part of the United States.

On analyzing this material it became clear that we had fairly detailed information relating to about 80 cities. Thus, we can speak with some certainty about cities of more than 500,000 inhabitants, with less certainty about cities of between 100,000 and 500,000 inhabitants, and with even less certainty about cities of fewer than 100,000 inhabitants.

The low percentage of smaller cities that have urban renewal authorities is not proof that the renewal problems in such cities are minor. Although many of them, especially those that are isolated and have remained relatively static, have few such problems, other small cities that are parts of major urban areas have suffered from the pressures of the major centers and many have grave renewal needs. For them, the lack of an urban renewal authority may well mean that they have no one in an official position who understands the gravity of the problems facing them.

Content of this report

This report consists of three main parts:

a. Chapters B and C present the urban renewal problem and its causes.
b. Chapters D and E attempt a critical re-examination of human settlements, in the light of which we proceed to study their future, particularly in the United States, in order to set the framework within which we shall have to re-examine urban renewal as it relates to the future.
c. Chapters F and G make some proposals for urban renewal policies and programs for the future and attempt to draft a blueprint for action.

The background of urban renewal

The problem

When I started working on the problem of urban renewal, I was not aware of its magnitude and complexity. I looked at it simply as a problem in renewal and, very much like others concerned with the problem, thought of it as a problem of urban renewal projects. But the more I worked, the more I found that the problem touched all other ekistic problems, and could only be faced within the framework of the total problems of the American city.

I have, therefore, gradually moved from the specific to the general: from the urban renewal project to the urban renewal program, urban renewal policy, and the definition of goals for urban renewal. Thus, gradually, I found myself thinking and working on the future of the American city and every major problem related to it. I have expanded my subject to urban renewal within the framework of the growing American city – within the framework of a new way of living that is taking shape in and around all major American urban centers.

This widening of the subject, necessary to clarify our thinking and develop a systematic approach, may confuse some people who are directly concerned with the problems of local authorities. However, such widening was indispensable, not only for the solution of urban renewal problems at the national level, but even more for the solution of these problems at the local level and at the project level.

Without a broad view of the over-all problem, the local efforts do not have any meaning, and they may even work against the interests of the local authorities and the people of the smallest communities and the smallest project areas.

The changing American city

A study of the evolution of TURA shows the extent of the changes over the last 120 years. Its population increased about 100 times, from 10,000 inhabitants in the whole area covered by the metropolis to about 1 million. The built-up area has increased much more, from approximately 3 to 3,000 square miles, that is, about 1,000 or so times. The changes are even greater in some other aspects, such as power generated within this area 120 years ago and today.

There is very little in the present-day TURA to remind us of the city that started as a human settlement 120 years ago and is still struggling to be one.

The changes have accelerated during the last few decades as the increasing population and physical dimensions of TURA have necessitated drastic surgical operations. Highways and new lines of communications, for instance, have been cut through the body of TURA.

The example of TURA, even if oversimplified for the purposes of this study, convinces us of one thing: that the changing structure of our settlements creates a complicated and fluid situation. It is very difficult to analyze any part of such a changing city in some specific way, as practically everything is changing continuously. The changing structure of our settlements vitally affects everything related to urban renewal.

At present, continuous, dynamic changes are taking place in American cities and we have no reason to conclude that this fluid phase is over. On the contrary, everything related to the typical city leads us to believe that we are simply somewhere in the middle (if not at the beginning) of an era of dynamic changes in the city.

The beginning of urban renewal

The idea of urban renewal began to be developed in the United States in the 1930s, as a program directly related to certain slum clearance and public housing projects.

The Illinois Neighborhood Redevelopment Corporation Act and the New York Urban Redevelopment Corporation Act, both enacted in 1941, marked the first official actions in the field of urban renewal, although the term was not yet officially used.

It was the national Housing Act of 1949 that set broader goals. It dealt specially with "... the elimination of substandard and other inadequate housing through the clearance of slums and blighted areas, and the realization as soon as feasible of the goal of a decent home and a suitable living environment for every American family, thus contributing to the development and redevelopment of communities ..." This was the first time the word "redevelopment" was used in federal legislation.

In 1953, a committee of experts recommended broader, more comprehensive renewal. It encompassed "programs for slum redemption, for rehabilitation of existing houses and neighborhoods and for demolition of worn-out structures and areas which must advance along a broad unified front to accomplish the renewal of our towns and cities." In 1954, such provisions were incorporated in the Housing Act.

By 1960, more than 400 communities had an average of about two urban renewal projects each, ranging from small ones related only to some tens of families to very large ones affecting more than 10,000 families.

The goals

The concept of urban renewal initially was confined to the achievement of a physical renewal, but if we remodel a community we should set up an ideal for the life within it. If we set redevelopment of the community as our goal, we should not limit ourselves to physical renewal. We should aim at physical urban renewal as an expression of a broader redevelopment of community life. We should, therefore, consider urban renewal not as *the* ultimate goal, but as one among a number of goals, and at the same time as one of the means of achieving a better community life and a more vigorous economic development of the community.

I think it is true to say that most of the people concerned with urban renewal did not interpret it as an opportunity for creating a better way of life, but mainly as the necessity for creating a better urban environment. In short, there was no clear conception of a way of urban life that could be achieved through a good urban renewal program.

A clear conception of an urban way of life could give rise to an ideal physical form to serve it. This has not come about in urban renewal, any more than it has in any other aspect of our planned efforts to improve our cities. But this phenomenon is not confined to the United States; it recurs everywhere in our era. We are afraid to conceive the proper forms for our urban life, and thus we can have no proper physical expressions of these forms. In a nutshell, we have no model to present as our ideal city.

Not only do we have no specific goals for the area of a

complete settlement. We have not decided what is the proper size of the typical urban renewal unit either. If we want to proceed with urban renewal, we have to determine what is the size of the minimum unit to be considered as an urban renewal unit.

We also have no proper estimate of the total size of the urban renewal problem. If we ask any urban renewal director what is the total size of his problem, I doubt if we can get a specific answer backed up by figures.

If we cannot estimate our present needs accurately, how can we go on to determine the needs for the future?

When we asked about the specific goals of urban renewal in our questionnaires, the answers gave the following order of priority: slum clearance, renewal of blighted areas, upgrading substandard houses, downtown remodeling, new public buildings, solving traffic problems, and house preservation.

If we try to understand the criteria for these specific goals – why, for example, upgrading substandard houses comes third, or why traffic problems have a lesser priority than slum clearance – we cannot get any specific reply; and much less, if we try to understand the ratings of traffic problems and blighted areas, each of which contributes to the other. Thus, while many LPA's have set goals and priorities, there seem to be no rules by which such goals and such priorities can be rationally justified.

Policies and programs

Since it is clear that we have not set specific goals based on proper conceptions, and proper methods of estimating our needs, it is natural that we cannot speak of definite urban renewal policies and programs. In our context we only mean such policies and programs as are based on very specific rules and as are leading to completely justified and comparable results.

When we asked in our questionnaire, for example, if an analysis had been made of the over-all problems that are making the urban renewal projects necessary, 68 percent replied that such analysis had been made, 59 percent that specific criteria had been set in advance, and 61 percent that specific proposals had been suggested. It is characteristic, however, that only in 25 percent of the cases had a budget been prepared of the required expenditures for these programs. This, alone, is proof that many of the programs are still very general and cannot be considered satisfactory. Any program that does not lead to a specific budget, related to the total financial potential of the city, is certainly not a program satisfactory enough to commit the city and the nation.

We might also note that 55 percent of the replies stated that the evolution of the present problems had been studied, and 42 percent that the expected evolution of anticipated new problems had been studied. And 28 percent said that predetermined criteria had been set defining the manner of studying the evolution of present and the creation of new problems. In 43 percent of the cases, a study of the problems of the future had been carried out; and in 24 percent, there is a statement that specific proposals for their solution have been made. Again, it is characteristic that only in 11 percent of the cases has a budget been worked out.

I think that we are entitled to conclude that only the 11 percent of the LPA's that have prepared budgets for the future come close to the notion of a long-term program; and from the few budgets that we could study it is clear that they do not anticipate major changes within the larger urban area, although such changes may occur and they would have a very great impact on the urban renewal projects.

Even if it is assumed that 11 percent of the programs are completely satisfactory, we learn from the replies that only 4 percent have had approval of the total allocation of funds necessary for implementation.

Thus, we are led to the conclusion that, because of the lack of specific goals, urban renewal as a whole has not developed a specific methodology for the formulation of policies and programs.

There can be no commonly accepted policies and programs until specific goals for the programs are set and until a specific method has been agreed upon for the proper estimate of the total size of the problem. Only then can the size of the problem be interrelated with the financial potential of the community that is to undertake the program and with the results to be expected from the implementation of the program. The Community Renewal Programs (CRP's) are tending to develop such programs for wider areas. They have not yet led, however, to the formulation of commonly accepted policies and programs.

Implementation

Looking around at the hundreds of urban renewal programs that have been implemented, we discover great variety in the methods followed to achieve the goals set. Because of the lack of general goals, every authority has in practice set its own goals – with emphasis on slum clearance, or downtown remodeling, or preservation of houses, or the solution of traffic problems, or whatever. What is more, every LPA has followed its own road toward the achievement of its goals, whether in the development of policies and programs or in the methodology of implementing projects, from the selection of the sponsor to the selection of a plan, of a design, and so on.

The fact that so many different methods have been followed for the implementation of the urban renewal effort has by now given us much valuable experience, but it has not yet led to the development of a methodology that can help everybody concerned to select his own road in a systematic way.

The difficulties that have occurred during the phase of implementation are due not only to the lack of a specific methodology, but also to the fact that LPA's have limited responsibility. The fact that LPA's in many cases have no responsibility for planning, often are limited in operations to only one part of the physical settlement, and often also are separated from the responsibility for housing, enormously limits the possibility of a proper implementation of their programs.

There are several hundreds of LPA's struggling toward the conception and implementation of urban renewal efforts. Some of these efforts are very important, some not at all. This is a valid situation in view of the size of the total effort and the methods that have been followed and the experience that has been gained from the many individual efforts.

Irrespective, however, of the degree of success and the degree of experience gained in individual projects, we can state that, on the whole, LPA's are following a rather random course. In this way they may solve partial problems, but they will certainly never solve the over-all problem of urban renewal. LPA's may – and I want to lay emphasis on "may" – in this way solve their problems for today but they certainly cannot solve them for tomorrow.

