TERMS, IMAGES and REALITIES

THE FUTURE OF URBANIZATION

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Observations:

- World population in 2030: 8 billion
- This is 2.3 billion more than in 2000
- Of these 2 billion will live in cities in developing countries
- They will double the present population in such cities from 2 to 4 billion (UN estimates)
World's Urban Population Growing Rapidly

Estimated and Projected World Urban and Rural Populations, 1950–2030

Source: United Nations, 2002 (131)
In 2008 more than half of the world’s population are living in cities.

- In Japan already more than 90%
- In Latin America nearly 80%
- In Indonesia in 2020 more than 60%
- In Africa in 2030 more than 50%
1. In Africa more people live now in slums than in India or China;
2. From 1991 to 2006 their number has almost doubled to some 200 million;
3. The UN expects their number to be doubled again in 2020 to some 400 million;
4. Taking into account that the population growth of the world will take place in particular in the cities of developing countries, this seems a gross under-estimation.
A TIME-BOMB TICKING

- Existing Infra-structure (water and sanitation, roads and public transport, housing, electricity, etc.) is already grossly inadequate and aging rapidly;

- Whereas the demand on such infra-structure is growing enormously with the expected fast increase in population.
There exist major concerns over the so-called mega-cities;
Rightly so, but what are mega-cities?
And what is the problem? Very high population densities over extensive areas!
So: distribute these in smaller entities!

The real challenge for the near future, however, is not the mega-cities, but are the many smaller cities!
And there (!) still much can be done!
Population Distribution of Developing and Developed Countries by Size of Urban Area and Year

Source: United Nations, 2002 (131)
SOUND URBANIZATION CRUCIAL FOR SOUND DEVELOPMENT

We can still act decisively, however:

- THERE SEEMS TO EXIST A WIDESPREAD DENIAL OR GROSS UNDER-ESTIMATION OF THE IMPORTANCE OF THE ISSUE;
- EVEN THE ACADEMIC COMMUNITY IS NOT TRYING WELL TO ADDRESS URBANIZATION WITHIN AN INTEGRATED APPROACH OF DEVELOPMENT;
- EVEN THE TERMS WE USE AND THE CONCEPTS AND IMAGES WE HAVE TO ADDRESS URBANIZATION LAG FAR BEHIND THE REALITY.
RE-THINK: WE NEED A NEW APPROACH

CRUCIAL QUESTION: HOW TO MOVE FROM A CULTURE OF RE-ACTION TO A CULTURE OF PREVENTION???

1. We must acknowledge that the future of humankind will be urban;
2. That cities are not inherently the problem to the sustainability conundrum but rather the solution;
3. That to achieve a sustainable urban future we need to find out what kind of urban places we should build? Where? And How?
WHAT A GREAT SPECTACLE !!!

- LET US LOOK AT URBANIZATION FROM A DIFFERENT PERSPECTIVE!

- FROM AN ORBITING SATELLITE:

- THESE PICTURES WERE TAKEN ON A CLOUDLESS DAY!
These lights are Boston, New York, Philadelphia and Washington.

It's still daylight in California.
Pollution Preventing the Sight of Stars

De helderheid van de hemel boven Europa, gezien vanaf het aardoppervlak. De oranje kleur geeft globaal de gebieden aan waar ‘s nachts vanaf zeepeil de melkweg niet meer of nauwelijks is te zien. In de rode gebieden ziet men hooguit nog een honderdtal sterren. Als de groei van de hemelwaartse lichtstroom in hetzelfde tempo blijft doorgaan, zal in het jaar 2025 in een land als Italië vrijwel nergens meer de melkweg te zien zijn. (Foto Royal Astronomical Society)
False-color image of Eurasia at night, based on satellite data from the DMSP spacecraft (yellow, city lights; red, flares from oil production areas; purple, burning vegetation).
An Urbanized Area with a Nebulous Structure
From Randstad to Central Urban Ring
From Randstad to Central Urban Ring
City, Agglomeration, Urban Region and Urban Zone

Stad

Agglomeratie

Stadsgewest (met stad als centrum)

Stadsgewest (met agglomeratie als centrum)

Stadsgewest (met twee steden als centrum)

Stadsgewest (met stad en agglomeratie als centrum)

Stedelijke zone

Bron: 2e Nota R.O. ’66

Fig. II.5 *De begrippen stad, agglomeratie, stadsgewest en stedelijke zone*
The Principle of Clustered Deconcentration
Randstad Holland: Access to Jobs
Abidjan: Doing Laundry for an Income
Key Questions

- What kind of “urban places” will exist in 2030?
- How can we assure that these urban places are organized and managed in such a way so that the eco-resource systems of which they are part are sustained and continue to provide the inputs such as water etc. that are necessary to sustain urban places?
- What needs to be done to develop the types of urban places that provide the basic needs of their population so that they exist in healthy, safe and livable environments and that can productively contribute to the economic, social and political aspects of the nations of which they are part?
A SUSTAINABLE URBAN FUTURE NEEDS AN UNDERSTANDING OF COMPLEXITY AND A PRO-ACTIVE PLANNING AND GOVERNANCE SYSTEM FOR AN URBAN REALITY, THAT IS:

