

## QUALITY OF URBAN LIFE AND DEVELOPMENT

Bogotá and Bangkok have a similar size and a similar income per capita (Bangkok is richer). Bogotá is far from being an exemplary city, but I will share some of our experiences with you.

Over the next 30 years, developing world urban population will increase by 2 billion inhabitants. And cities will grow more than proportionately

## Competitiveness and Quality of Life

First it was land that generated wealth and development. Later it was capital. Now it is highly qualified and creative people.

## Competitiveness and Quality of Life

How to attract and retain highly qualified people who could get a visa and work anywhere in the world? It is the most important challenge for economic development of this next Century

## Competitiveness and Quality of Life

Quality of Urban Life is a goal in itself. But it is also critical to retaining and attracting Highly Qualified and Creative Individuals.

After decades of environmental consciousness rising and many hours of wildlife television shows, children the world over have quite clear what is an ideal environment for a happy whale or a happy mountain gorilla. It is much less clear to all of us what the ideal environment is for a happy child.

## CITY VISION



## CITY VISION

WE CANNOT DESIGN AN URBAN TRANSPORT SYSTEM UNLESS WE KNOW WHAT KIND OF A CITY WE WANT.

## EQUALITY AND CITIES

Democratic constitutions state that **THE PUBLIC GOOD MUST PREVAIL OVER THE PRIVATE INTEREST.** The way we build cities and organize urban life can be a powerful means for achieving that.

## AN APPROPRIATE MODEL

Developing country cities can avoid the urban errors some advanced countries regret.

## CITY PROPOSED

- Dense, preferably without high-rises.
- No child or old person lives farther than 3 blocks from a park.
- With an important network of large pedestrian roads and linear parks.
- With wide, tree-lined sidewalks, uninterrupted by garage entrances and minor street crossings.
- With bicycle ways physically isolated from motor-vehicle traffic in all streets.

## CITY PROPOSED

- Surrounded by large expanses of publicly owned land both for parks and for lower income high quality housing.
- With high quality public transport.
- With a severe restriction to automobile use during peak hours, so that all citizens use public transport or bicycles during those times.



If a city is good for children and old people, by themselves, it will be good for everybody else.

## PUBLIC SPACE

## URBAN LIFE IN THE PAST



For 5,000 years all city streets were pedestrian

### URBAN LIFE IN THE PAST



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### URBAN LIFE IN THE PAST

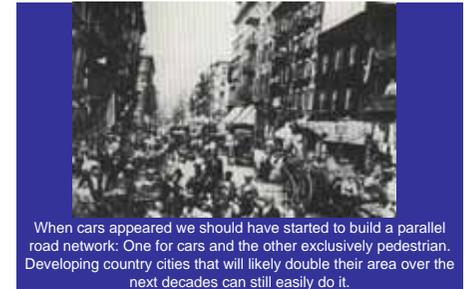


For 5,000 years all city streets were pedestrian

### URBAN LIFE IN THE PAST



### URBAN LIFE IN THE PAST



When cars appeared we should have started to build a parallel road network: One for cars and the other exclusively pedestrian. Developing country cities that will likely double their area over the next decades can still easily do it.

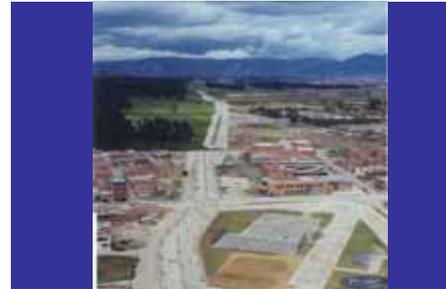
### PUBLIC SPACE

Over the last 80 years we have been making cities much more for cars mobility than for children's happiness.

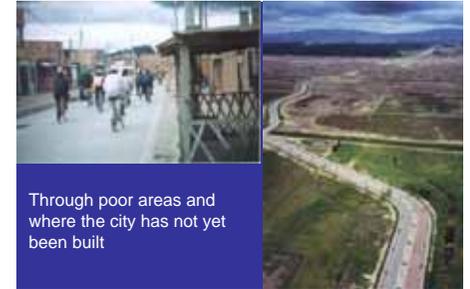
### PUBLIC SPACE

Traditionally in Europe pedestrian networks are located in historic centers. But we can create magnificent pedestrian roads in growth areas around our cities and through the poorest, recently informal neighborhoods.