It may be interesting to refer to the replies given to some questions related to the overall urban renewal effort. When asked if during the study of urban renewal projects it was found necessary to modify the areas surrounding them, over

half (53 percent) stated that it was not, and 44 percent stated that even after the implementation of projects there was no such need. However, 8 percent conceded that modifications were necessary although they had not been foreseen.

On the other hand, when we asked if the urban renewal projects affected neighboring areas, 63 percent replied "yes," and only 6 percent contended that the projects have no such influence.

Although only a short period of time had elapsed since urban renewal projects had begun to be implemented, it was generally conceded that little improvement had as yet been noticed. If we add those who did not give any answer to the question whether urban renewal projects affected neighboring areas (39 percent), then we can see that nearly half (some 43 percent) of those who replied did not feel able to answer "yes" to this question. When we consider that these were responses of people who had conceived and carried out the projects, we feel justified in stating that we can already find signs of dissatisfaction among those most closely concerned with renewal projects.

If we do not know the total size of the urban renewal problem, how can we be certain that the policies we are conceiving, the programs we are preparing, and the projects we are carrying out are, in fact, solving any part of our problem? How can we be certain that, in spite of our efforts, we shall not be worse off tomorrow than today? If we have no specific goal, and no specific system for estimating needs and programs, we cannot be certain that in cutting down trees to make a road we do not cut in the wrong direction – and instead of finding ourselves in open country, in fact penetrate deeper into the forest.

Conclusions

I think we may now draw the following conclusions[5]:

Urban renewal has had a slow start. This slowness is justifiable, since it is the beginning of a new effort in which man has no experience at all; but it has, unfortunately, resulted in disappointment for most of the people concerned.

Urban renewal has not followed a program conceived in a systematic, detailed way, so its problems cannot be accurately assessed and it cannot yet travel a well-defined road.

The relatively few projects that have been started have not yet led to any convincing results about the impact of such efforts on the future of our urban areas.

There are no signs that the period of continuous dynamic changes in U.S. cities is concluded. On the contrary, we must expect, in some cases at least, even more dynamic changes.

Urban renewal problems in the United States

Planned and unplanned urban renewal

Because our era is beset with so many problems and so many difficulties, there is a strong tendency of concentrating on a specific problem and trying to solve it. We can solve the specific problem on which we want to concentrate only if we first see it as a part of the total situation to which it belongs. For example, we cannot limit our research into the causes of cancer to the study of the cells suffering from cancer. We can be successful in our research only if we understand the impact of cancer on the human body as a whole, and then concentrate on the affected tissues. In the same way we have to try to look at our problem of urban renewal in the broadest possible frame. This means that we have first of all to expand our problem in time, in space, and in content, and only later turn to the specific problem with which we are concerned in this study.

It is wrong to think of urban renewal as a problem only of our times and of the great cities that have developed during the industrial era. Urban renewal is the age-old process of replacing the buildings, houses, and facilities that have outlived their usefulness. It is the age-old process that enables us to have cities today that have existed for centuries, sometimes even for thousands of years.

Urban renewal started in a very natural way. In every human settlement, whether village or city, everybody who could, rebuilt his own house or shop on his own plot when these buildings had passed their period of usefulness. This can be called the "natural" process of urban renewal.

In the same way the city as a corporate body rebuilds roads, sewers, and water lines, and sometimes even remodels or relocates roads and public squares better to serve its new requirements. It does these things as a matter of normal evolution, often related to the "natural" renewal of private properties.

In these circumstances, urban renewal can be said to take place in a natural way and the city needs only to have an administration fully aware of renewal needs. Such a city administration exploits every possible opening presented by the natural renewal of private properties to rearrange the public areas and facilities of the city to better advantage.

Although much urban renewal has taken place in this natural way, sometimes it does not, and then urban renewal becomes a public responsibility.

Historically, public urban renewal has usually taken the form of developing new areas outside the cities, rather than reconstructing obsolescent areas within them. This was practically always the case when a new group with higher living standards took over a city. The new group created new patterns of living extending the city instead of struggling to ameliorate and renew the old areas. Colonizing powers offer some examples, as the Roman expansions of cities and the building of British cantonments in India and Pakistan.

If the urban expansion was extensive, the new areas might attract residents from the old areas that were ripe for renewal. These old areas would then be relieved of pressures, values of land would fall, and it might be practicable to renew them through demolition and rebuilding. If, however, the expansion was not extensive enough to accommodate the new residents and also attract enough inhabitants of the obsolescent areas, this rebuilding would not take place and the city would merely expand, without the expansion involving any renewal of the old areas.

In a small number of cases in the past, urban renewal has been accomplished by demolition and complete reconstruction of the unsatisfactory urban developments by the city authorities. Such action has occurred especially in relation to the unhealthy parts of cities following major epidemics, but such cases are very few. Most such urban renewal projects were carried through in a compulsory, even savage, way. Perhaps the most drastic example was the destruction of Rome by Nero, who might be called the first urban renewal director of the school that believes in renewal through destruction!

The need for planned urban renewal

Much urban renewal still takes place in a natural way, but there are many cases in which natural urban renewal cannot keep up with needs, because rapid economic and technological developments have resulted in faster changes in

patterns of living, with corresponding requirements for buildings and facilities, than ever in the past. Thus we are forced to begin to think of renewal as a public responsibility.

Comparing present and past needs for planned urban development, we can state that:

- now is the first time in history that planned urban renewal has become of major importance; and,
- there have been few instances of planned urban renewal in the past and they have been in cities of extraordinary size or importance at certain periods, as, for example, Rome, Constantinople, and Paris.

Thus, we may say that we are entering a new era of planned urban renewal, with almost no experience and without being prepared for it. We can state with certainty that the problem of urban renewal has not only become extremely serious in our time, but that it is a problem that is apparent practically everywhere in every country. It occurs in every major city irrespective of its nature, and in many minor cities.

Not only is the problem of urban renewal gigantic, but people generally have not yet become conscious of its importance. It is discussed today only in the countries where the problem is very acute, and the urban problem of only a few countries has evolved to the critical stage it has reached in the United States.

However, it is of the greatest importance that the problem of urban renewal be understood not only when it reaches a critical phase, when the need for a solution is so urgent as to be unavoidable, but as a problem that must be faced even when it is small. Public health measures must be taken not only during periods of epidemics but also in normal times to avoid the onset of epidemics.

The U.S. pioneering effort

The United States in its urban renewal effort has started an historical process of the greatest importance for all countries. In pioneering this road, it must inevitably pay a high price for its experimentation. It also has a heavy responsibility to proceed carefully in the exploration of new approaches.

We must not forget that, though most urban renewal continues to be carried out in a natural way, this method is no longer adequate in various urban areas within many American cities. There are two reasons why public planned urban renewal has become not only necessary but indispensable. First, many urban areas have outlived the period of their usefulness, and, second, their owners and inhabitants have not had the ability and the money to rebuild the areas so that they will be useful to them and to the city.

Why have such areas outlived the period of their usefulness? We can offer three reasons:

- the age and/or construction of their buildings;
- the unsuitable location of buildings that, even if they are still usable, has made them lose their importance; and,
- changes in the structure of the area of the city in which buildings are located, involving changes in type of inhabitants, changes in use of buildings, mixed uses, and so on, resulting from rapid urbanization that has not been properly controlled.

Our survey brought out several overlapping reasons why the private owners and the inhabitants of such areas do not have the ability and the potential to rebuild them: 70 percent of the persons who answered believe an important factor is the great number of landowners, 36 percent that this inability is largely due to changes in the area's functions, and 35 percent that it is largely due to changes in population densities.

My personal conclusion is that there are two essential causes. The first, and more important, is the changing structure of the city. This may require:

- a change to a different land use, as when a residential area turns into a commercial area; and,
- a change to a related land use, but with different population densities or patterns, as when a residential area with single-family houses may have to be converted to multistory apartment blocks provided with parking lots, garages, and the like.

Thus, changes in economic conditions may result in problems of land use that are beyond the abilities of the individual inhabitants to meet.

The second major cause is when a whole area becomes ripe for demolition at the same time. This happens when a whole area was built at the same time, often by a single developer, and was sold to many people. Although the initiative for its development came from one source, the initiative for its renewal is now awaited from many. In such cases it is difficult for individuals to initiate renewal, since they are not confident that others will follow their lead.

These problems are intensified when the area that needs to be renewed is large. The cases in which one developer has taken the responsibility of buying large areas and renewing them on a comprehensive plan, like the Rockefeller Center in New York and some other large developments in other American cities, are too few and too small in relation to total needs to allow us to expect this system to operate everywhere without any governmental policy to make it more feasible.

Unplanned versus Planned urban renewal

When a city has buildings that are no longer useful in their present form, but their owners are able to rebuild them, no problem arises. It is only when the buildings are not useful and the owners are unable to rebuild, that we have major problems. There are also some cases of useful buildings whose owners are able to rebuild them, but that may have to be demolished because they happen to be within areas that have to be remodeled completely.

If we look into the causes of nonusefulness, we find that buildings may have become nonuseful because of age or location. Where buildings have become nonuseful because of location, or because of age and location, changes in the structure of the city enter in two ways: they have influenced the location and thus made the buildings non-useful, and they have also caused the owners to become unable to undertake the necessary renewal.

There is no question but that owners are more easily able to undertake renewal of their properties when a whole area undergoes a normal renewal and when any owner in it may follow the general trend if he can finance the renewal of his own property. If he cannot, he sells his property to somebody who can and who then undertakes the renewal effort in a natural way.

However, unless the whole area is experiencing such an upgrading, a single owner, or a small group of property owners financially able to undertake renewal, cannot be expected to make the effort to build better buildings. For if everything around them is nonuseful and dilapidated, the better buildings that they might construct will not change the structure of the area and will not yield a satisfactory return.

When owners are financially unable to undertake renewal themselves, they normally resist public renewal, as they know they will not be able to own the new buildings. This is particularly true in slum areas, especially when the buildings are already amortized, because low maintenance costs allow high profits from rents.

The conclusion is that there is a need for planned urban renewal, that this need is natural at this stage of development of American cities, and that the renewal must be undertaken by the community, since private individuals are seldom able to undertake it for large areas.

The Problem of TURA

In order to understand the urban renewal problem as a whole, which 3. is an indispensable preliminary to the study of methods by which we can tackle it, we turn to TURA. TURA (the Typical Urban Renewal Area) was created, as already mentioned, as a case study. In order to create it, we had to study many American cities and their evolution during the last century or so. As a result of this study, we present the typical Urban Renewal Area of TURA, whose development over a 120-year period is shown in figure 1.

