INTERVIEW WITH JAIME LERNER (1,363 words)

Curitiba is considered one of the best examples of urban planning on the planet. When did you begin participating in the design of its Master Plan?
In the mid-60s, I was part of a group of architects working for the City of Curitiba, advising the mayor at the time (Ivo Arzua Pereira) in every development phase of the Curitiba Preliminary Urban Plan. We later became the Instituto de Pesquisa e Planejamento Urbano de Curitiba (IPPUC), Curitiba Research and Urban Planning Institute. Through IPPUC, I participated in the preparation of the Master Plan to guide the City's physical, economic and cultural transformation, and was elected mayor of the city in 1971. I remained mayor for three terms (1971-75, 1979-83 and 1989-92).

How can a city be an instrument for change?
A city has to have the political will to change. A city needs a strategy, which works with potentiality, not just needs. And a city needs solidarity, not as rhetoric but as a sincere understanding of the daily life of its citizens. With every problem there needs to be an equation of co-responsibility. When everyone understands what the consequences of certain attitudes are they will more readily cooperate and help bring about change. A city needs to have a daily plan and daily processes that encourage constant learning.

This is why you have designed initiatives where the citizens are involved in such things as tree planting, recycling, and keeping the gardens clean?
Yes, involvement in all aspects of city life. When we started separating garbage in Curitiba, we looked first to the children. For six months, we taught every child the importance of separating organic from inorganic garbage. The children then taught their parents. Since 1989, we've had 70% voluntary participation in this initiative. When we had a fuel crisis about 20 years ago, even though we had a very good system of transport in place, everyone knew that they should rethink public transport. Curitiba has more private cars than any Brazilian city except Brasilia (500,000) yet 75% of commuters take the bus and Curitibanos spend only 10% of their income on transport. Why? Because they have a good alternative.

Jaime, tell me about the significance of the Plexiglas bus tubes you designed.
It was said for so many decades that a good system of transportation should be underground. But when you don't have the financial resources to build such infrastructure, it helps you to have more creativity. The tube, a less expensive option, gives the buses of Curitiba the same performance as a subway. We started to study this about 30 years ago and knew what was needed to create a good system of transport: it had to be fast, reliable, comfortable, and with good frequency. This meant not only putting buses in exclusive lanes like in many cities of the world, but also allowing for boarding on the same level and paying before getting on the bus. The tube supports both. In 1974, we moved 25,000 passengers per day with buses running in an exclusive lane.
The system was improved regularly and now we are transporting more than two million passengers per day.
On surface, we can have better frequency and the connections are faster. Underground, you can travel faster, but it's technically impossible to have a frequency less than two minutes and the connections take longer; sometimes it takes 15 minutes or more to walk underground alone. I have nothing against subways, but the problem is that it's hard to have a complete network of underground systems. Even cities that have a few subway lines need an effective surface system. The future of mobility has to be considered in terms of integrated systems, where each piece – bikes, cars, taxis, subways, buses – never competes in the space of another.

What do the different colors of the buses signify?
The colors allow for easy reading of the system. The double-articulated buses are red. The feeder buses are yellow. The interborough buses are green. So you know by the color of the bus what kind of bus it is. If you want to build solutions for the future and have people working with you, every citizen has to understand the system very well. You have to have a commitment with simplicity. Every child should know the design of his or her own city. They should design the city even, because if you can design the city you can understand the city. If you understand the city, you will respect the city.

What is the capacity of the double-articulated bus?
300 people. I used to joke about this though: it's 300 Brazilians or 270 Swedes!

As soon as the system has a very good boarding process, you can transport 300 passengers every minute very easily, which is 18,000 passengers per hour in one direction. In thirty seconds, this is 36,000 people per hour, which is a subway statistic, which is what we do in Curitiba.

Do you believe this kind of transformation can occur in any city of the world?
In my more than forty years of doing this, I'm convinced that every city in the world, no matter the scale, no matter the financial resources, can have a significant change in less than two years. I can swear to you that this is possible and that you can make important changes. With public transportation, you can definitely make important changes. With environmental issues, you can make important changes. On the care of children, you can make important changes. It all depends on the city, but anything is possible. It's not a question of scale. Sometimes mayors use as an excuse that their cities are too big. But no, it's not a question of scale; it's a question of philosophy. Don't be afraid of the scale. Don't be afraid if you don't have enough financial resources. You can always build a good equation of co-responsibility.

Are other places in the world mimicking the Curitiba model?
It took 25 years until another city tried to do what we did in Curitiba, and that city is Bogotá, Colombia. Now, more than 83 cities in the world are doing it, including Sao Paolo. I was in Seoul, Korea, and the mayor there is removing highways in the city in an attempt to design a surface system and restore an old stream, a small river in the city that was very important to their history. Honolulu is trying to implement a surface system and I'm sure they will do it very efficiently. These are just two examples of many, many more.

This must give you a feeling of great satisfaction.
It does, for sure. I'm convinced that the most important thing to work on right now is the mobility system, which is not only a system of transport; it's the whole understanding of a city. The more we create an integration of functions the better a city will become. We don't yet have a smart car. We have a smart bus, which is a good system of transport.
Cars that are good on design are not good on the engine. Cars advanced on the engine – hybrid systems – are not good on design. Small cars are not good on the road. Cars for the road are not good for the city. Bikes are another issue. We have to redesign the bike so that it opens up like an umbrella. If bikes were more portable we could integrate them with public transport, going from door to door. I'm working on this idea with a team here in Curitiba. We're exploring how far we can go with surface transportation. Lastly, why not develop a kangaroo system for cars? Rather than having two cars – one for the road and one for the city – we could have a car that feeds energy into a very, very small car.
I like to say, cars are our mechanical mothers in law. You have to have a good relationship with your mother-in-law but you cannot allow her to conduct your life.

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