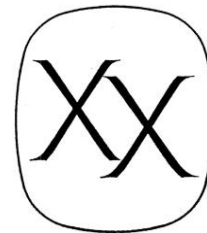


MEGALOPOLIS

THE URBANIZED
NORTHEASTERN SEABOARD
OF THE UNITED STATES

JEAN GOTTMANN



THE TWENTIETH CENTURY FUND

NEW YORK • 1961

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F O R E W O R D

Professor Gottmann, in his introduction to this volume, has made plain the nature of his undertaking and the precise significance he attaches to the term *Megalopolis*. I hope that his own definition will be heeded; for the term is so awe-inspiring, and the phenomenon it describes so dramatic and novel, that it is very easy for misconceptions to take root. In recent years, while this work has been in progress, I have found the almost universal impression among those who heard of it for the first time to be that of a monstrous city, a kind of indefinite extension of Times Square up and down the whole Atlantic seaboard.

This book is about something entirely different. Dr. Gottmann is too careful and too imaginative a scholar to assume that trends are running all in one direction, or to take it for granted that man is doomed to be crushed under an environment of his making. He sees the Northeastern seaboard of the United States as a development of immense significance, typically modern in its urbanized concentration, yet containing balances and counterforces which give it variety within its overall unity. This area, he says, "may be considered the cradle of a new order in the organization of inhabited space." The fact that the new order is, in his words, "still far from orderly" should not blind us to the possibilities that exist within this form of human settlement — nor absolve us of the responsibility to correct its deficiencies.

The inception of the present study was an interest of the Trustees of the Twentieth Century Fund, expressed nearly a decade ago, in seeing what light could be thrown on the problem of the modern city. That is

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My field studies and investigation of this area and its problems began some twenty years ago. For ten years I have been lecturing and writing on the subject. The last five years have been devoted entirely to its study. An innumerable number of persons, organizations, and institutions have helped in this inquiry, and my indebtedness to the work and knowledge of others is expressed in the many footnotes in the volume. A brief statement of acknowledgments following the conclusion stresses the most important contributors. This study could not have been carried out without the continued interest and generous support of the Institute for Advanced Study, Princeton, New Jersey, and of the Twentieth Century Fund, New York; to the Directors and staffs of these two institutions I express my profound gratitude.

J. G.

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evidently a complex problem, economic, political, and sociological in its implications. After much thought, it seemed to the Fund a good idea to seek out the contribution of a geographer, with his own method of combining the insights of various disciplines; and of a foreigner, who could look on a characteristic American phenomenon with fresh eyes. Dr. Gottmann, then at the Institute for Advanced Study in Princeton, on leave from the University of Paris, had completed his important study of Virginia. It seemed natural to us, and inviting to him, that he should proceed from this base to the far wider survey now presented to the public.

The book deals with a specific area; it treats that area as a unique development, with its own origin and destiny. But it is the hope of the Fund that the insights thus gained will be found applicable to other areas, both in this country and abroad, where many of the tendencies which shaped Megalopolis are now creating rapid growth and change.

It remains to say that working with Dr. Gottmann has been a particular pleasure. We have enjoyed having him within the household of the Twentieth Century Fund, in that penthouse office from which he could look out across the rooftops of the great city. He finished his manuscript on time; which is rare. And even rarer is the fact that we should have regretted seeing a work completed; for in this case it carried out of our circle, to other tasks and to another country, a scholar whose courtesy matched his endless curiosity and his zeal for getting at the heart of things.

AUGUST HECKSCHER, *Director*
The Twentieth Century Fund

41 East 70th Street, New York
August 1961

P R E F A C E

This book is the result of twenty years of study. It may seem bulky to the reader, but the author feels it provides just a brief summary. *Megalopolis* is a vast area. It encompasses many great cities, and its population is now close to 38 million, which is more the size of a nation than of a metropolis. It contains one of the largest industrial belts in existence and the greatest financial and political hubs on earth. Any attempt to describe such a region would require many words and maps.