TURA emerged as a settlement of some importance in the beginning of the nineteenth century on the banks of a river. It was a small city with a few outlying settlements, most of which were groups of private farms. At this stage, TURA was not necessarily based on a gridiron system; but as it expanded, it assumed this pattern.

At present, TURA has within its total urban area a population of about 1,000,000 people – 50 percent living in the central city and the other 50 percent outside the central city but in the metropolitan area. These figures are an approxi-

Fig. 1: TURA City.

mate average of the population of U.S. metropolitan areas. This average was computed on the basis that the population of U.S. metropolitan areas with a population over 1,000,000 is 61,600,000. Metropolitan areas with a population below 1,000,000 have a population of 51,300,000. Thus the total population of U.S. metropolitan areas is 112,900,000. Of this 112,900,000, the main central cities have 58,000,000 and the suburbs 54,900,000.

In 1840, the city of TURA was only a very small part of the area it now encompasses. Around it were some very small villages and a few farms that covered an extended area. How small the city of TURA was in 1840 in relation to its present-day development may be seen in figure 1. The expansion of its center along the river, which was the main factor in its development, is shown in figure 2.

By 1880, the construction of railway connections had resulted in a greatly elongated TURA City, as well as the development of several other settlements, mainly along the railway lines. The main city had become connected with the village north of it and had spread to the western side of the river.

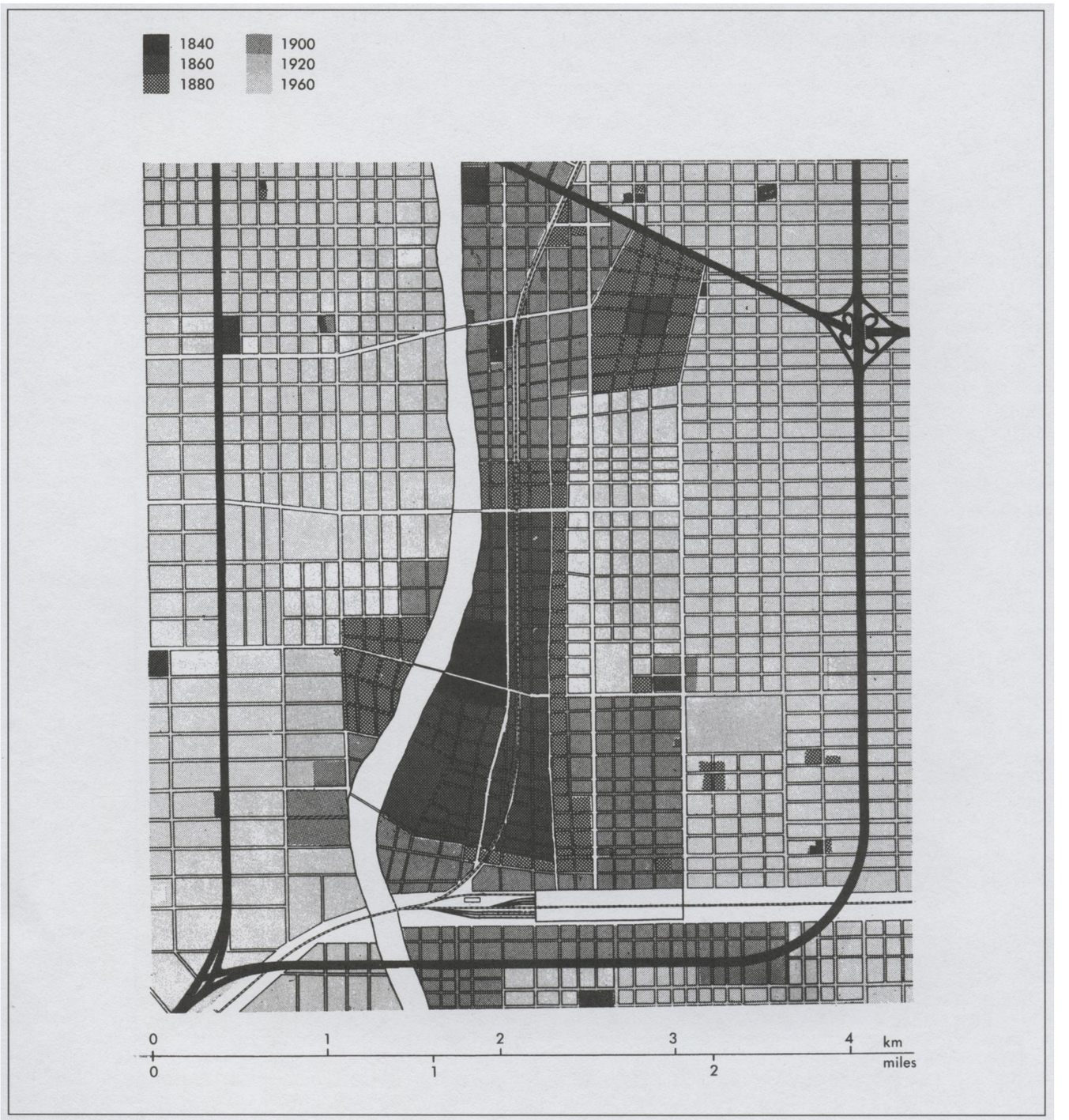


Fig. 2: TURA Center.

By 1920, the influence of cars on TURA City is apparent. The city has grown greatly and, as cars can drive in all directions, its shape is tending to become round. The elongated form that developed along the river and the railway has been superseded by a form that is much closer to a circle or a square, with rays spreading in different directions along the river, railways, and highways.

By 1960, the number of roads and highways has greatly increased. The gaps between early radial expansions are filled. The trends toward more transportation routes and denser population are continuing, and, in addition, we witness the first major surgery in TURA City in the form of major highways that cut through the urban body. The administrative area of TURA has now been completely built up and the city has expanded out into the countryside. While TURA City was growing, so were its problems, particularly in its central area. Many parts of this area have become slums, and the whole area suffers from traffic congestion. Citizens generally are dissatisfied with the conditions within TURA, but the city cannot raise the capital for complete renewal of its center.

Apparent and underlying causes of the need for urban renewal

The United States is facing problems calling for planned urban renewal on a greater scale than any other nation, and since they are occurring for the first time in history, it has not yet been able to develop the proper conception, policy, program, and methodology to meet them. Thus, it is impossible to estimate systematically the exact size of the urban renewal problem or its real relationship to the financial potential of the country.

Therefore, while the main apparent cause of our problem is the changing structure of the city itself, as we have seen in TURA, the situation is aggravated by our inability, first, to estimate the exact dimensions of the problem and, second, to develop a systematic program to deal with it.

The National Housing Conference, at its annual meeting, March 12, 1961, in a statement titled "A New Program for Housing and Community Development," adopted by its members, said: "It is conservatively estimated that more than two million new dwellings a year are needed to keep up with population growth and other current needs and for the replacement of substandard dwellings. Yet from a post-war peak of 1,400,000 dwellings in 1950, home building has in the first quarter of this year dropped to a rate of only 1,000,000 dwellings a year." Thus, it is quite clear that, despite the overall effort, the urban renewal problem in the United States is growing, and that through failure to provide the enormous number of new buildings indispensable to the normal functioning of communities, resulting from the changing structure of its cities, the situation is continuously deteriorating.

Looking at this problem in a different way, we reach a similar conclusion. According to the 1959 annual report of Housing and Home Finance Agency, "... between 1950 and 1956 the number of dilapidated units was reduced by 250,000 to 300,000, yet the total number of such units in 1956 was still over 4 million. At this rate it would take about 90-108 years to eliminate all of them."

This official statement shows only an approximate picture of what we should expect, and it may be optimistic, as we have no evidence that the number of buildings that annually become dilapidated or obsolete will not increase enormously. If we take into consideration that the obsolescence of buildings is due not only to age but also to the changing structure of the city, and that structural changes in cities are going to increase enormously, we may reach the conclusion that, in spite of our efforts, it may take hundreds of years to eliminate the obsolete buildings.

Urban renewal today: A static approach

The current situation has brought me to a firm conclusion, which I cannot yet prove with figures, as this will require much more research and the mobilization of great resources. But no matter where I start or which method I follow, this whole study and all my findings lead me to the firm conclusion that in none of the many urban areas that I have visited and studied is the situation as a whole improving, despite the efforts made through urban renewal.

If we try to find the real underlying cause of the need for urban renewal, we reach the conclusion that every problem results from the constant deterioration of our urban way of life, which is a result of the changes occurring continuously within our urban areas.

The great advances in our technology have prevented us from realizing fully how great has been the deterioration in our way of living and in our urban areas. We are only now beginning to understand this deterioration as a major problem of our generation.

And because we are facing the problems of changes within our urban areas in a static way with urban renewal projects, we are aggravating our situation. We are trying to meet continuous, dynamically changing conditions with a static solution. Let me explain this statement.

There is no doubt that the situation within our cities is changing much more rapidly now than ever before. This is what we can call a dynamically changing situation with an increasing rate of change. On the other hand, urban renewal projects have been conceived for certain parts of the urban area – for a certain size of population and the corresponding economic, traffic, and other conditions. This is planning for a static situation, even if the urban renewal project has anticipated a reasonable increase of population, growth of income, increase of traffic, and so on. For this projection all leads up to a certain moment in time, let us say the changes anticipated in ten or twenty years, and it will not be satisfactory beyond that time limit. Thus, the urban renewal project is conceived to solve a certain, defined problem, whereas the problem is continuously changing.

If we take any part of our urban area and try to face its problems in a static manner, for example by re-establishing a green belt as conceived in the past, a few years will show that such a static design cannot save the city or even any part of its periphery. We have only to think of how it was twenty years back, or ten years back, and how it is today, to understand that it is unrealistic to expect the city to remain much as it is today ten or twenty years from now. As long as the city is dynamically changing and this dynamic change affects all its parts, as long as the dynamic change of every part means a changing structure, it is not possible for the resulting acute problems to be solved by means of static urban renewal projects.

Changes at the center and at the periphery

The changes in cities are of several kinds: changes in population density, in land use, in transportation, in the way of living of the various types of inhabitants, among others. These changes can occur anywhere in a city, in parts that have already changed greatly and in parts that have changed little over a long period.

If we study these changes, we will discover that they are due to the fact that during the last hundred years the city started growing in all dimensions, expanding in area and increasing its central locations in height to a degree unknown earlier.

