SUSTAINABLE URBAN DEVELOPMENT - IFHP RANKO RADOVIC STUDENT COMPETITION

BY HENRIK VALEUR

I have been asked to comment on the issue of sustainable urban development in relation to the IFHP Ranko Řadovic Student Competition.

To illustrate this theme, I have selected three of the competition projects. The three projects in question are concerned with the development of urban areas home to the poor on three different continents. To explain this selection let me quote the Brazilian team: "Solving favelas' problems helps to prove that if underprivileged communities in a critical urban context can be prepared for the future, everyone else can and should be." [1]

Obviously it is not the favelado who is responsible for the excessive resource consumption and pollution in the world. But it seems as if it is here we can find solutions to these problems.

There are at least three reasons for that:
1. Developing countries are forced to take action, because the shortage of conventional resources is threatening to obstruct continued economic expansion in these countries, and because these countries are often more affected by and less capable of protecting themselves against climate change.

2. Sustainable urban development necessitates a high level of creativity and innovation. In developing countries with low levels of urbanization and rapid urban growth it is easier to test and apply (radically) new planning methods and technologies.

[1] A MICRO COMMUNITY SOLVING GLOBAL PROBLEMS, Bernado Guedes Pereira Araujo, Éder Andrés Barrientos Leite, Isabel Caldeira Brant, Mateus Andreatta Barros, Tmiago Barbosa de Campos, Escola de Arquitetura - Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, see page 176 – 181.

3. It is very difficult to change already consolidated patterns of consumption. In developing countries, where (Western) lifestyles associated with patterns of excessive consumption are not yet consolidated, it is possible to choose a different path.

So, developing countries have the possibility to lead the world in a new and more sustainable direction. But this cannot be accomplished without massive support from developed countries, including transfer and co-development of know-how and technology.

It is really quite simple. We - the rich - have to share our wealth with the poor if we want to revert the current trend of massive environmental destruction and climate change.

An obvious place to start is among the future generations. It is therefore stimulating to see so many students who choose to go abroad to try to solve problems in areas that are – if geographically, culturally and economically very far away - closely linked to their own future.

It is, however, sad to see to what limited extent local students get involved in these projects. Not only because both parties could obviously learn a great deal from each other, but also because a better understanding of local cultures, policies and social structures could be greatly beneficial to these projects.

Still, it is clear that the students from AAA in Denmark and ETH in Switzerland who respectively travelled to the Guangdong Province in China and Addis Ababa in Ethiopia, are concerned with the local perspective and the involvement of local inhabitants. [2]

This more inclusive, bottom-up approach is strangely absent from the project for the favela of Belo Horizonte in Brazil, developed solely by Brazilian students from UFMG. A project that illustrates both the huge potentials and the limitations of engineered sustainability. Maybe international – and interdisciplinary - collaboration would have been beneficial here as well.

The "European" projects in Africa and Asia presuppose a very strong alliance between planners and NGO's (because we don't really trust the local government?). There are many positive aspects to such an alliance, but it would obviously be very problematic if planners began to bypass local governments, developers and investors.

Sustainable urban development is not only about environmental issues. It is also about job creation, social stability, education, healthcare, life-styles and other factors that are determinant for the long-term success of the development. And then it has to be politically and economically feasible, if not downright profitable.

The real challenges confronting sustainable urban development, however, are not how to encompass so many different factors, but that these factors are constantly changing. How to combine long-term goals with even short-term unpredictability? How to create dynamic sustainability?

These three projects, offer us some very instructive examples, as they engage some of the most dynamic urban environments that are also most in need of sustainable solutions.

[2] THE TRANSFORMATION TOWARDS A "HAPPY VILLAGE", Katja Engel Zepernik, Anett Grønnern Olsen, Arkitektskolen Aarhus, Denmark, see page 194 – 199. MIXCITY, Fei Duan, Kathrin Gimmel, Imke Mumm, Stefanie Scherrer, Msa UTDT, ETH, Hönggerberg, Zürich, Switzerland, see page 240