What is offered here can hardly be termed a description. The writer has not aimed at a portrait of the area and its people, though he believes that it could have been a worthy and exciting enterprise. Rather he has endeavored to analyze and understand the extraordinary dynamics that have created, in a place that was a wilderness three centuries ago, the enormous and powerful concentration of people and activities now achieved in Megalopolis. Nowhere else have men ever built anything comparable, and with such a rhythm.

Exceptional as it is, the urbanization of this part of the Atlantic seaboard of North America has been a signal of a steady trend toward the concentration of dense populations in large urbanized regions, a trend gradually becoming characteristic of this century. The distribution of habitat and economic activities is thus changing; new modes of life are appearing and spreading. This process, which marks an essential turning point of history, has been most advanced in this region, Megalopolis. In this book the urbanization of Megalopolis is presented as a significant experiment, the lessons of which must be taken into account not only by the people living in the area but by those of many other lands as well.

I N T R O D U C T I O N

The Main Street of the Nation

The Northeastern seaboard of the United States is today the site of a remarkable development — an almost continuous stretch of urban and suburban areas from southern New Hampshire to northern Virginia and from the Atlantic shore to the Appalachian foothills. The processes of urbanization, rooted deep in the American past, have worked steadily here, endowing the region with unique ways of life and of land use. No other section of the United States has such a large concentration of population, with such a high average density, spread over such a large area. And no other section has a comparable role within the nation or a comparable importance in the world. Here has been developed a kind of supremacy, in politics, in economics, and possibly even in cultural activities, seldom before attained by an area of this size.

A Very Special Region: Megalopolis

This region has indeed a "personality" of its own, which for some three centuries past has been changing and evolving, constantly creating new problems for its inhabitants and exerting a deep influence on the general organization of society. The modern trends in its development and its present degree of crowding provide both examples and warnings for other less urbanized areas in America and abroad and call for a profound revision of many old concepts, such as the usually accepted distinctions between city and country. As a result new meanings must be given to some old terms, and some new terms must be created.

Great, then, is the importance and significance of this section of the United States and of the processes now at work within it. And yet it is difficult to single this area out from surrounding areas, for its limits cut across established historical divisions, such as New England and the Middle Atlantic states, and across political entities, since it includes some states entirely and others only partially. A special name is needed, therefore, to identify this special geographical area.

This particular type of region is new, but it is the result of age-old processes, such as the growth of cities, the division of labor within a civilized society, the development of world resources. The name applied to it should, therefore, be new as a place name but old as a symbol of the long tradition of human aspirations and endeavor underlying the situations and problems now found here. Hence the choice of the term *Megalopolis*, used in this study.

Some two thousand years before the first European settlers landed on the shores of the James River, Massachusetts Bay, and Manhattan Island, a group of ancient people, planning a new city-state in the Peloponnesus in Greece, called it *Megalopolis*, for they dreamed of a great future for it and hoped it would become the largest of the Greek cities. Their hopes did not materialize. *Megalopolis* still appears on modern maps of the Peloponnesus but it is just a small town nestling in a small river basin. Through the centuries the word *Megalopolis* has been used in many senses by various people, and it has even found its way into Webster's dictionary, which defines it as "a very large city." Its use, however, has not become so common that it could not be applied in a new sense, as a geographical place name for the unique cluster of metropolitan areas of the Northeastern seaboard of the United States. There, if anywhere in our times, the dream of those ancient Greeks has come true.

An Urbanized Area with a Nebulous Structure

As one follows the main highways or railroads between Boston and Washington, D. C., one hardly loses sight of built-up areas, tightly woven residential communities, or powerful concentrations of manufacturing plants. Flying this same route one discovers, on the other hand, that behind the ribbons of densely occupied land along the principal arteries of traffic, and in between the clusters of suburbs around the old urban centers, there still remain large areas covered with woods and brush alternating with some carefully cultivated patches of farmland. These green spaces, however, when inspected at closer range, appear stuffed with a loose but immense scattering of buildings, most of them residential but some of industrial character. That is, many of these sections that look rural actually function largely as suburbs in the orbit of some city's downtown. Even the farms, which occupy the larger tilled patches, are seldom worked by people whose only occupation and income are properly agricultural. And yet these farm areas produce large quantities of farm goods!

