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

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THE LATIN-AMERICAN METROPOLIS

by

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THE LATIN AMERICAN METROPOLIS

When we asked to write about the Latin American Metropolis, the first idea that comes to mind is that there is probably not one type of Latin American Metropolis but rather a lot of diversity between the cities of the different countries, depending on factors of historic development, location, climate, cultural circumstances, and so on. The Latin American context comprises countries like Argentina, where urban development has started relatively early, and where over 80% of the population is considered urban, and on the other end of the scale, countries like Bolivia or Honduras with urban populations comprising only 29% and 23% respectively of the inhabitants of these countries.

The climatic differences between the southern tip of the continent, the tropical and subtropical regions of the majority of the countries and the highlands of Mexico or Bolivia are considerable and not only affect settlement patterns and possibilities of agricultural development but also the requirements for housing and other services. There are other differences, like the racial composition of the population, which ranges from 95% of European origin in Argentina, Uruguay and the southern part of Brazil to 45-60% Indian in Bolivia, Peru and Ecuador; while countries like Chile, Colombia and Venezuela show the highest percentage of mix between the races with about 65% of mestizo population.

With all the obvious differences between the countries of the Latin

American continent, there are also a lot of similarities and common characteristics which will allow for some generalizations and the identification of development patterns within the region.

Historical and Geographical Context

The Latin American continent which stretches over 7000 km north to south, and over 5000 km at its widest point east to west, comprises 24 countries with a total surface area of about 20 million square kilometers and an estimated total population of 393 million inhabitants in 1984. This enormous mass of people is due to the unparalleled population growth of the continent, which increased by 100 million people between the years 1900 and 1950 and since then has added more than 200 million new inhabitants.

These numbers are particularly startling if one looks at the situation during the last century, when Latin America was considered underpopulated: Brazil in 1823 had a total population of 4.7 million inhabitants (about the population of Sao Paulo in 1960), with a gross density of 0.5 person per km², while Argentina exhibited similar characteristics in 1852, with 1.2 million inhabitants and a gross density of 0.4 people per km².

Although the Spanish colonization founded cities largely for the purposes of conquest and domination of the continent, many of these cities never grew beyond a few thousand inhabitants, while others were abandoned or had to be founded anew perhaps several times before they took root. The only major exceptions to this rule can be

found in the highlands of Central America and Peru, where the Spanish cities relied heavily on the existing infrastructure and population of pre-Colombian settlements.

The Portuguese colonization of Brazil developed mainly along the seaboard to support the agriculture of coastal plantations easily accessible to ports for the export of produce, leaving the large hinterlands for centuries without any major settlement.

Richard M. Morse $\frac{1}{2}$ cites five factors common to the history of urbanization of Latin America:

- "1. The colonization was in great part an urban adventure brought about by people with an urban mentality. The municipal nucleus was the parting point for the colonization of the land.
- In spite of elaborate regulations, urban site selection was often arbitrary, incorrect or obeying to momentary pressures.
- 3. The first to arrive tended to assure priority in buying up the land around the cities (even municipal land was often handed over to private persons) and to reserve special rights for their dependents. Therefore, the initial moment of social democracy was soon followed by the consolidation of an oligarchy based on land ownership and priority of arrival.
- 4. In Brazil and much of the rest of Hispano-America, the continuity of the institutions and municipal processes was menaced by the movement of the 'mayores' from the city to their rural holdings... By radiating centrifugal energy towards the surrounding land, all but the large commercial and administrative cities tended to become appendices of the countryside... Actually, a municipality (municipio) included the rural areas with no interstitial land between municipalities...

"5. The system of cities developed weakly. Geographical barriers were often formidable, while the mercantilistic policy of the Crown did little to foster centers of complementary economic growth. The cities of the New World used to relate individually with the overseas metropolis and to stay isolated between each other."

Many examples can be cited to prove these points, and the consequences of this historical heritage can still be felt today. To mention only two examples:

- In 1950, 86.5% of the total population lived in the areas along the seaboard, comprising only 50% of the continent. $\frac{2}{}$
- Communication between the major cities of Venezuela: Caracas,
 Maracaibo, Cumaná and Ciudad Bolívar was faster and safer by
 sea than by land until well into the twentieth century.

