

# Geographer, historian and classic French regionalist: The evolution of the writings of Jean Gottmann

“What began as the study of a spatial, regional complex, increasingly turned to concerns even predictions emphasizing social and economic developments. Now a good quarter of a century later, I realize that I was dealing with a mutation in the very nature of the city, and in the behavior of urban society.”

## Robert A. Harper

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## Introduction

*Megalopolis: The Urbanization of the Northeastern Seaboard of the United States* was a watershed for Jean Gottmann as well as for the study of metropolitan areas. Up until he embarked on his seminal study of the adjacent, interacting huge metropolitan areas from Boston to Washington, he had written little about cities and not much more about the United States. After that time the bulk of his writing was about large urban places.

## Early focus far from cities; but a seed had been planted

A Russian immigrant whose family had fled to France during the Russian Revolution, Jean Gottmann was educated in the French geographic tradition that emphasized human occupation of regions. This regional approach focused on the development of a particular culture's use of a given region through time. Emphasis was on the evolution of human development in the area from historical roots. As Gottmann, himself, has written:

I entered on a geographical career, intending to specialize in the human geography of the Mediterranean. I was trained in France where, at the time, the first two university degrees in geography and history were joined. So that historical geography or geographical history always seemed to me to be natural approaches (GOTTMANN, 1983a, p. 23).

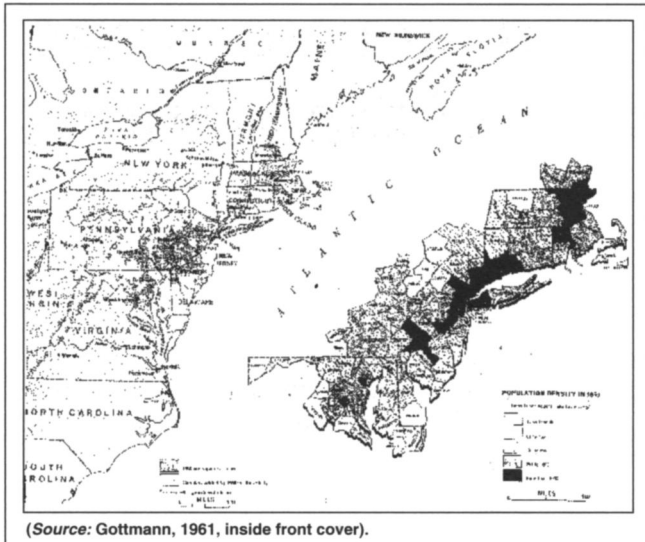
Robert Dickinson in his book *The Makers of Modern Geography* wrote about a discussion between a French professor at the Sorbonne and his pupil in 1932. The professor identified four major practical problems to which a geographer could direct his attention:

- what to do about the crowding masses of population and the inadequate food supply in eastern Asia;
- how to improve the relations between Whites and Negroes;
- how to enlarge the areas under irrigation in arid lands without polluting the land with accumulations of salt; and,
- how to guide the growth of great cities.

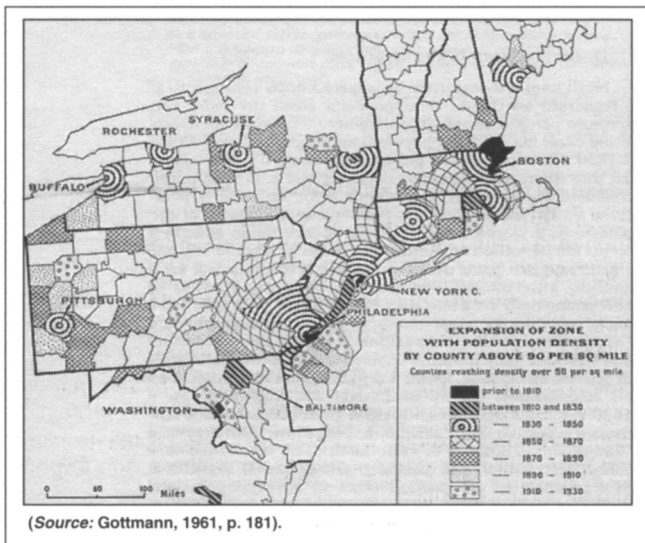
The professor was Albert Demangeon, author of one of the first French regional studies; the pupil Jean Gottmann.

