

Committee III
Human Beings and the Urban Environment:
The Future Metropolis

Second Draft --
for Conference Distribution Only

DETERMINANTS OF METROPOLITAN STRUCTURE

by

John W. Dyckman
Director
Johns Hopkins Center
for European Planning and Research
in the Nord/Pas de Calais, France

The Thirteenth International Conference on the Unity of the Sciences
Washington, D.C. September 2-5, 1984

© 1984, Paragon House Publishers

1/2

Introduction

The topic of this paper, as given in the program, is very broad. For the determinants of metropolitan structure are so varied and complex as to cast in doubt the possibilities of effective treatment in so short a paper. At the least these include economic factors, demographic growth, migration forces, historic and geographic advantages, levels of national development and dominant activities, and government policies. In the face of this complexity I have chosen two emphases. The first of these is to focus on the most pervasive forces at the global scale. The second is to select, for the most part, those forces which seem to me to be the most powerful in shaping metropolitan structure. It is in the latter interest that this paper gives its main attention to economic factors. The other major metropolitan-shaping forces are introduced mainly as they modify or temper the economic pressures.

These choices are only partly a matter of editorial selection and manageability. The conviction that economic forces are powerful in shaping metropolitan structure leads one to consider the global economy, and the international scope of those forces. The belief that the world economy is increasingly integrated should not blind us to the importance of the political powers of nation states or to their capacity to influence, in a variety of ways, their own settlement solutions. Even in these cases, however, policies must contend with strong economic influences. These influences are the main concern of the paper. This approach permits the author to greatly extend the range of structural effects that can be treated. While it deprives the paper of a certain richness in cases, the alternative of dealing with national policies across nations threatens to mire him in excessive particularism.

Nevertheless, one might fairly contend that from an economic perspective the world should be divided into different groups. While there is, in some sense, a world urban system, the problem remains of partitioning the analysis of world urbanization. The commonest distinction, and one that has merit for the study of urban structure, is between the "superpowers" and the "Third World", largely a political distinction, albeit with economic implications, or between the "developed" and "underdeveloped" nations, a somewhat fuzzy, largely economic distinction. It is the latter, not the character of urbanization which underlies this distinction. For example, the international lending and assistance agencies, such the World Bank and the United Nations, tend to make the separation on the basis of G.N.P. per capita, per capita income, and demographic rates of growth. The first is an economic measure, which is unfortunately not a perfectly good measure of development (e.g., are the petroleum exporting countries, which tend to high product per capita equally "developed"?). The second, while important for urban analysis, is also a gross measure. Whatever the uses of product or income per capita measures as criteria for classification, these cannot do justice to notions of development, a process more complex than economic level or growth.

For our purposes, some broad classification is necessary, despite the fact that the measures are very summary, and mask many internal differences. Since most of the countries in both the "underdeveloped" and "Third World" categories are in Asia, Africa and Latin America, it seems wise, as this conference has done, to treat them on their geographical ground. While this does not correspond to the other measures perfectly, as for example in the case of South Africa, which is both developed and metropolitan and largely underdeveloped and rural with a deceptive GNP per capita, it allows a clearer view of the internal processes in each continent.

It is useful as well for my purposes that the organizers have chosen to distinguish the "socialist" urbanization from the capitalist cases, since these not only belong to different economic systems, but have different interpretations of the significance of the economics of metropolitan centers, different ideological perspectives on urbanism, and different policies toward it. As a result, the socialist economic impulses and their urban expression are significantly different from those in the predominantly capitalist countries. These orientations are particularly manifest in political attitudes toward the growth and size of the largest metropolises, which are our main concern. (There are relatively few truly large metropolitan centers, outside of China, in the socialist countries.)

This is not to suggest that the socialist nations are insulated from all the economic forces affecting metropolitan structure in the capitalist world. They, too, are experiencing some shifts from manufacturing to service employment (though not on the scale of the chief capitalist centers), they also see the shifts from older types of manufacturing to higher technology production, have their share of automation and communications developments, and their "footloose" industries. But in general, they are starting from a different base, have more government control of location and employment, greater power over migration, and are largely - but not entirely - sealed off from some of the capital flows of the other "worlds".

In so general a paper, there will necessarily be many generalizations which fail to do justice to the complexities hidden by the broad categories - developed and underdeveloped, center and periphery, and "metropolitan". The purpose here is to focus on the main economic forces shaping cities. A number of these forces are common to socialist and capitalist urban systems, but others are not. Much of this analysis is appropriate to the capitalist system, as the more familiar to me, and my remarks on the socialist urbanization are largely confined to a few obvious similarities and differences.

From the point of view of capital, central to capitalism, there is a "center"- "periphery" distinction, in which the center, or centers, command major decisions. This center-periphery distinction is not simply international, for there are peripheral areas within center nations, and even within metropolitan areas. These latter distinctions, however important to the economics of urbanization in the states concerned, should not hide the much greater disparities between nations. Figures compiled by the World Bank, for example, ranking nations by GNP per capita, show that the quarter of the world population in nations with a product of more than \$2,000 per person account for 80 percent of the world product. And the 65 percent of the people on earth at the other end of the distribution accounted for just under 8½ percent of the total product (put by the Bank in 1977 at almost 3 trillion dollars.¹ While there is reason to consider the 65 percent of the world population in the poorest nations (in terms of product per person) as the "underdeveloped" world, not all of these nations are open to capital flows from the "center" (e.g., until recently at least, China) and therefore have not been in the world system for most purposes.