One of the decisive factors which changed the situation of Latin America, especially of its southern half, was the influx of European immigrants. This influx became dominant during the eighties of the last century. Until then, lack of industrial growth, the difficulty of acquiring land and a sense of personal insecurity on the continent combined to retard migrant flows from Europe that instead sought a more hospitable reception in North America. Once these flows shifted to favor Latin America, with a bias towards Argentina and Brazil and later Chile, the continent's first two metropoli began to materialize: Buenos Aires and Rio de Janeiro.

The Present Situation

Of the total population of Latin America, 61% was classified as

urban in the year 1975, making Latin America one of the most urbanized areas in the world. The growth of cities on the continent has been formidable and has been closely related to the overall growth of the population, which has been for extended periods of this century the fastest growing of the world. Over half of the countries had interannual growth rates of the total population of more than 2.9% between 1960 and 1975, while only four had growth rates below 2%.

These rates, however, have been much higher in the cities. interannual growth rate of the urban populations in nine countries reached over 4.5% between 1960 and 1970, and over 4% in the period 1970/75 in ten countries, leading to a high concentration of the population in the urban areas. The resulting contrast between the very highly concentrated populations of the urban areas and the sparsely inhabited rural areas (or unexplored and unexploited zones of the continent) is quite evident to see; and is highlighted quantitatively by statistical comparisons with European countries and the United States. For instance, though Chile and Venezuela have roughly half the overall population density of that of the United States -- 13.9 and 13.6 inhabitants per km^2 versus 23 inhabitants per km^2 -- the populations of the two Latin countries are more concentrated in urban areas: 83% for Chile, 82% for Venezuela as against 76% for the United States. On the other hand, while the Netherlands show a degree of urbanization comparable to that of Argentina (79% vs. 80%), the overall population density of that country is 36 times that of Argentina (336 persons per km^2 vs. 9.3).

But not all of the countries are equally urbanized or show the same degree of concentration in their populations. At the individual country level, there were four countries in 1975 with over 80% of their population in urban areas: Argentina, Chile, Uruguay and Venezuela, while at the other end of the scale there were six countries with 40% or less of their population in the same condition: Bolivia, Honduras, El Salvador, Guatemala, Paraguay and Costa Rica. Neither of these two groups, it should be noted, included the countries where urban growth is expected to be most dramatic: Mexico, Brazil, Colombia and Peru.

The two giants of the continent, Brazil and Mexico, account for almost 54% of the total inhabitants of Latin America. In 1976, Brazil possessed 51% of South America's population and Mexico 58% of that residing in Central America. If Colombia and Peru are considered as well, the four countries together accounted for two-thirds of the continent's population, or 212 million people.

There are also marked differences in the growth rates of urban populations: Three of the four countries in Latin America with over 80% of their population in urban areas -- Argentina, Chile and Uruguay -- show for the period 1970 to 1975 interannual rates of growth for their urban populations between 1.7 and 2.7% (less than the overall population growth rate for Latin America). At the same time, these rates are among the highest for the four

crucial countries:

Interannual	Growth	of	Urban	Population	(용)
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	1960-70	1970-75
Mexico	5.0%	4.6%
Brazil	5.0%	4.5%
Colombia	5.4%	4.9%
Peru	4.3%	4.2%

Source: World Development Report, 1978, The World Bank, August 1978

Nor surprisingly, the fastest growing metropoli of the continent are located in these countries, and their enormous growth will make them the largest urban agglomerations in the world. According to UN statistics there were four Latin American metropoli among the 35 largest cities of the world in 1975:

Rank		Country	Population (in million)
4	Mexico City	Mexico	11.9
6	Sao Paulo	Brazil	10.7
10	Gran Buenos Aires	Argentina	9.3
12	Rio de Janeiro	Brazil	8.9

The same statistics list six Latin American cities for the year 2000:

Mexico City	Mexico	31.0
Sao Paulo	Brazil	25.8
Rio de Janeiro	Brazil	19.0
Gran Buenos Aires	Argentina	12.1
Bogota	Colombia	9.6
Lima	Peru	8.6
	Sao Paulo Rio de Janeiro Gran Buenos Aires Bogota	Sao Paulo Rio de Janeiro Brazil Gran Buenos Aires Bogota Colombia

Clearly, the problem is not only a question of rate of growth but also of overall size of the urban agglomeration and its administration and management.