Gottmann's earliest papers from the early 1930s seemed to focus on the third of the above questions: irrigation agriculture. Fluent in Russian, he began writing about the agricultural and regional aspects of the Soviet Union. In the mid-1930s his interest in agricultural geography and irrigation became more focused, and his regional interests were now shifted to the arid lands of Palestine and the Middle East. He wrote about arid lands and irrigation agriculture.<sup>1</sup>

Writings about agriculture and the Mediterranean continued into the years of World War II. He now wrote about the Sahara and West Africa. It was during this period that he began writing more generally about human and social matters and about political states and power. From his first papers through this period almost all of his writing was in French journals.



**Fig. 1:** The concept of Metropolitan Areas was first used by the U.S. Bureau of the Census in 1950, the latest census Gottmann had to work with. He used the population density map to illustrate the central cities and their surrounding urban sprawl.



**Fig. 2:** Gottmann used this map to illustrate the outward sprawl from the key city centers through time.

## World War II and the beginnings of Gottmann's "Atlantic Transhumance"

During the War Gottmann began what he called "a trans-Atlantic transhumance" (GOTTMANN, 1983b, p. 23) working for the French government in Washington, then teaching at Johns Hopkins before moving on to the United Nations when it was located in Lake Success, then to the Institute of Advanced Studies at Princeton. All of these experiences took place within the boundaries of Megalopolis: in Washington, Baltimore, and the New York Metropolitan area.

After the War he wrote a series of articles dealing with methodology in social and human geography. But, he now began writing about the United States in French journals. In 1949 he published a text on the United States in French, then a year later reversed and wrote a geography of Europe in English. Both displayed his ability to conceptualize from

particulars and utilize his broad knowledge of history. During this time, with service for the French government and the United Nations, he began to write about political geography and international relations, geography and the United Nations, the Monroe Doctrine.

In the 1950s, based at the Institute for Advanced Studies at Princeton, he was writing about the organization of space, political partition, the partition of Palestine and the new state of Israel, even the presidential campaign of 1952. During this time he did his first regional study on the United States in English: *Virginia at Mid-Century*. Research for the book took him to the southern fringe of Megalopolis in the Virginia suburbs of Washington DC.

At first glance, Jean Gottmann seemed an unlikely choice for the monumental study of the cities of the Northeastern Seaboard of the United States (figs. 1 and 2). He had proved his scholarship and, with the work *Virginia at Mid-Century*, his ability to handle a complex regional study, but at the time he certainly was not an urbanist. But, writing in the foreword of *Megalopolis*, August Heckscher, Director of the Twentieth Century Fund, states "In planning a study of the growth of a great urban region, so characteristic of our times, it seemed to the Trustees of the Twentieth Century 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 representative American phenomenon with fresh eyes." Notice that the study is seen by Heckscher as a regional study whose focus is a cluster of large urban centers, not as an urban study in itself. In the study Gottman speaks of a "symbiosis of urban and rural" and devotes chapters to megalopolitan agriculture, and woodlands and wildlife. But, *Megalopolis* would change both the direction of Jean Gottmann's career and the scope of urban scholarship throughout the world. Moreover, a new word – megalopolis – had been added to our urban vocabulary, a word that applied to much more than the seaboard of the Northeastern United States.

## Discovering Megalopolis and its nature

The study of *Megalopolis: The Urbanized Northeastern Seaboard of the United States* grew out of discussions with colleagues at the Institute of Advanced Studies. Robert Oppenheimer, its director, was impressed and arranged for the Twentieth Century Fund to underwrite the study and its publication. Gottmann worked on the study full-time from 1956 through 1960.