Tendencies in World Urbanization

The single most dramatic feature of the urban scene for demographers and urban geographers is the shift in the center of gravity of urban agglomerations from Europe and North America to Asia, Latin America and even Africa, measured by size and rate of growth. Between 1950 and 1980 the urban population of Asia grew from 180 millions to almost 600 million, in Latin America from roughly 50 million to more than 160 million, and in Africa from 30 to 90 millions. Today, Shanghai is placed at 12 million persons, Mexico city at almost 10 million, Peking and Calcutta over 7 million, Bombay and Cairo over 6 million (in the latter case, the larger megalopolis has been estimated recently at about 12 million), with cities such as Seoul, Jakarta and Rio de Janeiro already surpassing 5 million. The rates of growth, even at the U.N. median estimates which now seem attainable, are awesome. Planners in Mexico estimate that the city will reach nearly 30 million in the next 20 years, and according to the recent U.N. population conference in Mexico city, Sao Paulo will surpass 20 million, and Rio, Peking and Shanghai will be in the order of 20 million in the year 2000. The same conference projections estimated, for example, that only three U.S. cities - New York, Los Angeles and San Francisco - would have urban agglomerations between 10 and 20 million at that date. Measured by population alone, Bombay, Calcutta and Jakarta will be at least as large.²

While these figures are not startling to the experts, and appear in one form or another elsewhere in this meeting, the problems attendant on this growth are likely to occupy the attention of urbanists in the next two decades. Traffic jams, pollution of air and water, subsidence, collapse of buildings, sewer overflow (whole quarters of Cairo were flooded for ten days by overflowing sewers in the winter of 1982-83) are familiar features of some of these rapidly growing cities.

The central city densities of most of these new arrivals to Megalopolitan status are still increasing. The potential for rural-urban migration in many countries of these three continents has not yet been exhausted. At the same time, there has been uneven absorption of rural immigrants, with a resulting labor surplus and informal sector. As mechanization of agriculture is extended, rural labor surpluses lead to further urban migration. The spread of business methods and technologies from the centers of world business to these nations leads to a breakdown of rural social patterns and contributes to migration. Rural unrest and agrarian revolts contribute their share of refugees to the cities.

The largest cities of what is sometimes called the Third World have perhaps the sharpest contrasts between a "modernized" sector and an intermediate area of mass communities (the "bidonvilles", "barriadas" and other "under-integrated"³ settlements which lack most urban services). The modernized sector, where business is carried on with centers in New York, London, Hong Kong or Paris, typically has the commercial center, banks, tall office buildings that may house branches of multi-national firms, and is served by an airport, highways and hotels. The more luxurious residences are typically not far from such centers. The apparatus of communication necessary for business, the telephone system, is centered there. In these cities, industrial districts are a growing feature of the landscape.

The metropolitan picture in the "mature" industrial countries displays some similarities, and many differences. The central city remains the center of service activities in both rich and poor countries, but in the former the consumer services are much more broadly diffused in space, and the concentration of producer services at the center is much greater. The "developed" countries are increasingly marked by metropolitan spread, by a hollowing out of central residential densities, by polynucleated forms with major sub-centers in the once suburban areas,

with a diffusion of one-time central city functions to the older suburban ring, and by increasing occupation of the former rural-urban fringe. That is, there is both some decentralization of the older central city functions, and greater geographical spread of residences and industry.

In part this pattern is the result of the richer infrastructure in roads, communications and equipment, and of the higher incomes of the population which reduce the relative burden of spatial mobility. It also reflects the increased freedom of location of industries, the ability of manufacturing to separate discrete stages of the production process, and to extend the division of labor in these processes. There has been a pronounced shift in the urban economic base of these countries from manufacturing to services, and from old types of manufacturing to those employing higher levels of technology and information.

The spread of manufacturing to the periphery, both internationally and within the most powerful nation states, with a division of the production processes that leads to a search for low-wage locations for mass production and assembly portions of the work, has tended to make the major metropolitan centers either international or regional service cities. These centers concentrate the financial services, legal services, accounting and marketing, and are the centers of product conception and design, engineering and business strategy. This spatial division of labor has resulted in greater specialization of industrial activity in the lower-order urban centers, and has resulted in a growing "duality" of the service and high-technology labor forces. And many cities are saddled with obsolete and abandoned industrial plant, high unemployment and increasing fiscal burdens.

The Economic Environment of Urban Change

The preceding very dense description of metropolitan trends deserves expansion, and explanation. The influence of history, particularly colonialism, on the urban pattern of Latin American, Asian and African countries has been well-argued by Celso Furtado, Andre Gunder Frank, Samir Amin and many others.⁴ The policies of nation states, the role of capital cities, and the accidents of resource distribution have been well studied by urban geographers. The influence of transport costs and distance to markets have preoccupied regional economists. Urban planners have focussed on infrastructure systems, environment and urban policy. This paper chooses to look at the present pattern as it is influenced by very broad economic tendencies which it sees as global in scope, and which influence the distribution of production in space.

Economic accumulation at the centers of capital (most prominent of which is New York) is both the result of an increased mobility of capital, and a spur to further mobility in its placement. Both institutional and geopolitical factors have developed to exploit the technological possibilities of this mobility. Monetary arrangements, such as the agreement to settle oil accounts in dollars, and the spread of international banking,⁵ the growth of stock exchanges in New York and Hong Kong, and the creation of large "trading blocs" have featured the institutional and geopolitical responses. Computerization of banking, satellite communications, and other technical developments have virtually eliminated spatial arbitrage and make very speedy international and national transfers possible. These factors have responded to and contributed to the impressive mobility of capital in the world. What are some of the urban impacts of this mobility?