Growth of the Metropolis

It has been argued with good evidence that the change of a country from rural to urbanized is a finite process with a beginning and an end, and that it is necessary to distinguish between urbanization and growth of cities.

However, while a country is undergoing the process of urbanization, its cities grow at a much faster pace than at the beginning or the end of the process.

As Kingsley Davis has pointed out, the typical growth-form for the cycle of urbanization is a curve in the shape of an attenuated S. 3/ This sigmoid curve has also been observed and established in ecological studies of population growth under the condition that "there are no marked changes in exploitable potentialities of the environment"; in other words, assuming that no new resources are made available.

If we try to apply this concept to the growth of cities, it could be observed that, in recent history, technological innovations have opened up innumerable resources for the cities to continue to grow, although, in the numerous mountainous areas of Latin America, the availability of the basic resource - space - and its

utilization have become so restrictive as to imply a very limited supply. $\frac{4}{}$

It can be assumed that serious restrictions of resources in terms of availability, access and cost will divert growth from one urban center to other less limited areas. The problem with resource restriction however is that it affects not only the potential future inhabitants but also the existing population. While in ecological terms each stage in the urganization process (city building) represented a significant expansion over the preceding one in terms of the components of the system, the growth not only occurred in terms of increased densities but also in the size of the territory of the "effective population unit". While cities continue to grow, the territory of the "effective population unit" becomes larger and larger. At present this "effective population unit" and its related territory have reached unprecedented proportions if we look at cities like Sao Paulo and Mexico. It might be asked, however, whether these urban agglomerations are still representing "effective population units", or whether they are rather undergoing structural changes that transform them into several related but to a certain degree independent Richard Meier's $\frac{5}{}$ graph of the "Maturation of Urban Settlements" is certainly attractive as a model for urban development, but it does not take into account the differences of absolute size which might be important in terms of the nature and characteristics of the settlements.

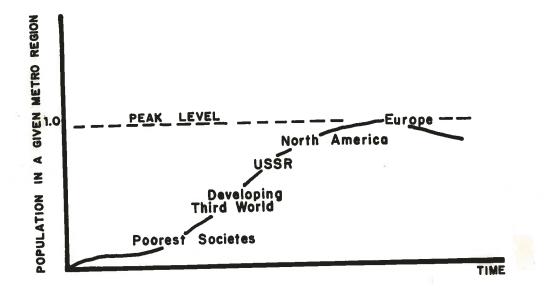


Fig. No. 1 The Maturation of Urban Settlements Source: Richard Meier

While the cities continue to grow, new resources will have to be made available which might substantially alter the urban environment. Meier is arguing for a reduction in the demand of resources, which in the context of the developing nations is possibly the only way to accommodate additional growth of metropolitan areas.

In Latin America a large proportion of the population is living in metropolitan agglomerations and increasingly will be living in this type of urban settlement. As John D. Durand and Cesar E. Pelaez have pointed out, $\frac{6}{}$ the majority of the Latin American countries show a megalocephalic urbanization, or concentration to a large extent in one primate city. According to their study, two-thirds of the Latin American countries had over 50% of their urban population concentrated in one city or metropolitan area (1960).

This absolute dominance of the primate city cited also by Castells $\frac{7}{}$ has established a pattern of dependence in terms of goods and services of the rest of the country from the capital which will prevail for a prolonged period, although recent trends indicate for some countries a decrease in the participation of the primate city in the overall urban population. This slow-down of growth of the primate city, is accompanied by a more accelerated growth of the settlements of a lower order.