Thus the old distinctions between rural and urban do not apply here any more. Even a quick look at the vast area of *Megalopolis* reveals a revolution in land use. Most of the people living in the so-called rural areas, and still classified as "rural population" by recent censuses, have very little, if anything, to do with agriculture. In terms of their interests and work they are what used to be classified as "city folks," but their way of life and the landscapes around their residences do not fit the old meaning of urban.

In this area, then, we must abandon the idea of the city as a tightly settled and organized unit in which people, activities, and riches are crowded into a very small area clearly separated from its nonurban surroundings. Every city in this region spreads out far and wide around its original nucleus; it grows amidst an irregularly colloidal mixture of rural and suburban landscapes; it melts on broad fronts with other mixtures, of somewhat similar though different texture, belonging to the suburban neighborhoods of other cities. Such coalescence can be observed, for example, along the main lines of traffic that link New York City and Philadelphia. Here there are many communities that might be classified as belonging to more than one orbit. It is hard to say whether they are suburbs, or "satellites," of Philadelphia or New York, Newark, New Brunswick, or Trenton. The latter three cities themselves have been reduced to the role of suburbs of New York City in many respects, although

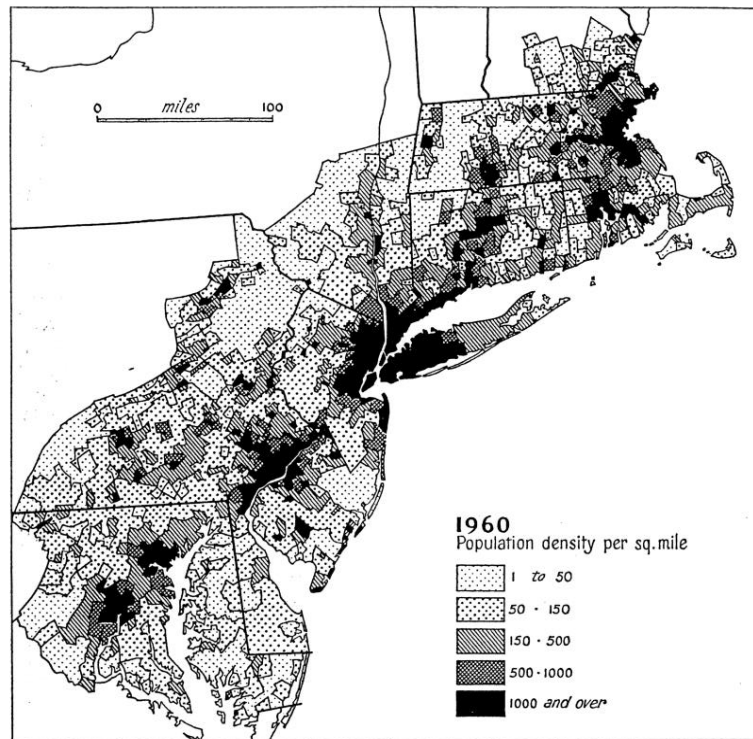


FIG. 1. The density of population according to the 1960 Census, by minor civil divisions. Compare with similar maps for 1940, p. 386, and 1950, p. 387, and with the maps of density by counties in 1960 on the end-papers at the front of this volume.

Trenton belongs also to the orbit of Philadelphia. (See Fig. 1, the distribution of population density.)