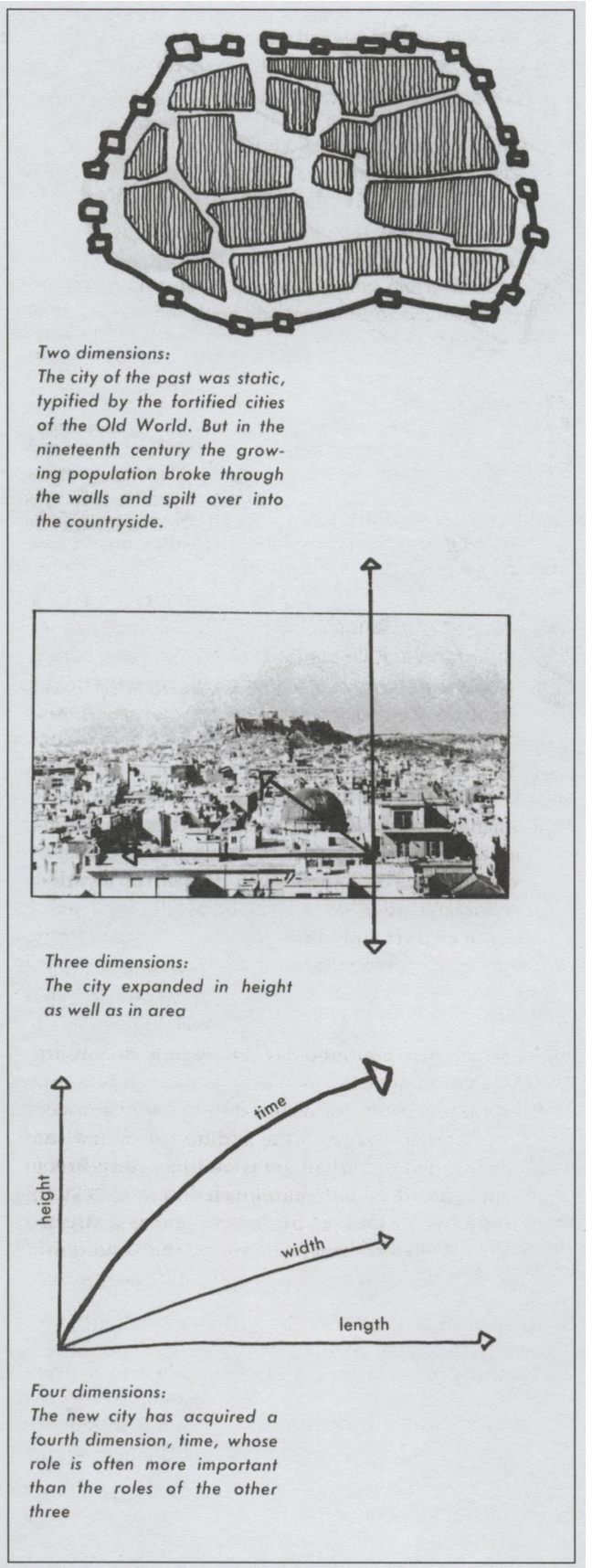


Fig. 3: The city acquires new dimensions.

Up to the nineteenth century only three dimensions were important in the city: length, width, and height. But the population explosion made it essential to take into account a fourth dimension, time, and the role of this dimension is continuously increasing in importance (fig. 3).

In addition to the population explosion, another change occurred in the early part of the present century – the addition of a new inhabitant. The automobile invaded the urban areas and has since become a much more important inhabitant than man himself in size, in strength, and in speed. We only have to look at our cities – along a street, in a public square, or from the air – in order to observe the validity of this statement (fig. 4).

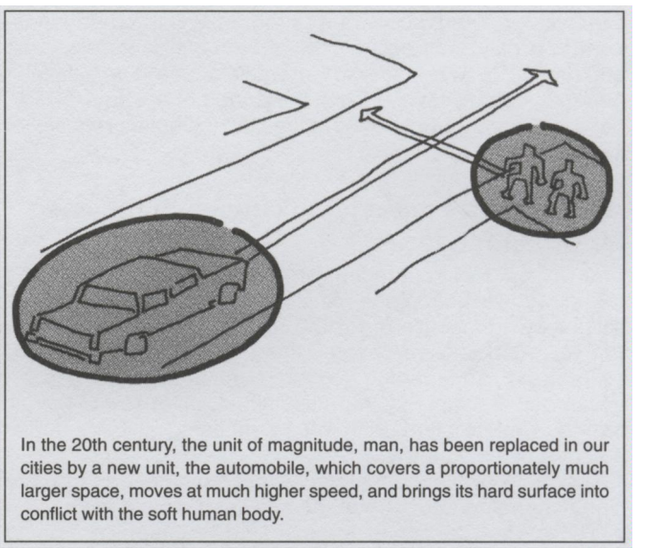


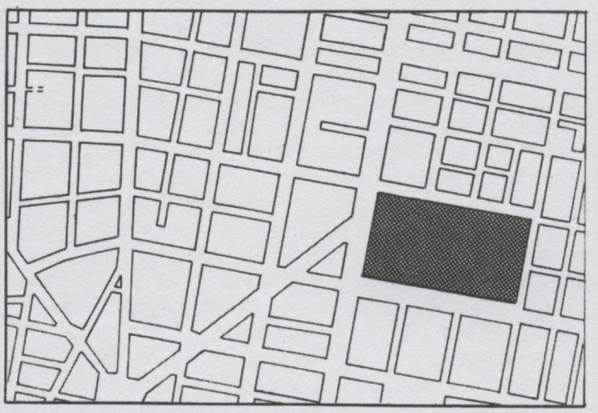
Fig. 4: The city is conquered by a new inhabitant.

The increase in population and in automobiles inevitably causes great changes in the center of the city, and the problem of the expansion of the center is complicated by the fact that it must take place within a built-up area. Thus, the pressure of the continuously expanding center gradually changes the structure of many residential areas around it.

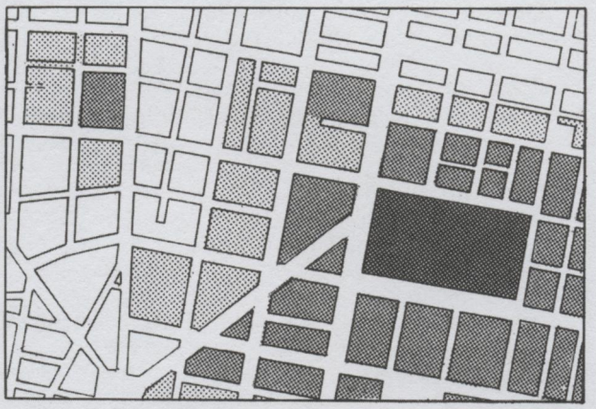
These expansions appear to occur like waves, spreading from the center and gradually covering certain parts of the city and changing their structure completely. If we examine these changes microscopically, we will discover they appear not as concentric waves, but as a series of minor changes that occur in every area in many directions as a result of major developments taking place close by. Such a microscopic view shows that these changes do not occur in concentric circles but in spots (fig. 5); but when these spots are viewed macroscopically, they appear as concentric waves (fig. 6).

The city's center

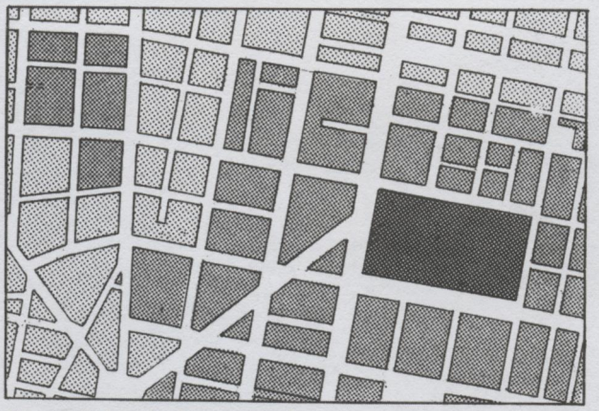
A characteristic example of change in the center of the city is in the number of floors per building. We may have an area with buildings that average five or six stories; but then, because of growth of the city, many more functions are needed within the central area, and the easiest way to accommodate them is for the buildings to conquer the height dimension and build upward to 20 or 30 floors. This change does not happen from one day to the next, and it does not happen to all plots of a certain area, since this kind of change seldom



A residential area not far from the town center. A large market is built

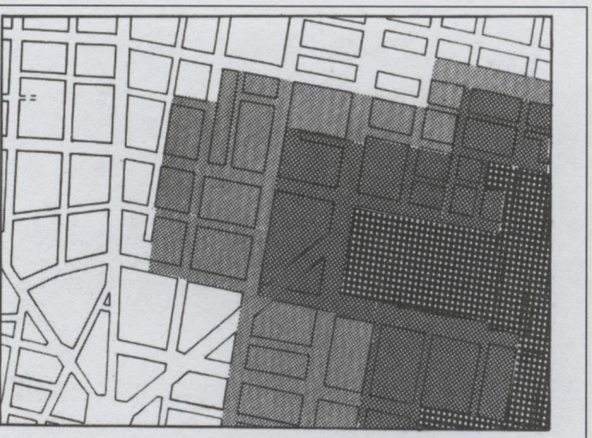


Shops are built within the residential area as an extension of the market, with warehouses next to them. The first inhabitants move out

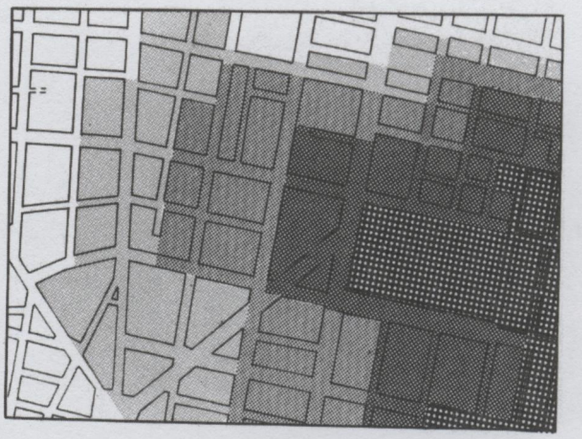


More inhabitants have moved out and new, lower-income groups are moving in. The original character of the area is entirely changed

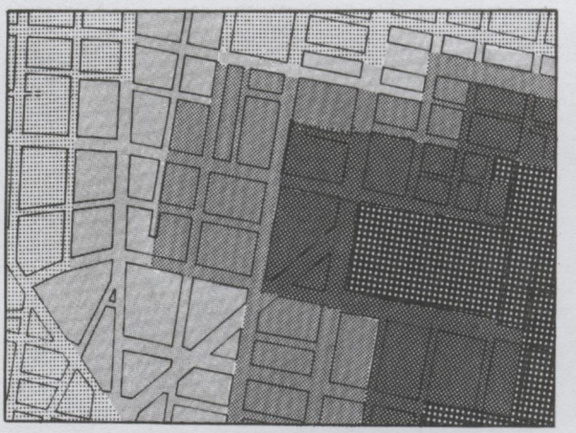
Fig. 5: Changes of urban structure – Microscopic view.