Characteristics of the Latin American Metropolis

When Hans Blumenfeld defined the 'Modern Metropolis" in 1965 8/
he modelled it mainly on the European and North American examples
in terms of size of population and the basic characteristics which
set the metropolis apart from traditional cities. Of these characteristics - concentration of political and economic power, size
of population and surface area, inclusion of open space, separation
of work places from place of residence and high mobility in choice
of jobs and occupations - some can be used to describe the Latin
American metropolis. However, looking more closely at the major
components, there are some important differences with those of
Europe and the United States.

The first difference is one of size of overall population: at present, cities of 500,000 to 1 million inhabitants do not classify as metropoli in Latin Amerida as they do not offer the specialized urban services which are characteristic of the metropolis.

The effective population to generate these services is only a portion of the total. Taking into account the limited resources of the majority, larger numbers are needed to provide the critical mass. $\frac{9}{}$

With respect to the location and importance of the central business area in the Latin American metropolis, it normally is located around a very small historic center, concentrating government, banks and related services like lawyers' offices, maintaining the primacy of the original center as the most important workplace concentration of the city. Specialized retail and offices of major corporations do not necessarily concentrate in the same area, often creating specialized centers in other parts of the city. There generally is more dispersal of commercial activities than in European cities - the lack of effective controls and regulations has contributed to a situation where commercial establishments are relatively footloose and locate according to convenience.

Manufacturing has played a less important role in the maturing of the Latin American metropolis. The typical fringe areas of the centers of European cities are almost nonexistent, or are rather of a different character.

The biggest difference, however, can be observed in the area of housing. Central city slums versus high-income suburbs is not the typical pattern, although some deteriorated housing does exist at the fringe of the old centers. It is the contrast between formal residential developments and the informal housing areas of the

poor which characterizes the Latin American metropolis.

Location and extension of these areas do, of course, differ, but a typical growth pattern has been a series of ringlike developments with the high income groups at the center and the lowest income sectors at the fringe. In Caracas, for example, there are several such rings, the original being the old center, where the most prestigious residences were located as close as possible to the central square while the poor settled in the surrounding areas of difficult topography.

While elaborate planning and design rules were set up and applied to the new developments of the formal sector, no such controls were established for the informal sector, to the effect that different standards are observed for services, densities and other indicators. Eventually the metropolis gets to a stage where the informal and formal parts of the city grow outwards in different directions, leading to an ever increasing social segregation.

The fourth major component of metropolitan land use - open land - is a scarce commodity in many of the Latin American metropoli.

Continuously built up areas without any major open space are characteristic, for example, of cities like Sao Paulo and Mexico City.

The access to open space for leisure and recreation is a privilege of the rich and middle class. In Mexico City, thousands of the poor have benefited from the subsidized fares of the Metro to cross

the whole city from Ciudad Reforma east to west on weekends to get to the only major park of Chapultepec. There are, of course, noted exceptions, where nature has provided for spectacular natural assets and measures of protection have been taken, as in the case of the beaches of Rio de Janeiro and Mount Avila towering over Caracas.

Problems of the Metropolis

For most of the Latin American countries the main problem of their major metropoli is the continuing high rate of growth, leading to ever enlarging metropolitan areas of gigantic size, which require an unprecedented effort to supply goods and services for the population

The notion of progress which traditionally has been associated with the process of urbanization has become questionable. However, without entering a socio-historical argument, the comparison of data of countries of different degrees of urbanization shows a remarkable interdependence hetween the level of urbanization and the GNP per capita, as well as the availability of services. The six countries with the lowest degree of urbanization in Latin America (40% or less) together showed substantial differences with respect to the four most urbanized countries of the continent in terms of indicators like: access to safe water, population per physician, adult literacy rate, and percentage of enrollment in

the different levels of the educational system.