The "standard metropolitan areas,"¹ first used by the U. S. Bureau of the Census in 1950, have clarified this confused situation somewhat but not entirely. For example, the New York-Northeastern New Jersey standard metropolitan area cuts across political boundaries to reveal the

¹ The U. S. Bureau of the Census defined a standard metropolitan area as "a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more. In addition to the county, or counties, containing such a city, or cities, contiguous counties are included in a standard metropolitan area if according to certain criteria they are essentially metropolitan in character and socially and economically integrated with the central city." In New England, "towns and cities, rather than counties, are the units used in defining standard metropolitan areas."

relationships of this vast region to the core city of New York. And yet the mechanical application of the term "standard metropolitan area" has resulted in the establishment of separate areas for Trenton, which is closely tied to both Philadelphia and New York, and for Bridgeport, which is for many practical purposes part of the New York area. Similar problems can be found in other parts of Megalopolis.²

Thus an almost continuous system of deeply interwoven urban and suburban areas, with a total population of about 37 million people in 1960, has been erected along the Northeastern Atlantic seaboard. It straddles state boundaries, stretches across wide estuaries and bays, and encompasses many regional differences. In fact, the landscapes of Megalopolis offer such variety that the average observer may well doubt the unity of the region. And it may seem to him that the main urban nuclei of the seaboard are little related to one another. Six of its great cities would be great individual metropolises in their own right if they were located elsewhere. This region indeed reminds one of Aristotle's saying that cities such as Babylon had "the compass of a nation rather than a city."

Megalopolis — Main Street and Crossroads of the Nation

There are many other large metropolitan areas and even clusters of them in various parts of the United States, but none of them is yet com-

² For the 1960 Census the term "standard metropolitan area" was changed to "standard metropolitan statistical area." The definition was modified and a somewhat different set of criteria used which resulted in breaking down several of the formerly recognized larger metropolitan areas into smaller such units. The results thus achieved may be more precise in some respects but in the case of Megalopolis they may cause some confusion. The New York-Northeastern New Jersey standard metropolitan area of 1950 has been replaced by four standard metropolitan statistical areas: one for New York in New York State and three in New Jersey, those of Paterson-Clifton-Passaic, Jersey City, and Newark. The stricter definition of metropolitan integration of adjoining counties now excludes Somerset and Middlesex counties, formerly classified as metropolitan. As a result the percentage of the population of New Jersey residing in metropolitan areas fell from 89.9 in 1950 to 78.9 in 1960 — a statistical trend surprising to those who know how much more metropolitan — or should we say Megalopolitan — the whole of New Jersey grew through the 1950's. To compensate for such an impression and for the separation between New York City and Northeastern New Jersey, a new term has been created and defined: "Standard Consolidated Areas," of which there were two (recognized for 1960) in the country: the New York-Northeastern New Jersey area (which included Somerset and Middlesex counties in New Jersey), and the Chicago-Northwestern Indiana area. The recognition of these broader areas was intended to stress "the special importance of even more inclusive metropolitan statistics" (see Executive Office of the President, Bureau of the Budget, *Standard Metropolitan Statistical Areas*, U. S. Government Printing Office, Washington, D. C., 1961). The metropolitan area of Philadelphia remained unchanged in both its Pennsylvania and New Jersey parts.

parable to Megalopolis in size of population, density of population, or density of activities, be these expressed in terms of transportation, communications, banking operations, or political conferences. Megalopolis provides the whole of America with so many essential services, of the sort a community used to obtain in its "downtown" section, that it may well deserve the nickname of "Main Street of the nation." And for three centuries it has performed this role, though the transcontinental march of settlement has developed along east-west axes perpendicular to this section of the Atlantic seaboard.

In recent times Megalopolis has had concentrated within it more of the Main Street type of functions than ever, and it does not yet seem prepared to relinquish any of them. Witness, for example, the impact of the Federal government in Washington, D. C., as it tightens up over many aspects of national life; the continued crowding of financial and managerial operations into Manhattan; New York's dominance of the national market for mass communication media, which resists all attempts at erosion; and the pre-eminent influence of the universities and cultural centers of Megalopolis on American thinking and policy-making. Megalopolis is also the country's chief façade toward the rest of the world. From it, as from the Main Street of a city, local people leave for distant travel, and to it arriving strangers come. For immigrants it has always served as the chief debarkation wharf. And just as passing visitors often see little of a city except a few blocks of its Main Street, so most foreign visitors see only a part of Megalopolis on their sojourns in the United States.