Normal residential area not far from the town center. The residential area is changing as the central area expands

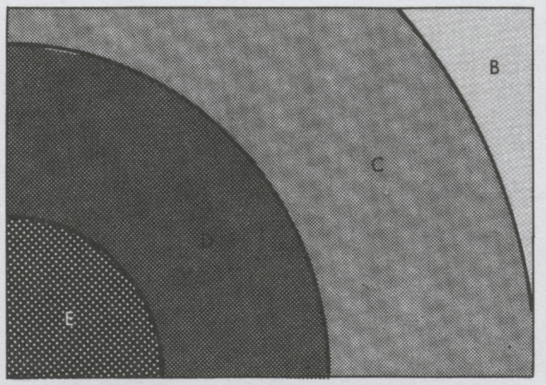


Changes are spreading as the central area continues to expand

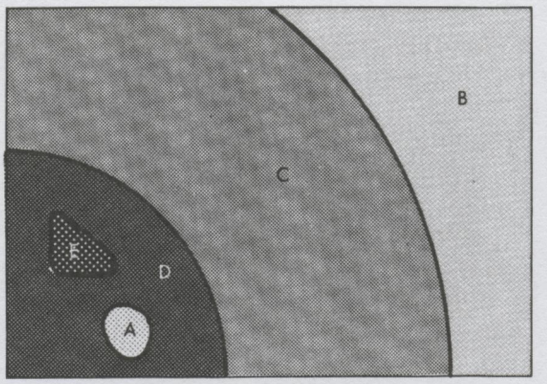


Ultimately, the whole area is changed in greater or less degree

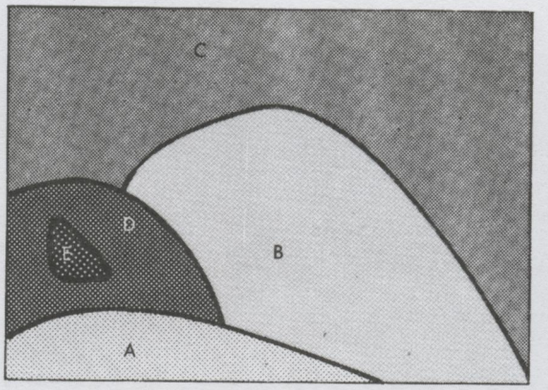
Fig. 6: Changes of urban structure – Microscopic view.



Early phase: highest-income group next to the business center (E)



Business spreads into the high-income area. The first slums appear as areas are taken over by the lowest-income groups (A)



The unplanned continuation of change means a continuing deterioration of several areas and a consequent uncontrolled redistribution of social and economic groups

Fig. 7: Changes of urban structure – Changing pattern of income groups.

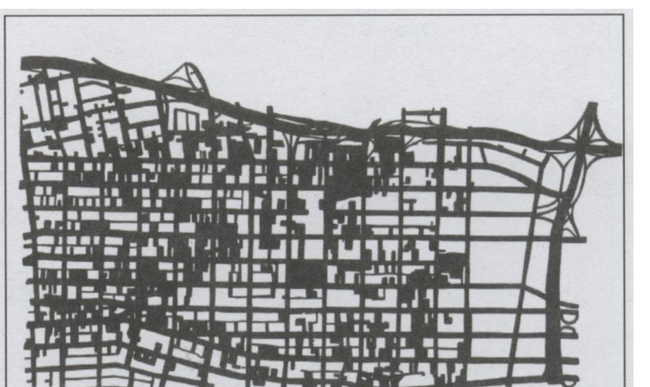
takes place on the basis of an over-all development plan. If we look at the area microscopically, we discover that certain parts, while still mainly built with few floors, have some new buildings with a much larger number of floors.

Many old cities have shown over a long period a comparatively regular distribution of income, from the highest at the center to the lowest at the periphery, but gradually different patterns begin to appear. For example, very low-income groups may move into the houses, previously inhabited by the highest-income groups, that were left as the business sector spread over high-income residential areas. Such a change will induce further changes in neighboring areas. If an area at the center is downgraded from being the residence of a high-income group to that of a very low-income group, it is a deteriorating area that may become completely depressed; and this depression will radiate into neighboring areas. Such downgrading will result in all kinds of changes in the pattern of distribution of professional, income, racial, and social groups within the city (fig. 7).

Another frequent result of change is the disappearance of many parks, particularly within urban areas. Recent estimates are that because of the interstate highway program alone, two million acres of parks will be covered by concrete. This is only one of many factors leading to the extinction of parks; among others is the construction of all types of public buildings, including schools and post offices, that are taking over large park areas in American cities.

The total free space for parks and gardens in most American cities is continuously decreasing, and we can ask ourselves what we mean by urban renewal when we deprive a city of such elements as parks and gardens, and the beautiful buildings of the past, all of which made it worth living in.

We have only to look at a map of such a city center as downtown Los Angeles to see that freeways, streets, and parking spaces cover two-thirds of the whole area; and they are increasing at a rate that may lead to its complete obliteration (fig. 8). In spite of these extensive systems of freeways, streets, and parking, we can now cross the central areas of most large cities in an automobile at an average speed of only six to eight miles an hour – an even slower speed than in a horse-drawn carriage at the beginning of the century. We



This map shows the extent to which the automobile has pre-empted the central city area of Los Angeles. Statistics also indicate that one third of all the land in the Los Angeles metropolitan area is devoted to vehicular transportation facilities.

Fig. 8: Two thirds of downtown Los Angeles is devoted to freeways, streets, and parking.

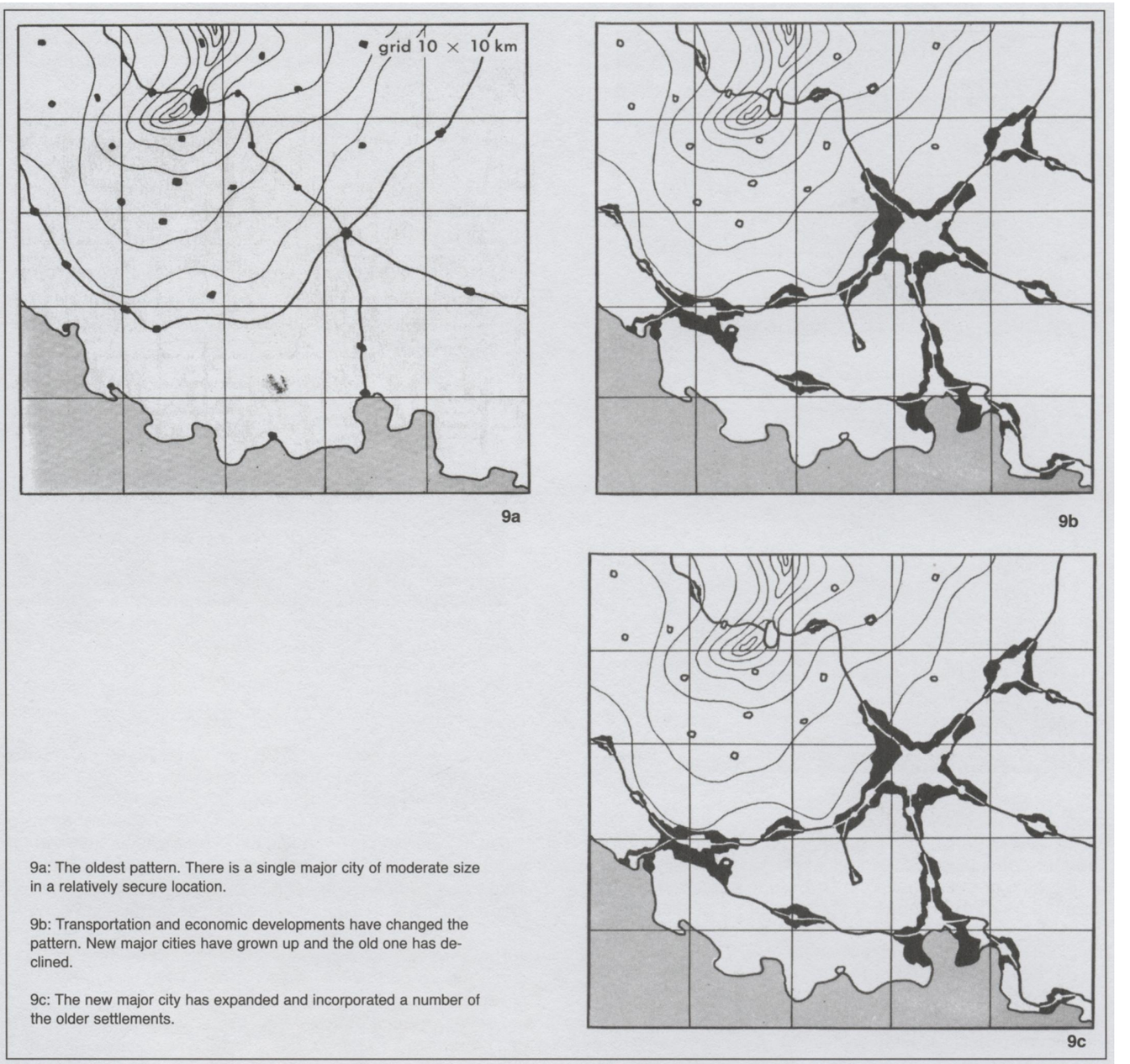


Fig. 9: Old and new regional patterns of settlements.

cannot imagine designing a building with lobbies, halls, and staircases but no rooms, yet we seem to work that way in developing the hearts of our cities.

The city's periphery

Changes occur not only in the central areas but also at the periphery, although the problems of renewal are not so immediately apparent at the periphery as at the center.

To understand the changes at the periphery, we have to look at the pattern and distribution of settlements over our countryside. In the pre-industrial era we had one important urban center and around it many minor centers scattered fairly densely close to it and less densely at greater distances.