Table No. 1, shows, for instance, that in the six countries exhibiting low level of urbanization an average of 42% of the population had access to safe water, compared to 78% for the highly urbanized countries. In the latter group there is a physician for every 1163 people while in the former there are 2925 persons per medical doctor. Adult literacy rates are 89% vs. 63.5% and attendance of higher education 19.5% vs. 8%. figures clearly show that the more urbanized countries, aside from offering better economic conditions (GNP per capita of US\$ 1640 vs. US\$ 597) on the average provide for better social services in terms of health care and education. It is however erroneous to assume that these services are available on an equitative basis to all of the population of the more urbanized na-Large sectors of the urban population of these countries have limited access to the services of the metropolis. Nevertheless, this limited access is still a considerable improvement over the complete lack of services in many parts of the countryside and the smaller towns.

If one distinguishes the problems of the metropolis from those in the metropolis, it is obvious that those of the metropolis have to be dealt with on a larger - the national scale. It is at this level where policies have to be established and measures taken to balance the distribution of resources and turn growth into development.

Lack of continuity of planning policies and goals, however, is characteristic for many of the Latin American countries, not only at the national but also at the local scale, which has prevented many good plans from being executed consequently over the years.

Of the many problems in the metropoli of South America, a most pressing one is the low level of social equity, expressed in many forms in the city. In social terms, the South American metropolis is hardly catering to its citizens in an equitable way. Community services are unevenly distributed, infrastructure of water and sewer lines prevail in the formal sector but are absent in many of the informal areas. Access to lots by paved (or unpaved) streets is rarely provided in the low income areas and the highway system favors the parts of the population with higher incomes.

On the other hand, rules and regulations are applied in the formal sector but are totally neglected in the informal sector; residents of the formal areas have to pay property taxes, while those of the informal areas do not even have title to the land.

These incongruencies lead to abuse in both areas -- the betteroff evading taxes and the less well-off evading regulations.

In terms of space consumption, low income areas - be they formal or informal - tend to show higher densities, less open space and fewer services than the higher income areas. In Caracas, the over-

all density of the informal areas is more than twice the density of the rest of the city. The overall density in the formal areas has gone up in recent years due to the large numbers of families moving into apartment buildings, but they are, on average, much lower than the densities reached in areas of single family dwellings of the informal sector. This is also an indicator for the degree of crowding in the individual dwelling.

Access to jobs is another factor, where the poor are at a disadvantage with respect to middle and higher income groups. Places of residence of the majority of the poor are located now on the fringe of the metropolis, resulting in very long journeys to work, often by several modes to reach the places of work, which are mostly located in central areas.

Another important problem has been the lack of provision of urban infrastructure including streets, due to the runaway occupation of new territory by rich and poor alike. Traditional planning strategies to guide development by building the urban infrastructure have widely failed when trying to move against established trends and growth patterns. $\frac{10}{}$ While the political system normally favors higher income areas eventually supplying the required systems, the low income areas are often neglected.

TABLE NO. 1

		URBANIZ	IZATION AND SO	SOCIO-ECONOMIC INDICATORS	INDIC	ATORS			
Country	% Pop, Urb. Areas	GNP p/ capita US \$	% Pop. w/ Access to Safe Water	Persons per Physician	Primary School Er rollment % age gry M	ry 1 En- ent grp	Higher School ment as grp	& Sec. Enroll- s % age High	Adult Liter- acy Rate
Chile Uruguay Argentina Venezuela	83 81 82 82	1040 1390 1550 2570	70 98 66 NA	2420 910 450 870	119 103 108 96	118 103 109 96	4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	17 14 28 79	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Average highly urbanized countries		1640	78	1163	ts.				68
Bolivia Honduras El Salvador Guatemala Paraguay Costa Rica	37 28 40 35 37 40	390 390 490 630 640	34 41 39 13 72	2120 3360 4070 4200 2200 1580	72 89 71 62 106	65 88 69 56 102 109	31 13 13 52 52	10 4 8 4 17	40 61 63 47 89
Average less urbanized countries	tries	597	42	2925					63.5

Source: The World Bank

Planning of the Metropolis

Efforts to guide and control growth of the metropolis in Latin America started in the twenties, became more visible by 1940 but gradually formed part of official policy only towards the middle of the century, when the first negative effects of rapid urban growth became apparent. Faced with the unproportionate concentration of population in the major cities, most countries established a policy designed to slow down metropolitan growth and to organize the urban areas. Urban renewal programs and the building of an urban highway system often went hand in hand with goals for decentralization of industry and decongestion of the major urban area by, for instance, the creation of new towns.