First, the mobility of capital has greatly facilitated the spatial division of labor. Michael Dunford summarizes the argument of Lipietz (in Le Capital et Son Espace) on this impact on the separation of production in space as follows: "This gives rise to different states of production within a single branch circuit (e.g., conception, manufacture, assembly) which can be located in different, unequally developed regions with different values of labour-power. This process results in the establishment of a new interregional division of labour with different areas specialising in activities corresponding to different stages in the process of producing commodities."⁶

A classic example of this division in space is that of the Silicon Valley electronics industry of California, which centers conception and design in the San Francisco area, along with certain core manufacturing, and which uses Hong Kong or other Asian centers for other manufacturing and assembly. The examples of such spatial separation of production processes are numerous. They may take different forms, as in the case of the automobile production of Renault, where design and planning are done in Paris, where many of the parts are manufactured in Spain, and where assembly and finishing is completed in a highly automated line in the North of France. Of course, such producer services as advertising, marketing, accounting and the rest take place in the capital center.

The urban impacts are felt in the loss of manufacturing and assembly jobs in the metropolitan center (Apple Computer once centered the entire production process in the San Francisco area, as did Renault in Paris), and in the strengthening of the high-skilled and professional concentrations in those centers. These impacts are also evident in the increasing "footloose" character of industries and the spread of manufacturing to new areas, (in Britain and the U.S. to the southeast and southwest respectively). A study by R.B. Cohen has shown how much of

the high-technology manufacturing growth of Houston, for example, has been financed by and depends heavily on the producer services of Chicago, thus increasing the specialization of each.⁷ These forces of spatial reorganization are producing, in the territory of a large state such as the United States, a spatial solution which corresponds to the separation of production processes noted in individual industries. The tendency, as Stanback and Noyelle have demonstrated in several studies of U.S. cities⁸, is for all cities to have a growing economic base in services, but for those services to hierarchically nest, with only a few cities providing national and international services to producers, and for the service component to increase with hierarchical position.

At the international level, the export of technical services from the centers of the developing countries is channeled through central cities in those countries. In the global sense, the national centers of the underdeveloped countries act as regional centers in the larger system. Where in the United States the proportion of the working population in "services" is 65%, the average in Latin America is no more than 45%, and that of Asia and Arica, 25% and 18% respectively.⁹ While these figures must be considered with caution, given the large agricultural subsistence populations in under-developed countries, the difficulties in measuring certain services in these populations, and the ambiguities surrounding the concept of "services", it is possible that the real differences are understated. For the structure of the tertiary sector in developing countries is complex, because of the great variations in the forms of their economic growth, and particularly of the role of the traditional sector, with its shopkeepers, officials, clergymen, military, domestics, artisans and the like. To talk of "producer services" in such countries

is meaningless without specification of the forms of production, and "consumer" services depend heavily on traditional organization of the cities and countryside. In some developing countries, moreover, the construction sector accounts for up to 40% of employment, roughly twice the proportion in developed countries. And when one considers the sizable role of the state apparatus in some developing countries, with its military, police and functionaries, all of which are counted as "services", the relatively small size of production services, and the heavy dependence of these countries on the import of such services is striking. Former colonial countries are notoriously dependent on the former colonial powers for technicians and experts of all types, particularly in the development of modern industrial facilities. The international "assistance" agencies provide a floating population of experts of all types which does not enter the structure of the cities in developing countries in a permanent way. Taken together with employees of multinational firms, this group helps to form the large advanced service population of the main centers of the developed countries. Finally, as the IMF recently noted in a report, the pressures of foreign debt in developing countries have impelled these countries to focus on their own export industries at the expense of local services and infrastructure. This tends to "freeze" the spatial and employment patterns in these countries and to inhibit the growth of advanced service centers. Indeed, an argument often levelled by planners in the developing countries is that the pattern of services in the dominant city or cities is unproductive, and that these cities are in a sense "parasitic" of national energies and an impediment to development. But this argument deserves separate treatment.

Urban Structure, Employment and Labor Markets

To this point, we have emphasized the impact of the mobility of capital on industrial location and urban specialization. Also important for cities in the "developed" countries has been the substantial mobility of persons. Two processes appear to be at work in these nations. In one, capital flows abroad in search of lower wage workers for "detachable" portions of production. In the other, lower wage workers flow into the metropolitan areas of the "center" countries to perform a variety of manufacturing and service tasks. These workers account for substantial portions of the work force in countries such as Switzerland, Germany, and France, as well as in the United States. Speaking of the latter, Sassen-Koob has written:

"The large influx of immigrants from low-wage countries over the last fifteen years, which reached massive levels in the second half of the 1970s, cannot be understood separately from this restructuring. It is a mistake to view this new immigration phase as a result mostly of push factors and as being absorbed primarily in backward sectors of the economy. It is the expansion of the supply of low-wage jobs generated by major growth sectors that is one of the key factors in the continuation at even higher levels of the current immigrants." 10

That is, the processes of automation, division of production tasks, and the replacement of middle-income skilled workers by machines has at the same time increased the demand for both highly qualified and very low-wage workers. The latter effect has, for a variety of cultural and institutional reasons, created opportunities for immigrants. If industrial restructuring continues along these lines, that demand may continue. Such restructuring is not available to all industries, but the pressure for it is greatest in industries where technology is well-known internationally and where the competitive pressure on labor costs is greatest. The continuing role of immigrants also depends on the degree of their insertion or integration into the economy, as Moulaert and Deryckere have shown in a comparison between the time-paths of employment of migrant workers in West Germany and Belgium.¹¹ But in many countries we may expect it to remain an important element of the workforce.