Just as a Main Street lives for and prospers because of the functions of the whole city, rather than because of any purely local advantages of its own, so is Megalopolis related to the whole United States and its rich resources. In general, Megalopolis itself was blessed only moderately by nature. It has no vast expanse of rich soils (there are some good soils but more poor ones), no special climatic advantages (its cyclonic climate is far from ideal), and no great mineral deposits (though there are some). In these respects it cannot compare with the generous natural potential of the Middle West or Texas or California. But it does excel in locational advantages—deep harbors of a drowned shoreline, on which its principal cities were early established, and a connecting-link relationship between the rich heart of the continent and the rest of the world. By hard work man has made the most of these locational resources, the most outstanding ones in an otherwise average natural endowment. As a result, early in its history Megalopolis became a dynamic hub of international relations, and it has maintained and constantly expanded that role to the present day. It

is now the most active crossroads on earth, for people, ideas, and goods, extending its influence far beyond the national borders, and only as such a crossroads could it have achieved its present economic pre-eminence.

Megalopolis as a Laboratory of Urban Growth

Modern technology and social evolution provide increasing opportunity in urban pursuits on the one hand, and on the other steadily improving means of producing more agricultural goods with less manpower. The forces at work in our time, coupled with the growth in population, are, therefore, bound to channel a rising flow of people toward urban-type occupations and ways of life. As this tide reaches more and more cities they will burst out of old bounds to expand and scatter all over the landscape, taking new forms like those already observable throughout Megalopolis. This region serves thus as a laboratory in which we may study the new evolution reshaping both the meaning of our traditional vocabulary and the whole material structure of our way of life.

Tomorrow's society will be different from that in which we grew up, largely because it will be more urbanized. Nonagricultural ways of life will be followed by more and more people and will occupy much more space than they ever did, and such changes cannot develop without also deeply modifying agricultural life and production. So great are the consequences of the general evolution heralded by the present rise and complexity of Megalopolis that an analysis of this region's problems often gives one the feeling of looking at the dawn of a new stage in human civilization. The author has visited and studied various other regions of the world but has not experienced such a feeling anywhere else. Indeed, the area may be considered the cradle of a new order in the organization of inhabited space. This new order, however, is still far from orderly; here in its cradle it is all in flux and trouble, which does not facilitate the analyst's work. Nevertheless, a study of Megalopolis may shed some light on processes that are of great importance and interest.

A Study in Entangled Relationships

As the work of data-gathering and analysis progressed it became evident that the key to most of the questions involved in this study of Megalopolis lies in the interrelationships between the forces and processes at work within the area rather than in the trends of growth or the development of techniques. Thus the trend of population increase, easy to measure and perhaps to forecast approximately, provides less insight into the nature of the area than do the interrelations existing between the processes that

caused the local population to grow, those that attracted certain kinds of people to Megalopolis, and those that supplied the swelling crowds with the means to live and work together there. Many of these processes are statistically measurable and some of them can be mapped, but the degree to which each of them stems from the others or determines them is a much more subtle matter, and is more basic to an understanding of what is going on and what can be done about it.

Most regional studies stay on the safer and more superficial grounds of statistical description and functional classifications. Had this report followed that pattern it would have been devoted mainly to summing up the abundant data available from the Censuses and other sources of general information about the various characteristics of Megalopolis. A description of natural conditions, such as topography, climate, hydrography, and vegetation, would have introduced a historical sketch to be followed by chapters on population, industries, trade, transportation and communications, the real estate market, other occupations, and descriptions of the main cities and of the general features of "rural areas." Such a report would have concluded with a description of present problems and forecasts of the future presented by means of graphs, based on the assumption that the trends of the past twenty to fifty years will continue for the next twenty years.

A mere compilation of such data would probably be of service to some people but it could hardly help those who need further insight into and understanding of the basic problems of the area. By attempting to find out more about the deeper processes and their entanglements, one may hope to achieve a more fundamental kind of knowledge, which can be applied to another area or projected into the future more safely, though not always more easily. This is why the present report is organized along a somewhat less classical outline, its goal being a more reasoned discussion and an objective analysis. For such complicated phenomena as the social and economic processes at work in Megalopolis there are, of course, numerous and interlocking determining factors. The author has endeavored to search for *all* these factors, keeping in mind their multiplicity and entanglements and avoiding any arbitrary choices among them.