With the development of transportation and industrialization the pattern changed. New centers were created at new transportation nodes and many more grew up around them in an even denser pattern. Old centers often declined as the new ones emerged. These declining centers have become depressed areas with renewal problems of a completely different nature from those downtown in the center city. Instead of having to incorporate additional functions, they are facing the loss of those they have, so a policy has to be developed either of reviving or of eliminating them.

Thus, as the new major city expands it incorporates different kinds of existing settlements. Within and around these settlements a new kind of urban renewal problem arises, for the new forces taking over these settlements exercise new types of pressures on them. Thus, on the periphery of the expanding new major city, existing settlements create problems because of great changes in their functions (fig. 9).

A chart of the growth of U.S. population as a whole and in

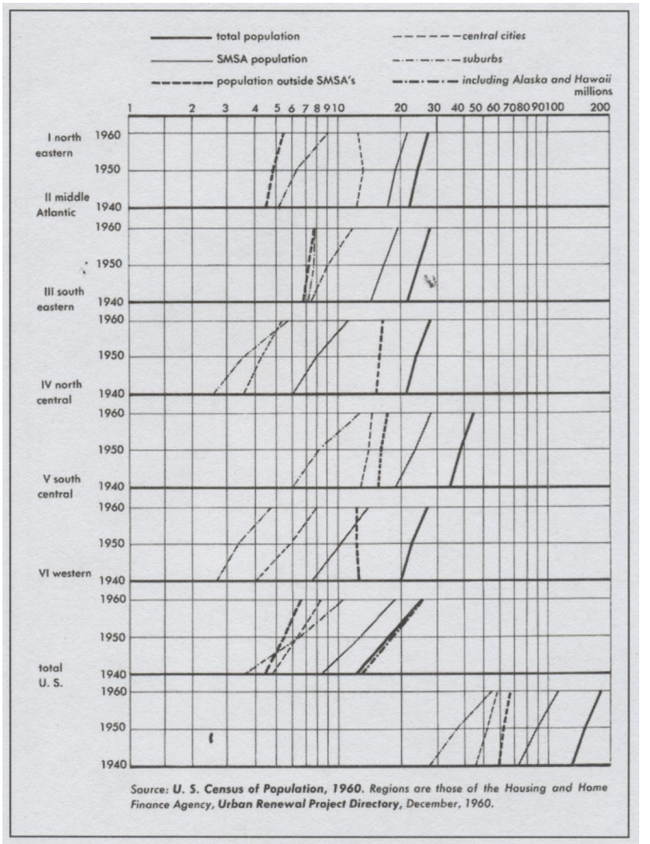


Fig. 10: U.S. population, by regions.

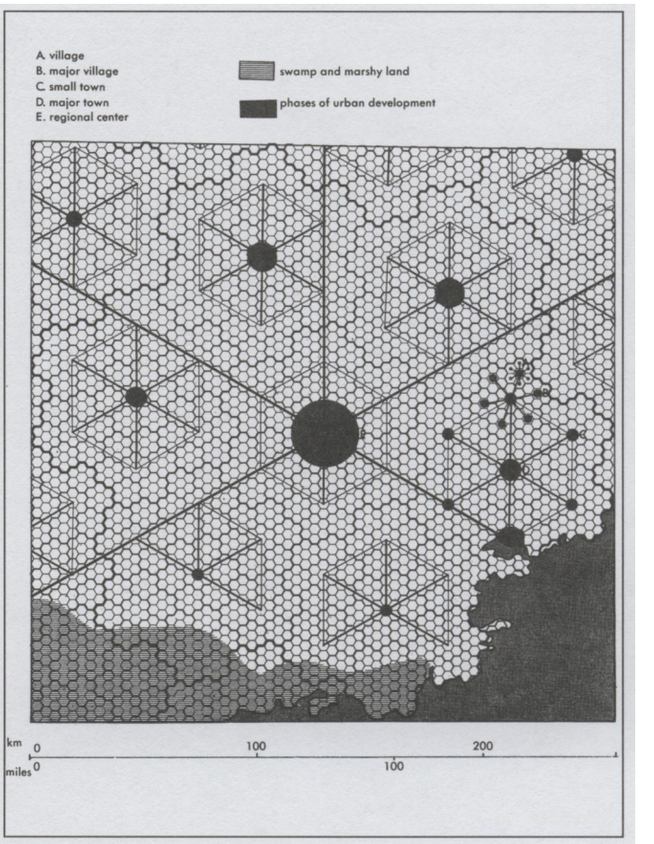


Fig. 11: Old pattern of regional distribution of settlements.

the several regions shows the importance of change in the periphery of cities (fig. 10). It is apparent that in the years 1940-60 the greatest growth in U.S. population occurred in the suburbs of the Standard Metropolitan Statistical Areas (SMSA's). Their central cities have grown less in resident population than the areas as a whole and, especially during the decade 1950-60, their growth has been scarcely more than the low rate of population growth outside the SMSA's.

It is also clear that:

- There are great pressures on the SMSA's, which can be expressed as pressures upon the center, and
- There are great changes in the periphery, where growth and expansion are such that other types of problems are created.

If we study these phenomena by regions, we find that the greatest growth has taken place in Region VI, the Far West, and in this region the suburbs show the highest rate of increase in the entire country.

In a schematic way we can think of the distribution of settlements in the United States in the period before the great changes as making a roughly hexagonal pattern, with several types of centers spread around the countryside. These centers were in a certain balance among themselves (fig. 11).

A new pattern emerges with population shifts (fig. 12). The regularity of the hexagonal pattern persists only in areas that have not yet been influenced by the great changes. Those areas that have experienced a great increase of population present other patterns of distribution of settlements. A comparison of populations still living in the old pattern and those living in the new shows clearly where we can expect problems of urban renewal: either in the center (suffering from many additional pressures) or in the periphery (incorporating and absorbing many preexisting settlements). We have only to consider how many minor settlements have been incorporated into the new pattern of major settlements to become aware of how many central and peripheral problems of urban renewal we have to be prepared to meet.

The importance of the phenomena presented in figure 12 can be realized if we look at figure 13, which shows all settlements of the previous phase plus the areas that become added to these settlements over an interval of time. What we want to illustrate is that any diagram that we present to show the current phase of our expanding urban areas is valid only for a certain period of time. After the lapse of some more time, the whole picture changes.

Development of the suburbs

As a result of further changes in population distribution, arising from the growth of new centers and of new means of communication, we witness at a later stage another big change – a great increase in urban-type population living in the so-called rural territories. There is thus created a new phase or kind of urban problems outside the periphery of existing urban centers.

This phenomenon has been especially intense in the northeastern part of the United States, as demonstrated by the studies of Jean Gottmann described in *Megalopolis; the Urbanized Northeastern Seaboard of the United States* (fig. 14).

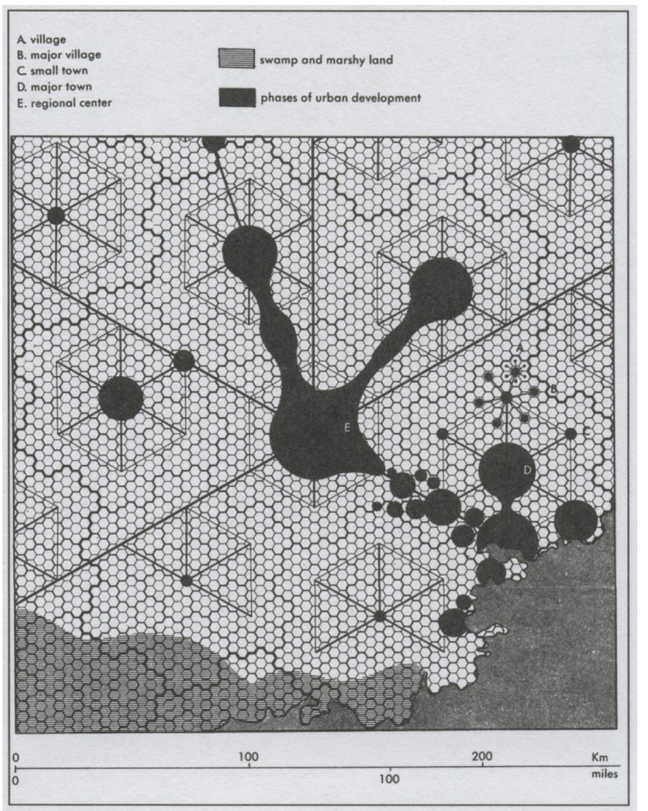


Fig. 12: New pattern of regional distribution of settlements.

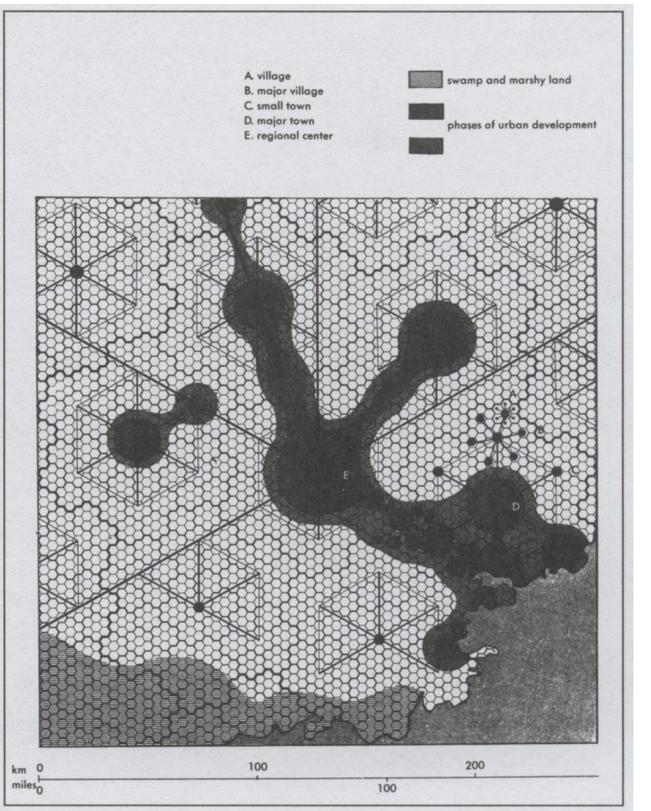


Fig. 13: Newer pattern of regional distribution of settlements – The pattern of the previous figure after a certain time (x).