The important presence of an immigrant work force has a number of impacts on urban structure. On the one hand, the presence of a large immigrant population may make an area attractive for industrial location by certain industries. Sassen-Koob finds this immigrant population an important factor in the industrial expansion of the San Diego area near the Mexican border of the U.S.¹² Secondly, cities with such high immigrant populations show a greater-than-average polarization of their income structures. Looking at New York and Los Angeles, both of which have very high numbers of such immigrants, she observes:

"The combination of these various trends expresses itself in an increased income polarization in these two cities. Comparing household income for 1969 and 1979 there is an increase in the high- and low-income strata and a shrinking in the middle stratum. Considering the 1969 and 1979 median income and including the bracket immediately below and immediately above to constitute a middle-income stratum, we find that almost 49% of the Los Angeles and 51% of the New York city households were in the middle stratum in 1969, compared with respectively 38% and 39% in 1979. The higher income stratum increased from 21.5% to 29.5% in Los Angeles and from 19% to 23.5% in New York City. In considering the city rather than the metropolitan region there may actually be an overestimate of middle-income households."¹³

Thirdly, there has been substantial social segregation of immigrant groups, creating higher indices of segregation in such metropolitan areas. A 1981 report of the Ad Hoc Group on Urban Problems of the O.E.C.D. found that the operation of housing systems and labor markets tended to distribute population in a polarized fashion and to create segregation of social and racial groups. The report found:

"This is accentuated in some European countries by the inflow of foreign "guest workers". This concentration and the perceived disparity between the well-being of inner city areas inhabited by low-status and minority groups and suburban areas inhabited by higher-status, more dominant culture groups, spark social tensions and raise questions of social equity. Indeed, one study of urban decline in the U.K., Netherlands, Belgium, France and Germany concludes that it is the increasing concentration of all kinds of minority groups in terms of age, income and culture, added to the dilapidating physical urban fabric, and declining economic strength of the central cities that together are the building blocks for what is called the urban decline problems."¹⁴

The bi-polar income distribution in major metropolitan centers of the United States, such as New York, Chicago, Los Angeles and San Francisco, has been a major spur to the "gentrification" of central city areas. This development has sometimes been exaggerated to mean a "back to the city" movement. Nationally and numerically, it is relatively unimportant, since the population active in this movement is predominantly childless, and displaces a larger number of persons than it introduces. But with the impact of economic restructuring which reduces the number of blue- and white-collar workers in the "middle" income categories, taken together with the movement of lower-middle and middle-income families to cheaper suburban or exurban locations, it is likely to be a continuing feature of the occupancy pattern of the major metropolitan areas which provide the bulk of producer services.

These advanced producer services appear to benefit significantly from clustering - from "agglomeration effects".¹⁵ The highly specialized firms providing these services are consumers of each other's outputs, and engage in much joint production.¹⁶ The numbers of highly-trained persons engaged in these activities form a significant part of total employment in these major centers. According to Sassen-Koob, such producer services accounted for 31% of employment in New York City and 25% in Los Angeles in 1981.¹⁷ Not all of these employees seek central city residential locations, but enough of the accountants, lawyers, brokers, designers and computer specialists do so to contribute to the expansion of central city demand for higher income housing, a factor which swells the demand for gentrification and piecemeal redevelopment. And whether or not such employees choose central city residences, there is evidence that they prefer to have access to the attractions of the major centers.¹⁸

At the same time these centers are developing the technological capacity to decentralize substantial portions of their traditional office

employment. With the expansion of ownership of home computers which can be linked by telephone lines to central offices, the computer has the potential to become the traditional sewing machine equivalent in the "putting out" or "home work" system. Such a development would provide firms with the capacity to "suburbanize" substantial portions of their office work, while retaining central control and management at the center. Of course, the possibility also exists for decentralizing such work much farther. Major credit card companies in the U.S. have already decentralized central billing and accounting to relatively remote locations, in smaller cities with lower living costs. The possibilities do not stop with this level of decentralization. Sassen-Koob comments that "Barbados and Jamaica are two key locations for overseas office work because of their high literacy rates and English-speaking population. And they earn about \$1.50 an hour for work which in the United States ranges from \$4.00 to \$12.00 an hour."¹⁹

A likely scenario for those metropolitan areas that are most highly integrated into the world economic system, then, contains some of the following elements. These centers will continue to locate management, control, finance and headquarters functions in the downtowns of those cities. The downtowns are likely as well to house scientific and design functions. The employees of the firms who are engaged in these central functions are likely to swell the demand for gentrification. Their income and life styles contribute to the demand for high-level consumption activities, for cultural facilities, and personal services. But the lower-income populations engaged in the provision of the relatively low-paid services are probable candidates to inherit the aging inner-ring suburbs whose more affluent inhabitants move to more remote suburbs. The inner-ring suburbs are in turn candidates for economic decay. In the less

"central" or "international" cities the effects will be weaker, and the demand for gentrification and high-style consumption less. These are likely to retain the bulk of the low-paid and unemployed in the inner city. (If, as Stanback and Noyelle contend, there are only four major producer service centers in the United States - New York, Chicago, Los Angeles and San Francisco - the bulk of American cities will be in this category.)