Outline of This Report

Part One presents a sketch of the *dynamics of urbanization* and attempts to show, in terms of the region's history, why things have come to be as they are and where they are. Although this section is largely descriptive it cannot avoid raising some new questions.

Part Two takes up what may be called the "*modern revolution in land use*." The new mixture of urban and rural must be dissected and each part related to the others in the newly developing system. Separation between place of work and place of residence creates within the area the system of daily "tidal" movements involved in commuting. Over these are superimposed other currents, some seasonal and some irregularly recurrent. These reflect relations between different parts of Megalopolis that stem from more complicated needs than the simple journey from home to work. These other needs grow more complicated and more general as average family income rises and both goods and activities that were once considered dispensable come to be regarded as necessary by large numbers of Megalopolitans. As Montesquieu observed two centuries ago, on the eve of the Industrial Revolution, "It is the nature of commerce to make the superfluous useful and the useful necessary." Perhaps it is not commerce but just human nature that produces this sequence. At any rate it has certainly been proven true of the consumption of goods, and now it seems to apply to the consumption of activities and space. The modern urban revolution, so apparent already in the affluent society of Megalopolis, devours time and space as well as food and industrial goods, and the fulfilling of these needs requires many types of movements.

These various tidal movements involve a reshaping of land use. Much agricultural land has been taken over by residential and industrial development. On the remaining farms a new specialized type of agriculture is developing, which requires less space than did the old system of farming. Woods have spread over much of the land abandoned by the farms, and this expansion of forests calls for new methods and concepts of forestry management, to provide for recreational and other suburban needs and for a better conservation of the landscape and of wildlife. Simultaneously the old city cores or "downtowns" are evolving toward decline or renewal, while uptowns, suburbs, and outer suburbia are becoming interlocked in a new and still constantly changing web of relationships. Regional integration is taking on forms unknown a generation or two ago, and the old system of local, state, and national authorities and jurisdictions, which has changed little, is poorly suited to present needs.

New *patterns of intense living* that have become normal in Megalopolis affect not only land use. They also exert a strong influence on the economic and social foundations of society, and Part Three endeavors to describe the problems thus created. The density of activities and of movement of all kinds is certainly the most extraordinary feature of Megalopolis, more characteristic even than the density of population and

of skyscrapers. It has become a means of maintaining economic growth and stabilizing society; but how far can it go without destroying itself? For example, the growth of Megalopolis owes much to the automobile, but highway traffic jams are beginning to strangle city activities and to take the pleasure and efficiency out of driving a car. At the same time cars contribute to the ruination of other means of transportation, made more necessary than ever by the massive tidal currents of people and goods. The self-defeating effect of dense concentrations may be observed also in other fields than transportation. Many industries, for example, are now aiming at decentralization. The intense living of Megalopolis makes a great deal of waste inescapable, waste of space and time as well as of materials. For a long time such waste may have seemed justifiable, for, paradoxically, the crowding that caused it brought higher economic yields. Now this crowding seems at times to defeat its own aims. Why and how does such intense living grow and threaten itself? Answers to these queries build up a general picture of a dynamic and prosperous society, obviously responsible for maintaining the growth of large-scale urbanization but responsible also for the problems the process creates and for finding the badly needed solutions.

It is easier to accept responsibility for solutions than to provide them. The many millions of people who find themselves *neighbors in Megalopolis*, even though they live in different states and hundreds of miles from one another, are barely becoming aware of the imperatives of such a "neighborhood." Part Four attempts to point them out. Responsible public opinion is becoming conscious of the problems involved, and the struggle to find solutions has started. It is especially difficult because no one problem can be tackled without affecting the others. Transportation, land use, water supply, cultural activities, use and development of resources, government and politics — all are interrelated.