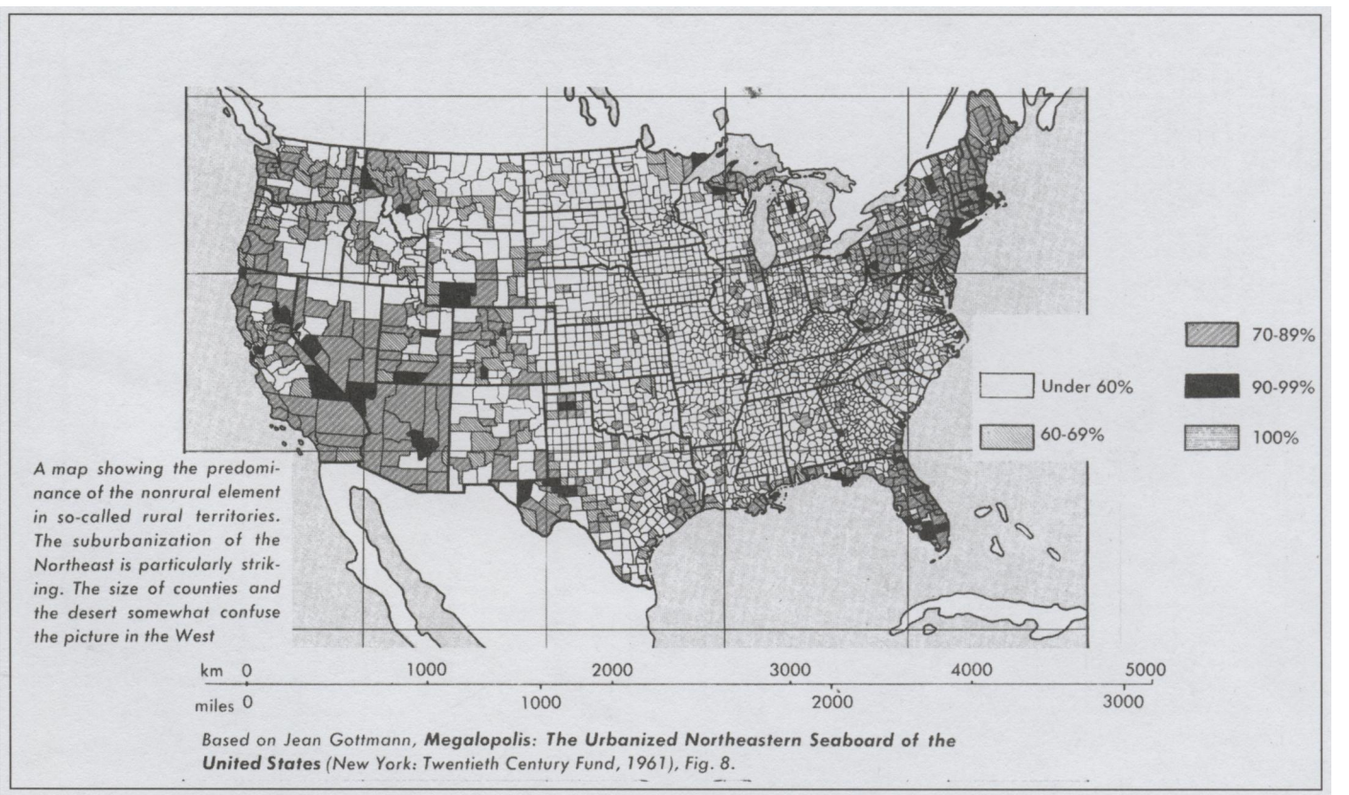


Fig. 14: Suburbanization in the United States.

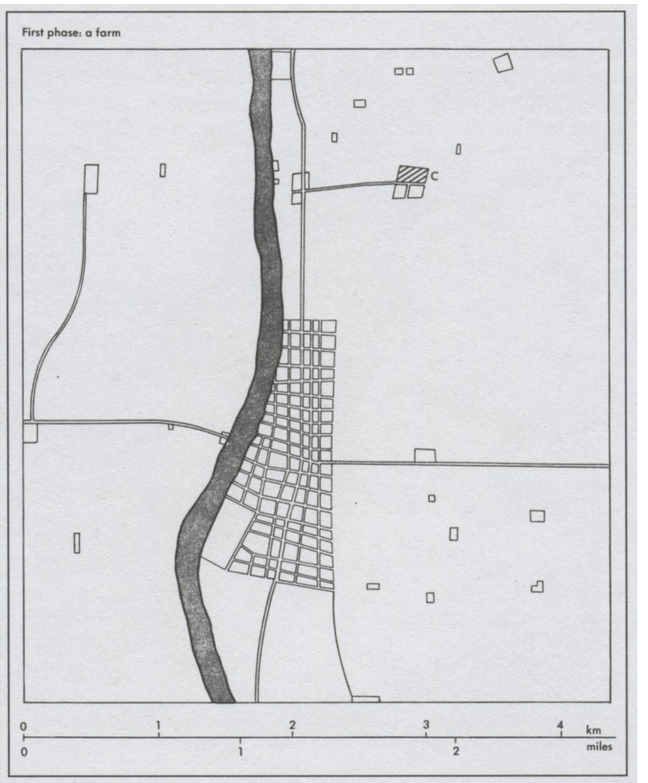


Fig. 15: The fate of a cell "C" 1840.

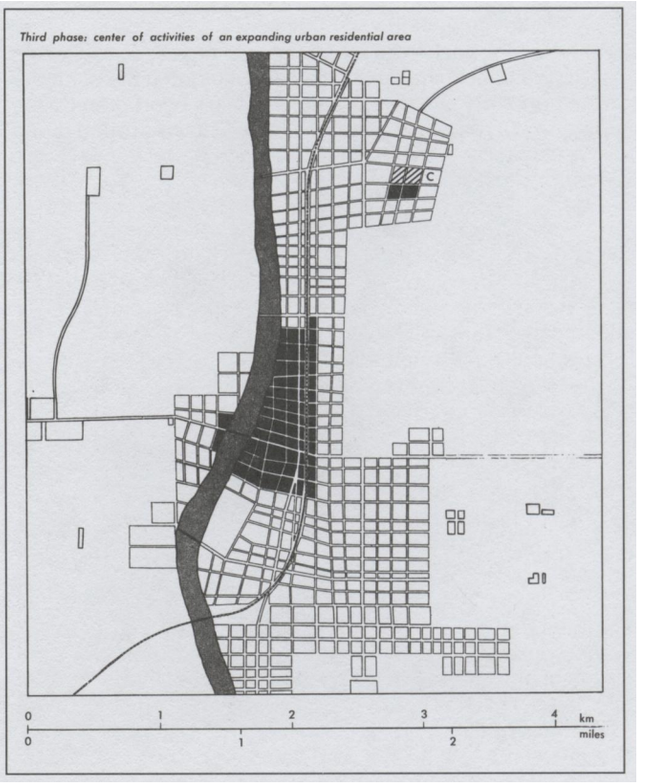


Fig. 16: The fate of a cell "C" 1880.

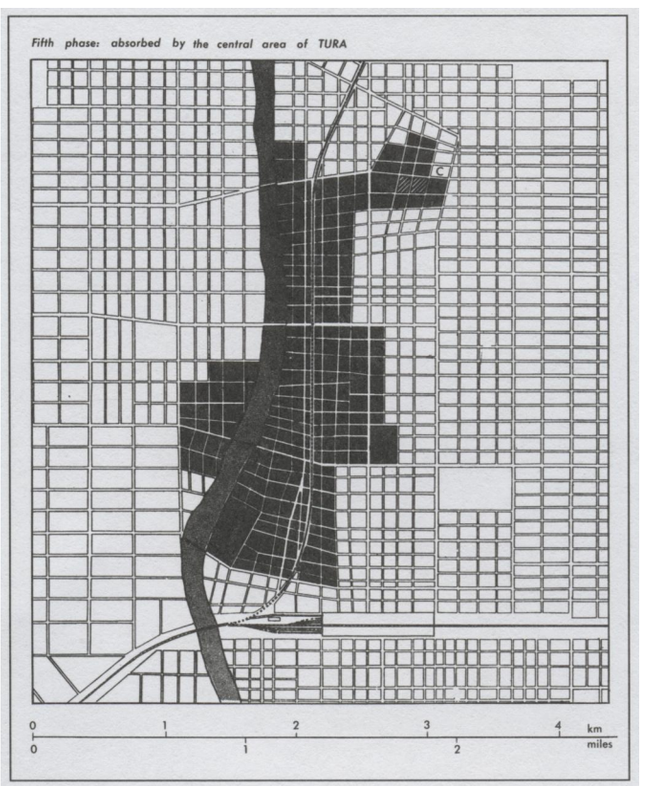


Fig. 17: The fate of a cell "C" 1920.

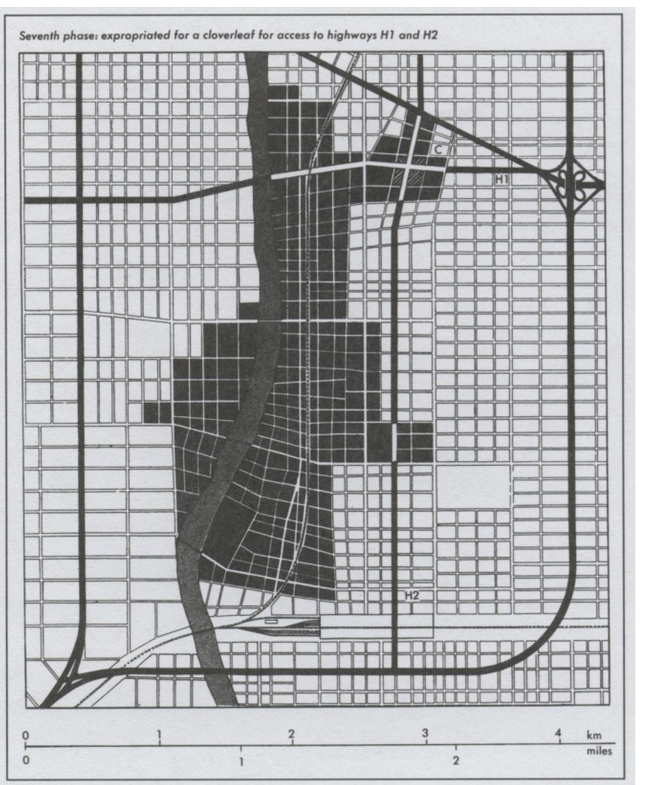


Fig. 18: The fate of a cell "C" 1960.