There are also many cities whose base has been heavily in older manufacturing industries whose technology is well-diffused in the world. In Europe as well as in North America these cities are experiencing crises of employment and fiscal capacities as demand declines, as competition from less-developed countries grows, and as old plants are shut down and industries move to new locations. The north of England and France, the upper New York state and the Great Lakes in the U.S., the Ruhr valley and many older industrial regions face these problems. The city of Liverpool, which has an overall unemployment rate of 21% and as much as 80% in some quarters of the city, is bankrupt. In such cities the prospects are indeed bleak, for with declining activity and employment, local revenues and ability to maintain services also suffer. As services decline, so does the ability - however small it is at best - to attract new activities. These urban areas confront the prospect of substantial depopulation. Between 1960 and 1980 many of the older cities lost population at a high rate - not only in the central city, but also in the metropolitan area. Merseyside in England, for example, experienced a loss of 12.7% in the city and almost 7% in the metropolitan area. In other cases, the metropolitan area continues to grow, but the central cities are losing population at a high rate. In some cases, this rate amounts

to a virtual "hollowing out" of the centers. Between 1961 and 1971 in the U.K., for example, losses in the inner areas amounted to 37% in Glasgow, 32% in Liverpool, 27% in Birmingham, and 27% in Manchester.¹⁹ These numbers mean something quite different for cities that are predominantly manufacturing, and at best regional service centers, than they do for cities such as London, New York and Chicago, which also lost substantially in inner city population (from roughly 11% in London and New York to 7% in Chicago between 1960 and 1980) but which are major producer service centers.

The cities of Europe and North America which were once the industrial heartlands of those continents too frequently find themselves holding the wrong end of the "product cycle" in the international economy, that of the mass production which is diminishing in importance in their own national economies and which faces brutal international competition from the less-developed countries that have been rapidly industrializing. The general strategies for such local economies are to "modernize" by adopting new technologies of production, by changing the product mix, and by searching for new, usually "high technology" industries. All of these steps, which involve increasing capital investment in automation and new plant, specializing in the high value items of the production, and searching for technological growth industries, respectively, have some promise. But none is likely to replace the employment lost in the recent past in the older industries. For even if these policies could be successfully pursued, they would involve the substitution of capital for labor, ^{would} involve some retreat from previous levels of production, and would employ a substantially different labor force. Success in attracting a semi-conductor activity, for example, is almost certainly to be followed by the "off-shoring" of the mass assembly portions of that output to low-wage regions of the world.

The prospect for many older industrial areas of the world, then, is for some continued decline in employment and population. Very few of these areas have locations favorable with respect to markets and financing. All suffer from the historical disadvantage that newer, growing industries in their own countries have in recent years located elsewhere. Short of large-scale policies in their countries to direct investment and industrial location and massive reformation of the labor force, the cities in these regions must await still another cycle of international industrial restructuring and hope they may be advantaged by it.

The impacts of economic restructuring have been very different for the developing and under-developed countries. The "middle level countries" - with metropolises that include Seoul, Taipei, Hong Kong and Singapore in Asia and Sao Paulo, Rio, and Mexico in Latin America - have experienced the most rapid economic development. This development is manifest in a number of ways. First, they have begun to change the composition of industrial activity and exports from low-cost consumer goods towards intermediate products having higher capital composition and more sophisticated technology.²⁰ A good example is the Hyundai Group of Korea, which as Mucchielli observes, "is the second firm in the world in the mechanics sector and which comprises a vast conglomerate working as well in construction, automobile and ship-building."²¹ Secondly, these centers have begun to "farm out" work in some of the older, less sophisticated industries such as textiles. As an example, Hong Kong has dispersed some of its textile operations to Malaysia, Sri Lanka, Macao and the Ile of Mauritius.²² These latter are able to use older machinery which requires large inputs of labor at competitive costs. The metropolitan centers of these "middle" countries thus play, in an analogous if less dominant manner, the role of the major centers of the developed countries.

There are, nonetheless, major differences in the internal structure of the main metropolitan areas of these "middle" or developing countries and that of the principal centers of the "developed" nations. Despite the high pace of growth of exports, local collective and individual consumption lags well behind that in the older industrial cities of Europe and North America, not to mention the great service centers. The growth of services is still another aspect of "export" activity, with hotels and services for tourists and international business, but with relatively underdeveloped infrastructure for local populations. Enclaves such as Hong Kong and Singapore have achieved high levels of public housing and "standard" accommodations, at astonishing densities. Yet many cities, in the same class of national development, such as Sao Paulo and Mexico city, are ringed with layers of squatter or minimal housing settlements, poor served even by basic utilities. So pervasive are these extensions of the city that open land around these centers is virtually preempted.²³ The great population concentrations in these centers are a relatively recent phenomenon, even in Latin America, where functional primacy dates from colonial times. Chase-Dunn has demonstrated that the overwhelming population primacy of Latin American cities did not emerge until well into this century.²⁴ Of course, developments in agriculture and the force of demographic effects in many developing countries are relatively recent.

Services in many cities of the developing world depend heavily on the "informal sector". (The term "informal" is somewhat fanciful, given the high level of organization of these activities, and their degree of integration into the larger economy.) All kinds of activities, from food vendors to shoe shiners to waste collectors, are lumped in this "informal" category, largely because the workers are outside the normal wage and tax systems. Increasingly, many types of small manufacturing and repair, fashioning of parts and tax-free merchandising fall into this class. (In Bogota, for example, there is a very large

and well-developed district for the selling of "duty free" items, outside the normal "legal" channels.) Such activities are not limited to the developing countries - the importance of the "black" economy in Italy, for example, is considerable, and such extra-legal work flourishes in developed countries as well.²⁵ But the relative importance in the developing world is generally very great, and is in fact essential to the functioning of the cities.