### EL PORVENIR PROMENADE



### EL PORVENIR PROMENADE



Through poor areas and where the city has not yet been built

### EL PORVENIR PROMENADE



### PUBLIC SPACE

It is during leisure times that income differences are felt more acutely. While higher income citizens have access to country houses, clubs, restaurants, lower income citizens only alternative to television is public pedestrian space.

### PUBLIC SPACE



High quality pedestrian public space begins at least to compensate for inequality.

### PUBLIC SPACE



### PUBLIC SPACE



### PUBLIC SPACE



Sidewalks are not simply for getting from one place to another. They are for walking aimlessly, talking, playing, kissing, enjoying the city.

**PUBLIC SPACE**

To say that in a sidewalk there is enough space to carve out parking bays as well as for people to walk by, is equivalent to saying that a city's main plaza or park can be turned into an open air parking lot, just as long as enough space is left between cars for people to walk by.

**PUBLIC SPACE**



Cars parked on sidewalks, or parking bays where there should be sidewalk, are evidence of lack of respect for human dignity and of an insufficient democracy

**PUBLIC SPACE**

We enjoy walking and being with people. A good city should facilitate that



**PUBLIC SPACE**



**PUBLIC SPACE**



**PUBLIC SPACE**



**PUBLIC SPACE**



**PUBLIC SPACE**



**PUBLIC SPACE**



**PUBLIC SPACE**



**PUBLIC SPACE**



The quantity and quality of a pedestrian public space is one mark of a civilized city.

**PUBLIC SPACE**



**PUBLIC SPACE**



**PUBLIC SPACE**

Shopping Malls can be wonderful, but when they replace public space as a meeting place for people, it is a symptom of a city that is ill.

**PUBLIC SPACE**



**PUBLIC SPACE**



**PUBLIC SPACE**



**PUBLIC SPACE**



**PUBLIC SPACE**



**PUBLIC SPACE**



**TOURISM IS PEDESTRIAN**



**TOURISM IS PEDESTRIAN**

In tourism magazines photos cars rarely appear, except in ads. Instead we see boats, bicycles, horses and above all people walking, sitting, talking.

**TOURISM IS PEDESTRIAN**



**TOURISM IS PEDESTRIAN**



**TOURISM IS PEDESTRIAN**



**HUMAN IMPACT STUDIES**



**HUMAN IMPACT STUDIES**

Just as environmental impact studies are required in order to minimize damage to animals and plants from infrastructure projects, HUMAN IMPACT STUDIES and investments should be required for infrastructure projects so that they improve children's quality of life.

**HUMAN IMPACT STUDIES**



**HUMAN IMPACT STUDIES**





Human Impact Studies

### A DRAINAGE CANAL BYPRODUCT



As there are environmental impact studies, there should be human impact studies

### HUMAN IMPACT STUDIES



### HUMAN IMPACT STUDIES



### PUBLIC SPACE: WATERFRONTS

Although most land in our planet became private, some unique God given pieces must remain in the public domain for every child to enjoy. To do otherwise would be practically immoral. It is the case with waterfronts.

### PUBLIC SPACE: WATERFRONTS

Waterfronts as axis of urban life: Barcelona, London, Boston, Buenos Aires, Sidney, Capetown, Shanghai, Chicago, New York, Paris, Toronto, Hamburg, Stockholm, Boston, Copenhagen, are cities where riverfronts or ocean fronts have significant pedestrian quality-spaces. Many of this great waterfront projects have been realized or greatly improved over the last 25 years.



Hudson River, New York

### PUBLIC SPACE: WATERFRONTS

Today many cities regret deeply having built motor-car roads next to their waterfronts.



Car-Free Day in Paris



Paris



Paris



Boston



Boston



Boston



Toronto



Toronto



**PUBLIC SPACE: WATERFRONTS**



**PUBLIC SPACE: WATERFRONTS**



**PUBLIC SPACE: WATERFRONTS**



**PUBLIC SPACE: WATERFRONTS**  
  
A marvelous walkway on stilts could be built in front of traditional houses without affecting their charm



**PUBLIC SPACE: WATERFRONTS**  
  
All new buildings on the river could be required to build high quality public walkways on their waterfront.