For Gottmann *Megalopolis* was a complete shift from his earlier studies of his mentor's third practical issue, irrigation, to the fourth, how to guide the growth of great cities, but his methodology was a clear up-grading of traditional French regional geography. In *Megalopolis* he was following the French regional method he had been taught, examining the changing human occupancy of a particular region. Writing of the purpose of his study in his preface to the book, he states:

What is offered here can hardly be called a description. The writer has not aimed at a portrait of the area and its people ... 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 ...

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

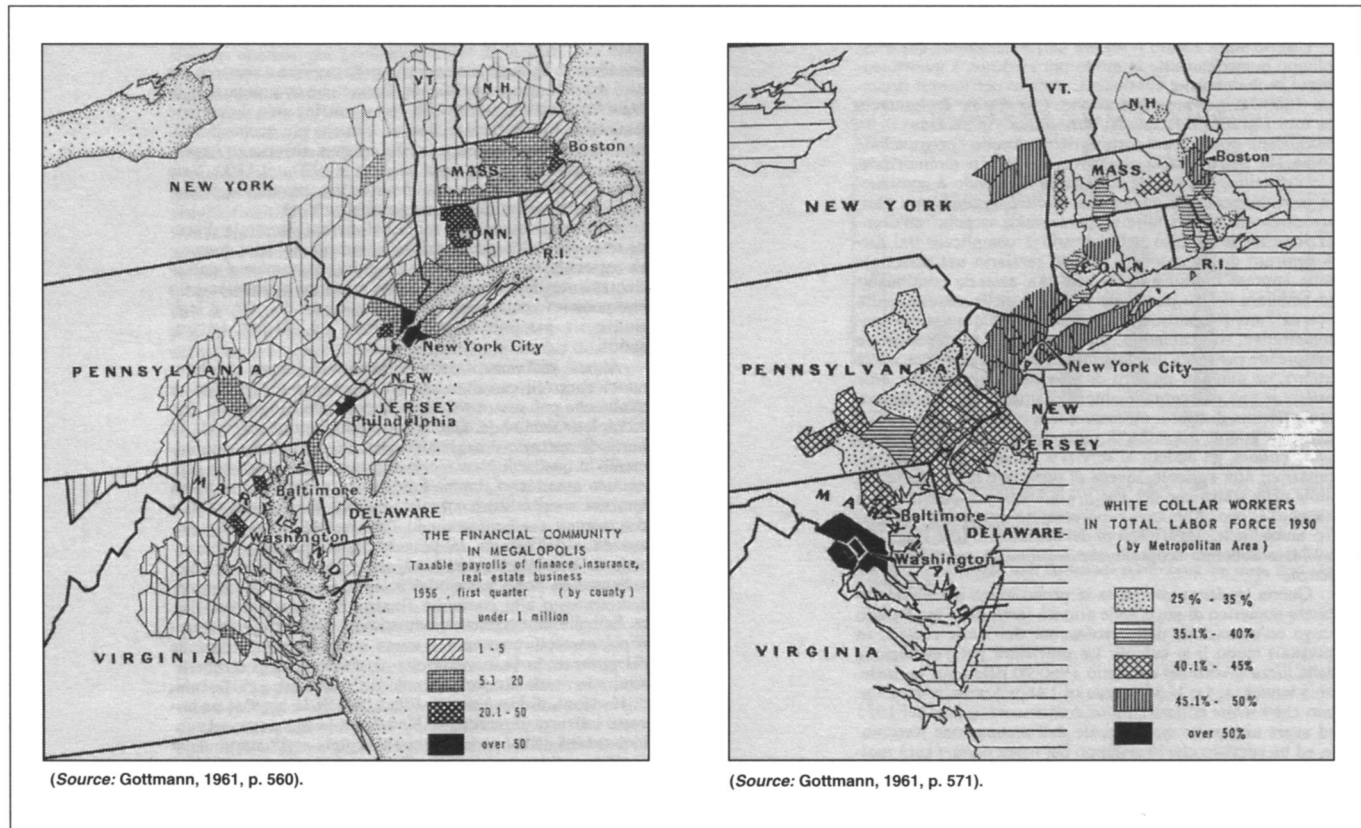


Fig. 3: Gottmann used the two figures above to illustrate the importance of white-collar employment, his quaternary functions, to point out the importance of finance and management functions in what he saw as the rise of these functions as the keys to the dominance of Megalopolis in the U.S. and world economies. He saw the centers within Megalopolis as changing from dominantly manufacturing-trade centers into what he spoke of as "transactional centers."