Today it is essential that solutions be found to save this area from decay and to reassure the nation and the world about the kind of life modern urbanization trends presage for the future. Megalopolis has been built and often reshaped by its people. These people are now wealthier, better educated, and better endowed with technological means than ever. They ought to be able to find ways of avoiding decline of the area.

For the Better or for the Worse?

The preceding paragraph may seem to imply an unwarranted optimism about society's ability to control itself. True, history records a long list of brilliant civilizations that have sunk under the pressure of internal decay

and external jealousy. We remember their names: Babylon, Corinth, Sparta, Athens, Rome, and many others. In the shadowy vistas of ancient times they vanished into the distance like shipwrecked ships loaded with ambition and precious cargo. Can such a fate be looming in the offing for Megalopolis? Modern urban sprawl is viewed by many as a threat to progress and general welfare. What is happening in Megalopolis today has been described as a pathological phenomenon, a sickness, a cancer. Such views are held by distinguished and respectable citizens of the area. One may well be alarmed by their invectives, all the more so as one does not have to go far away from Megalopolis to hear expressions of distrust and jealousy inspired by the amazing concentration of wealth and power in the great seaboard cities. Are people both in and out of this extraordinary region united in condemning it?

Urban growth in general has been discussed and condemned on moral grounds for a long time. Such debate is expectable and desirable, but on the whole history has shown the condemnation to be unjust, as can be seen by a brief review of some of the consequences of crowding.

Contrasts between rich and poor, for example, are especially striking in the crowded communities of cities. These may exist in rural areas too, but there they are diluted by scattering and veiled in greenery. The growth of urban pursuits (industries, trade, services) sharpens the contrasts by condensing them into a smaller area. Rich and poor live within short distances of one another and mix together in the streets in a way that often arouses righteous indignation. It seems brutally amoral to witness destitution neighboring on elegant sophistication, poverty mixing with prosperity. And yet, alas, a growing city's environment can hardly escape offering such sights. For many centuries there was an enormous difference between the advancement possible in trade and industry on the one hand and in farming on the other (though modern farm mechanization and subsidies to agriculture have substantially increased the profit possibilities of farming), and so to rise economically within the span of one lifetime has traditionally been easier in cities than in rural areas. The affluence of those who have so risen draws to the city large groups of humbler people, who come there to profit by the local abundance of money and the volume of spending and to serve the wealthier. In contrast to the more conservative "open" country, the "closed-in" city offers a more dynamic environment, socially and economically.

In cities, too, other vicious aspects of economic growth and social life have always been more evident than in the country. As urban development was accelerated by the Industrial Revolution, some of these vicious

aspects became increasingly obvious. Slums and mobs grew worse than ever, making the urban landscape ethically and aesthetically shocking to those who cared about the people. From his sojourns in an industrializing western Europe, and especially from Paris during the French Revolution, Thomas Jefferson brought back impressions that reinforced his normal Virginian opposition to great cities and the development of manufactures or large-scale commerce. As slums and mobs became more general in European cities in the first half of the nineteenth century there arose more awareness about the classes of society and social injustice. There was more discussion of these matters, and the early Socialist doctrines were largely inspired by them. Then came the teachings of such philosophers as Fourier and Proudhon in France and Engels and Karl Marx in Germany, opposing great urban concentration as much as great concentration of capital. Engels' writings on the slums and working conditions in the then fast-developing British cities, such as Manchester, are well known. Because urban conditions of living and working were largely at the root of nineteenth-century Socialist doctrines, Karl Marx stressed that his theories applied much more to the industrialized countries of western Europe, which had accumulated large amounts of capital, than to the rural, little-urbanized countries to the east. Twentieth-century events have proved him wrong on this score, however, for communism has conquered the mainly rural countries, and the forms of socialism that developed in the more urban and capitalistic countries of the West have turned away from Marxism.