In contrast to the metropolitan areas of the developed world, where the virtually ubiquitous infrastructure permits the middle- and upper-classes to find congenial exurban residential locations, the elite residential areas of developing countries are typically in closer-ring suburbs or quarters of the city. (The "ex-urban" locations are relatively self-contained ranchos or estates at a considerable distance.) The commercial middle class, in Asia particularly, remains in central city residences. In Arab countries it is common for the commercial class to have their residences, often very large, in the same structures that house commerce on the street level.

The rapid pace of urban construction in developing countries - often of a speculative nature - poses many future problems. In addition to the difficulty of a time-concentration of obsolescence to be faced in the future, there is frequently inadequate maintenance and shoddy construction. The governor of Cairo declared last year that "40% of the buildings in Cairo are threatened with collapse".²⁶ While this is a rather alarmist view, there is no doubt that much urban building is hasty and below standard. Under the pressure of demand and with the financial stakes in construction, building controls are likely to be absent or ineffectual. This problem is not confined to Cairo, though it may well be extreme there, it is common to many under-developed countries.

The growth of metropolitan centers in the under-developed countries has to date generally outstripped even these important gains in industrialization. In his paper for this conference, Dwyer notes that:

"Within the industrialised countries in recent decades there has been a massive replacement of industrial labour by capital in the form of every more sophisticated machines, with the result that the industrial employment opportunities created by a given quantum of industrial development have progressively become less and less. As a result, contemporary industrial growth within the developing countries has in general been much less labour absorptive than was the case in the previous experience of today's industrially advanced countries."²⁷

He goes on to cite a United Nations report that found "Although the Third World's industrial production increased by an average of 7 per cent per annum during the 1960-1972 period, it contributed very little to employment growth, especially in Africa."²⁸ In some regions, industrial growth in employment is barely half the rate of urban population growth. Despite the development of the "informal" manufacturing and service activities, these differential rates insure the presence of substantial unemployment and under-employment in these urban centers. Indeed, it is the presence of this "labor surplus" which keeps wages low and endows these areas with much of their labor cost advantage. But it also contributes to the scale of urban problems in these nations, particularly in managing growth, providing necessary services, and achieving standard housing conditions.

The socialist countries of Eastern Europe have not experienced the same population pressures, nor have they the phenomenon of metropolitan giantism and primacy to the degree found in Asia, Latin America and Africa, or for that matter, in France and Britain. In part this may be due to policy, which has emphasized regional equalization, "filling up" the developable space, and attempts at restriction of urban population size. (Though these latter have not been wholly successful in attaining desired numbers, as witness Moscow, they have probably maintained city size below what it might otherwise have been.) As Mihailovic has pointed out in a study of Eastern

Europe, the success of these socialist countries in regional equalization and occupancy of the national space has depended upon the degree of industrial development of the countries concerned. Thus he found much more equalized and pervasive development in East Germany and Czechoslovakia than in Yugoslavia, Bulgaria or Albania, with Poland and Hungary in an intermediate position.²⁹

Paradoxically, some of the success of these efforts may result in a situation where the major metropolitan centers of Eastern Europe are actually too small to play a role in the exercise of metropolitan functions and in the competition of metropolitan areas in Europe and the world. As an example, Szelenyi and others have made the argument that development policies in Hungary have actually kept Budapest too limited in size, and have prevented it from the full exercise of the metropolitan functions.³⁰ In any event, the size of the principal metropolitan area even in countries with the greatest regional inequalities and lower levels of development within this group are not very large as metropolitan areas go. (In Yugoslavia, for example, the largest city, Belgrade, is just over one million, and Zagreb is just slightly smaller.)

In a comparative study of London and Hamburg with East Berlin, Warsaw and Moscow, Friedrichs and associates found that all had:

- 1) a similar urban structure in land use distribution and specialization;
- 2) similarity in planning policies for shared development patterns; and
- 3) a relatively low success rate in implementing urban policies.³¹

Given the difficulty of characterizing "structures", spatial organization and social organization across national and cultural lines, such findings must be treated carefully. But all such cities showed distinct social differentiation, leading to the spatial differentiation.

That social differentiation exists in socialist as well as capitalist countries cannot be doubted, but the nature of distinctions and the impact on spatial differentiation is not as well understood.³²

Whatever the similarities of structure within metropolitan areas in socialist and capitalist countries, there are clearly differences in the workings of national urbanization policies. An excellent study by Banerjee and Schenk comparing "Lower Order Cities and National Urbanization Policies: China and India" concludes that despite some similarity in policies and objectives, "Much of the available evidence suggests that the lower order cities have played a much more significant role in the urbanization and economic development of China than in India, although the latter's performance may not have been as dismal as it appears on the surface, or as in some other developing countries."³³ The main reason for the difference, they find, is between the capitalist and socialist ideologies and institutions. They say flatly, "the most profound difference between China and India is related obviously to their two different political institutions."³⁴ The Chinese appear to believe that industrialization and modernization are not inexorably linked to greater or more concentrated urbanization, while Indian planners have accepted greater polarization and spatial inequality as the price for industrialization. The Chinese are also more committed to a "bottom-up" and total resource mobilization model.

What will be the evolution of urban structure in socialist countries is a matter for history to say. That the Marxian and Maoist national urban policies have much overlap with the strategies advocated by such capitalist institutions as the World Bank, however, cannot be denied.³⁵ The push for development of middle-sized and market cities in developing countries, and for more "even" development has become part of the conventional wisdom of international development agencies.

