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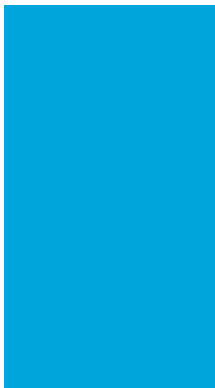
Author

Wilheim, Jorge

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Center for Latin American Studies
University of California, Berkeley



Urban Planning:
Innovations From Brazil

Jorge Wilhelm

Urban Planner
São Paulo, Brazil

November 2004
Paper No. 11

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Urban Planning: Innovations From Brazil

Jorge Wilhelm

Urban Planner
São Paulo, Brazil

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CONTENTS

THE PRESENT PERIOD OF HISTORICAL TRANSITION	1
CITIES AND THEIR PEOPLE: A NEW GEOGRAPHY	3
THE CASE OF SÃO PAULO, BRAZIL	5
THE NEW STRATEGIC MASTER PLAN	8
PLANNING GUIDELINES	9
THE MAIN INNOVATIONS: (A) LAND USE AND ZONING	12
THE MAIN INNOVATIONS: (B) THE 2-LEVELS AREA FLOOR RATIOS	13
THE MAIN INNOVATIONS: (C) AN EXPANDED CONCEPT OF PUBLIC SPACE	14
THE MAIN INNOVATIONS: (D) THE URBAN OPERATIONS.....	14
THE MAIN INNOVATIONS: (E) THE BUS SYSTEM	15
THE MAIN INNOVATIONS: (F) ENVIRONMENTAL ISSUES.....	16
THE MAIN INNOVATIONS: (G) ANTI-EXCLUSION PROGRAMS	16
WHAT NEXT?.....	17
URBAN PLANNING AND THE 21ST CENTURY	17
BIBLIOGRAPHY AND SUGGESTED READINGS	22
APPENDIX.....	24

THE PRESENT PERIOD OF HISTORICAL TRANSITION

In order to understand the present experience of planning in the city of São Paulo, it is necessary to understand the historical context that has led to our present situation. We are living in a period of historical transition in which the discontinuities are more significant for our future than the adjustments we are trying to put in place. The adjustments are a mere response to the present difficulties in the field of global governability, but they are shortsighted and hide the substantive issues of the transitional period. In other words: fiscal orthodoxy, the curbing of state regulations, the idea minimized state power, the empowerment of the market — all the issues of what is called neoliberalism, constitute a fake solution for development and a false and short-sighted response to the difficulties of handling substantive changes that were created in the last two to three decades.

What are these substantive changes? Civil society is solidly organized through an increasing number of NGOs, social movements, action groups, foundations, the so-called Third Sector, all justly demanding to share with government (state) and entrepreneurs/corporations (the market) both social action and decision-making. These social changes mean a deepening of democratic life and, although we are not always sure of how to handle this sharing, the shift and the renegotiation of the social contract it represents should be welcomed!

A second substantive transformation results from the development of communications technology. The mating of satellites and the computer gave birth to global connectivity, shrinking world space, as well as time. What was sequency is now almost simultaneity. Everyone's life has accelerated, decision-making is under pressure, evaluation and eventual corrections are speedy; on the other hand, a new exclusion was created because the electronically illiterate and those not equipped and linked to the global network are kept on the outside and their life-style pace tends to be slower.

Since the early 90s when the World Wide Web was set up, the above transformation opened up the age of communication (*Castells, 1998*) and established the “environment of globalization” in which we all live. These new social linkages operate on two levels: the realm of *fluxes* and the realm of *spaces*. This separation as well as their mutual effects, establish new horizons for urban planning; we shall come

back to this issue later.

A third transformation is represented by the change of paradigms of industrial production. Partly a consequence of computer technology and the increase in automation, products are now manufactured in a fragmented and global process. But these changes are not only due to automation, but also to the possibility of enhancing profits by incorporating the lowest workers' wages possible worldwide. The transnational system of production is diffuse in its production and concentrated in its management and finance. This brings along a globally fragmented production, a globalization of labor and new forms of inequality (*Saskia-Sassen, 1998*).

Commenting on inequality, Zygmunt Bauman (*Liquid Modernity*), describes the exclusion of "superfluous people" and the difficulties in handling them. He mentions that the new imperium set up by the fragmented economy commanded by finance, operates in the space of fluxes, the present realm of global power, but creates difficulties in the realm of spaces, where people live and nation-states operate and govern.

This brings us the a fourth substantive transformation: although the first result of global connectivity was the expansion and intensification of exchanges at the level of consumer habits and culture, it is the financial world that has reaped the most profit from the enhanced information and decision-making capability brought on by the Web. The speeding up of financial movements made it possible to accelerate operations and increase profits; financial results blew up a virtual bubble of very concentrated wealth with the value of shares being determined by potential instead of proven profits, bringing serious instability to the world economy, and specifically to indebted countries whose economies are manipulated by creditors.

Many authors wrote on the dangers of this financial bubble, based on speculation. While Rifkin and Thurow (1995, 1997) express bluntly that finances abandoned the economy, Saskia-Sassen (1991) underlines who the new capitalists of the transition period are: while bank-lending increased US\$6 trillions (1980-91), nonbank institutions, mainly insurance companies, mutual and pension funds, increased investments to the level of approximately US\$40 trillion.