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 (GOTTMANN, 1961, p. lx).

This was a clear statement of his interpretation of the French approach to regional geography. Notice, in the statement above, Gottmann saw the megalopolitan region as "a signal of a steady trend toward concentration ... in large urban areas, a trend characteristic of this century ... new modes of life are appearing and spreading." In 1990 in writing about his thinking over almost 30 years since *Megalopolis*, he spoke of how that study "proceeds from a particular case in point to more general observations. What began as the study of a spatial, regional complex, increasingly turned to concern even predictions emphasizing social and economic developments. Now a good quarter of a century later, I realize that I was dealing with a mutation in the very nature of the city, and in the behavior of urban society" (GOTTMANN, 1990, p. 4).

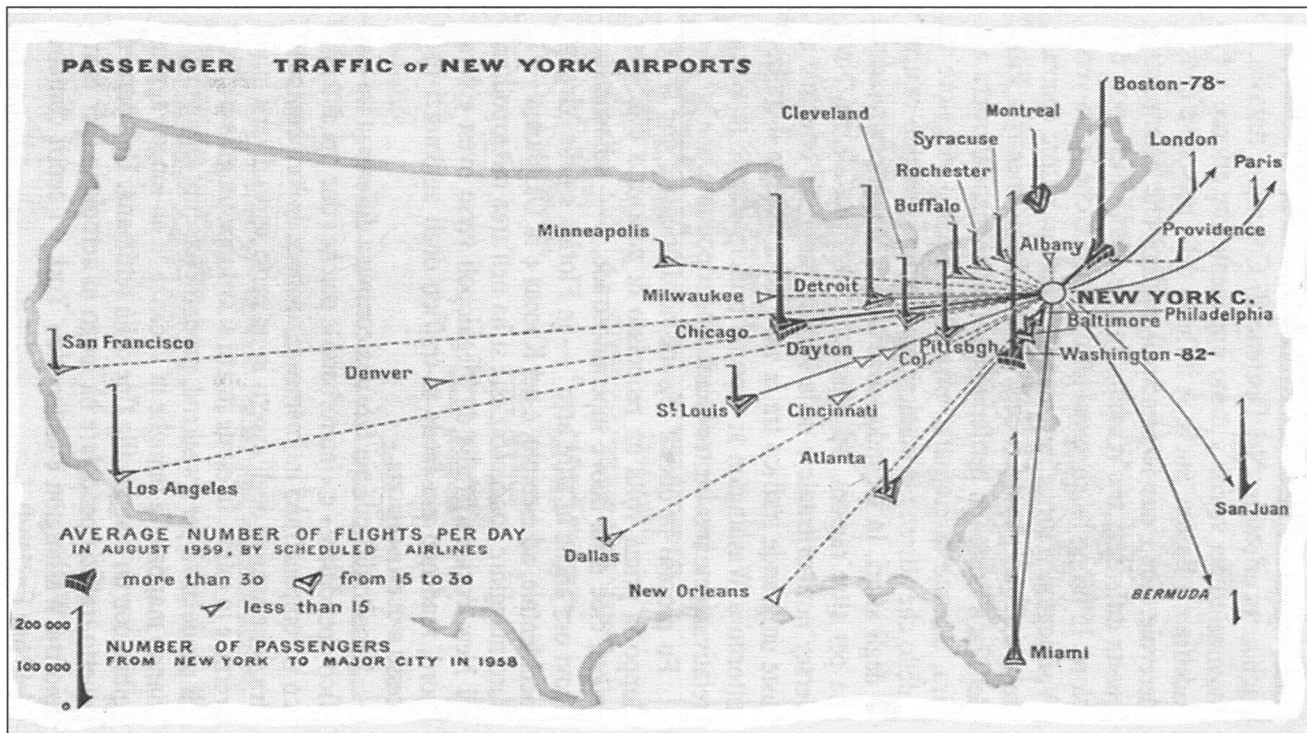
Gottmann's choice of the cluster of giant metropolitan areas along the Eastern Seaboard of the United States from Boston to Washington in the immediate postwar period could hardly have been more significant in time or place. Those adjacent urban concentrations had been and were increasingly "the hinge" between the world's largest economy and the rest of the world. As the largest urban centers of the