Economic Forces and Human Values in the Metropolis

In the preceding sections the emphasis has been placed heavily on economic forces determining metropolitan structure. This is the result of the choice of a vantage point from which to approach the explanation of that structure, not a plea for economic determinism in urban policy. It is not a case for structuring cities according to the efficiency of capital. Economists are concerned with such efficiency, but citizens of metropolitan areas have other values and objectives as well. The most "livable" cities are not necessarily the most efficient locations for capital investment, though they may well attract the skilled persons indispensable for the deployment of that capital. Whether or not they perform this function, however, they are desirable ends in themselves.

Nor do I wish to suggest that urban problems are a simple function of economic development and growth. The most strikingly "successful" of the sunbelt and West Coast cities of the United States in attracting growth and "post industrial" economic activity are also cities marked by the most dramatic income inequalities and segregation, as are the "international metropolitan centers". At the same time, one should not conclude that urban problems are the exclusive province of the centers of world capitalism. Bensman has argued that the "general problematics of urbanization, industrialism, population density, and the struggles for control over scarce resources by organized elites, classes, regional groups, and rural and urban dwellers exist in all societies whether capitalist or socialist, developed or underdeveloped, colonial or neo-colonial." ³⁶ He adds, "of course, the problems that become the basis of theoretical problematics are experienced differently in different societies, depending on their history, their culture and their stage of economic, political and social development, as well as on the character of their structures,

History and culture not only affect the form of development - they contain their own embodied value systems as well. Values at the level of social needs and wants are particular historical products. Urbanization itself has, as many writers have observed - often ruefully - an impact on needs and wants, particularly in underdeveloped countries experiencing mass migrations from primitive rural conditions to at least partially "modernized" cities.³⁸ The term "civilization", which derives from "civis", or membership in an urban community, has come to stand for a certain constellation of values. There is a level of values which is broadly cultural, racial or national, but the concrete expressions of the broader values are local, and come from local social interaction.

These social forms, and the relation of individuals to the production processes of their economic life, must be placed in a specific historical context. The level of generalization of this paper has not permitted the development in appropriate depth of this type of analysis. In this sense it must be considered a prolegomenon to the theory of metropolitan structure, and not an adequate explanation. But at least implicitly, it calls attention to the profound delocalizing forces in the world economy. If these forces are not to prevail, it will be because local values attached to local places will be mobilized by citizens whose defense of this localism finds effective form, and who gain control of some of these forces. The abstraction of production that characterizes this paper is not simply a device of the argument; it is, in my view, an actual tendency. That production seeks to overcome space in all its manifestations, including the national spaces. In its realization, it would make people as mobile as capital. In so doing, it threatens to depreciate the local shared experience that is so essential to the formation of local values and the history of people.

It is not an accident that in Italy, where localism is relatively strong, and where the "state" remains for many an undeveloped abstraction, the so-called "black economy" of small, flexible, informally arranged enterprises is strongest. (It is estimated that firms employing ten or fewer persons account for almost 20% of the Italian output.) For the organization of local communities and local responses is a mediating force between "civil society" and the state. Localism has justifiably been associated with narrowness and provincialism. But it may also appear increasingly as a defense of a specific place, where social values are nurtured. Decentralization and the development of strong local governments is not simply a matter for administrative reform. For without some transfer of power, including economic power, such reforms are likely to be empty. If democracy is among the values to be preserved, local direct participation must also be preserved. In the end, this can be made meaningful only if there is movement towards economic as well as political democracy.

N O T E S

1. Lacoste, Y., Geographie de Sous-Developpement, 5th edition, Presses Universitaires de France, Paris, 1984, pp.62-64
2. Ibid., pp.p149-50
3. The term " under-integrated ", says Lacoste, is attributable to the Moroccan urbanist Mohamed Naciri.
4. See, for example, Furtado, C. Analyse du Modèle Brésilien, Anthropos, Paris, 1974 and other writings; A. Gunder Frank, Le Développement du Sous-Développement, Maspero, Paris, 1970, and similar literature.
5. See Sassen-Koob, S., in Smith, M,P., ed., Cities in Transformation, Urban Affairs Annual Reviews, n°26, Sage Publications, Beverly Hills, CA, 1984. She writes, " From 1971 to 1981 foreign branch assets of U.S. banks had a sixfold increase, from \$ 55.1 billion to \$ 320 billion. A study by the Centre on Transnational Corporations (1981) of the United Nations, found that six countries accounted for 76% of the assets of all transnational banks in 1978. The United States was the leading owner. " (p.145)
6. Dunford, M., " Capital Accumulation and Regional Development in France ", Georum vol.10, N°1, 1979, note 9, p.105.
7. Cohen, R.B., " The New International Division of Labor, Multinational Corporations and the Urban Hierarchy ", in M.Dear and A.Scott, Urbanization and Urban Planning in Capitalist Society, Methuen, London 1981.
8. Stanback, T.M. jr., and T.J.Noyelle, Cities in Transition : Changing Job Structures in Atlanta, Denver, Buffalo, Phoenix, Columbus, Nashville and Charlotte, Allenheld Osmun, New Jersey, 1982.
9. Lacoste, op.cit., p.161.
10. Sassen-Koob, S., " The New Labor Demand in Global Cities ", ch.8 in Smith, Cities in transformation, p.158.
11. Moulart, F and P. Deryckere, " The Employment of Migrant Workers in West Germany and Belgium : A comparative Evaluation of the Life-Cycle of Economic Migration (1960-1980) ", International Migration, September, 1984.
12. Sassen-Koob, op.cit.
13. Ibid., p.159
14. Ad hoc Group on Urban Problems, Managing Urban Decline, O.E.C.D., Paris, 9 November, 1981, p.25.
15. Stanback, T.M. jr, and T.J. Noyelle, Cities in Transition : Changing Job Structures in Atlanta, Denver, Buffalo, Phoenix, Columbus, Nashville, Charlotte, Allanheld Osmun, New Jersey, 1982.