The fifth transformation, very much linked to the previous ones, is the trend toward capital concentration. Large corporations like Pegasus and Nike don't actually manufacture their products anymore. Production, in our post-Fordism industrial paradigm, occurs in globally fragmented plants; profits are disconnected from production. One of its consequences is increasing financial imbalance: the earnings of the 14 administrators of Pegasus (Germany) is equal to the total earnings of the 18,000 Filipino workers who manufacture the shoes because, while the selling price of each pair is of US\$70, the labor cost is a mere US\$1.66. The concentration of wealth can also be expressed by the relationship between the earnings of CEOs and workers (Andre Gorz, 1997): in 1975 the former earned 41 times more than the latter; in 1992 the ratio rose to 145 times; and in 1994 to 187 times.

Much of the imbalance and concentration of wealth is due to the destruction of the labor structure in industry. Unemployment and the widening of the gap between rich and poor (countries and people), the dangerous instability of the financial bubble and the fusion of megacorporations, have been to date the result of neoliberal theories and market strategies. They may result in the precise opposite of their initial aim: ingovernability.

The above elements of our transitional period of history have a definitive impact on the urban world, on cities. They are part of the context of planning and thus must be acknowledged, their dynamics understood and acted upon when we deal with urban development in each city. Because, as Shakespeare wrote: "What is the city but the people?" Thus, to the new global connectivity, the new debate and negotiation of the social contract, the new paradigms of production and of the market economy with its financial dominance, we must add a new geography.

CITIES AND THEIR PEOPLE: A NEW GEOGRAPHY

"Cities have always been the melting pots and market places, the physical sites of social interaction and communication, the places where ideas and products flourish and receive their social and economic value. They are the focus of creativity and culture, where opportunities are offered, creating the preconditions for progress and the firmest foundations for civilization." Beyond this, what is new?

First of all, the extraordinary pace of urbanization worldwide is a new phenomenon. In 1975 only 38 percent of the global population lived in cities and towns; this rate increased to 47 percent in 1998. By 2015 an estimated 55 percent of the world's population will live in urban areas, increasing to 61 percent in 2025 (UN estimates). While in 1975 there were only 100 cities with a population of over one million, it is estimated that there will be 527 cities in this category by 2025. There were only two megacities with populations over 10 million in 1960 and 14 in 1975. According to estimates, there will be 26 in the year 2015.

If we focus on a single country, Brazil, of its 170 million total population, 81.2 percent are urban. Forty percent of the total population lives in its 27 metropolitan conurbations (60 percent of the total urban population) which amounts to approximately 69 million people.

This increase in the pace of the urbanization brings forward the role of cities in national development, as well as their global role. Authors have tried to establish ranks and links among cities. Some large cities are now considered to be global cities because the activities hosted there are important for political and economical decision-making. Do they set up a significant network? The list of global cities, depending on the author, is limited to ten or 14; others go as high as 34, depending on criteria. These vary and in some cases cities are classified as "global" depending on how many U.S. consultant firms have a permanent branch there. In other cases the criteria is the number of foreign bank branches or the activity of their stock exchange. But whatever the criteria, all of the authors' lists placed over 80 percent of the global cities in the "north," which means in post-industrialized developed countries.

A different distribution comes up if we consider the list of megacities, huge ever-growing metropolis over 10 million people. Of the estimated 26 that will exist in the year 2015, at least 22 will be in the "south," which means in developing and less developed countries. It is easy to imagine the problems that the "south" will have to face.

Lists of global cities and of megacities illuminate some of the planning issues, but they don't really describe the current global urban structure and system. I propose that these are better represented by the figure of an urban archipelago whose islands are formed by the fragmented world of modern consumers

and their physical settings, all sharing similar habits worldwide, consuming similar products, living a speedy life pushed on by the Internet, communicating through computers and its codified English language.

But when we imagine islands we must think that they are surrounded by seas and oceans. In these float those that are excluded by modern consumerism because of lack of income, ignorance, unemployment and other forms of exclusion. This dual society is everywhere, but in New York the “island” is large and the excluding “sea” relatively small; in Mumbai the “island” is certainly small and the ocean large. Unfortunately in many cases there is more contact, understanding and complicity between citizens of “islands” of different countries than between islanders and floaters (the excluded) of the same country.

Although the design of the urban archipelago is rather schematic, I think it helps to develop some ideas on what might happen in the urban world in this century.

THE CASE OF SÃO PAULO, BRAZIL

We shall now look at an example of what can be done, in the field of urban planning, given the present circumstances of a transitional period in history. I shall present the case of São Paulo. As an introduction, for those who are not familiar with Brazilian history and in order to place this metropolis in its historical context, let me briefly focus on certain issues that explain why and how a city born in 1554 can be considered a typical American 20th century city.

When I say “American” I don’t mean the United States of America, a country that is also American. America, the New World by European standards, is a continent whose predatory conquest by Europeans created original cultural aspects, mixed and sometimes acculturated to the previous local culture, that are often common to many parts of the continent. Some of these unique characteristics include: the mobility of its population, roaming over an immense space with few physical barriers; the constant arrival of migrants from abroad as well the spirit of domestic migrants; and the lack of classical villages and village-life on the Atlantic-side of South America (where villagers journey daily to till the land and return to the village, common in Europe, impossible given the dimension and low density of the new world).