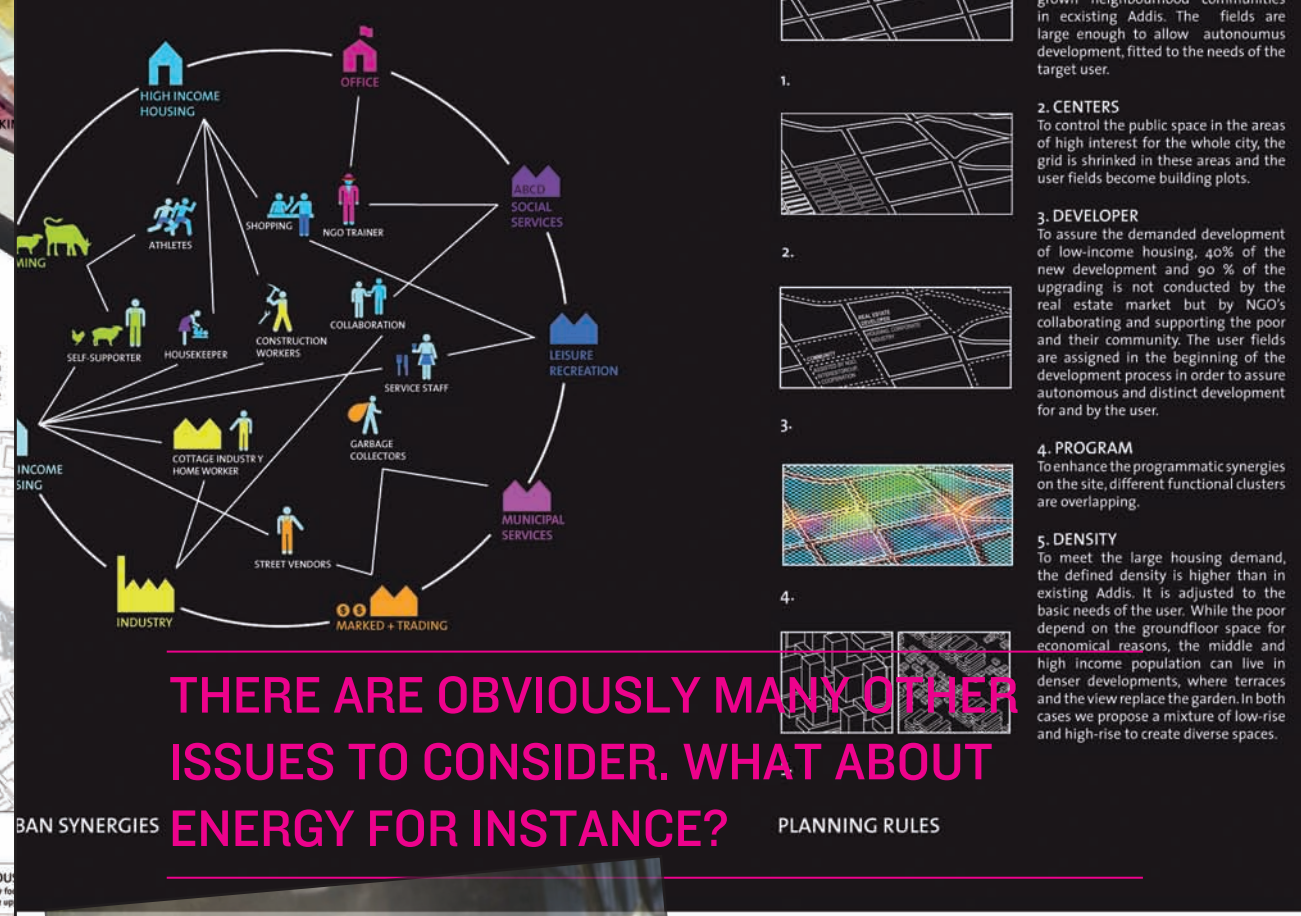
MIXCITY

"AS SOON AS THE SITE IS LEFT BY THE MILITARY AND THE EMPTY LAND IS ORGANIZED WITH THE GRID, THE FIRST PLOTS ARE SOLD AND CONSTRUCTION STARTS" – DON'T WASTE ANY TIME!

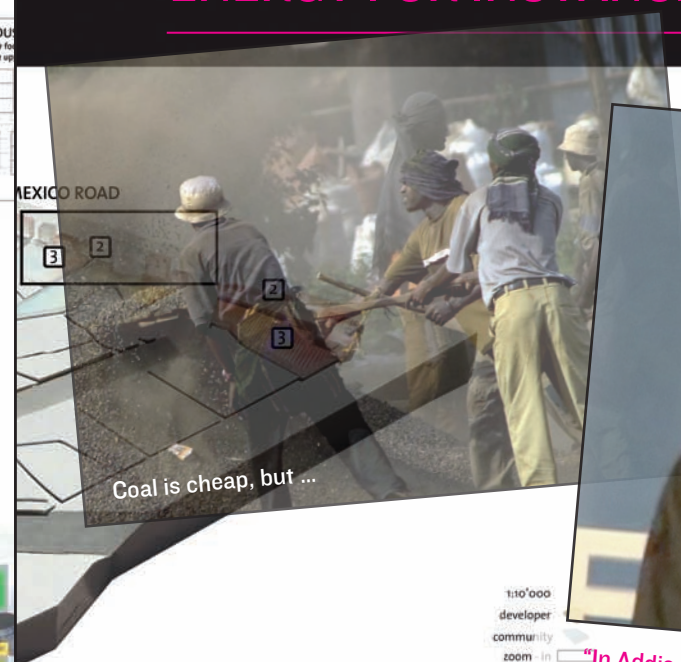
A dilemma in fast growing urban environments is: How to provide sustainable solutions when you don't have any time to think?