United States since the beginning of European colonization, in the post-World War II period its "hinge" function now served the world's largest economy as it emerged from a tradition of isolation into a power in the new global world. The trends he saw emerging along the Northeastern Seaboard of the United States were being mirrored on varying scales in the urban core centers of every country.

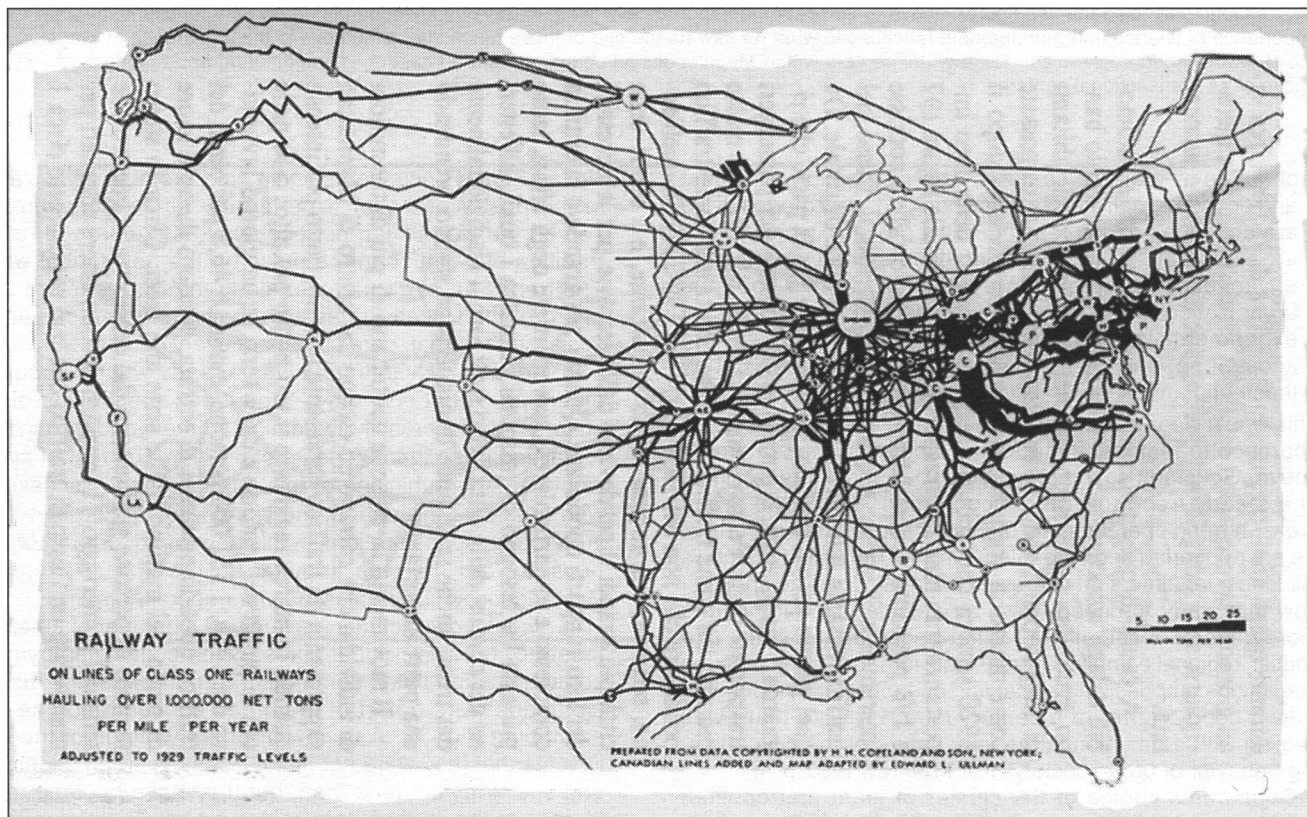
In *Megalopolis* Gottmann was already writing about the emerging global economy – and its accompanying global culture – that increasingly dominated the world through the remaining more than 30 years of his life. The rest of his life would be spent thinking of this phenomenon, discussing it with urbanists throughout the world, and writing about the large urban concentrations of this new world. From *Megalopolis* onward, he was engulfed in the last of Professor Demangeon's four great issues for geographers.