Crowding of population within a small area creates shortages of various resources, and most of the crowded people are bound to suffer in some ways because of the shortages. To alleviate them, to make crowding more bearable and the population happier, ways and means of constantly better distribution must be found. Otherwise no lasting growth can develop, and the whole enterprise will soon be doomed. From the struggle against such shortages have come some of mankind's most important advances. In the arid areas of the Middle East, for example, early civilization arose when people first congregated around the main springs and permanent rivers. As the settlement grew, the supply of both water and irrigable land became scarce. To insure survival of the people a proper distribution system had to be achieved, and rules and regulations had to be set up and accepted. Thus organized society, ruled by law, was born. Because authorities were needed to enforce law, political power arose, and people organized themselves to avoid more oppression than was necessary. Everywhere, the more crowded people have become in cities the more they have craved both

security and freedom. Modern political life and its concepts of liberty, self-government, and democracy are the products of urban growth, the inheritance of cities in process of growth and development — places such as Jerusalem, Athens, Rome, Bruges, Florence, Paris, London, to mention only those that have been most studied by historians. And the same places, or similar urban centers, have contributed most of our scientific and technological developments, either because people there were struggling to solve pressing problems or because urban societies make possible a leisurely enough elite, some of whose members can devote themselves to disinterested research and a search for a better understanding of the universe.

Thus urban crowding and the slums and mobs characteristic of it may be considered growing pains in the endless process of civilization.

In the same way, the picture of Megalopolis is not as dark as the outspoken pessimists and frequent protests would seem to paint it. Crowded within its limits is an extremely distinguished population. It is, *on the average*, the richest, best educated, best housed, and best serviced group of similar size (i.e., in the 25-to-40-million-people range) in the world. The area is still a focus of attraction for successful or adventurous people from all over America and beyond. It is true that many of its sections have seen pretty rural landscapes replaced by ugly industrial agglomerations or drab and monstrous residential developments; it is true that in many parts of Megalopolis the air is not clean any more, the noise is disturbing day and night, the water is not as pure as one would wish, and transportation at times becomes a nightmare. Many of these problems reflect the revolutionary change that has taken place as cities have burst out of their narrow bounds to scatter over the "open" countryside. In some ways this suburban sprawl may have alleviated a crowding that had threatened to become unbearable, for residential densities of population per square mile have decreased. But new problems have arisen because of the new densities of activities and of traffic in the central cities and because the formerly rural areas or small towns have been unprepared to cope with the new demands made upon their resources. New programs are needed to conserve the natural beauty of the landscape and to assure the health, prosperity, and freedom of the people. In spite of these problems, however, available statistics demonstrate that in Megalopolis the population is on the average healthier, the consumption of goods higher, and the opportunity for advancement greater than in any other region of comparable extent.

Thus the type of urban growth experienced here generates many con-

trasts, paradoxes, and apparently contradictory trends. It calls for debate and naturally excites passionate opinions for and against it. Are its results for the better or for the worse? It is not for our generation to moralize on the matter, but to strive to make the outcome be for the better, whatever obstacles may be in the way. Megalopolis stands indeed at the threshold of a new way of life, and upon solution of its problems will rest civilization's ability to survive. In the search for such solutions there will be found no easy keys to success, no "gimmicks" or "open-sesames." Solutions must be thought out, ironed out, and constantly revised in the light of all the knowledge that can be acquired by all concerned. It is the author's hope that this report, a systematic and sometimes critical analysis of the past and present of Megalopolis, will contribute to the gathering of such knowledge and to its distribution. At the same time, it will tell the story of an extraordinary region as its people have made it.

PART ONE

THE DYNAMICS OF URBANIZATION

On the Northeastern Atlantic seaboard, from Massachusetts Bay to the valley of the Potomac, there is an almost continuous chain of impressive cities along the old highway known as U. S. I. Along this axis, over a distance of about 500 miles, are five of the larger metropolitan areas in America — Boston, New York, Philadelphia, Baltimore, and Washington — each of which had a population of well over a million people in 1950.¹ Between them and in the interior immediately west of this axis there were a good dozen other metropolitan areas each with populations ranging from 200,000 to 800,000.

Such a constellation of large cities is unique in the country, not only

¹ There were nine other metropolitan areas in this category elsewhere in the United States.