Urban renewal projects and highway construction probably helped to attract more people to the metropolis and industry was still looking for locations near the metropolis - the place of the biggest supply of labor and the best market. A lot of study is still needed to identify and explain the specific growth-form of the metropolis - present evidence is indicating that a prolonged growth-phase is an inevitable phenomenon of the metropolis, a transitional phase from one stage to another later stage at which urban population might become stable. 12/ While growth itself is difficult to curb and control, it can be ordered and, to a certain degree, guided into desirable directions to achieve the goals of society. In a highly informal environment such as the South American continent, however, it will take strong measures of control to achieve

stated planning goals.

Some of the difficulties are due to historic circumstances, such as for example the conflict between national and municipal authorities in matters of urban planning laws which regulate titles to land and "bienhechurias" (any improvement on the land - houses, etc.)

The planning effort of the metropolis for the future should be undertaken outside as well as within, "outside" meaning that the growth of the metropolis cannot be curbed within its boundaries or sphere of influence, but rather has to be part of national policies and strategies.

If the Latin American continent wants to explore its resources, it must look inward towards the enormous extension of uninhabited land, with natural and mineral resources of great value, and with a largely underutilized reservoir of agricultural land. If cities of second or third degree are strengthened in terms of infrastructure, services, and job opportunities they will become more attractive as places of residence, especially if supported by agricultural production nearby, as has happened, for example, with the city of Mérida in the Andes of Venezuela.

As national policies will have effect only over a prolonged period of time, the metropoli will continue to grow in numbers of inhabitants and territory requiring an internal planning effort of the metropolis at least as demanding as those at the national and regional scales.

This planning effort within the metropolis will have to be directed to improve the living conditions of the marginal population, and to incorporate this sector into the formal economy and city structure. The disparities between formal and informal, between rich and poor have to be reduced by attacking the most pressing problems of these areas: $\frac{13}{}$ lack of land tenure, lack of infrastructure, lack of community services, excessive distances to places of work. Housing itself ranks relatively low on this scale, as it is the element that can be provided most easily by the residents themselves.

While planning for the underprivileged is urgently needed to improve the balance of social justice, there is a second aspect of major concern for the future of the metropolitan areas: the protection of the environment and the preservation of nonrenewable resources of all kinds. Urban populations tend to consume many times the resources of rural populations. The development of new habits (or, maybe, going back to traditional habits) of energy consumption - and resource preservation together with the use of less wasteful technologies are needed for a more balanced development of the overall environment.

The Individual in the Metropolis

The individual's situation in the urban environment of the metropolis is characterized by the extremely limited relevance of his actions and the wide freedom of choice (if not conditioned by economic factors). This kind of environment is probably unsettling

for many individuals, who not only depend on feedback to evaluate the effect of their actions but also need identification with an environment that fits $\frac{14}{}$ their needs and aspirations. Urban environments, however, are not built to fit the individual but rather to cater to a hypothetical statistical average citizen, applying standards of different kinds according to cultural and economic circumstances. Depending on housing type, location and regulations, this preestablished environment allows some limited modifications. Paradoxically in South America, at both ends of the social scale, the individual interferes more directly in the shaping of his environment: one building his house according to his needs, the other building his 'rancho' $\frac{15}{}$ according to his means. In any case, the individual will look for additional elements which allow him to establish his identity - be it by locating near family and friends, within ethnic neighborhoods or close to special services, place of work and so on.

While the single individual's possibility to influence planning decisions and to shape his environment is extremely restricted, he can join pressure groups - neighborhood associations, professional groups, chambers of commerce, etc., to try to widen his influence. Until now, however, participative planning has been quite limited in the South American context as the urgency to provide infrastructure and services did not allow for prolonged processes of consensusbuilding. Thus capital budget programs, infrastructure and road improvement plans have had more weight in planning decisions than

social cohesion and organization or individual well-being. As the metropolis becomes more structured and more organized over the years, the process of consolidation will result in more conservative attitudes of the residents, defending their environment against physical and social disruption and slowing down the pace of change and replacement which has been extremely fast over the last decades.