In *Megalopolis* Gottmann examined a number of emerging facets of the new global cities: white-collar employment, communication links, commuting, urban centrality that for Gottmann were a part of the urban concentration he was examining (fig. 3). A review of urban writings of the time indicate that they were not major issues in urban geography and sociology courses then, but they have become major themes of the study of large cities since. Their importance was recognized in large part by his findings in *Megalopolis*.

After *Megalopolis* was published in 1961, Gottmann's writing was almost entirely about urban matters, although a few political articles continued in the 1960s. They probably represent materials that he had worked on before *Megalopolis*.

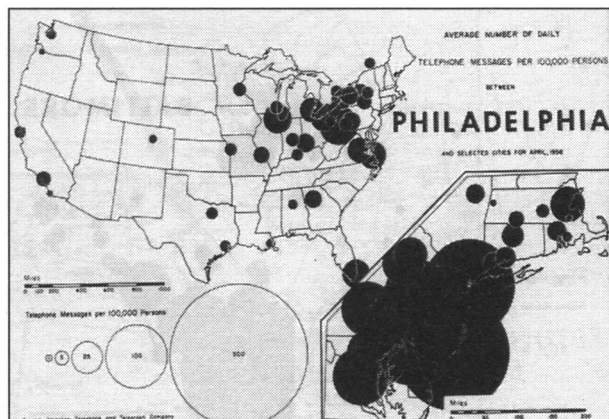
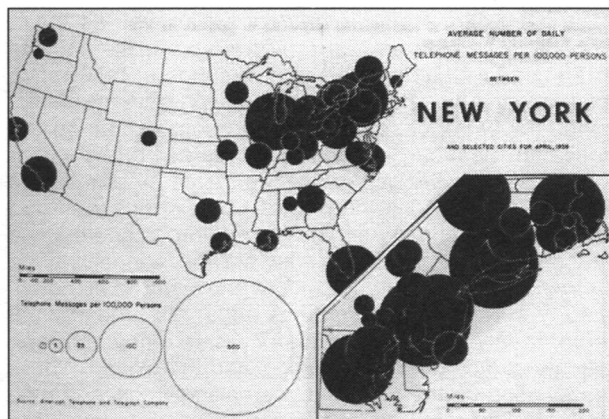
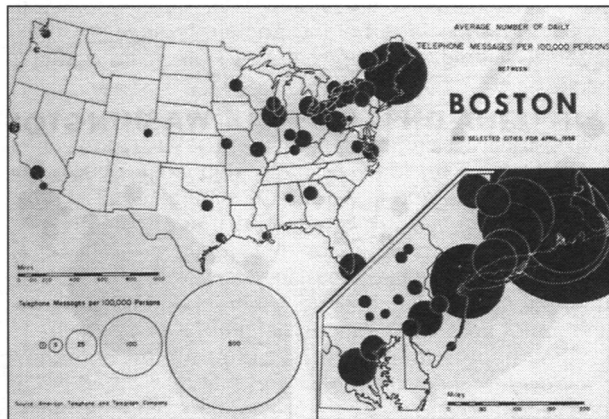


(Source: Gottmann, 1961, p. 646).



(Source: Gottmann, 1961, p. 635).