1. Multi-layered and therefore needs to be approached based on the subsidiarity principle;
2. Multi-sectoral and therefore needs to be approached in an interdisciplinary and integrated manner;
3. So complex that it must involve both formal governmental institutions, as well as civil society
Urban Formations

Frankfurt am Main, Am Fünffingerplätzchen
“Borrowed Spaces” in Hong Kong
Old and New in China
Metro City in Hong Kong
“Children’s City” in The Netherlands
“Glass City” in The Netherlands
Vast Evacuation Site on a Super Levee in the Shirahige West District

Evacuation capacity
120,000 (66% of the population in the Arakawa Ward)
SEVEN KEY THEMES FOR RESEARCH

1. *Re-conceptualization* of the urban (and rural) challenge;
2. *Identification* (imaging and mapping) of the development of urban constellations;
3. Analyzing *the forces driving change*, their impacts and the ways to influence these;
4. Studying optimal solutions for *an adequate infrastructure* (roads, public transport, water etc.);
5. Developing strategies to improve the *quality of life* and *reduce environmental impacts*;
6. Studying ways to improve the *attractiveness of the urban milieus* and social development;
7. Strengthening the *inclusive governance* of urban places and creating responsible societies.
1. Re-conceptualizing the urban challenge

. We need new conceptual tools and fresh perspectives to direct attention to the fact that urbanization is only a form of the distribution of people and activities over the surface of the planet Earth: there is no opposition between the urban and the rural, but rather different forms of mixture.

. We must promote new theoretical and conceptual approaches that can help us address the “urban problem” and the “rural problem” in an integrated manner.
2. Identifying urban constellations

- Identifying a city has always been difficult. This is even more the case now that urbanization is spreading wide and far. New technologies, in particular remote sensing/earth observation however, provide the promise of more precise work in this area;

- Using these technologies and new analytical tools, researchers can provide basic background information on urban development previously unavailable;

- Urban constellations can be outlined and matched with public administration entities for which data are available;

- With GIS and mathematical modeling more optimal forms of population distribution can be explored.
3. Forces creating urban change

- In the contemporary era, economic, political and social forces that are driving globalization also act upon localities; yet there is also considerable regional dynamism, due to national and local policies, pressures and conditions. Understanding how “indirect” and “direct” forces creating change, are themselves changing and how they interact to shape potential futures for urban areas is an urgent task;

- Important driving forces shaping urban areas include transportation and communication technology innovation and adoption. At the same time, policies and responses to forces of change themselves are important drivers.
4. Adequate Infra-structure

- Many cities suffer from an inadequate infra-structure (roads, public transport, housing, water and sanitation, solid waste disposal, electricity, pipelines etc.);
- Rapidly growing small and medium sized cities in developing countries, in particular, will need to improve the quality and capacity of their infra-structure well ahead of the major surge in population growth;
- Using Earth Observation and GIS, it will be possible to prepare on time, at much lower cost the optimal direction of urban growth, taking into account the local topography and many other characteristics, to guarantee a sound development of the cities and timely reduction of environmental risks.
5. Quality of life and reducing environmental impacts

- The complex nature of urban “environmental” and “quality of life” issues need to be the target of any successful urbanization policy and the research underpinning such policies;

- Knowledge of successful policies that address these concerns; those that can cross cultural/political borders without loosing effectiveness, those that can be “scaled up” and those that address multiple challenges of cities at different levels of income must receive specific attention!
6. Social development and attractiveness of urban milieus

. The quality and quantity of urban “formations,” the physical manifestations of the integration of the social, economic and environmental systems, are elements of attractiveness. Urban regions provide a variety of urban “formations” both within individual urban regional nodes and between urban regions. The development of these formations can either provide for attractive and socially vibrant communities or ugly, harmful spaces;

. At the core of these dynamics are demographic and social trends and how these impact on social justice and equity.
7. Inclusive Governance of the ‘Urban places’

. We need to explore major governance challenges related to managing risks created by urbanization, and those threatening urban areas; how these challenges differ with development and linkages to the global economy;

. Governance is particularly challenging as to be performed well, it depends upon science/experts (for knowledge of trends, conditions, and opportunities), but must also include transparent decision making processes and “deliberative democracy”;

. Governance tensions arise across ministerial sectors, geographical scales, levels of organization and ideological biases, to name just a few arena’s;

. Governance is at the core of sustainable urban futures. Yet there is an institutional lag in the development of effective administrative institutions, in particular in the rapidly growing middle and smaller cities, where most of the future growth will be and at the level of the large urban constellations of which these will be a part;

. It will be more and more important for the future of the cities to create a good and functional relation between citizen’s groups and the formal administration.