16. Ibid
17. Sassen-Koob, op.cit., p.141.
18. Castells cites the evidence to this effect in a study of the electronics industry in the San Francisco area ; Saxanian, A.L., " Silicon Chips and Spatial Structure: The Industrial Basis of Urbanization in Santa Clara County ", MCP thesis, Department of City and Regional Planning, University of California, Berkeley (1980) in Smith, Cities in Transformation, note, p.257.
19. O.E.C.D., op.cit., Annex, p.64.
20. Chenery, H. and D.B. Keesing, " The Changing Composition of Developing Country Exports ", in Grassman, S., and E. Lundberg, eds., The World Economic Order, Past and Prospects, Macmillan London, 1981.
21. Mucchielli, J-L., " Evolution des Avantages Comparatifs et Spécialisation Optimale: La Leçon des Années Passées ", Cahiers Lillois d'Economie et de Sociologie, n°3, 1st semester, 1984, p.46 (my translation).
22. Ibid., p.50
23. This point is made by Dieter Kunckel, in " The Latin American Metropolis " prepared for this conference.
24. Chase-Dunn, C., " Urbanization in the World System : New Directions for Research " in Smith, Cities in Transformation, p.117.
25. Sauvy, A., with R. Klatzmann, Le Travail Noir et l'Economie de Demain, Calmann-Levy, Paris 1984.
26. " Le Caire menace de s'effondrer ", Libération, 18 and 19 August 1984.
27. Dwyer, D.J., " The Metropolis as a Geographical Phenomenon " p.17.
28. Ibid
29. Milhailovic, K., Regional Development : Experience in Eastern Europe, Mouton, Paris 1972.
30. Richardson, for example, (in Richardson, H.W., The Economics of Urban Size, Saxon House, London 1977) argues that in less-developed countries, the primate cities offer a higher rate of return on investment than alternate locations. This argument about the economies of scale in large cities is much debated by economists. It is worthwhile to remember that it is a " competitive " claim not always accepted in Eastern Europe.
31. Friedrichs, J., ed., Stadtenwicklungen in Kapitalischen und Sozialistischen Landern, Reinbek : Rowohlt, 1978.
32. For an interesting study of this differentiation, see Voslensky, M., La Nomenclatura : Les Privilégiés en U.R.S.S., Pierre Belfond, Paris 1980.

33. Banerjee, T. and S. Schenck, " Lower Order Cities and National Urbanization Policies : China and India ", Environment and Planning A, Vol.16, 1984, p.507.
34. Ibid.
35. This position is increasingly advanced in the literature by non-Marxian urbanists such as Dennis Rondinelli and Walter Stohr.
36. Bensmann, J., " Marxism as a Foundation for Urban Sociology ", Comparative Urban Research, vol.6, n° 2-3, 1978, quoted (along with the following citation, in Hill, R.C., " Urban Political Economy : Emergence, Consolidation, Development ", in Smith, op.cit., p.129.
37. Ibid. p.130
38. This view is often expressed as the " explosion of expectations " with their demand for consumer goods and services which foreign critics feel must be dampened in the interest of capital accumulation in developing countries.

BIBLIOGRAPHY

- Berry, B. and J. Kasarda, Contemporary Urban Ecology, Macmillan, New York, 1977.
- Bluestone, B. and B. Harrison, The Deindustrialization of America, Basic Books, New York 1982.
- Bradbury, K.L., Downs, A. and K.A. Small, Urban Decline and the Future of American Cities, Brookings Institution, Washington, D.C., 1982.
- Friedrichs, J., ed., Stadtenwicklungen in Kapitalistischen und Sozialistischen Landern, Reinbek, Rowohlt, 1978.
- Grassman, S., and E. Lundberg, eds., The World Economic Order, Past and Prospects, Macmillan, London 1981.
- Hawken, P., The Next Economy, Holt, Rinehart, Winston, New York, 1983.
- Lacoste, Y., Geographie du Sous-Développement, 5th edition, Presses Universitaires de France, Paris 1984.
- Massey, D. and J. Meegan, The Anatomy of Job Loss, Methuen, London 1983.
- Meltzer, J., Metropolis to Metroplex : The Social and Spatial Planning of Cities, Johns Hopkins Press, Baltimore, 1984.
- Moulaert, F. and P. Wilson-Salinas, eds., Regional Analysis and the New International Division of Labor, Kluwer-Nijhoff, Boston, 1982.
- Osborne, A., Running Wild : The Next Industrial Revolution, Mc Graw-Hill, New York 1979.
- Pred, A., City Systems in Advanced Economies, John Wiley, New York, 1977.
- Sauvy, A., with R. Klatzmann, Le Travail Noir et l'Economie de Demain, Calmann-Levy, Paris 1984.
- Smith, M.P., ed., Cities in Transformation, Urban Affairs Annual Reviews n°264 Sage Publications, Beverly Hills, CA, 1984.
- Stanback, T.M. jr., and T.J. Noyelle, Cities in Transition : Changing Job Structures in Atlanta, Denver, Buffalo, Phoenix, Columbus, Nashville, Charlotte, Allanheld Osmun, New Jersey 1982.
- Stanback, T.M. Jr., Bearse, P.J., Noyelle, T.J., and R. Karasek, Services : The New Economy, Allanheld Osmun, New Jersey 1981.
- Timberlake, M., ed., The Changing Structure of the City, Sage Publications, Beverly Hills CA, 1979.