**Fig. 4:** The transactional role of Megalopolis was further emphasized by using transportation and communications data. These are noted in the maps of passenger traffic at New York airports, U.S. railroad traffic and telephone destinations between Boston, New York and Philadelphia and selected cities for April 1958.



a. Telephone destinations – Average number of daily telephone messages per 100,000 persons between Boston and selected cities for April 1958. (Source: American Telephone and Telegraphy Company; Gottmann, 1961, p. 583).

b. Telephone destinations – Average number of daily telephone messages per 100,000 persons between New York and selected cities for April 1958. (Source: American Telephone and Telegraphy Company; Gottmann, 1961, p. 584).

c. Telephone destinations – Average number of daily telephone messages per 100,000 persons between Philadelphia and selected cities for April 1958. (Source: American Telephone and Telegraphy Company; Gottmann, 1961, p. 585).

Fig. 4 (cont'd)

## A whole new direction after *Megalopolis*

Jean Gottmann never wrote another book, but produced a wide range of articles following up on the issues he examined in *Megalopolis*. Many of them appeared in *Ekistics*. He also was asked to lecture and speak at symposia and conferences. Many of these talks were published.

In his post-*Megalopolis* writings and lectures, Gottmann moved from the particular case of the urban complex he called *Megalopolis* to explore the ideas he gained in that study in the examination of large urban centers generally – both in time and space.

His new writings spread across the spectrum of urban topics that had emerged in *Megalopolis*. Drawing on his background in history and geography, a body of his writings dealt with urban centers of the past. He examined the early development of large cities and city networks around the Mediterranean – on the ancient Greek island kingdoms, in the days of King Solomon's Jerusalem, in Alexander's empire, then in Rome and Constantinople. He dealt with historic China, the founding of Brasilia, even cities on the American frontier.

He fleshed out the key dimensions of *Megalopolis* – quaternary services, urban networks and the interplay of world cities, urban centrality, the dimensions of urban social and political processes, how large cities grow. In *Megalopolis* he had written about "the transactional city" and the importance of the office work involved in transacting business (fig. 4). He later described these transactional activities as "the product of administration (including the administration of justice), politics, business management, the gathering and interpretation of information – and therefore of the mass media, but also of scientific research, higher education, the performing arts, and the specialized commercial trades aiming at special categories of customers" (GOTTMANN, 1970, p. 47). He called these activities "quaternary." He followed "the white-collar revolution," that he had emphasized in *Megalopolis* as it burgeoned with advances in electronic technology that has produced today's global system. He now wrote about the dimensions of "the transactional city." He wrote about the ethics of living in high density settlements and the attraction of the world's great cities to migrants.

*Megalopolis* made Gottmann an international celebrity among academics interested in urban matters and his thinking benefitted greatly from his interactions in those circles. He was asked to speak to international symposia and to serve on panels on development and change, urban affairs, regional development and habitat. He gave lectures at universities throughout the world and filled visiting appointments in a number of them. He was asked to contribute chapters to collections of urban writings.

Over the years he regularly commuted between Europe and North America. In time his ideas gained particular followings in Japan and Italy. In all this, he had the opportunity to study the megalopolitan complexes that have been emerging in all of the major urban regions of the world.

Most of all, Gottmann responded to the tremendous changes taking place in the large urban centers of the world in the years after *Megalopolis*. He had identified some of those in the study, but the technological changes in transport and communications of the final decades of the century and the responses to them increased the importance of the centrality, networking, and urban growth that he had noted in the Northeastern United States.

More and more, his thinking on these topics expanded. In *Megalopolis* he had spoken of the urban region as "a hinge"

connecting the United States and the world. Now, in another metaphor, he described the global outreach of “world cities” as “the opening of the oyster”; when commuting made cities into metropolitan regions, local society was changed by the influx of newcomers from many countries and cultures, and the interests and connections of such cities became global. As he put it “Rather than being simply the center of a region, the city has become a participant within a partnership of many cities. Probably it has always needed to function in that way. But the city is only now becoming fully conscious of the new dynamics of a world increasingly woven tightly together” (GOTTMANN, 1990, p. 16).