Battery Park, New York



Battery Park, New York



London



London



London



London



London

### PUBLIC SPACE: WATERFRONTS

Just as significant investments are made to make cars life better, important investments should be made in order to make people's lives better.



London



London



Bonn



Bonn

## TRANSPORT

### TRANSPORT

TO TALK ABOUT TRANSPORT IS TO TALK ABOUT URBAN STRUCTURE.

TRANSPORT



Road infrastructure investments lead to lower population densities and do not solve traffic jams

TRANSPORT



Shanghai

Different from other challenges such as health or education, urban transport does not improve with economic development.

TRANSPORT

More than whether trains, tramways, buses, monorails are chosen, public transport success depends on density. High density makes possible low cost, high frequency public transport.

TRANSPORT

Bangkok has a high density. It is a great asset. But very high apartment buildings have a tendency to age badly.

TRANSPORT

And there is always the risk of sprawl.

TRANSPORT

Density is the most important transport policy. Sprawl is to be avoided.



TRANSPORT

Suburban city is inconvenient:

- Makes it impossible to provide low-cost high-frequency public transport
- Mobility problems for vulnerable members of society: Children and young people, the elderly, the poor.
- Inefficient use of land with agricultural, recreational and environmental values.
- Unfriendly pedestrian environments, with long distances to points of interest such as stores.
- Lack of people in public spaces.

TRANSPORT



One truth about urban transport: It does not matter what is done, traffic jams will become worse; unless a radically new model is adopted.

TRANSPORT

Trying to solve traffic jams building more road infrastructure is like trying to put out a fire with gasoline

TRANSPORT



TRANSPORT

COUNTER-INTUITIVE TRUTHS:

- The Earth circles around the sun
- High interest rates drive down inflation
- More road infrastructure brings about more traffic jams

TRANSPORT

It would take the typical developing country city more than 100 years to have a road infrastructure like that of Houston, Atlanta or Seattle. Yet in those cities TIME LOST IN TRAFFIC JAMS INCREASES EVERY YEAR.



TRANSPORT



Cars are wonderful but they don't function well if we all decide to use them simultaneously at peak hours

TRANSPORT



The only solution is public transport, but not for those with lower incomes, but for everybody.

TRANSPORT

If density and use of public transport are our goals, traffic jams may not be a problem, but a useful tool.

TRANSPORT

Transport is not a technical, but a political issue. Who benefits from the policies adopted?

## TRANSPORT

Which is the objective of our transport policy?

- a. Provide efficient mobility for all.
- b. Minimize traffic jams for the higher income groups.

## TRANSPORT



Public road investments aimed primarily at reducing traffic jams are highly regressive.

## TRANSPORT



Public funds for roads instead of needs of the poor

## TRANSPORT

Even if highways are paid with private funds, they tend to dehumanize cities, lower quality of life and real estate values next to them.



## TRANSPORT

Unavoidable: As a city becomes friendlier to cars, it becomes less friendly to people.

## TRANSPORT

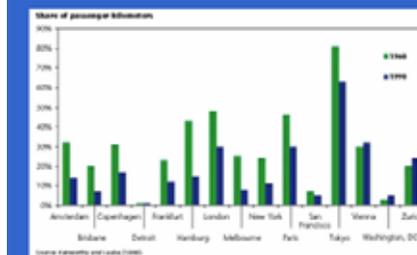
Every bit of infrastructure built to make cars faster, makes the city a bit less humane and livable.



## TRANSPORT

Quality public transport is necessary but not sufficient. Car use must be restricted.

### Transit Share



## TRANSPORT

Severe car use restrictions are the only effective means to achieve:

- Public transport use
- Population density

## TRANSPORT

Among the means to restrict automobile use are:

- Tag number-based restrictions
- Tolls
- High fuel prices
- Parking restrictions
- Ban on peak hour use
- Traffic jams

## TRANSPORT



Traffic jams without public transport are relatively useless; so is public transport without traffic jams or some other form of automobile use restriction.

## Bogotá Experience: TRANSPORT

Through a tag number system, 40 % of all cars have to be off the streets during peak hours two days every week. This reduced trip times by about 21 minutes and lowered pollution levels. Gas consumption went down 10.3%.