You suggest a very interesting solution: self-organization. But no matter how tempting it may seem to leave the welfare institutions and the social system to "voluntary neighborhood organizations" and let NGO's provide "temporal housing for the construction site workers", "public kitchens", "sanitation facilities" and "waste treatment" it also points to some more fundamental institutional problems that can not be bypassed by simply leaving everything up to volunteers.

Likewise, your proposal to promote and explore the potential synergies in "Social MIXITY and land use MIXITY" is highly interesting, but physical mix may hide deeper non-physical barriers.



THERE ARE OBVIOUSLY MANY OTHER ISSUES TO CONSIDER. WHAT ABOUT ENERGY FOR INSTANCE?



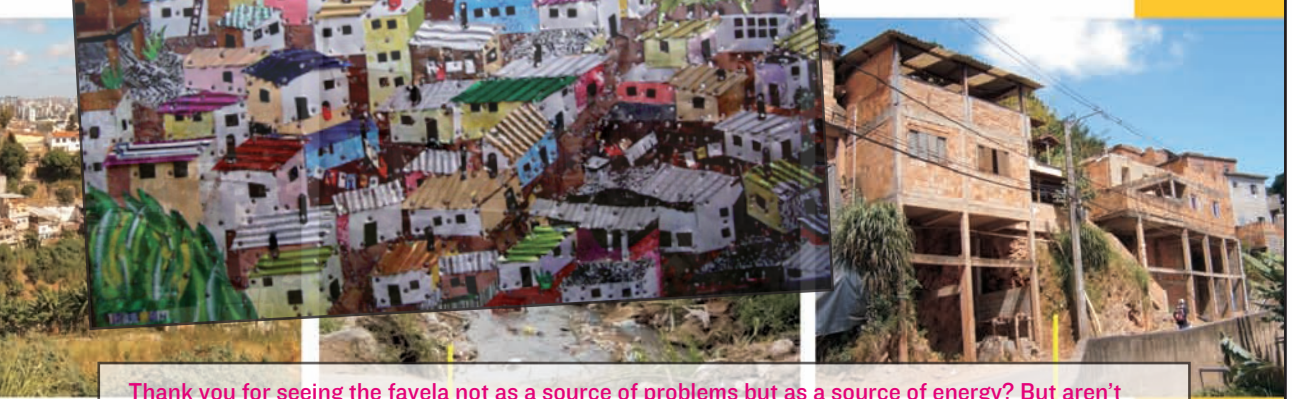
"In Addis Ababa we boast of thirteen months of sunshine(!). Which means there is abundance of solar energy. Which would contribute to reduce green house effects if it was developed properly. But the problem is how to get the technology that will make it a reality for us."
Addis Ababa Mayor Birhane Deressa at the C40 Large Cities Climate Summit 2007 in New York

FAVELA

SOME PEOPLE SEE THE FAVELA FROM THE SAFE DISTANCE OF A HELICOPTER. FROM THIS PERSPECTIVE IT IS NOTHING BUT AN ENDLESS STRING OF PROBLEMS.

Why be concerned? Why bother to stop? Now we are almost home and safe in our gated community.

ne of Brazil's largest cities and has a population of over 2 million inhabitants. Although the city was planned in the late 19
fabric outside the planned area has become quite chaotic. On Belo Horizonte's hillsides it is very common to see *favelas*
ytowns - aim of [illegible] - to sleep in houses [illegible] by *favelas* next to the more expensive and prosper areas o
of their proximity to job opportunities, commercial centres, [illegible] and other urban facilities. These hillsides ar
e for occupation and remain empty. In a *favela* [illegible] a. The *favelas* are a common phenomenon i
es' larger cities and occupation like [illegible] inside the [illegible] etics, slang and cultural production. Howeve
ependable on the formal city infrastructure [illegible] problems we have applied them to a specifi
da Sera [illegible] *favela* is the biggest [illegible] America, with a population of over 50,000 people and with lots of socia
mental problems.



Thank you for seeing the favela not as a source of problems but as a source of energy? But aren't you still hovering overhead in the helicopter?