The Venezuelan Metropolis

As an example of recent trends in urban and metropolitan development, Venezuela offers some interesting aspects, as certain shifts in trends have developed over the last ten years. Already highly urbanized in 1970, this trend has continued and seems to have reached a certain level where qualitative changes are as important as quantitative ones. While overall population growth of the country has remained quite high and constant at about 3.6% annually over the last 20 years, the growth of cities has varied considerably. The only metropolis, Caracas, has slowed down from 6.14% annually between 1950 and 1961 to 1.91% annually between 1971 and 1981, while all towns located in the metropolitan fringe have increased their rate of growth dramatically. While the growth rate of Caracas fell below the overall population increase, almost all of the cities of the interior had rates well above the natural in-The result of these trends can be seen in Tables No. 2 and 3:

Table No. 2

Venezuelan Cities with Population of 100,000 Inhabitants or More - 1950-1981

(in	tho	usar	nds)
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City	1950	1961	<u>1971</u>	1981
Maracaibo Valencia Maracay Barquisimeto Puerto La Cruz Barcelona Acarigua-Araure Guarenas-Guatire	272 139 105 132	458 237 198 234	677 485 381 373 122	954 817 638 566 154 178 152
Ciudad Lozada La Victoria Los Teques Valera Lagunillas Mérida Cumaná Maturín Barinas Coro			101 111 115 115 133 133	152 200 130 122 142 116 188 195 199 118
Punto Fijo Puerto Cabello Cabimas Ciudad Bolívar Ciudad Guayana San Cristóbal Depto. Vargas Caracas	712	117 117 141 1372	102 109 139 125 153 162 202 2184	120 133 155 177 200 325 213 254 2640
Total	1360	2874	5922	9238

Source: Census 1981

Table No. 3

Indicators of Urbanization
Venezuela - 1950 - 1981

	1950	1961	1979	1981
Caracas, as percentage of total population	14.14	18.24	20.37	18.12
Caracas, as percentage of cities of over 100,000 population	52.35	47.74	36.88	28.58
Cities with over 100,000 population as percentage of total population	27.01	38.2	55.23	63.4

Source: Census 1981

- the relative importance of the capital diminished not only with respect to the total population but also with respect to the population in cities over 100,000 inhabitants.
- two other cities will soon reach the 1 million mark: Maracaibo and Valencia.
- Venezuelan cities or metropolitan areas of 100,000 people or more grew from 5 (five) in 1950 to 26 (twenty-six) in 1981, increasing their share of the total population from 27% to 63.4%.
 All these trends seem to indicate a more balanced urban development in recent years, due to a series of factors, of which we can cite a few and others will still have to be identified:
- restrictions to development in the capital due to limited land supply and high costs.
- decentralization policy of the government for industrial establishments, including the oil industry's administrative apparatus.
- improved and widened services in cities of second order.

 The figures might also indicate that Caracas is about to amplify its 'effective population unit' and related territory. As the towns and cities of the fringe continue to grow, their interrelations with the capital will increase proportionately and eventually will require mass transportation links (perhaps the extension of the metro, presently under construction in Caracas) converting them into effective parts of the metropolis.

Technological breakthroughs helped to set off the first geographical expansion of the city beyond the colonial precinct of the present

center. Steel and reinforced concrete construction of bridges and the new means of transportation expanded the urban area many times, resulting in a marked decrease of urban densities during the years 1920-1940. (See Fig. No. 2)

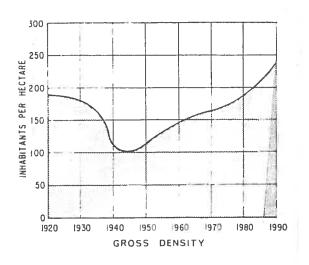


Fig. 2 Caracas, Gross Density in Urban Area Source: OMT

Within the newly enlarged urban area, enormous population growth was responsible for bringing densities back and beyond the preautomobile level, resulting at present in a gross-residential density of 190 inhabitants per hectare.