Urban renewal in an era of change

If we now think back to an urban renewal project conceived as a static element in the fabric of a city, whether at the center or on the periphery, we can see that it will be overtaken by the radiating waves of the changes taking place around it and will, itself, finally be compelled to change under the pressure of so many forces.

We have become accustomed to thinking that we are creating the fortress of the city of the future, consisting of many strongholds called urban renewal projects, but we discover that it is as impossible to defend this fortress as it was for the French in the Second World War to defend their nation with a static Maginot Line against the attacks of the dynamically conceived German army.

The great underlying cause of all urban renewal problems, and the reason our society has not faced them, is the constant change occurring within every part of our urban areas.

The fate of a cell

The fact that our settlements are changing continuously, in size and in nature, is forcing us to re-examine their problems both on a macroscopic scale, in reference to the whole body of the city, and on a microscopic scale, in reference to the changes that take place within every part of the city body. To demonstrate, we select one cell of an urban area, consisting of one normal city block, and we examine its evolution over the past 120 years.

The first phase of its life in this context begins in 1840, when our cell C is a farm next to a small rural settlement. This farm may have existed for many tens or even hundreds of years as a completely rural entity until the settlement grew up near to it; it was the building of this settlement that brought cell C into its first contact with urban life (fig. 15).

The small settlement begins to exercise an influence on the farm, bringing changes in its economy and in the social and political standing of its inhabitants. Twenty years later, the growth of settlements has turned cell C into part of a residential suburb. The small settlement of the previous phase grew because of its proximity to TURA and its location at the junction of a new road leading into a wider agricultural region.

By 1880, our small settlement is connected with TURA and is beginning to acquire the characteristics of an urban residential area (fig. 16).

Another twenty years and our cell has become part of the urban area of one of the outlying communities of TURA, but it is also beginning to experience pressures from the expanding central area of TURA. Previously, it had contained small shops to satisfy the needs of a minor area; but a demand has developed for workshops and small factories along the elongated center of TURA which follows the railway line, and our cell is deteriorating in competition with this more accessible central area.

By 1920, the expansion of TURA and its major center is such that cell C has been absorbed into this central area. As a result, it is now remodeling and recovering from its period of deterioration (fig. 17).

Yet another twenty years and a major highway H1 has been opened in the vicinity of cell C. This has given much greater importance to the area and has resulted in an increase in its property values and in its further development.

In 1960 the time has come for the opening of a new north-south highway, H2, and cell C is expropriated for the location of the clover-leaf providing access to the two highways (fig. 18).

1840-1960 – The evolution of a cell

Thus, the use and structure of cell C have been changed seven times in 120 years, and each phase of its evolution has lasted only an average of twenty years. It is apparent that this evolution has been completely unreasonable; no change was ever completely realized and the new structures and developments were never completely amortized.

We can consider the effects of these changes on a city official who took over responsibilities in relation to TURA in 1920 and who prepared the first plans for the expansion of its center toward cell C as a young man. This same official, when he was a chief of section, in the 1940's, had to change these plans markedly in order to accommodate additional functions. And by 1960, just before retirement, he has had to see all the plans he prepared both as a young man and as a chief of section become completely obsolete.

This review of the evolution of a cell may convince us that the kind of changes that occur in it affect practically every other cell of the whole urban tissue. The cell we have looked at is typical; there are changes everywhere, though they are not always changes from farm use to residential, to central area, and then to highway use. In other cases the changes may be from one type of residential area to another, to an industrial area, to a new traffic line, and so on. And changes are not always on the positive side; they may create opportunities for development and, again, they may create conditions of deterioration.

If we present our whole urban pattern in a macroscopic way, changing in space by continuously covering larger areas, we must also consider that the tissue within this urban area is not expanding in a uniform way but is undergoing continuous change, like the waves of an ocean that do not leave any particle of water twice in the same position.

There is no cell of a city that is not influenced by the ebb and flow of the waves continuously moving through it.

From chaos to disaster

As with the ocean, the changing urban area has both continuous movement and continuous change. The waves do not move only in one direction, as if there was only one force blowing out of one center, as used to happen in the small cities of the past.

Now our urban areas are much more complicated. They have many centers and are undergoing many and continuous changes. A general picture of these changes can be shown by a model that we have constructed for this purpose – an electromagnetic model of TURA – in which, by varying electromagnetic fields, we have tried to show some of the changes within this area.

The electromagnetic models of TURA in 1920 and in 1945 (figs. 19 and 20), produced by changing the intensity of the electromagnetic fields, show many similarities to patterns of evolution we have discovered within an urban area. The changes in traffic alone, which have been studied in such cities as Chicago and Philadelphia, and the resulting models of actual traffic flows, although they are very useful for traffic problems, do not give the total picture of the problems raised by changes that occur within a city. What we try to do in these models is to show that it is not only along main transportation lines that we have great changes because of increasing traffic, but that, since changes in all the functions are occurring at a very high speed, they create not only much larger, but also much more complicated, problems – expressed in traffic of vehicles, in traffic of people, in communication among people, in volume of buildings, in problems of facilities, and in aesthetic problems, among others.

By the construction of such models we can introduce new methods of understanding more nearly exactly what is hap-

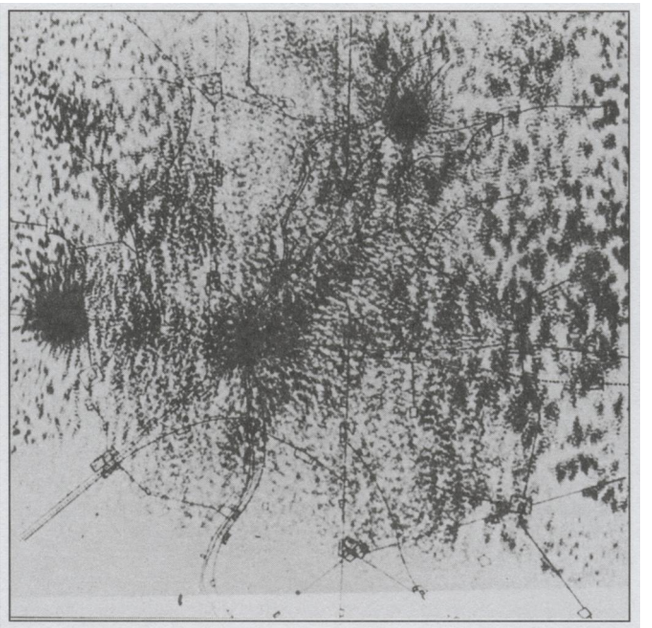


Fig. 19: TURA – Electromagnetic model 1920.

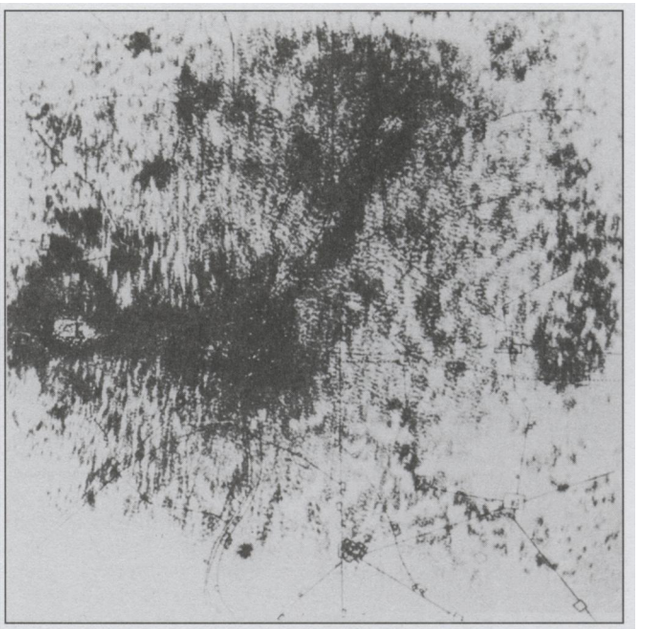


Fig. 20: TURA – Electromagnetic model 1945.

pening within urban areas undergoing continuous change.

At this stage we are entitled to describe the urban structure as chaotic, for the causes of every change are so many, work in so many directions, and at so many speeds that the whole structure is at present understood with great difficulty and is certainly not controlled in any way. By looking at these two pictures, or models, we can easily understand why we have avoided looking at the over-all problem in a systematic way: it is too complicated.

The need: A methodology

This chaotic situation shows the need for a methodology by which we can judge the changes taking place within our urban areas. Such methodology will demand some standards of measurement not only regarding existing conditions, but also regarding the degree of change and the degree of deterioration.

It is fairly obvious that such standards have not yet been developed. When asked about this, most of the NAHRO members (72 percent of those who replied) stated that standards exist for the classification of urban renewal areas. Rather more stated that they are able to define the areas requiring urban renewal on the basis of some standards. About the same number also stated that standards exist for houses and roads, but fewer thought there are standards for community facilities and other types of buildings. However, I have the impression that these answers refer to static standards, standards that mostly describe static situations.

The study of the chaotic structure of our urban areas may convince us that we need a different type of approach to these standards.

If we now consider for a moment that the situation of our urban areas is not improving, but that with every day that passes it is getting more and more complicated as a result of the great increase of population and the continuous and additional pressures that are exercised on our cities, both from the outside and the inside and from many points, we can state with conviction that we are at present moving from chaos to disaster.

Life in certain parts of our cities is already difficult today, many parts of our cities are deteriorating, and we have every reason to believe that the process of deterioration is going to continue at an accelerated rate. More and more areas are going to become overcongested, more and more areas are going to be turned into slums – and at a higher rate of speed than at present.

If we cannot cope with the present situation, we shall be still less able to cope with the situation of the future. This increase of the problems, if combined with an inability to face them, is certainly going to lead to disaster.

Conclusions

Urban renewal problems have not suddenly arisen without any real cause. There are real causes for them and these causes continue to exist, and to multiply.

Our cities are continuously changing in size, in makeup, and in structure.

We are unable to face and to meet the increasing problems of our urban areas with the techniques that we have developed up to the present. We do not have any reason to believe that present approaches, present policies, and present programs can lead to the solution of our urban problems, in spite of the great efforts made by many people in the public sector (government) as well as in the private sector.

The chaotic structure that has developed around us presents a situation that is leading to disaster, and because of its complexity, it is creating confusion in our minds.

This confusion does not allow us to see the over-all picture of the problem. It binds us too much to present-day notions about remedies. It concentrates our attention too much on the idea of an individual project, a single city, or a single urban area, whereas we should be thinking about regions and the nation as a whole.