THE PROBLEI

Most slum houses have less than 50 square metres and shelter families with up to 10 member
each. There is already a high density problem because people live crammed up in small one floo
houses which are built along several years and remain unfinished due to lack of money. The infills d
not respect health parameters, don't allow public or leisure spaces and hinder the access of vehicle
such as police cars or garbage trucks. The structures of the houses are frequently unstable. Violenc
and drug dealing are also a big problem of Aglomerado. The chaotic occupation makes it easier fo
violent action and crimes to happen. The narrow and steep ways create accessibility problems
making it difficult for anyone to walk around. Sanitation is inefficient and sometimes water or sewe
systems do not exist, allowing diseases to spread easily. Everyday *favela* inhabitants have to wal
down the *favela* for kilometres to go to work in the formal city or to catch a bus or a subway trair
These citizens are usually left aside from public transport planning. Most of the following solution

WHY NOT USE THE ENERGY AND THE EXISTING RESOURCES OF THE FAVELA?

From high in the sky you design a number of intelligent environmental solutions, promoting clean energy and local sanitation, maybe even local job opportunities and social stability.
(Could the local population be trained to manage the production and distribution of clean energy?)

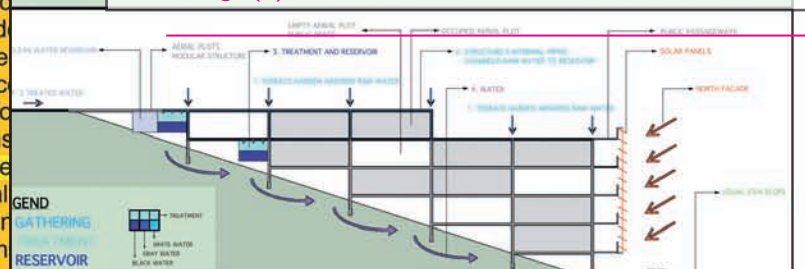
But why tear down and rebuild everything from scratch? Who will pay for that?

Why not engage the people actually living in the favela in the development of their own community?

Sustainable urban development is not only about physical planning and design. Sometimes it is a matter of property rights, helping provide people with land titles, and thus giving people the means to get loans to start their own businesses. Sometimes dance and music can be used to change reality.

"Favela Rising" tells the story of Anderson Sa, a former drug trafficker from Rio de Janeiro's most feared slum, who becomes a social activist and uses music and dance, inspired by the rhythms of his streets, to combat the violence and oppression that have affected generation after generation of impoverished teens. (...) Filmed over more than two years in the most desperate neighborhoods of Rio, the film illustrates how art and culture can be catalysts for social change (...)

HOUSING



The slope of Aglomerado varies from 35% to
allowing gravitational force to be used as an e
saver in water distribution. The abundant sunl
Brazil is transformed into solar energy as
energy can be collected from this windy regio
abundant rain water from this tropical climate i
used. All the household water is 100% recycle
reused. The housing structure itself serves
solution to pedestrian circulation in these
hillsides. There is a fixed circulation hub that
access to the aerial plots and functions as a

HAPPY VILLAGE

THE VILLAGE WITHIN THE CITY

The villagers sold their land and then they spend the money on buying their food – instead of growing it themselves. One day they woke up surrounded by high-rises. They were still living in their village but they had no more food and they didn't know what to do in the modern city. Then they went to the office of the planning bureau – in one of the high-rise buildings – threatening to throw themselves out from the rooftop. "What do you do?" Asked the local planning director.

The village within the city is already a clearly defined enclave. Now that they are trapped within the modern city the question is not how to enhance the edges of their village, but rather how to be integrate it. How do the villagers become part of the city? How do they get access to the opportunities and benefits of the city?

THE FLOATING POPULATION

Interview with Mr Jin and Mr Zhang, two migrant workers living together in a future office space on a temporary construction site.

HOW DO YOU SLEEP?

We sleep with quilts on some wooden boards.

WHAT DO YOU EAT?

We go to the nearest grocery store (I km away) at 6 am to get some vegetables and some meat that we prepare on an electric cooker. We also have tap water, but it is not drinkable.

WHEN DO YOU WORK?

We work from 7.30 am to 6.30 pm, seven days a week, all year around.

WHEN DO YOU SEE YOUR FAMILY THEN?

Our families live in our home province (Jiangsu). If something happens to them we ask for leave to go back and see them. Otherwise we see them during spring festival (one or two weeks a year) where we will bring them some presents and show them how much we earned last year.

WHAT ARE YOUR AMBITIONS FOR THE FUTURE?

(Laughing) ... We want to earn more money. Our sons need money to get married and build new houses. We are already 43 and 45 years old, life is just like this, no big change will happen any more.

Moveable bedroom with storage facilities

Flexible kitchen with living room qualities

It is admirable that you invest yourselves in problems that may seem so far away. And your proposals for better housing, more public space for social interaction and spaces for small-scale private enterprises are good. But there is a reason why the migrant workers are called a floating population. The nature of their jobs do not allow them to settle in one place. In fact, they are not really allowed to do so.