As urbanizable land has become a sparse commodity in the urban area of the city, growth has been diverted to the surrounding towns and slowed down the growth of the central city.

Qualitatively, there has been a constant increase of the population living in informal urban areas as proportion of the total population. While in 1959 this proportion was 21% of the total and

2-1

32% in 1966, it rose to 42.5% in 1979. It may be that general scarcity of land, high costs and overregulation have forced major portions of the population into the informal areas or into the outlying towns, thus producing the double effect of a decreasing role of the central city and a decreasing role of the formal sector within the central city.

Admittedly, more data will be needed over a longer period of time to confirm this trend. However, official planning goals have shifted to take account of the situation and to direct a major effort towards the marginal areas of the city, reducing the budget for highways and urban infrastructure and orienting investments towards the creation of community services and employment opportunities within the marginal areas. While the Venezuelan example might not be typical for overall trends of urban development in the continent, as the country is already highly urbanized, there are aspects to its urban environment which allow the raising of general questions with respect to the future of the South American metropolis:

- will the cities of the continent be able to satisfy the aspirations of its future inhabitants by providing an acceptable environment and social justice?
- will the metropolis continue to offer better services, more opportunities, wider choices than other types of settlements?
- will it be possible to control costs, violence, pollution and congestion in the metropolis?

As world population and metropolitan areas will be faced with a period of growth well into the 21st century, the goals for planning the future must be revised as well as the means of their fulfillment.

Waste of resources is becoming increasingly unacceptable, more equitable distribution of wealth ever more urgent.

Planning the future will need the reconfirmation of basic values of the human society - equal rights, freedom of thought, respect for the individual, social justice and the willingness to sacrifice a portion of one's own wealth or happiness for the good of the community. This is not meant to be the call for the plan of another 'ideal city', but rather a reminder that in planning one will always have to mediate between the ideal and the possible.

NOTES:

- 1. Richard M. Morse "Una Investigación Reciente sobre la Urbanización Latinoamericana: Un Estudio Selectivo con Comentario" en: "La Ciudad en Los Paises en Vías de Desarrollo" Gerald Breese, Editor, Editorial Tecnos, Madrid.
- Manuel Castells "La Cuestión Urbana", Siglo Veintiuno, Editores.
- 3. Kingsley Davis "The Urbanization of the Human Population" in "Cities", Scientific American, September 1965.
- 4. The city of Caracas is a good example for such a situation, as shown later on.
- 5. Taken from Richard Meier: "A Stable Urban Ecosystem", Third World Planning Review, Vol. 2, No. 2, Autumn 1980.
- 6. John D. Durand, Cesar E. Pelaez, "Pautas de Urbanización en America Latina", en Gerald Breese, op. cit.
- 7. Manuel Castells, op. cit.
- 8. Hans Blumenfeld, "The Modern Metropolis" in "Cities", op. cit.
- 9. As happens with the term "urban", the term "metropolitan"not only is used as a description of size, but also as a description of specific qualities of the environment.
- 10. This has been shown in detail in studies on Ciudad Guayana, Venezuela. See: María Pilar García and R. L. Blumberg, "The Unplanned Ecology of a Planned Industrial City: The Case of Ciudad Guayana, Venezuela" in "Urbanization in the Americas", Aldine Publishing Co., 1977
- 11. A recently adopted policy of the Venezuelan Government prohibits the government owned utility companies from providing water or electricity to newly established illegal housing (ranchos).
- 12. The World Bank includes projections of size of "hypothetical stable population" and year of reaching it in the tables of the World Development Report, 1978.

NOTES: (continued)

- 13. The recent food riots in the cities of Brazil indicate the potential for social unrest which exists.
- 14. The 'good fit' as understood by Christopher Alexander ("Notes on the Synthesis of Form", Harvard University Press), might in this case be provided by environments where there are no 'misfits'.
- 15. Venezuelan term for squatter house.