Portugal, a small country with talented and audacious navigators, arrived in Brazil in 1500 and founded harbors along the coast in order to establish Portuguese “ownership” of the land and its presumed wealth. Portugal and Spain signed the Tordesillas Treaty in 1494, dividing South America between them along a meridian that would today be approximately east of Belo Horizonte, reducing Brazil to one fourth of its present territory. This treaty was over-ruled mainly by the de facto possession of vast territories, after the expeditions (called *bandeiras*) of adventurers mainly from São Paulo that, led by Indians, penetrated as far as the Amazon region looking for hidden treasures of gold and diamonds and people to enslave; leaving behind sadness and some newly established farms.

The foundation of São Paulo by Jesuit priests with the help of a local Indian tribe was significant because it established a foothold on the vast Brazilian highland, away from the coast where the Portuguese occupation had been limited. It was quite an achievement because of the difficulty of climbing the 800 meter-high slopes covered by dense rain forest.

The city was founded on a hill looking over the flat land and swamps formed by the Piratininga river, later called Tamanduateí, on which the canoes of the Jesuits and Indians navigated. The site was clearly selected because of classical defense criteria: on one side lay the slope towards the Tamanduateí River and on the other side was the slope of the small Anhangabaú River. During almost three centuries the town remained enclosed by these two valleys, growing a little towards the south, with little occupation of the “other” side of the two rivers.

The real urban expansion occurred in the 19th century, mainly during its second half. Up until then São Paulo was only politically important as a stronghold and base for the conquest and economic occupation of the highlands and a base for travelers between the harbor (S. Vicente and then Santos) and sources of mineral and agriculture wealth to be exported or appropriated by the Portuguese crown.

At the time of independence in 1822, Brazil’s wealth and economic potential were very similar to those of the United States. However, misguided policies and bad education, to make it brief, caused the country to miss the opportunities offered by a new market economy system that was flourishing in Europe: capitalism. Instead of following this trend by establishing banks, industry and railroads, the

Emperor, his conservative party and the uneducated elite chose to remain agriculture and slavery minded, closing their eyes to renewed traffic in slaves (Although slave traffic from Africa was prohibited in 1850, Paulista farmers “imported” slaves from the north-eastern farms). Slavery was not completely abolished until 1888.) “Modern” initiatives, like those of Baron Maua, who created the first Banco do Brasil and a railroad as well as some industries, were handicapped by the government.

The second half of the 19th century is very important for the understanding of urban development in São Paulo. Coffee plantations prospered in the interior of the province and railroads had to be built in order to bring export crops to Santos. The railroad couldn’t enter the city proper, precisely because of the two valleys that surrounded its core. Stations were built outside and immediately streets and urban developments were opened near the site of the *Estacao da Luz*. On the other hand, with the abolition of slavery, farmers had to give incentives and contract migrant farmers, mainly from the Mediterranean region. In a typical but huge *fazenda* (of the Prado family) there were 60 field slaves, 50 house slaves and 49 immigrant families (*Marcovitch*). At the end of the 19th century, after the fall of the Emperor and the establishment of the Federal Republic in 1891, many Italians, Spaniards and Portuguese, as well as families from Germany and Switzerland immigrated to São Paulo, a city that, in 1890 had a population of only 65,000. By 1900 the population had reached 265,000.

The sudden and intense demand for housing caused the rich Paulista families to give up their pleasure farms that surrounded the original city, giving birth to scattered neighborhoods, scarcely linked by roads to the rest of the city. The unplanned, individual initiatives and sloppily designed new districts explain the chaotic aspect that the city still possesses. One should add the fact that the present urban site is not flat but, on the contrary, a sea of hills with many creeks in the valleys.

The concentration of three factors — coffee, money and banking, the late abolition of slavery and the overwhelming presence of the immigrant culture — are at the base of the rebirth and refoundation of São Paulo from 1890 on. The establishment of industry was mainly the work of immigrant entrepreneurs, although some of the old Paulista families also engaged in these new activities (Bresser Pereira, F.H.Cardoso). In 1900, 92 percent of industrial workers were foreigners; 81 percent were Italians. During

the 20th century São Paulo was considered the city of opportunities, constantly growing and receiving immigrants from the northeast and from the hinterlands of the state. The two world wars brought many Europeans to São Paulo along with significant Japanese, Jewish and Arab communities. The city never stopped growing although this has by now calmed down; since the mid-seventies its growth has been mainly due to natural growth and not to domestic or foreign immigration. Although recently arrived Chinese, Koreans, Peruvians, Bolivians and Argentineans are now part of the Paulista population and culture.

The attached table shows the population explosion that occurred during the 20th century and the maps illustrate why I consider São Paulo to be a 20th century metropolis. The above “history in a nutshell” should be sufficient to present a superficial historical context, added to the context of the times we are living through, in order now to approach the issue of São Paulo’s new plan. But I strongly recommend perusing the books mentioned in the bibliography in order to gain a better knowledge of the roots of current development in Brazilian and the challenges the country faces.

THE NEW STRATEGIC MASTER PLAN

In the year 2001 the newly elected Mayor, Marta Suplicy, of the Workers Party (PT), urged me, as her Planning Secretary, to prepare a Master Plan in order to orient public and private initiatives for the next decade, since the old plan of 1971 and a makeshift plan from 1988, which had never been debated or voted on, were inadequate to face the present challenges of São Paulo. What were these challenges?