Nowhere did he get more stimulation than in his association with C.A. Doxiadis and his concept of Ecumenopolis, “immense networks of urbanized corridors extending as a frame over the continents, weaving an almost continuous and universal urban system which could be the habitat of 90 percent of future mankind even if it reaches the tens of billions” (GOTTMANN, 1978, p. 157). The two men talked of the Great Lakes Megalopolis, a trans-European megalopolitan belt crossing the continent from the Mediterranean to the North Sea and the Irish Sea, the Japanese megalopolis, and potential centers elsewhere in the world. Gottmann became increasingly fascinated by the “mutations” he saw occurring so rapidly in the world’s largest cities.

Unlike most scholars whose seminal writings must be retrieved from various sources, Gottmann’s most important post-*Megalopolis* writings appear in one volume, *Since Megalopolis*.<sup>2</sup> That volume contains the fifteen articles – out of the dozens and dozens written after *Megalopolis* – that he, himself, thought made up the heart of his legacy with regard to large cities plus a specially written introduction that places them into an overall framework and stands as the summary of his view of modern cities.<sup>3</sup> In the volume his writings are grouped in terms of concepts that he developed in *Megalopolis*. He deals with seven different ideas:

- urban origins
- urban centrality
- the differences between city and metropolis
- megalopolitan systems over the world
- the transactional city, and
- living in the modern metropolis.

He concludes with

- an examination of “transatlantic orbits” over time to show the evolution of cities and city systems.

Many of his writings in *Since Megalopolis* first appeared in *Ekistics*. Nine of the 16 articles that he chose for inclusion in the book came from *Ekistics*, one of them his reworking of a combination of two *Ekistics* pieces.

## Gottmann’s own assessment of large urban centers

He summed up his view of the problems and prospects of today’s largest cities in his introductory essay in *Since Megalopolis* designed to be an overall statement of how the components of his writings fit together.

Success, wealth, and power attract crowds of those who do not have such benefits, but hope to achieve them once implanted in the place that breeds them. The result often appears to be chaotic ...

The difficulty today resides in the speed of change, the unexpected shifts of trends, in the fragility of forecasts, in the tide of rising expectations, in the opening of closed

societies. Things have been made worse by the neglect to which most cities in the world have been subjected. Physical change lags behind social change, the main barriers to attempts to adapt to the latter are in the minds of people.

... New cultures, new structures are gradually emerging in the lively and exciting cities of today. The new forms differ from place to place. Much of what is happening shocks our established taste and threatens our expectations and old scales of values, even more than modern youth may perceive. The city is in permanent revolution. It is not easy and it may be unpleasant to many to live in the midst of it. But, if so many cities continue to attract and retain larger numbers of people, at least in daytime, it can only mean that they hope and strive for a better future, and know somehow that the past is past and that a new and better world is coming and may be achieved through participation in this immense chaotic urban transition (GOTTMANN, 1990, p. 19).

Gottmann’s writings after *Megalopolis*, as well as those before, drew heavily on his early training in history and geography as well as his own interpretation of the French regional geographic approach as he moved from the particular megalopolitan case of the urban complex along the Northeastern Seaboard of the United States he had examined so closely, to the general case of large cities evolving through time until in the time after *Megalopolis* they had become both the primary engines of modern economic and cultural growth and the fundamental network connecting the global world. As global urban centers grew and, as he noted, “mutated,” so, too, did his writings about the fundamental nature of the world’s largest urban centers today and their outreach that increasingly encompassed the world. Where others focused on the problems increasingly concentrating within large urban places, to the end, Gottmann saw large cities as positive forces in our world and wrote optimistically about their future.

## Notes

1. A list of the titles of all his writings before *Megalopolis* can be found in *The Coming of the Transactional City*.
2. An Italian book (*La città invincibile*, Milan, 1983) collects 20 articles translated by Luca Muscarà (for the English comparison with *Since Megalopolis* see: <http://www.nexta.com/geografia/2002/download/SinceMegalopolis>).
3. The volume also includes a listing of all of his urban writings before 1990.

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