## Bogotá Experience: TRANSPORT



« Peak hour and Tag » (« Pico y Placa »)

93% population support

### Bogotá Experience: Ciclovía



### Bogotá Experience: Christmas Ciclovía



### Bogotá: CAR FREE DAY



### Bogotá: CAR FREE DAY



During 13 hours all citizens meet as equals in public transport, bicycles or walking. It builds community

### Bogotá : REFERENDUM

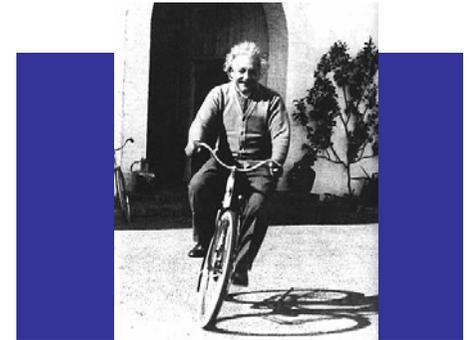
People enjoyed the adventure. Afterwards in the referendum of October 2000, nearly 64% of voters approved establishing a car free the first Thursday of February every year.

### TRANSPORT

- Banning car use during peak hours would result in:
- Lower travel times for the majority (more time with children)
  - Less pollution
  - Less public investment for high income groups and more for the poor
  - Suburban sprawl is discouraged. Density is stimulated

### TRANSPORT

The people of Bogotá voted positively a referendum asking whether they wanted all cars off the streets every week-day between 6 AM and 9 AM and between 4:30 PM and 7:30 PM from January 2015 onwards.



While cars tend to be a means of social differentiation, bicycles integrate people.



Amsterdam, The Netherlands



Amsterdam, The Netherlands



Utrecht, The Netherlands



A school parking lot, Chiangmai, Thailand



Sukhotai, Thailand

### TRANSPORT

Bicycles will be used only if quality physical infrastructure protects bicyclists and show that cyclists are important



Houten, The Netherlands



### BIKE PATHS



Bogotá riders increased from 0,3% to 4,4% of population.

### Bogotá: BIKE PATHS



More than 300 kms of bike paths have been built

### Bogotá: BIKE PATHS



### Bogotá: BIKE PATHS



### Bogotá: BIKE PATHS



Respect for human dignity

### Bogotá: BIKE PATHS



### Bogotá: BIKE PATHS



### TRANSPORT

Rail mass transit is wonderful; but it is expensive. And it presents other costs...

### SKY TRAINS?

Several cities such as Paris and New York demolished most elevated trains they used to have...but when I was a student in France I preferred the elevated line

### TRANSPORT

Elevated trains also cost much less than underground ones.



Elevated trains deteriorate the quality of public space...



This used to be an elevated train in Paris. Now is a park



Elevated trains deteriorate the quality of public space...



But it's much nicer for ride outdoors than underground.

### TRANSPORT

If public transport is to reach all points of the city during the next 100 years, the ONLY public transport we can talk about is buses.

### TRANSPORT

Not one developing country city rail system serves more than 10% of population.

### TRANSPORT

If a few lanes are given exclusively to public transport, it is possible to structure mass transit systems, with similar speed and capacities as rail systems, at much lower costs.

### THE OLD SYSTEM



### TRANSMILENIO



### TRANSMILENIO



### TRANSMILENIO



### TRANSPORT

Bus based transit systems have advantages:  
Lower investment cost  
Lower operational cost  
More labor intensive  
Much higher share of transport for equal investment  
Surface travel is more pleasant  
Flexible

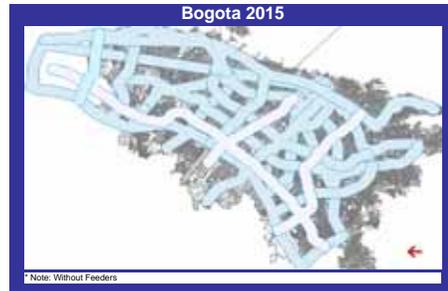
### TRANSMILENIO



### TRANSMILENIO



### TRANSMILENIO



### TRANSPORT

IN TERMS OF TRANSPORT, A CIVILIZED CITY IS NOT THAT ONE WITH HIGHWAYS BUT RATHER, ONE WHERE A CHILD ON A TRICYCLE CAN SAFELY GO ANYWHERE