Among the city’s **short-comings** we found: an average of 120 km of daily traffic jams; an average of two hours daily lost to transportation; only 43 (54 in 2004) km of subway operating (the original project, now considered insufficient, established a network of 140 km); a perverse modal split: of the 30 million daily trips, 1/3 are made on public transport, 1/3 by private cars and taxis, and 1/3 on foot; one third of all homes are built irregularly or in *favelas*; an unemployment rate of 17.8 percent in year 2001; a high rate of homicides, mainly among youth: 57 per 100,000; as well as over 13 tons of garbage to be collected and disposed of every day. The situation also included a recent history of two administrations in eight years that had been open to corruption and citizens with very low self-esteem who were living in a

sort of abandoned city.

On the other hand, São Paulo presented important **positive factors**: it is the largest Latin American airport hub; it houses the largest universities and most extensive research nucleus on the subcontinent; it has a sophisticated modern medical network; it has the continent's largest active core of cultural institutions and events including: six permanent symphonic orchestras, over 80 theatrical plays per season and important museums with active cultural and community programs; it hosts modern, cosmopolitan lifestyles as well as services and business and an intense business and cultural tourism; its manpower is adaptable, easily up-dated and qualified; and the excluded population and informal agents demonstrate an amazing vitality and diversity of survival strategies. Mentioned as the "metropolis of 1,000 peoples," a city of hospitality, all having the same right to be considered and accepted as "Paulistanos," notwithstanding the national gap that is still viciously maintained in all of Brazil between the *haves* and the *have nots*.

PLANNING GUIDELINES

On the basis of this situation, what *planning guidelines* should be used to set up the new plan? **First** of all, in order to comply with the political time schedule, necessary for achieving positive results, I established that we would *not* engage in writing *a book* but in writing the laws of the new plan. The book would be written afterwards (in 2004). All the technical staff had to put their ideas into articles of the law that established the new plan, in order to send it for debate and approval by the City Council as soon as possible. A law must be clear, without adjectives or ambiguities, one idea per article. It was a challenge for all involved.

Second, I asked my staff to look out of the window at the city and ask themselves "*Who did all that, good or bad?*" A city is a collective cultural expression of the whole society; thus we, as part of the local government, had to know our task and its limits, as well as how to deal with other actors on the scene. The *public interest* had to be the only criteria for planning decisions, but, quoting Jean-Jacques Rousseau, "*the public interest is not the same as the interest of all.*" Conflicts of interests are legitimate in a plural open society, but it is the role of the public power, the elected local government, to conduct the solution

of these conflicts, as well as to arbitrate according to our interpretation of what the public interest would be in each case. If government makes a mistake in this interpretation, it will pay politically for it. But the obligation of orienting and arbitrating is unavoidable.

Third, we should have the *assets of the public sector* clearly in mind in regards to those of the private sector, mainly private developers and builders, in order to cause their market activities to produce structures and spaces that are positive for the urban development of the city. São Paulo's local government has little capital to invest due to huge debts built up in the last decade and a payback agreement with the federal authorities which forbids financing new debts and allows the federal government to automatically take 13 percent of all monthly revenues. The basic authority of the local government also had to be reestablished because of the immorality and corruption that pervaded the last two administrations. And almost one third of all housing was built irregularly or on invaded public land.

What remained as an asset to bring to negotiations with the private sector? The only strong asset was the *regulation of the floor area ratio* and a new zoning criteria, by which the public sector ruled how many square meters can be built by the market and on what *financial conditions* these square meters can be enhanced. Among these conditions we established the norms for negotiating and selling additional building rights based on a two-level floor area ratio system: (a) the free basic and (b) the purchased maximum levels.

Fourth, based on a fairly good and consolidated knowledge of the urban situation by all the engaged staff, we considered that the scale of the city and its public transport deficit and suggested several *decentralizing policies* including the legal creation of 31 *sub-prefeituras*, mainly in charge of responding to localized demands and maintenance services. In order to cause people to travel less and go shorter distances, the plan had to establish *mixed zoning*, allowing people to perform daily activities *near their homes*, including: work, school, leisure, banking and shopping with a subway station hopefully nearby. This criteria led to the identification and careful planning of every *linear or focal centrality* in all neighborhoods.

Fifth, the new plan had to face the challenge of São Paulo's vast, impermeable hilly region and the

yearly occurrence of tropical rains, correcting the *drainage deficit* that causes floods in most urban valleys during summertime. Reservoirs along main urban rivers were planned and a new building rule established the construction of reservoirs able to reserve one hour of heavy rain before letting it go to the city's main watershed network. As we shall see other measures were legally established to face this important environmental problem.

Sixth, considering the *infrastructure* and *housing* deficits, the plan corrects the street network, which is still incomplete due to the historically chaotic land occupation. The eastern region lacks streets linking its northern to its southern districts. And the northern region lacks streets linking its eastern to its western districts. The plans propose new criteria for the subway extension based on *station densities* instead of linear extensions. A radical decision was made to change the *bus* system into a real network, which went against the vested interest of the private bus companies that profited from subsidies based on the length of their line concessions. A two-hour ticket allows passengers to transfer from one bus to another paying only one simple fare. And the zoning established special zones where public housing as well as medium market housing could receive the benefit of a credit policy.

Seventh, we recognized a nearly empty wide corridor, historically generated by the now rarely used cargo railroad, crossing the whole city, through its downtown, from south-east to north-west and considered this huge space as a "*region of opportunity*." To this corridor we added other regions in order to establish *ten large urban operations*, to be planned and regulated by specific **laws**.

