

INTRODUCTION

In the history of urban society, the Metropolis is a relatively recent phenomenon.

As Hans Blumenfeld pointed out in 1964, the Metropolis is not merely a larger version of the traditional city, but a new and different form of human settlement, consisting of a core city and its hinterland which may include a number of smaller urban units forming a total entity with its parts in intricate interaction.

Blumenfeld also established that the Metropolis has a minimal critical size which he defined as the area within a perimeter given by an average travelling time of 40 minutes from the periphery toward the center by the predominant means of transportation. Although Blumenfeld set the minimal population size of the Metropolis at 500'000 inhabitants, we shall limit our investigation to urban agglomerations with population in excess of two million inhabitants seeing this as the lower limit at which a city can exert truly metropolitan influence in the context of a worldwide reorganization in the spatial division of labour and increasing global interdependence.

Serious discussion of the Metropolis started around 1960 in the United States. At the time Europe and Japan were just recovering from the destruction caused by the Second World War and the task of reconstruction has absorbed all creative energy. In the US, post-war planning first focused on housing- and then on urban renewal - but increasingly theoretical attention turned toward analysis and conjecture about the phenomenon of the metropolis.

I may cite here the 1958 publication on "The Exploding Metropolis" by the Editors of Fortune Magazine, the 1959 "Anatomy of a Metropolis" by Raymond Vernon and Edgar M. Hoover and the refreshingly utopian paradigms of metropolitan structure put forward by the Goodman brothers in "Communitas" in 1960.

Of considerably greater impact was a symposium organized in 1960 at Tamiment Institute the outcome of which was published in 1961 winter issue of "Daedalus" and later in book form under the title of "The Future Metropolis" edited by Lloyd Rodwin. This was perhaps the first attempt to grope with the phenomenon on a comparative basis and to project conjectures of the Metropolis on a global scale.

Now, a quarter of a century later, it seems indicated to review some of the findings in this seminal publication.

Before examining the composition of the authors of this book and their methodology, let me first enumerate some further events and publications on the Metropolis during the decade of 1960-1970, which have largely established our present views on the subject.

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- 1961 Publication by the 20th Century Fund of Jean Gottmann's "Megalopolis"
 - 1964 Meeting of the U.N. group of experts on Metropolitan Planning in Stockholm (published 1967 by ECOSOC)
 - 1965 Special issue of the "Scientific American" devoted to "Urbanization"
 - 1966 Publication of Percy Johnson-Marshall's "Rebuilding Cities" reporting on the European experience of the post-war restructuring of the built environment
 - 1967 Publication of Hans Blumenfeld's collected essays in the volume on "The Modern Metropolis"
 - 1968 Publication of C. Doxiades's "Ekistics", an attempt to elevate to the level of science the knowledge on the evolution of human settlements

It is fair to say that a corpus of significant publications emerged which established the Metropolis as a subject of scientific enquiry; but this enquiry was still largely based on information on the North-American Metropolis and most conjecture about the nature and evolution of Metropolis in other global regions was extrapolated from data and insights which may or may not have general validity.

It is rather striking to observe that of the eleven authors of articles in the "Future Metropolis", six were born in New York and two in Chicago: all were American. Further, nine of them were professors at Harvard or MIT - only Karl Deutsch came from Yale and John Dyckman from Chicago. None came from the West Coast, from Europe or from Japan.

Several articles used as references some data on European cities, but only one - Rodwin's - made mention of the problem of the Metropolis in developing countries.

The 1965 Scientific American issue showed somewhat greater concern for geographical diversity: of its 12 articles, one was contributed by an Indian, another by a Swede and the key article on the Metropolis has been assigned to Hans Blumenfeld of Toronto. Still nine articles - written by American authors - focused on American material.

Yet during the same decade scientific progress has largely changed our consciousness of the global interdependence, and the world-wide interaction of population and resources on "spaceship earth".

In 1960, for the first time, images of the earth were taken from space, produced by the TIROS-1 weather satellites. This was followed by color pictures of the earth taken from hand-held cameras of the Gemini and Apollo astronauts.

The interest of these pictures on which the impact of men's activities on our global habitat can be discerned on a geographical scale created the desire for the monitoring of the conditions of the earth surface on a regular basis. Landsat-1, the first satellite specifically designed for that purpose, was launched by NASA in 1972. Ten years later, Landsat-4 was launched providing repeat coverage of the same areas every 18 days under uniform observing conditions from a height of 570 miles - returning to the earth each second more than a million separate items of information - every day of the year.

This provides ongoing information on the changing pattern of land use the growth of urban areas on world urbanization, on water and air pollution.

In organizing this Committee, I tried to take into account not only the size-related problems common to all large cities, but also the diversity of problems which appear to be culture-dependent; influenced by political ideology; or reflect geographical factors such as the climate.

Of the nine thematic groups, three are to focus on epistemological and phenomenological questions: what is the Metropolis; how to establish criteria to evaluate its performance on a comparative basis and what could be defined as goals for the development of the Metropolis? Specifically,

Group I is to examine the role and impact of the Metropolis in the regional, national (and global) context.

Group II is to analyse the internal structure and form of the Metropolis; its morphology.

Group III is to review Gottmann's and Doxiades's conjecture about "Ecumenopolis" or a global system of linearity interconnected Metropolises - as well as other forms of metropolitan spatial organization such as a constellation of relatively isolated metropolises (Africa) or a sort of polycentric rural-urban continuum such as the "Randstad" of the Netherlands or the urban system of the Swiss 'Plateau' or 'Mittelland'.

The six regional groups should attempt to define the specific problems in their area and determine what - if anything - makes the large agglomerations in their region different from a Metropolis of similar size elsewhere.

The groups on North America, South America, Western Europe; the Islamic belt; the Eastern European Socialist countries (including the Asiatic USSR); the ESCAP-region (including Japan, China and Australia) seem to cover most of the globe with the exception of Australia. Sub-Saharan Africa which has relatively few cities of metropolitan size is covered in the paper of Dr. O'Connor and reference to the leading cities in South Africa is made in the paper of Dr. Gallagher.

It may seem dubious to have included Japan in the ESCAP group with South-East Asia since the Japanese Metropolis has some features in common with development in the highly industrialized western countries. On the other hand, the Japanese metropolis exerts great influence in the ESCAP area and is looked upon as a role-model for the planning, development and management of other metropolises in the large ESCAP region.

Nevertheless, since papers, as well as comments on the Asian Metropolis focus on South and South-East Asia, it seemed indicated to include a separate paper based on Japanese conditions. Mr. Kiyonori Kikutake's paper also explores a more utopian paradigm of metropolitan organization to complement the more pragmatic bias of the conjectures developed in the other contributions.

One session has been reserved for the discussion of value determinants shaping the metropolis. Individual and collective, social and cultural values, the multiplicity, convergence and divergence of values and interests are invariably reflected in the land-use pattern and spatial organization of the Metropolis.

We intend to explore the limits of rational planning and intervention making allowance for random actions, as well as of the homeostatic drive toward self-organization in such non-equilibrium systems as spontaneous agglomerations and squatter settlements. It is hoped that the discussion will lead to a better understanding of the interactions between deterministic and stochastic factors in the evolution of the metropolis such as the symbiosis of the formal- and informal sectors in the leading cities of the L.D.C.s.

However, the main objective of our Committee is not so much the description of the phenomenon of the modern Metropolis, or the analysis of the root causes of its evolution and present characteristics - but above all the search for credible scenarios and conjectures of future development based on a vision of what is likely, what is desirable and what is possible to achieve within the narrow cone of opportunity in guiding the transformation and growth of the Metropolis.