Eighth, the new plan had two timelines: the directives for a ten-year horizon and the strategic actions that would be put in place during the present administration. These two schedules resulted in the title of the new plan: *Strategic Master Plan* (2002-12).

Ninth, recalling that during her campaign Marta Suplicy committed her government to *act in solidarity with the excluded* people and sectors of the city — all social, economic, infrastructure, education and health programs should start from those violent peripheral districts where the majority of the citizens are poor, unemployed and lacking in urban equipment and facilities, with a high rate of illiteracy and violence among young people. These districts were mapped by a university report called

“*The Map of S.Paulo exclusions*,” which was later extended by a detailed study on the *vulnerability of families*. The local government strictly followed this map to distribute its social programs, public computer centers and new schools with cultural and sports facilities (called *CEU-Centro Educacional Unificado*).

Tenth, last but not least, in order to comply with the general spirit of sharing the main decisions on the future of the city with the people, the new Plan would be prepared in seven months by SEMPLA’s technical staff as a first proposal. It would then be widely diffused and public hearings would begin. The *public debate* took another six months, more than 60 public meetings plus *ad hoc* groups formed with special actors (real estate developers, builders, architects, academics, social movements, NGOs, environmentalists). The media took part, mostly by publishing the criticisms of interest groups unhappy with the general outline of the new law. We finished the debate with a City Conference attended by over 600 people, and the Mayor sent the final proposal to the City Council, where the final hearings, negotiations and approval were undertaken. The new Plan became law (number 13430) on September 13, 2002.

THE MAIN INNOVATIONS: (A) LAND USE AND ZONING

The territory was divided in two macrozones. One is reserved for **environmental preservation** and consists of an area on the south side of the city where two large reservoirs and their watersheds produce part of the drinking water for São Paulo, a northern mountain range and agricultural land in the far-east. The other macrozone is the already occupied **urban structure**. The main reason for this division is to protect the preservation areas by allowing landowners there to “transfer” (sell) the virtual potential and building rights of their land to another lot, situated in the urban structure macrozone. This space drifting, through the shifting of building rights, will enable private owners to resist to the temptation of irregular construction in the preservation macrozone.

The transfer of building rights is also permitted inside the urban structure macrozone from private or public owners of heritage and architecturally important buildings to other lots.

In the **land-use directives** of the Plan, followed by the new zoning law approved in July 2004,

we made an effort to consider the present spontaneous uses and activities of the “real city” and not only the legal one represented officially on maps and records. But from this concrete situation we are directing the city to a more rational use of land, trying to achieve a mix of activities while maintaining their conviviality with homes. The existing strictly residential neighborhoods are maintained, but service and commercial corridors can be found nearby. There are three degrees of mixture of activities, from more to less restricted kind of activities. And the previous industrial zones are now also considered for commercial, services and even residential adaptations.

The mixing of uses and activities not only seeks to create a more lively urban setting for informal social encounters, it is also a consequence of the size of the city and the present and near-future transportation difficulties, both public and private. One should travel less and go shorter distances in daily life. Most daily necessities should be met within one’s own neighborhood.

The city zoning also establishes a long list of Popular Housing Zones (ZEIS), including *favelas* (public land invaded by irregular housing), to be urbanized and specific areas intended to receive dwellers that now are living on risky areas prone to land-slides and floods. By popular housing the plan includes families whose earnings are insufficient for the purchase of a home, homes but also market-supplied modest housing.

Finally, on this issue it is important to emphasize that the city was divided into 31 sub-municipalities, with an appointed sub-mayor in each. And in 2004 in the same law that approved the new zoning, the City Council approved the 31 local plans with decentralized administrations elaborated by the planning department.

THE MAIN INNOVATIONS: (B) THE 2-LEVELS AREA FLOOR RATIOS

In all zones, except for strictly residential quarters, building rights are divided in two levels: (a) the **basic** and free level whose factor is **1** (one can build one times the area of the lot); and (b) the **maximum** level, that can shift to factor **2.5** or **4**, depending on the zone (one can build four times the area of the lot), through the purchase of the additional area building right. The income from selling additional building area goes to a public fund (FUNDURB) and can only be spent on the purchase of land for public use,

enhancing infrastructure and environmental facilities and solving public housing issues.

This innovation was subject to harsh criticism, mainly from developers. Some arguments were based on ideological issues (by those who consider private property sacred), some on financial issues (by developers who were not willing to surrender part of their estimated profits for the benefit of the public), and some came from economists who believed that the innovation would decrease the market value of the land, thereby lowering tax revenues.

However, we could make a sound defense of our point; we estimated that developers would in time create downward pressure on the landowners selling price and eventually adapt their financial schemes to the new reality. In fact, the announced catastrophes did not occur and business is going on as usual...

THE MAIN INNOVATIONS: (C) AN EXPANDED CONCEPT OF PUBLIC SPACE

The usual concept of public space restrains it to the ground surface. We defined as public also what is under and above this surface. The implications are clear: the city “owns” the underground space and can build or give permission to build ducts intended to receive all kinds of infrastructure and service networks. And considering that private outdoor marketing messages receive their economic value only when transmitted through public space, there is a good reason for the city to charge for this participation in marketing.

THE MAIN INNOVATIONS: (D) THE URBAN OPERATIONS.

The Plan establishes the perimeters of 10 Urban Operations. These are defined as limited territories with detailed plans, each to be approved by a specific law, ensuring better quality for public housing, the environment and infrastructure and enhanced public space. In these territories developers can reach the maximum level of building rights and many building incentives are proposed to induce public use on private land, such as creating galleries with shops on the ground-floor of buildings that link the sidewalks of one street to another.

The urban position of these Urban Operations is crucial because it redesigns urban development trends, opens up new opportunities for developers along mass transport lines and concentrates activities

and densities in order to reinforce and regulate centralities. As the selling of additional floors must be invested inside the perimeter of each Urban Operation, the local government will have the financial resources to enhance infrastructure accelerating the implementation of the Operation. But these private resources would come in only at the rhythm of private investments. Thus, from 2004 on the local government established the possibility of purchasing, on the stock exchange, certificates for additional building rights, to be used only inside of the perimeter of the Operation; this would enable the local government to invest in the infrastructure and accelerate the estimated urbanistic results of the Operation.

THE MAIN INNOVATIONS: (E) THE BUS SYSTEM

The Plan establishes quite clearly that the mass transport system (subway and city trains) has to be considered as the main solution for the present transportation difficulties and the 33 million trips that take place every day in São Paulo. The criteria for its expansion considers the “density of available stations” aiming at the ideal that no one would live farther than 500 meters from a metro station. Public transport would take users to the nearest station if this ideal cannot always be reached, and parking would be provided at one third of the metro stations for those users that would drive from their homes.

To achieve this ideal the Mayor is presently proposing a strong political move, together with the State Governor and the public metro company, in order to bring in the federal government and through it international financing, to enhance the subway network, from the present 54 km to the projected 150 km and beyond.

In the meantime the Plan proposes two main changes (already implemented in 2004): **structural bus lines** using large articulated buses, circulating through exclusive lanes, complemented by smaller buses and even vans, which will diffuse transport inside the peripheral neighborhoods. The second innovation is the “**One ticket**” service by which, paying just one fare, the user may travel during two hours, taking as many buses as he needs. In the future this “one ticket” will be integrated with the metro that is controlled by the State.

THE MAIN INNOVATIONS: (F) ENVIRONMENTAL ISSUES

The site of São Paulo is defined as a *sea of hills*. Its climate is tropical and temperate, and heavy rains fall during the summer. There is an acute drainage problem that must be solved in order to avoid yearly floods. The immediate solution calls for **reservoirs** along the rivers that cross the city in order to hold water during sudden downpours until the main rivers are able to carry it safely. In addition to this engineering decision we added a legal provision that every new building and parking structure build a reservoir able to retain rain water for one hour.

The Plan also determines that **linear parks** will be created along all urban creeks and rivulets. For this purpose incentives and regulations have been established in order to give incentives to private owners to shift building rights, thus allowing for the linear park to be extended in front of high-rise buildings. The final result will be the “greening” of the city, with a 700 km network of linear parks.

Another important environmental issue is **garbage**: over 13,000 tons must be collected and disposed of daily. Presently garbage collection is private and there are two huge but nearly filled in areas available for disposal. It is of utmost importance to reduce the total amount of daily garbage. For this purpose a recycling system was put in place and is established by the Plan: there will be a recycling unit in each of the 31 sub-municipalities, managed by a cooperative formed mainly by street-collectors. Public service is already taking the recycling garbage weekly from homes to 17 of these units; and the garbage tax is abated when the volume of garbage produced by each home is diminished. It will be lower if one takes off cans, plastic and paper, sending them to recycling stations.

THE MAIN INNOVATIONS: (G) ANTI-EXCLUSION PROGRAMS

The present local government followed the Workers Party commitment to implementing programs for the inclusion of poor families. These programs were recorded in the new Plan as strategic actions for the first half of the Plan’s 10-year horizon. There are four **income distribution** programs that to date have helped 200,000 families by providing them with \$60 a month in addition to the opportunity to participate in working apprenticeships (60,000 young people), the “starting again” program for learning a new profession (55,000 adults), plus temporary jobs (14,000 adults). And there are three **emancipation**

programs: popular credit, skills training and solidarity economy for setting up small new manufactures.

The results of these programs, although still financially modest in scale, are evident: in the districts in which they were implemented unemployment receded, the homicide rate went down, school attendance went up and local commerce increased.

Another efficient inclusion program is the creation of public Telecenters, each with 20 computers and one instructor. There are by now 130 of these centers located in the impoverished peripheral regions of the city, and they are widely used and appreciated by young and old alike.

WHAT NEXT?

The new Strategic Master Plan of São Paulo established a process by which planning activities would be continually handled by the City Planning Department (SEMPA) with the collaboration of the planning coordinators from the 31 districts. The next step is to concentrate on planning improvements in the neighborhoods. The Municipal Council for Urban Policies will debate a new code for the use and regulation of public space, underground and above ground.

The whole cycle of public debates and the setting up of participatory processes was very enlightening; it goes beyond the topical contributions or the decision on priorities for the setting up of the annual budget expenditures. It is a vast pedagogical experience for the citizenry. The transformation of citizen participation into an institutional process is a challenge because one risks freezing the whole social dynamic. Therefore many unknown issues will follow in the wake of the new Plan.

URBAN PLANNING AND THE 21ST CENTURY

What planning challenges will we face and what role will planners play in the new century? Given that we are living through a period of historical transition in which interruptions and radical changes are more fruitful than adjustments, which are the right questions to be asked when thinking about the new century?

The first is of a political nature: *What will happen during the present phase of global U.S. imperial hegemony and how will it come to an end?* As Zygmunt Bauman says (Bauman, *Liquid Modernity*), the product of worldwide modernity, brought along by globalization, will be the isolation of residual and

superfluous people. What culture will impose an imperial power when mobility, rather than the possession of territory, is the strategic factor in the struggle for power? What will happen when, as Saskia-Sassen writes (1988, 1998), a new dynamic of inequality appears, and global cities mediate nation states and the world economy?

A second question is also important: *Will capitalism, as we know it today, be the best operator of a market economy?* History tells us that the market economy existed before the invention of capitalism; its basic rules existed even before the invention of currency. What will happen to capitalism when “money has become a parasite that devours economy” (Gorz, 1997). The present neomonopolistic phase of capitalism might suffer a reflexive transformation process as suggested by British economists (Beck, Giddens, 1994). In this transformation what will arise when the present neoliberal proposal ends in failure, as is likely? Will there be “market economy socialism” (an apparent paradox in terms) in the future when the socialist utopia starts to again stir our dreams of equality and justice?

But then, *what will the new design of the socialist utopia be* with new actors on the stage: NGOs, cities, the market? With the efforts to minimize states and maximize the market, the neoliberal dream of governability is resulting in its opposite: ungovernability!

Authors define globalization as an answer to the governability crisis of the 60s (Rifkin and Thurow, 1998). However, the deregulation and flexibility that only favors employers and capital is moving this latter outside the control of political power and causing capitalism to go back to its savage first phase (Gorz, 1991). Socialism might be a phoenix born from the ashes of worldwide ungovernability.

Within the stress and sadness of global unemployment, it is necessary to answer the question: *What does labor (work) mean in the life of human beings?* Hegel wrote once that “a person is someone if he (she) subscribes to the objective materiality of what he (she) produced.” In other words: work. But nowadays one tends to enlarge this meaning of labor in our life: it does not only mean salary but also self-esteem and social interaction. If technology allows people to live with less fatigue, and if many productive processes can replace one kind of worker with another, more sophisticated worker, labor does not disappear: it shifts. When the telephone was invented some people thought that there would be no necessity for personal contact. On the contrary, it produced many other motives for personal encounters,

but employment shifted. One didn't need to have a go-between, a messenger any more, but the job of telephone operator was created.

Another basic question, profoundly discussed in the recent book by Jane Jacobs (*Dark Age Ahead* 2004) is: ***What will the future of the family be and how will men and women coexist in the new century.*** This issue has been widely discussed during the last three decades. Robert Kurz mentions the end of families and of work as a tragic moment in history. Another author (Rosiska Darcy Oliveira, in Wilhelm, 2001) recalls the paradox: although we all know that we are born from a woman's womb, religious teachings tell us that Eva was born from Adam's male rib! The new status of women in many countries (certainly not all) brought to the surface the fact that the market rules in which we live separate private and public life, leaving the former hidden; this gives women a constant and unfair sense of guilt. There is a trend not to value anything that cannot be rendered in dollar terms. Thus we tend to forget the importance of such values as love, generosity, friendship and solidarity. I dedicate one chapter in a recent book to this issue (Wilhelm, 2001), ruminating on the apple of paradise.

In the new context an old question resurfaces: ***How can we make better use of time?*** The present global connectivity colors this question in a different shade. The acceleration of all processes of change is challenging. The necessity to find quick answers to the overwhelming flux of questions is stressful. And we have to reassess the distribution of tasks and our attitudes toward daily life. How does each of us want to live this daily life? When and where should we produce and create (work), and what are the other time-consuming actions we value in life? Technology allows us more free time; but to make it actually "free" there are changes that must be made in our life purpose. The time question also implies the life-span; we shall probably live to be over 90 unless a traumatic accident cuts short this estimate. The current rule of stepping down and going into retirement at 60 or 65 is absurd, but the question of dealing adequately with active elders has not yet been answered by society.

And there is the fundamental issue of maternity, a period of several years (in which I include the obvious nine months of pregnancy) during which time infants would gain enormous psychological benefits from the presence of the mother. And probably many mothers would prefer to have more time with their children at an early age, but not at the price of losing their careers, salaries and social and

professional contacts. And we know that in the era of communications technology, new solutions to this problem may arise. There must be a solution to this dilemma, and it will not come from market rules, since these already established that private life should remain “nonexistent.”

A very important question arises from the new global connectivity that brings opportunities as well as challenges: *How can we go from information to knowledge?* The internet brings us **data** as well as links that can take us to **information**. But this is still not **knowledge** because we must reach an understanding that demands a synthesis of different areas of knowledge, the interaction of several specialized pieces of information with the intuition and the cultural background of the researcher. Finally, knowledge is still not **wisdom**. Although not everybody will reach this superior stage, everyone should be capable of reaching knowledge. But this is the big challenge to all education systems which will have to go through a profound transition of methods, processes and aims. In other words, as Edgar Morin states, the first aim of education today is to learn how to learn.

For urban planners, but also for all society a vital question must be answered: *How will megacities survive?* This is not a technical question. Urbanism and engineering can solve the technical problems of traffic, housing, infrastructure, environment, garbage etc. But the question is how do we want to live in these huge metropolises? Where is the place in our life for meeting people and how can we transform *spaces* into *places*? What do we mean by quality of life and what space do we need to ensure this quality? Are we really members of an urban society or are we individuals in constant competition with other individuals? Are justice and solidarity really important to us? The survival of megacities will depend on major decisions — decisions that will be made only if society is capable of answering these preliminary questions.

The fact that we have to answer questions and redefine important issues is one more proof that we are living through a transitional period of history. It is always at these stages that humanity needs and value encyclopedists! We now have to collectively define what we want the 21st century to be. One of the questions we could ask is: *Will there be a 21st Century Renaissance?* As I described in one of my books (Wilhelm, 2001) there are several factors indicating that the **humanistic trend** typical of the XV century appears side by side with very humiliating antihumanistic trends. I would say that mafias, intolerance,

fundamentalism, drugs, the banalization of violence, the destructive power of arms, the tendency toward making meek adjustments rather than face real problems, demography and environmental risks — are all enemies of the construction of a new Renaissance. But still...the alternative to dark ages exists if we are able to build it.

Finally we must ask a professional question: *What should the role of urban planners be?* I start with a statement: although immersed in the problematic issues of the urban present, we are professionals that deal with an immaterial and substantive issue: the future. We project; we dream. That is, we invent or propose what could be. We “see” through our imagination how this future might be and propose a strategy to reach it. This is no small business at this stage of uncertainty. But we are not prophets. And only with a generous amount of humility will we be able to learn from the collective experience of life.

In the case of an urban planner in Brazil or any other Third World country, I would argue that the issues concerning inequality, growth and development are the substantive ones. Latin American development cannot be achieved unless we are able close the outrageous gap between the haves and the have-nots, between included and excluded. Even from an economic point of view, unless we transform the great majority of our people into citizens as well as consumers in a real market, we shall be too dependent on external decisions.

Growth has its reasonable limits and must be considered as just one dimension of development, not its synonym. As Galbraith once wrote, what are we aiming at: the quantity of goods that we possess or the quality of our lives? This dilemma is not new; Father Debret, the founder of the Economy and Humanism movement in France in the 50s, also stated that we should work towards a civilization of “being” and the equitable distribution of “having.” Is competition thus the overriding principle of development? Only in a consumer-oriented society. We can do better than that.

The limits on the implementation of our “dreams” are political as well as human. But not to dream of a world of equity and well-being for all would be a betrayal of the meaning and the expectations of our profession.

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APPENDIX



A drawing of São Paulo Circa 1759.



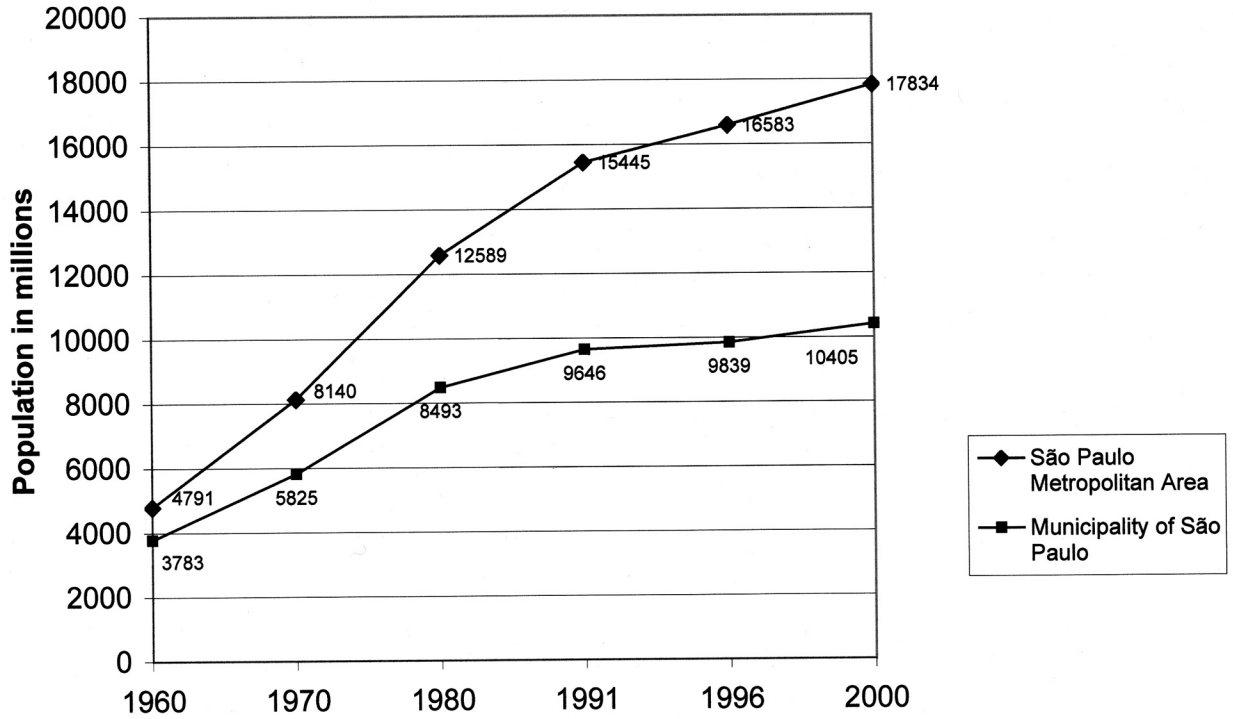
Map of São Paulo in 1880.



São Paulo and surrounding areas, 1880.

Population — Absolute Growth

Evolution of Local Population



Population of the São Paulo Metropolitan Area from 1960 to 2000.
Source: IGBE

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